People's Biodiversity Register जन जैवविविधता पंजिका



District : Kannauj, Uttar Pradesh जिला : कब्नौज, उत्तर प्रदेश



U.P. STATE BIODIVERSITY BOARD



People's Biodiversity Register जन जैवविविधता पंजिका

Kannauj District Uttar Pradesh

Introductory, Agro-biodiversity Domesticated Biodiversity Wild Biodiversity & Annexures

Prepared by

Prof. Amita Kanaujia Biodiversity & Wildlife Conservation Lab Department of Zoology

University of Lucknow, Lucknow - 226007 (U.P.)

Sponsored by :

U.P. STATE BIODIVERSITY BOARD

'A' Block, IIIrd Floor, East Wing, PICUP Bhawan, Vibhuti Khand Gomtinagar, Lucknow-226 010 (U.P.)



अखिलेश यादव मुख्यमंत्री उत्तर प्रदेश



दिनांक 11 जून, 2016

<u>l **a**sk</u>

मुझे यह जानकर अत्यन्त प्रसन्नता हुई कि 'जैवविविधता अधिनियम, 2002' के प्राविधानों के अनुपालन में जनपद कन्नौज में स्थानीय जैवविविधता का सर्वेक्षण व अभिलेखीकरण करके जन जैवविविधता रजिस्टर तैयार किया गया है।

जीवन को बनाए व बचाए रखने में जैवविविधता की महत्वपूर्ण भूमिका है। इसके मद्देनजर जैवविविधता के संरक्षण व संवर्धन के लिए राज्य सरकार सतत प्रयासरत है।

जनपद कन्नौज अपने इत्र के लिए जग प्रसिद्ध है। कन्नौज का इत्र उत्पादन जैव विविधता का एक अनुपम उदाहरण है। यहाँ के जन जैवविविधता रजिस्टर में कुल 294 जीव—जन्तु व 168 वनस्पति प्रजातियों का विवरण है, जो जनपद की जैवविविधता की समृद्धि को दर्शाता है। इस विवरण को संकलित करने में 'उ0प्र0 राज्य जैवविविधता बोर्ड' एवं लखनऊ विश्वविद्यालय के जन्तु विज्ञान विभाग का योगदान सराहनीय है।

मुझे आशा है कि जैव संसाधनों के अभिलेखीकरण से जनमानस इसके संरक्षण एवं संवर्धन के प्रति आकर्षित होगा।



0522-2238213 CH : 2213307 82] e[q; Hkou] moizIfpoky;] y[kuÅ



दुर्गा प्रसाद यादव मंत्री वन विभाग



<u>सन्देश</u>

जैवविविधता संरक्षण, संवर्धन हमारी परम्परा व संस्कृति का अनिवार्य अंग है। देश व प्रदेश में न केवल दूरस्थ एवं दुर्गम वन क्षेत्रों में समृद्ध जैवविविधता उपलब्ध है बल्कि हमारे आस—पास की पालतू प्रजातियों में भी विविधता पायी जाती है। हमारे प्रदेश में साल के घने वन, घास के मैदान, शीशम की बहुलता वाले घासयुक्त वन, सागौन, खैर, यूकेलिप्टस, जामुन, दलदली क्षेत्र एवं राष्ट्रीय पशु बाघ, तेंदुआ, एक सींग वाला गैंडा, राष्ट्रीय जलीय जीव डाल्फि्न, राज्य पशु बारसिंघा तथा राज्य पक्षी सारस सहित विभिन्न पादप व प्राणि प्रजातियां हमारी जैवविविधता को समृद्ध कर प्रदेश को गौरव प्रदान करती है।

जैवविविधता अधिनियम, 2002 के प्राविधानों के अन्तर्गत स्थानीय जैवविविधता का सर्वेक्षण कर अभिलेखीकरण का कार्य जन जैवविविधता रजिस्टर के रूप में किया जाता है। इसी क्रम में जनपद कन्नौज का जन जैवविविधता रजिस्टर तैयार किया गया है, जिसमें कुल 168 वनस्पति व 294 जीव जन्तुओं से सम्बन्धित प्रजातियों का उल्लेख है। इस रजिस्टर से स्थानीय जैव संसाधनों, चिकित्सकीय उपयोग एवं पारम्परिक ज्ञान प्राप्त हो सकेगा।

जनपद कन्नौज इत्र उत्पादन में जैवविविधता का एक उदाहरण है जोकि देश—विदेश में भारी मात्रा में निर्यात किया जाता है।

मानव समुदाय का मानना है कि वन, वन्य प्राणियों, नदियों सहित समस्त प्राकृतिक संसाधनों पर प्रथम अधिकार मनुष्य का है। इस अधिकार भावना से हम प्रकृति की आवश्यकताओं का ध्यान न रख कर प्राकृतिक संसाधनों का अत्यधिक दोहन करते हैं। प्रकारान्तर से वनस्पतियों एवं वन्य प्राणियों को नष्ट कर अपने जीवन के समक्ष संकट उत्पन्न करते हैं। जैवविविधता संरक्षण भावी पीढ़ियों के स्वस्थ व समृद्ध जीवन के लिए अति आवश्यक है।

आशा है, जन जैव विविधता रजिस्टर जैवविविधता संरक्षण की दिशा में महत्वपूर्ण अभिलेख सिद्ध होगा।

375-71-13522

1/4ng kZi z kn ; kno 1/2

अर्द्धशासकीय पत्रांक वन एवं वन्यजीव तथा पर्यावरण विभाग उत्तर प्रदेश शासन कार्यालय : 2238669, फैक्स : 2235206 लखनऊ : दिनांक :.....



संजीव सरन आई.ए.एस. प्रमुख सचिव



<u>संदेश</u>

पर्यावरण को संतुलित रखने में धरती पर पाई जाने वाली प्रत्येक पादप व प्राणि प्रजाति की विशिष्ट भूमिका निर्धारित है। प्रकृति को संतुलित रखने, जीवन की मूलभूत आवश्यकताओं को पूर्ति करने, निरन्तर विकास एवं स्थानीय समुदाय को भोजन व आजीविका प्रदान करने में जैवविविधता अत्यन्त महत्वपूर्ण है।

हमारे प्रदेश की जलवायु एवं धरातल की विविधता के कारण पक्षियों की 550 से अधिक प्रजातियां, तितलियों की लगभग 150 से अधिक प्रजातियां तथा मछलियों की लगभग 115 प्रजातियां पाई जाती हैं। प्रदेश में एल्गी, कवकों, लाइकेन्स एवं फूल व फलदार वनस्पतियों में भी अत्यधिक विविधता पाई जाती है। प्रदेश में पाई जाने वाली पादप व प्राणि प्रजातियां एवं उनके प्राकृतवास को सुरक्षित रख कर जैवविविधता को फलने—फूलने का अवसर देने हेतु प्रदेश में एक राष्ट्रीय उद्यान व 26 वन्य जीव विहारों का प्रबन्धन किया जा रहा है।

प्रदेश में विद्यमान जैवविविधता, विशेषकर प्राकृतिक जैवविविधता की सुरक्षा एवं विभिन्न प्रजातियों के व्यवहार से सम्बन्धित सूचनाएं एकत्र करने हेतु जन सहयोग व जन सहभागिता प्राप्त की जा रही है। जैवविविधता समितियों द्वारा ग्राम स्तर पर जन जैवविविधता रजिस्टर तैयार किया जा रहा है। इन जन जैवविविधता रजिस्टर में सम्बन्धित ग्रामों में पाई जाने वाली सम्पूर्ण जैवविविधता का विवरण रखा जा रहा है। इसी क्रम में कन्नौज जनपद का जन जैवविविधता रजिस्टर तैयार किया गया है, जिसमें कुल 168 वनस्पति व 294 जीव जन्तुओं की प्रजातियों का उल्लेख है। इस रजिस्टर से स्थानीय जैव संसाधनों, उनके चिकित्सकीय उपयोग एवं अन्य पारम्परिक ज्ञान भी प्राप्त हो सकता है।

कन्नौज जिला इत्र उत्पादन जैवविविधता का एक उदाहरण है तथा यही इत्र देश विदेश में भारी मात्रा में निर्यात किया जाता है।

आशा है, जन जैवविविधता रजिस्टर जैवविविधता संरक्षण की दिशा में महत्वपूर्ण अभिलेख सिद्ध होगा।

 $\frac{1}{2}$

प्राक्कथन

जन जैव विविधता रजिस्टर (पी.बी.आर.) एक ऐसा शोध प्रकल्प है जिसके द्वारा कन्नौज क्षेत्र के जैविक एवं अजैविक विविधताओं के विषय में योजनाबद्ध जानकारी मिलती है। किसी क्षेत्र के पी.बी.आर. के निर्माण का मुख्य उद्देश्य सम्पदा के विषय में आत्मबोध करना है। इसके द्वारा उस क्षेत्र में व्याप्त जैविक विविधताओं के पोषणीय उपयोग एवं उनके द्वारा उत्पादित वहीं दूसरी ओर हमारे चारों ओर व्याप्त जैव संसाधनों उनकी रक्षा एवं उससे संबंधित जानकारियों का एक योजनाबद्ध दस्तावेज भी तैयार होता है।

उ.प्र. जन जैव विविधता बोर्ड का प्रारम्भ 28 सितम्बर 2006 को उ.प्र. सरकार द्वारा भारतीय संविधान के भाग 22 जैविक विभिन्नता अधिनियम 2002 के अन्तर्गत किया गया।

कन्नौज क्षेत्र का पी.बी.आर., उ.प्र. जन जैव विविधता बोर्ड द्वारा लखनऊ विश्वविद्यालय के प्रतिष्ठित जन्तु विज्ञान विभाग में प्रो. अमिता कन्नौजिया के नियंत्रण में कन्नौज क्षेत्र के क्षेत्रवासियों एवं विशेषज्ञ क्षेत्र सहायकों की एक टीम द्वारा तैयार किया गया है।

कन्नौज जिला अपने इत्र उत्पादन में आत्मनिर्भर है। यहाँ इत्र का उत्पादन बड़ी मात्रा में होता हैं। यह इत्र देश—विदेश में बड़ी मात्रा में निर्यात किया जाता है एवं बहुत लोकप्रिय हैं। यहाँ का इत्र उत्पादन जैव विविधता का एक अनोखा उदाहरण हैं। क्षेत्र सहायकों की टीम ने यहां पर अपने शोध द्वारा बहुत सी जैविक विविधताओं का अवलोकन कर अपने आंकड़े प्रस्तुत किये है, जिसमें कुल 168 वनस्पति व 294 जीव जन्तुओं की प्रजातियों का विवरण है।

> प्रो. अमिता कनौजिया जैव विविधता एवं वन्यजीव संरक्षण प्रयोगशाला जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ

जन जैवविविधता पंजी प्रमाण–पत्र

प्रमाण–पत्र

(जैवविविधता नियम 2004 के नियम 22 (10) के अनुसार)

जैवविविधता प्रबन्ध समिति कन्नौज की –

- जिला पंचायत अध्यक्ष (हस्ताक्षरमय सील व दिनांक)
- जैवविविधता प्रबन्ध समिति के सचिव (हस्ताक्षरमय सील व दिनांक– यदि नियुक्त हो)

<u>र</u> सुनीता दोहरे अध्यक्ष जिला पंचायत, वान्नीज

नियुक्त नहीं है

Prof AMITA KANAUJIA M Sc.(ZOOLOGY) Ph D. NET DEPARTMENT OF ZOOLOGY UNIVERSITY OF LUCKNOW LUCKNOW-226007

उ.प्र. राज्य जैवविविधता बोर्ड के प्रतिहस्ताक्षर मय सील व दिनांक

 जैवविविधता पंजी निर्माण में लगे (संगठन के प्रतिनिधि के प्रतिहस्ताक्षर)

कब्नौज ''इन्न की जगरी''

BENIRAMMOOLCHAN PERFUMERSKANAUJU

बनीराममुलचन्द्रकाररवानाइत्रकत्राज

E 19MM

128 28 28 28 28 28

19 44





Contents

Subject

| Мар | of the Area (L | ocation ma | p, village map) | xi | | |
|-------|------------------------------------|--------------|---|------------|--|--|
| A | Profile of the | | | | | |
| | 1. General F | | | | | |
| | 2. Socio-Ec | onomic Profi | le | xv-xix | | |
| | 3. Non-Livi | ng Resource | S | xx-xxiv | | |
| В | People Biodi | versity Reg | gister (PBR) | | | |
| | Part- I | Gen | eral Details | | | |
| | | Gene | eral Information | xxvii | | |
| | Annexure 1 Details of the Pancl | | of the Biodiversity Management Committee (BMC) of chayat. | xxviii | | |
| | Annexure 2 | stock) pr | List of Vaids, hakims & traditional health care (human & live- stock) practitioners residing & or using biological resources oc- curring within the jurisdiction of the village. List of individuals perceived by the villagers to posses Traditional Knowledge (TK) related to biodiversity in agriculture, fisheries & forestry. | | | |
| | Annexure 3 | Knowled | | | | |
| | ment inst | | of Schools, colleges, departments, universities, govern- titutions non- government organization & individuals in- n the preparation of the PBR. | xxxi-xxxiv | | |
| | Annexure 5 | Life in K | Life in Kannauj | | | |
| Part- | - II PBR For FLORAL BI | | TV | | | |
| | FLORAL BI | | Agrobiodiversity | | | |
| | | mat- I(A) | Vegetables | 1-34 | | |
| | | mat- I(B) | Fruits | 35-61 | | |
| | | mat-I(C) | Grains | 63-78 | | |
| | | mat- I(D) | Pulses | 79-89 | | |
| | | mat-I(E) | Spices | 91-102 | | |
| | | mat-I(F) | Oil Yielding Plants | 103-114 | | |
| | | mat- I(G) | Fibre Yielding Plants | 115-120 | | |
| | | mat- I(H) | Timber Yielding Plants | 121-127 | | |
| | | mat- I(I) | Sugar Yielding Plants | 129-130 | | |
| | | mat- I(J) | Perfume Yielding Plants | 12) 130 | | |

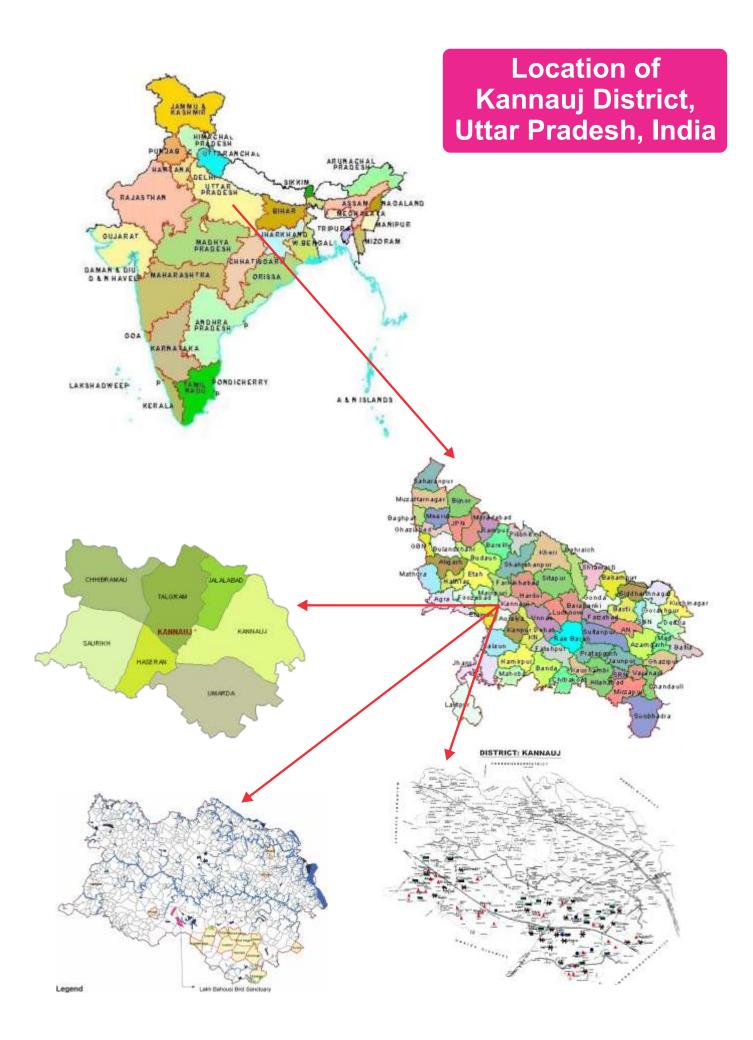
| FORMAT- II | Ornamental Plants | | | | |
|-----------------|----------------------------------|---------|--|--|--|
| • Format- II(A) | Non- flowering Ornamental Plants | 139-146 | | | |
| • Format- II(B) | Flowering Ornamental Plants | 147-162 | | | |
| FORMAT- III | Medicinal Plants | 163-190 | | | |
| FORMAT- IV | Wild Plants | 191-204 | | | |
| FORMAT- V | Aquatic Plants | 205-219 | | | |
| FORMAT- VI | Fodder Plants | 221-226 | | | |
| FORMAT- VII | Grasses | 227-231 | | | |
| FORMAT- VIII | Sacred Plants | 233-250 | | | |
| FORMAT- IX | Thorny Plants | 251-253 | | | |
| FORMAT- X | Microscopic Algae | 255-257 | | | |

FAUNAL BIODIVERSITY

| FORMAT- XI | Protozoa | |
|-------------------|-----------------------|---------|
| • Format-XI (A) | Fresh Water Protozoan | 261-266 |
| • Format-XI (B) | Parasitic Protozoa | 267-274 |
| FORMAT- XII | Porifera | 275-277 |
| FORMAT- XIII | Coelentrata | 279-280 |
| FORMAT- XIV | Parasitic Helminths | 281-291 |
| FORMAT- XV | Annelids | 293-296 |
| FORMAT- XVI | Arthropods | 297-389 |
| FORMAT- XVII | Molluscs | 391-399 |
| FORMAT- XVIII | Pisces | 401-412 |
| FORMAT- XIX | Amphibian | 413-417 |
| FORMAT- XX | Reptilles | 419-432 |
| FORMAT- XXI | Aves | |
| • Format- XXI (A) | Aquatic birds | 433-472 |
| • Format- XXI (B) | Terrestrial Birds | 473-531 |
| FORMAT- XXII | Mammals | 533-552 |
| FORMAT- XXIII | Minor Phyla | 553-554 |
| FORMAT- XXIV | Plant Nematodes | 555-565 |
| FORMAT- XXV | Insect as Pest | 567-601 |
| FORMAT- XXVI | Sacred Animals | |
| | | |

Annexures

- 1. List of Flora described in the PBR in alphabetical order.
- 2. List of Fauna described in the PBR in alphabetical order.



(A) Profile of the Study Area

v/;;u {k⊱ dk fooj.k

1- I kekl; fooj.k %अध्ययन किये जाने वाले जिले का नाम कन्नौज है। यह जिला भारत देष के उत्तर-प्रदेष में स्थित है। कन्नौज भारत का बहुत प्राचीन जिला है जो अपनी सांस्कृतिक व पुरातत्व विरासत में धनी है। प्राचीन समय में यह शहर कान्यकुब्ज या महोदया के नाम से रामायण व महाभारत पुराण में अंकित है बाद में कान्यकुब्ज का नाम बदलकर कन्नौज कर दिया गया।

कन्नौज एक ऐतिहासिक शहर है जो गंगा नदी के किनारे बसा हैं। 7वीं शताब्दी में कन्नौज राजा हर्षवर्द्धन के राज्य की राजधानी या कन्नौज फिर 12वीं शताब्दी में राजा जयचंद के राज्य की राजधानी बना। कन्नौज जिला तीन तहसील व आठ विकासखण्ड क्रमशः हसेरन, गुगरापुर, उमर्दा, कन्नौज, तालग्राम,

छिबरामऊ, जलालाबाद व सौरिख में बंटा हैं। कन्नौज का राजनीतिक दृष्टि से भी बहुत महत्व हैं। यह जिला समाजवादी पार्टी की सांसद श्रीमती डिम्पल यादव का चुनाव क्षेत्र है। कन्नौज सुगंध, महक व इत्र उद्योग के लिए अन्तर्राष्ट्रीय स्तर पर जाना जाता है। यह जिला बीड़ी उद्योग के लिए भी प्रसिद्ध है तथा पूरे उत्तर—प्रदेश में बीड़ी निर्यातक का प्रमुख केन्द्र है।

Fragrance & Flavor Development Centre (FFDC):- भारत सरकार, मंत्रालय, नई दिल्ली, ने उ.प्र. सरकार व UNDP/UNIDO के सहयोग से सन् 1991 में FFDC की स्थापना की।

FFDC की स्थापना का मुख्य उद्देश्य Essential oil, Fragrance and Flavour Industry और शोध संस्थानों के साथ मिलकर कृषि—तकनीक व रसायन तकनीक का उपयोग कर कन्नौजवासियों, किसानों व छोटे व्यवसाइयों को इत्र, तेल व सुगन्ध उद्योग तथा किसानों को उद्योग संबंधित कृषि के बारे में जागरूक करना तथा प्रशिक्षित करना था जिससे वह विश्व व स्थायी बाजार में अपने आप को स्थापित कर सकें।



कन्नौज जिला आलू उत्पादन में भी उत्तर प्रदेश में अपना विशेष महत्व रखता है। कन्नौज से आलू प्रदेश के बाहर खाद्य के रूप में निर्यात होता है। यहाँ आलू की कई किस्मों की पैदावार होती है। कन्नौज जिले का तेजी से विकास होने के कारण यहां की जैवविविधता का तेजी से क्षय होता जा रहा है। अतः तीव्र शहरीकरण व विकास के कारण विलुप्त होनी वाली जैवविविधता को देखते हुए जन—जैवविविधता पंजी के निर्माण हेतु कन्नौज जिले में वर्तमान अध्ययन प्रारम्भ किया गया।

LFkku vkj HkkSckfyd {k= %कन्नौज अक्षांश 27° 13′ 30′′ उत्तर और देशान्तर 79° 19′ – 80° 1′ पूर्व पर स्थित हैं। यह समुद्र स्तर से 139 मीटर ऊपर स्थित है। गंगा नदी कन्नौज के उत्तर–पूर्व की सीमा को, काली नदी दक्षिण के किनारे को तथा ईशान नदी कन्नौज में होकर बहती है। कन्नौज में गर्मी का मौसम बहुत ही गर्म–सूखा तथा सर्दियाँ खुशनुमा होती हैं। सामान्यतः वर्षा लगभग 80 से.मी. दर्ज की गयी है।

कन्नौज जिला कानपुर मण्डल के अन्तर्गत आता है तथा उत्तर में जिला फर्रुर्खाबाद, पूर्व दिशा की ओर से हरदोई, दक्षिण—पूर्व की तरफ से कानपुर देहात, मैनपुरी व इटावा जिले क्रमशः पश्चिम तथा दक्षिण सीमा की तरफ से कन्नौज जिले को घेरे हुए है। कन्नौज जिले का भौगोलिक क्षेत्रफल 1.993 km² है तथा कुल जनसंख्या 1,386,227 है।



b= m | ksx ½ // UlukSt ½

l kekftd , oa ∨kfFk2d : ij{kk

1- Tkul a[; k

| कुल सदस्य | : | 1375775 |
|-----------------------------|----------|---------|
| पुरूष | : | 734245 |
| स्त्री | : | 641530 |
| आयु वर्गानुसार स्त्री/पुरूष | जनसंख्या | |
| पुरूष | : | 734245 |
| 18 वर्ष से कम | : | 387636 |
| 18 वर्ष से 65 वर्ष | : | 305808 |
| 65 वर्ष से अधिक | : | 38902 |
| स्त्री | : | 641530 |
| 18 वर्ष से कम | : | 331005 |
| 18 वर्ष से 65 वर्ष | : | 268306 |
| 65 वर्ष से अधिक | : | 40747 |

2- xkeka dk fodkl [k.Mokj fooj.k

| Ø-I - | fodkl [k.M | dyy xktekadh I a[;k |
|-------|-------------|---------------------|
| 1. | छिबरामऊ | 132 |
| 2. | तालग्राम | 94 |
| 3. | सौरिख | 96 |
| 4. | हसेरन | 57 |
| 5. | जलालाबाद | 49 |
| 6. | कन्नौज | 165 |
| 7. | उर्मदा | 108 |
| 8. | गुगरापुर | 51 |
| | <u>क</u> ुल | 752 |

3- I k{kjrk nj

ग्रामीण साक्षरता दर

| | | | l k{kjrk i <i>f</i> r'kr |
|--------|---|--------|--------------------------|
| पुरूष | : | 506915 | 81.76 |
| स्त्री | : | 339578 | 63.03 |
| dy | % | 846493 | 7305 |

uxjh; lk{kjrk nj

| | | | l k{kjrk i <i>f</i> r'kr |
|--------|---|--------|--------------------------|
| पुरूष | : | 96681 | 76.73 |
| स्त्री | : | 73913 | 64.75 |
| dy | % | 170594 | 71-03 |

dy tuin Ik{kjrk nj

| | | | l k{kjrk i <i>f</i> r'kr |
|----------|---|---------|--------------------------|
| पुरूष | : | 603596 | 80.91 |
| स्त्री ः | | 413491 | 63.33 |
| dy | % | 1017087 | 72-70 |

4- ihus clk ikuh & Iksr rFkk Ia[;k

| Ø-I - | l kr | l a[; k |
|-------|------------------------------|-------------|
| 1 | इण्डिया मार्क–२ नल | लगभग 76,000 |
| 2 | सरकारी ट्यूबवेल (डीप बोरिंग) | 245 |
| 3 | निजी ट्यूबवेल (उथला बोरिंग) | लगभग 34063 |

5- I QkbZ i cák

- अधिकांश घरों में साफ शौचालय उपलब्ध, विशेषतः नगरीय क्षेत्र से लगे भाग में।
- कूड़ा उठाने के लिये नगर निगम की गाड़ियों की व्यवस्था।

6- Hktlie LokfEkRo d'f"k ; kt/; Hktlie

| | | oræku ijrh ½gĐVşj e¥∠ | ∨U; ijrh ½gĐV\$je¥z |
|-------------------------|---|-----------------------|---------------------|
| कृषि योग्य ग्रामीण भूमि | : | 11930 | 5380 |
| कृषि योग्य नगरीय भूमि | : | 2 | 80 |
| dgy dĭ"k ; kx; Hknie | % | 11932 | 5460 |

0; ol k;

| • खेती | • व्यापार तथा उत्पादन |
|-------------------------------|------------------------------------|
| मछली पालन | असंगठित श्रमिक |
| • पशु पालन | संगठित श्रमिक |
| • मुर्गी पालन | |

[ksrh ds izdkj

अनाज, दाले, तिलहन, सब्जियाँ

eNyh ikyu

• tuin ena miyC/k xke lekt ds rkykc ½eNyh ikyu ds fy,½

संख्या – 649

क्षेत्रफल – 614.25 हे.

● iV¥sij fn;sx;srkykc ½eNyh ikyu dsfy;5⁄2

संख्या – 49

क्षेत्रफल – 31.76 हे.

- tuin ea eRL; ikydka dk forfjr fd;k x;k eRL; cht संख्या – 167.05 लाख
- rkykcka ea ik; h tkus okyh eNfy; ka dk fooj.k
 - 1. भारतीय मेजर कार्प कतला, रोहू, नैन
 - 2. एक्जोटिक कार्प सिल्वर कार्प, ग्रास कार्प, कामन कार्प

estj dki Zg\$pjh dk fuekZk

मत्स्य पालकों को सुगमता से मस्य बीज उपलब्ध करवाने हेतु विकास खण्ड हसेरन में श्री राधेश्याम पुत्र श्री नाथूराम बाथम निवासी ग्राम हसेरन का नाम चयनित किया गया है।

• eksckby fQ'k ikyji; kstuk

जनपद में एक मोबाइल फिश पार्लर (सचल वाहन द्वारा मत्स्य व्यंजनों की बिक्री हेतु) योजना संचालित है। जिसकी परियोजना श्री मोमीन पुत्र श्री रशीद निवासी ग्राम व पोस्ट उमर्दा, कन्नौज को उपलब्ध कराया गया है।

ty lykfor Hknie ij rkykc fuekZk

ऐसी भूमि जिस पर वर्ष में 8–9 माह पानी रहता है जल प्लावित श्रेणी में आती है वित्तीय वर्ष 2014–15 में 3.00 हेक्टेयर जल प्लावित भूमि पर तालाब बनवाये जाते हैं।

● eNqvk vkokl

लोहिया आवास की भाँति जनपद में गरीब मछुआ समुदाय के व्यक्तियों की मछुआ आवास हेतु ग्राम जलेसर वि.ख. गुगरापुर में 10 आवासों का चयन किया गया है।

• eNavk nåkavuk chek

जनपद में सक्रिय मत्स्य पालकों जिनकी उम्र 18 वर्ष से 70 वर्ष के मध्य हों का मछुआ दुर्घटना बीमा योजनान्तर्गत आच्छादन किया जाता है।

i'kqikyu

xkstkrh; ¼ns kh½

| नगरीय गाय की संख्या | : | 3803 | | | |
|----------------------------------|---|--------|--|--|--|
| ग्रामीण गाय की संख्या | : | 114947 | | | |
| योग | : | 118750 | | | |
| xkstkrh; Økl c h M | | | | | |
| नगरीय गाय की संख्या | : | 347 | | | |
| ग्रामीण गाय की संख्या | : | 9433 | | | |
| योग | : | 9840 | | | |

Hka Vefgl tkrh; ½

कन्नौज जनपद में कुल 301071 महिस जातीय भैसें हैं जिनमें 291619 ग्रामीण क्षेत्रों में पायी जाती है व नगरीय क्षेत्र में 9452 भैंसे हैं।

Hk\$VI+

कन्नौज जनपद में कुल 15108 देशी भेड़े है। जिनमें से 14674 ग्रामीण व 434 नगरीय हैं।

कन्नौज जनपद में कुल 157 क्रास ब्रीड हैं। जिनमें से 152 ग्रामीण व 5 नगरीय हैं।

cdj o cdjh

कुल 32094 बकरा व बकरी कन्नौज जनपद में है जिनमें से 320636 ग्रामीण है तथा 580 शहरीय हैं।

?kkMso VV¥q

248 घोड़े व टट्ट्र ग्रामीणीय है तथा 67 शहरीय है। जिनकी कुल संख्या 315 हैं।

Ιψj

कन्नौज जनपद में कुल 17025 सुअरें हैं जिनमें से 16446 ग्रामीण है तथा 579 शहरीय हैं।

eqkh2 ikyu

नगरीय मुर्गे, मुर्गियां तथा चूजों की संख्या 2381 तथा ग्रामीण क्षेत्र में पायी जाने वाली मुर्गियों की संख्या 73454 है। कन्नौज जनपद में कुल मिलने वाली मुर्गी, मुर्गे एवं चूजों की संख्या 75835 हैं।

vl; d**≬**d≬

कन्मौज जनपद में मिलने वाली ग्रामीण क्षेत्र में कुल अन्य कुक्कुट 65756 है तथा नगरीय क्षेत्र में 14708 है। कुल अन्य कुक्कुटों की संख्या 80464 है।

0; ki kj rFkk mRi knu

कन्नौज जनपद में विभिन्न प्रकार के व्यापार होते है। जिनमें से मुख्य व्यापार खेती (मुख्यतः आलू और मक्का), सब्जियों का उत्पादन व फूलों का उत्पादन होता है। कन्नौज जनपद ''इत्र व परफ्यूम'' के लिए दुनिया भर में प्रसिद्ध है।

m | ksc

कन्नौज जनपद में कुटिर उद्योग, लघु उद्योग इकाईयाँ जैसे रासायनिक, विधायन, हथकरघा, रेशम, नारियल की जटा व हस्थशिल्प उद्योग लोगों की जीविका का मुख्य श्रोत है।

कन्नौज जनपद में 681 ग्रामीण एवं लघु उद्योग है। 102 पंजीकृत कारखाने हैं।

xviii

xjhch js[kk ds uhps thou ; kiu djus okys (BPL)

परिवारों की संख्या – 75,000

8- fpfdRlk, oatu LokLF;

जनपद में चिकित्सा और स्वास्थ्य की स्थिति बेहतर है क्योंकि कन्नौज में ऐलोपैथिक, आयुर्वेदिक, यूनानी व होम्योपैथिक चिकित्सालय व औषधालयों की अच्छी स्थिति है। जनपद में लगभग 74 एलौपैथिक चिकित्सालय, 11 सामुदायिक स्वास्थ्य केन्द्र, 36 प्राथमिक स्वास्थ्य केन्द्र, 18 आयुर्वेदिक चिकित्सालय, 3 यूनानी चिकित्सालय, 12 होम्योपैथिक, 14 परिवार एवं मातृ शिशु कल्याण केन्द्र तथा 180 परिवार एवं मातृ शिशु कल्याण उपकेन्द्र है।

जनपद कन्नौज में पारम्परिक चिकित्सीय इलाज भी ग्रामीणों द्वारा किया जाता है। जैसे सर्दी और खांसी के लिए तुलसी अदरक और जरांकुश, चोट के लिए हल्दी, पेट दर्द के लिए हींग, मधुमेह के लिए जामुन तथा मेथी, लहसुन, रूधिर परिसंचरण के लिए, नीबू एवं बेल और पपीता पाचंन तंत्र के लिए, अल्सी कब्ज के लिए, घृतकुमारी त्वचा सम्बन्धी रोग के लिए, सतावर कामोत्तजक के लिए, प्याज जोड़ों के दर्द के लिए, नीम पायरिया के लिए। यहाँ पर अधिकांश लोग सामान्य बीमारियों के लिए जिला चिकित्सालय जाते है और जटिल एवं गम्भीर बीामरियों के लिए राज्य के राजधानी लखनऊ में स्वास्थ्य सेवायें लेते है।

9- bilku ciki izdkji, oa i kor

जनपद कन्नौज का मुख्य ईधन स्रोत रसोई गैस, ईधन की लकड़ी व गोबर के उपले है। कन्नौज में भारत गैस व इण्डेन गैस के गोदाम शहर आपूर्ति को पूरा करते है।

10- n**s**ud Hkkstu

कन्नौज जनपद में शाकाहारी तथा माँसाहारी दोनों प्रकार के भोजन किये जाते है। जिनमें मुख्यतः खाद्य गेहूँ और चावल, दलहन में अरहर, मसूर, मूंग, चना, लोबिया, मटर एवं उड़द का सेवन करते है।

सब्जियों में कद्दू, पालक, भिंडी, मटर, टमाटर, आलू, फूलगोभी, बन्दगोभी, मूली, गाजर, मिर्च, धनिया, शलजम, प्याज, करेला, बैंगन, लौकी, तरोई, कुन्दरू, बन्डा तथा तिलहन में सरसों, सूरजमुखी, मूंगफली, तिल इत्यादि का सेवन होता है।

फलों में पपीता, आम, अगूंर, अमरूद, जामुन, बेर, अनार, केला तथा शहतूत का सेवन कन्नौज जनपद में किया जाता है।

मांसाहारी भोजन में मछली, अंडा, माँस इत्यादि का सेवन करते है। जिनमें से मुख्य मछलियाँ, लेबियों, कतला, नैनी, ग्रास कटर, चन्ना, मांगुर आदि है।

11- ikyrwtkuoj %

कन्नौज जिले में मुख्यतः पालतू जानवर, गाय, बकरी, भैंस, मुर्गा, कबूतर, कुत्ते, भेड़, सुअर तथा खरगोश पाले जाते है।

- 12. कन्नौज जनपद में ज्यादातर आवास पक्के हैं। गांव में भी ज्यादातर मकान पक्के तथा यहाँ के लोगों का रहन–सहन अच्छा है। ग्रामों में कुछ लोगों के मकान कच्चे भी है।
- 13. कन्नौज जनपद के ज्यादातर लोग (ग्रामीण) जैवविविधता व उसको होने वाले खतरे के बारे में जानते है कन्नौज में लाख–बहोसी पक्षी विहार होने के कारण यहाँ के स्थानीय लोग प्रवासी व स्थानीय पक्षियों से भलि–भाँति परिचित है। इनमें से कुछ लोग कन्नौज जनपद की घटती पादप व जन्तु जैवविविधता तथा जैविक धन के बारे में चिन्तित है।

futho ikdfrd lak/ku

Hknie I a k/ku

भूमि और मिट्टी जैविक विविधता बनाये रखने के लिए महत्वपूर्ण संसाधन है। कन्नौज जनपद की मिट्टी अधिकाशतः दोमट व चिकनी है। मिट्टी एक अक्रिय पदार्थ नहीं है यह बहुत सुक्ष्म जीवों जैसे बैक्टीरिया, कवक, सुक्ष्म कीट इत्यादि को आश्रय प्रदान करती है। भूमि और मिट्टी के सम्बन्धों को समझने के लिए वहाँ की भौगोलिक– कृषि, ग्रामीण, शहरी व पहाड़ी क्षेत्रों का ज्ञान जरूरी है।

1. 'kgjh {ks= ds fy,

• ekuo fodkl ds fy,

मानव निवास हेतु उपयोग में लाया गया कुल भु–भाग लगभग 2093 वर्ग कि.मी. है। जिनमें 207432 आवासीय मकानों में 280928 परिवार रहते है।

 मानव निवास हेतु वरियता प्राप्त भूमि 2022 वर्ग कि.मी. लगभग ग्रामीण क्षेत्र के अन्तर्गत आती है। और 70 वर्ग कि.मी. लगभग शहरी क्षेत्र के अन्तर्गत आती है।

2- IM-d

- कन्नौज जनपद में राष्ट्रीय राजमार्ग की लम्बाई 100 कि.मी., प्रादेशिक राजमार्ग 13 कि.मी. तथा मुख्य जिला सड़के 80 कि.मी. है तथा अन्य जिला तथा ग्रामीण सड़कों की लम्बाई 164 कि.मी. है।
- जिला पंचायत के अन्तर्गत आने वाली पक्की सड़कों की लम्बाई 113 कि.मी. व नगर निगम और नगर परिषद के अन्तर्गत पक्की सड़कों की कुल लम्बाई 312 कि.मी. है।
- 3- I **i** Fkkxr ∨kj okf.kfT; d {ks=
- लघु उद्योग इकाईयाँ जैसे इंजिनियरिंग, रासायनिक विद्यायन, हथकरघा, रेशम, नारियल का जल, हस्तशिल्प, बीज विक्रय केन्द्र, कीटनाशक विक्रय केन्द्र, खाद्यी ग्राम उद्योग व ईट उद्योग आदि कन्नौज जनपद की जीविका उपार्जन का मुख्य स्रोत है।
- Cktkj & बाजार अच्छी तरह से विकसित व सुविधा सम्पन्न है। कन्नौज जनपद मुख्य रूप से ''इत्र बाजार व आलू के व्यवसाय'' का मुख्य केन्द्र है। कन्नौज जनपद में इत्र मुख्यतः बॉडी स्प्रे, लोर परयूम इत्र, अगरबत्ती, धूपबत्ती व अन्य प्रकार के परयूम बनते है। इत्र मुख्यतः फूलों व रसायनिक पदार्थों से बनाये जाते है। कन्नौज जनपद मुख्यतः आलू की खेती के लिए प्रसिद्ध है। वहाँ पर कई प्रकार के आलू की खेती होती है जिनमें से मुख्य आलू की फसले चिपसोना, जी.एम. आदि प्रजातियाँ है।
- dk; k2y; o l & Fkkxr l & Fkk; a

कन्नौज जनपद में क्रय–विक्रय सहकारी समितियाँ 15 संयुक्त कृषि सम्मितियाँ 310 प्रारम्भिक दुग्ध उत्पादन समितियाँ, 1 बुनकरों की प्रारम्भिक औद्योगिक सहकारी समितियाँ कार्यरत है।

कन्नौज जनपद में 1709 प्राथमिक विद्यालय, 620 उच्च प्राथमिक विद्यालय, 256 माध्यमिक विद्यालय, 35 महाविद्यालय, 9 स्नात्कोत्तर विद्यालय तथा 1 औद्योगिक प्रशिक्षण संस्थान एफ.एफ.डी.सी. स्थित है।

- जनपद में 74 एलोपैथिक चिकित्सालय, 18 आयुर्वेदिक औषधालय, 3 युनानी चिकित्सालय तथा 12 होम्योपैथिक चिकित्सालय, 14 परिवार एवं मातृ शिशु कल्याण केन्द्र कन्नौज वासियों की सेवा के लिए उपलब्ध है।
- कार्यालय जैसे कृषि विज्ञान केन्द्र, वन विभाग कार्यालय, विकास भवन, बेसिक शिक्षा अधिकारी कार्यालय, मुख्य चिकित्सा अधिकारी कार्यालय, योजना भवन, राष्ट्रीय सूचना केन्द्र इत्यादि सरकारी कार्यालय शहर की व्यवस्था को सूचारू रूप से चलाते है।
- भारतीय स्टेट बैंक, इलाहाबाद बैंक, बैंक ऑफ बड़ौदा, पंजाब नेशनल बैंक, युनियन बैंक, प्रथमा ग्रामीण बैंक इत्यादि बैंकों की 128 शाखायें कन्नौज जनपद में स्थित है।
- कन्नौज जनपद में 688 विकास खण्ड मुख्यालय 688 ग्राम विकास अधिकारी केन्द्र, 688 कृषि सेवा केन्द्र, ग्रामीण बाजार व हाट, कृषि मण्डी शीत भण्डार, बीज विक्रय केन्द्र, उर्वरक विक्रय केन्द्र उपलब्ध है।

4- ikd) cxhpk vkj /kkfeld LFky

पार्क तथा उद्यान क्षेत्र परिभाषित नहीं है। जिसमें धार्मिक इमारतें जैसे राज जय चन्द्र का किला, माँ काली देवी मन्दिर, भवानी देवी मन्दिर, श्री मनकामेश्वर नाथ मन्दिर तथा भारतीय पुरातत्व संग्रालय इत्यादि शहर की मुख्य धरोहर है।

5- ∨kniłktie

कन्नौज जनपद में लाख बहोसी पक्षी बिहार यहाँ की जैव विविधता की सम्पन्नता व जैवविविधता का प्रतीक है। यहाँ की लाख व बहोसी झीले प्रवासी व स्थानीय पशु–पक्षियों के आश्रय का प्रमुख केन्द्र है।

कुल 649 तालाब (614.25 हेक्टेयर) कन्नौज जनपद में ग्राम समाज के अन्तर्गत आते है। 49 तालाब पट्टे पर दिये गये है। इनमें से ज्यादातर गर्मी के मौसम में सूख जाते है। अथवा पानी सूखने के कारण इनका क्षेत्रफल कम हो जाता है। इसके अलावा कुछ अस्थायी तालाब मानसून के दौरान बनते है।

6- ufn;k∦ ugj ∨kÿ ladjh [kkMh

कन्नौज की जीवन चर्या की शुरूआत गंगा नदी की प्रवाह व अविरल धारा के साथ शुरू होती है। गंगा नदी कन्नौज जनपद के अधिकांशत क्षेत्रों से होकर गुजरती है। जनपद की नहरों की कुल लम्बाई 387 किमी है।

unh o ugjka ds i kuh dk or eku mi ; kx % सिचांई, कपड़ा धुलाई, मछली—पालन व परिवहन के रूप में भी किया जाता है।

x§ ou xkeh.k {ks= ds fy,

- 1- d'f"k Hknje
- uhph]e/;e vkg mPp Hknie ena tek ikuh dh jkf'k

मानसून के दौरान पर्याप्त पानी अगले कुछ महीनों के लिए टपकन और सिंचाई के लिए नीची सतह में जमा रहता है हालांकि मध्यम और उच्च भूमि पानी की महत्वपूर्ण राशि जमा नहीं कर पा रहे है।

• , sh Hknie dk , dy Qly] nks Qlyka; k vf/kd ds fy, bLrseky

इस तरह की भूमि दो फसलों के लिए इस्तेमाल की जाती है। एक मौसम में दो या तीन फसलों की खेती की जाती है। इस प्रकार की भूमि का क्षेत्रफल 80 हजार हे. है।

oržeku es fl pkbž dk i pfyr rjhdk

नलकूप, टयूबवेल, नहरें व नदियाँ इत्यादि।

• [korh ds fy, bLraeky gkous okyh ized[k QI ya

आलू, मुख्य फसल के रूप में, गन्ना, उड़द, सरसों, ज्वार, बाजरा नकदी फसल के रूप में। कुछ किसान टमाटर, प्याज, लहसुन, आलू, पत्तागोभी, मटर, कद्दू, बैंगन, गुलाब व बेला बागवानी फसलें भी उगाते है।

2- vknž Hktie

 जनपद (विवरण जल संसाधन के तहत दिया जाता है।) में झीलों का नाम, स्थान, क्षेत्र और वर्तमान उपयोग

कन्नौज में लगभग 650 प्रभावी आर्द्रभूमि क्षेत्र, तालाब व झीलें उपलब्ध हैं लाख व बहोसी झील यहाँ की आर्द्रभूमि क्षेत्रों का प्रतिनिधित्व करती है। इनके आस—पास बहुत से आर्द्रभूमि क्षेत्र हैं हालांकि अस्थायी व स्थायी तालाब इस उद्देश्य की पूर्ति करते है। इस तरह के तालाबों को जनपदवासियों द्वारा सिर्फ पशुओं को नहलाने, सिंचाई के लिए, मछली, चावल, सिंघाड़ा की खेती तथा जल रिचार्जिंग के लिए इस्तेमाल किया जा रहा है।

3- ekuo fuoki grq Hktie

● ekuo fuoki gsrqiz,ksx fcl;k x;k {ks=

लगभग 2093 वर्ग कि.मी.

• fuoki gsrqojh;rk itkir Hkofe

निवास हेतु भूमि, जमीन के प्रकार के बजाय जिलें में व शहर से निकटता और सम्बद्धता मानव बस्ती के लिए निर्णायक कारक है अधिकांश मानव बस्तियां जनपद की चारों दिशाओं में बसी है।

4- ijrh Hkofe

• ijrh {k⊱ ∨kÿ LFkku

सड़क के किनारे, स्कूल व कालेजों के आसपास, ईट उद्योग के पास, सरकारी कार्यालयों में आस–पास, रेलवे ट्रैक के किनारे और मन्दिर के आस–पास परती क्षेत्र उपलब्ध है। कुछ क्षेत्र भूमि के क्षारीय भी है।

• ijrh Hknje en ouLifr

लैंटाना, दूब घास, मदार, बेर, बबूल, कांस, शक्की, भांग, यूकेलिप्टिस व नागफनी आदि।

ijrh {ks= ea miyC/k dkbZ mYys[kuh; thou

परती क्षेत्र में कोई विशेष जीव जन्तु नहीं पाया गया। हालांकि कुछ डम्पिंग साइटस पर कौआ, चील, गिद्ध, कुत्ता व कुछ प्रकार की चीटियाँ भी पायी गई।

• ijrh Hkolie dk /kkfeld iz, kstuka ds fy, iz, ksc

परती भूमि क्षेत्रों का कुछ हिस्सा धार्मिक मेलों के लिए प्रयोग किया जाता है। कुछ क्षेत्रों में इस भूमि का प्रयोग शादी–विवाह, सांस्कृतिक आयोजनों व अन्य समाज सेवी कार्यक्रम के लिए प्रयुक्त होता है।

- LFkk; h ijrh g\$; k or ku ijrh & स्थायी परती
- 5- ufn;k] ugj@ladjh [kkMh
- unh@ugj dh mRifRr

कन्नौज जनपद के पास गंगा नदी बहती है और सभी नहरों की उत्पत्ति इसी से होती है।

• unh@ugj dh yEckbZ

गंगा नदी का लगभग हिस्सा कन्नौज जनपद से होकर गुजरता है। कन्नौज जनपद की नहरों की कुल लम्बाई 387 कि.मी. है।

6- unh@ugj ds i kuh dk or zeku es mi; ksk

खेतों की सिंचाई, मछली पालन व औद्योगिक निर्गत जल से नदी सी.ओ.डी. व बी.ओ.डी. स्तर काफी हद तक भवयवास्थित हो गयी है। कन्नौज शहर में मलजल और औद्योगिक अपशिष्ट का प्रवाह गंगा नदी के प्रदूषण का प्रमुख कारण हैं औद्योगिक अपशिष्ट जल और अनुपचारिक मलजल का निर्वहन गंगा नदी में होने के कारण जल की गुणवत्ता निर्धारित मानक के अनुरूप नहीं है।

7- I Md

• iDdh o dPPkh I Md dh yEckbZ

जनपद में कोलतार निर्मित पक्की सड़क व ईट इंटरलॉकिंग वाली कच्ची सड़कों की लम्बाई लगभग 2471 किमी है। जनपद की ज्यादातर सड़कें पक्की है।

8- txy@>kfM;kj

 LFku & जनपद व आस—पास के विकासखण्डों में झाड़ियाँ, सड़क के किनारे, रेलवे ट्रैक के किनारे व कुछ बबूल की जगंलनुमा झाड़ियाँ क्षारीय भूमि (ऊसर) में अच्छी तरह विकसित है। कन्नौज जनपद का कुछ क्षेत्रफल में जंगल भी पाया जाता है हालांकि जंगल ज्यादा विकसित नहीं है।

9- I ØM xko] rkykc

- LFku & जनपद कन्मौज में खण्डवार बहुत से पवित्र ग्रोव व तालाब है यह सभी पवित्र ग्रोव मन्दिर, घाट या उद्यान आदि जगहों पर स्थित है।
- eq[; fo'kškrk; a

इन सभी स्थानों पर बरगद, नीम, पीपल, तुलसी और केला आदि प्रमुख पवित्र पौधे है। इन स्थानों पर मुख्य रूप से पीपल, बरगद, तुलसी व केले की पूजा व अर्चना ग्रामीण महिलाओं द्वारा की जाती है।

ou {k⊱

सामान्यतः लगभग 13,332 हेक्टेटर क्षेत्र जो कि 61 प्रतिशत कुल भौगोलिक क्षेत्र को क्रास करता है। बबूल, टीक, महुआ, संभल, आम, साल, नीम, व जामुन इत्यादि वृक्ष वन क्षेत्र में पाये जाते है।

ty l Łkk/ku

- 1. Irgh ty lak/ku
 - unh] ugj] oVyM & स्थान / स्थान गंगा नदी व लाख बहोसी झीलें व वेटलैण्ड।
 - {ks= & लाख व बहोसी झील, गंगा नदी
 - mi; kx & पीने (पाक कला / सिचांई : सिंचाई, कपड़ा धोने, मछली पकड़ने और सिघाड़ा उत्पाद के लिए।)
 - vkn#kfe dk mRi knu & मछलियाँ / फूल (कमल) / जलीय पौधे (सिंघाड़ा) / कमल ककड़ी इत्यादि।
 - **vknäktie es i {kh &** किंग फिशर, बगुला, अंधा बगुला, सलेही, पनकव्वा, पनडुब्बी आदि।
 - आर्द्रभूमि बाढ़ के दौरान जल संग्रहण / जल रिचार्जिंग के रूप में काम : हाँ।
 - मनोरंजन हेतु हैंडपम्प इस्तेमाल : नहीं

2- Hkwty Ialk/ku ¼igkMh ifjfLFkfrdh ra⊨ dks NkMdj½

- पीने के पानी हेतु उपलब्ध हैण्डपम्प की संख्या 76,000
- पीने के पानी हेतु उपलब्ध हैण्डपम्प की गहराई 30–40 फीट
- सरकारी ट्यूबवेल (गहरे नलकूप) की संख्या 245
- निजी ट्यूबवेल (उथले नलकूप) की संख्या 34063

People Biodiversity Register (PBR) Part-I

(B) I kekl; fooj.k (General Details)

| जिला | : कन्नौज |
|--|---|
| राज्य | ः उत्तर प्रदेश |
| देश | ः भारत |
| प्रशासनिक शाखा | ः कानपुर |
| जनपद में कुल विकास खण्ड | |
| जनपद का भौगोलिक क्षेत्र | ं 3129.2 वर्ग कि.मी. |
| जनपद के तहत जनसंख्या | ं कुल — 13,75,775 |
| | पुरूष — 73,4245 |
| | ू महिला—6,41,530 |
| पर्यावास और स्थलाकृति | : अक्षांश 27 ⁰ 07 ⁰ उत्तर और 79 ⁰ 92 ⁰ देशान्तर पूर्व, समुद्र स्तर से 139 मीटर ऊपर |
| जलवायाु (वर्षा, तापमान और अन्य मौसम के मिजाज) | ं वर्षा लगभग 80 सेमी., तापमान 4 $^{\circ}\mathrm{C}$ से 45 $^{\circ}\mathrm{C}$ |
| भूमि उपयोग | ः कृषि योग्य भूमि — 576000 हेक्टेयर |
| | परती भूमि – 28203 हेक्टेयर |
| | वन क्षेत्र – 13,332 हेक्टेयर |
| | अन्य बंजर – 5164 हेक्टेयर |
| | तालाब, नदी, नाला — 481 कि.मी. |
| | आबादी — 2093 वर्ग कि.मी. |
| | रास्ता – 774 कि.मी. |
| | चकमार्ग — 204 कि.मी. |
| | शमशान, कब्रिस्तान – 04 हेक्टेयर |
| | रेलवे ट्रैक – 43 कि.मी. |
| | रोड – 1102 कि.मी. |
| | ऊसर भूमि – 5164 हेक्टेयर |
| | कुल अकृषिक – 28203 हेक्टेयर |
| | कुल कृषिक क्षेत्र – 542633 हेक्टेयर |
| | ग्राम का कुल योग – 752 हेक्टेयर |
| PBR तैयारी की तिथि, माह और वर्ष | |
| BMC का गठन | : 18 फरवरी 2015 |
| PBR का मान्यकरण | ः संकल्प संख्या 156 (जिला पंचायत कार्यालय) |
| | दिनांक 16.06.2015 |

| Details of Biodiversity Management Committee | (BMC) of the Kannauj District |
|---|-------------------------------|
|---|-------------------------------|

| S.No. | | | Photo |
|-------|------------------------|----------------------------------|-------------------|
| 1. | Name of the Chairman | Jherh I µhrk nkgjs | |
| | Age : | 45 | |
| | Gender: | महिला | |
| | Address: | मानीमऊ, उमर्दा, कन्नौज | |
| | Area of specialization | जिला पंचायत अध्यक्ष | |
| 2. | Name of the Member | Jh jke ujšk ; kno | |
| | Age : | 40 | |
| | Gender: | पुरूष | |
| | Address: | उमर्दा, कन्नौज | |
| | Area of specialization | ग्राम प्रधान | |
| 3. | Name of the Member | Jh rkrk jke 'kekZ | - 10 M |
| | Age : | 35 | The second second |
| | Gender: | पुरूष | |
| | Address: | तालग्राम – कुशल का पूरवा, कन्नौज | the st |
| | Area of specialization | ग्राम प्रधान | 2 |
| 4. | Name of the Member | eks fj;ktgy [kku | |
| | Age : | 42 | 1 |
| | Gender: | पुरूष | E |
| | Address: | छिबरामऊ, कन्नौज | A A |
| | Area of specialization | ग्राम प्रधान | |
| 5. | Name of the Member | Jherh xaxk non | |
| | Age : | 68 | CD . |
| | Gender: | महिला | |
| | Address: | सौरिख, कन्नौज | |
| | Area of specialization | गृहणी | |
| 6. | Name of the Member | Jherh vlui wkl noh | and |
| | Age : | 32 | |
| | Gender: | महिला | |
| | Address: | रूपपुर, सौरिख, कन्नौज | |
| | Area of Specialization | किसान | |
| 7. | Name of the Member | Jherh fu'kk | |
| | Age : | 34 | |
| | Gender: | महिला | A CONTRACTOR |
| | Address: | रूपपुर, सौरिख, कन्नौज | No Star |
| | Area of Specialization | गृहणी | |
| | | | |

BMC का गठन : 18 फरवरी 2015

List of Vaids, Hakims and Traditional health care (Human and Livestock) Practitioners residing and/or using Biological resources occuring within the jurisdiction of the Village

| S.No. | | | |
|-------|---|--------------------------|-----------|
| | Name : | udjr [kku | 0 |
| | Age: | 60 | |
| | Gender: | पुरूष | Ann |
| | Address | कपूरपुर, छिबरामऊ, कन्नौज | urtinity. |
| | Area of specialization: | हकीम | E |
| | Location from wihch the person access Biological material : | गाँव | |
| | Perception of the Practitioner on the resources status : | _ | |

| S.No. | | | |
|-------|-------------------------|-----------------------------------|---|
| 1. | Name : | Jh ∨fouk'k nkgjs | |
| | Age: | 35 | 1 And |
| | Gender | पुरूष | |
| | Address: | राजपुर, गुगरापुर, कन्नौज | 1 million |
| | Area of specilization : | शिक्षक | |
| 2. | Name : | Jh Igosk clękj | |
| | Age: | 39 | and the second second |
| | Gender | पुरूष | |
| | Address: | सौरिख, रूपपुर, कन्नौज | |
| | Area of specilization : | कृषक | |
| 3. | Name : | Jh,l-ih-flag | |
| | Age: | 55 | a ary |
| | Gender | पुरूष | AND AND A |
| | Address: | हसेरन, कन्नौज | |
| | Area of specilization : | बी.डी.ओ. | |
| 4. | Name : | Jh deydkr dfV; kj | 1. Same |
| | Age: | 40 | 1 |
| | Gender | पुरूष | and a star |
| | Address: | जलालाबाद, कन्नौज | |
| | Area of specilization : | कृषक | |
| 5. | Name : | tehy vgen | |
| | Age: | 32 | 2 |
| | Gender | पुरूष | |
| | Address: | जलालाबाद, कन्नौज | A L |
| | Area of specilization : | व्यापारी | |
| 6. | Name : | Jhiadt dækj | A Carl |
| | Age: | 62 | |
| | Gender | पुरूष | |
| | Address: | सौरिख, कायमपुर, कन्नौज | |
| | Area of specilization : | शिक्षक | |
| 7. | Name : | Jht; flag | |
| | Age: | 42 | and the second se |
| | Gender | पुरूष | |
| | Address: | दुन्धौराखुर्द, मनीमऊ, कन्नौज | 15000 |
| | Area of specilization : | प्रधान | and the state |
| 8. | Name : | Jherh ize yrk | |
| | Age: | 35 | |
| | Gender | महिला | |
| | Address: | दुन्धौराखुर्द, मनीमऊ, कन्नौज - | |
| | Area of specilization : | गृहणी | 田 |

List of individuals perceived by the villagers to possess Traditional knowledge (TK) related to Biodiversity in Agriculture, Fishries, and Forestry

Details of Schools, Colleges, Departments, Universities, Government Institutions, Non-Government Organization and Individuals involved in Preparation of PBR

| S.No. | | | |
|-------|------------------------------------|--|--|
| 1. | Contact Person : Address: | johlnz fl g ; kno एडीएसटी विकास भवन, कन्नौज | |
| 2. | Contact Person : Address: | l ¢hr dç kj श्रीकृष्ण बीज एवं कीटनाशक, कन्नौज | |
| 3. | Contact Person : Address: | e ψuk ; kno जिला बागवानी अधिकारी विकास भवन, कन्नौज् | |
| 4. | Contact Person : Address: | fou; dekj 'køyk वरिष्ठ क्लंक विकास भवन, कन्नौज | |
| 5. | Contact Organization : Address: | l at ; dekj इत्र व्यापारी मोहल्ला होली, कन्नौज | |
| 6. | Contact Organization : Address: | ˈkfDr fou; ˈkþyk प्रथम निदेशक फ्रेमनेंस एण्ड फ्लोवर, डेवलप्मेंट, कन्नौज | |
| 7. | Contact Person : Address: | /khj ¥nz टो़ब्दkj >k गौतमबुद्ध, पी.जी. कॉलेज शैय्यापर, मझिला, कन्नौज | |

| 8. | Contact Person : | Mk- ∨k'kh"k depkj] असिस्टेंट प्रोफेसर | and the second se |
|-----|------------------------------|--|---|
| | Address: | जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 9. | Contact Person : Address: | Mk- l ksuch dd kokgk जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 10. | Contact Person : Address: | Jh vkns'k dçekj] 'kks/kkFkbZ जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 11. | Contact Person : Address: | l µh f'kokach feJk] 'kks/kkFkh2 जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 12. | Contact Person : Address: | Jhn;k 'kadj 'kek] VDI kukTeLV जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 13. | Contact Person : Address: | Jh vk'kh"k dqekj xqrk] 'kkskkFkh2 वनस्पति विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 14. | Contact Person : Address: | Jh vidr fl lgk] QhYM vfl LVi/ जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |

| 15. | Contact Person : Address: | l µh vkclkákk fl ligk] QhYM vfl LV¥ जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
|-----|------------------------------|---|---|
| 16. | Contact Person : Address: | l ψh : ch ; kno] QhYM vfl LV¥ जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 17. | Contact Person : Address: | l µh olhuk /kheku] QhYM vfl LV¥/ जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 18. | Contact Person : Address: | Jh veu fl g] QhYM vfl LV¥ जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 19. | Contact Person : Address: | l ψh; rh feJk] QhYM vfl LV¥ जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 20. | Contact Person : Address: | l µh T; krh ; kno] QhYM vfl LVa/ जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
| 21. | Contact Person : Address: | l µh jrh xqrk] QhYM vfl LV¥ जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | G |

| 22. | Contact Person : Address: | dkejku okj l h] MkVk vkWj¥j जैवविविधता एवं वन्यजीव संरक्षण प्रयोगशाला, जन्तु विज्ञान विभाग, लखनऊ विश्वविद्यालय, लखनऊ | |
|-----|------------------------------|--|------------------------|
| 23. | Contact Person : Address: | Jh uj\$nz dækj] QhYM vfl LV\$/ भजुरिया, कन्नौज | |
| 24. | Contact Person : Address: | Jh ohjbnz dqekj] QhYM vfl LVb/ बहादुरपुर, कन्नौज | |
| 25. | Contact Person : Address: | Jh vujkx dækj] QhYM vfl LV¥ रामपुर, मझिला, कन्नौज | |
| 26. | Contact Person : Address: | Jh ekgj fl aj QhYM vfl LVa/ बहादुरपुर, मझिला, कन्नौज | |
| 27. | Contact Person : Address: | Jh feyu d ç kj] OhYM vfl LV¥ भजुरिया, इन्दरगढ़, कन्नौज | |
| 28. | Contact Person : Address: | Mk-jtuh 'kpyk वनस्पति विज्ञान, विभाग, लखनऊ विश्वविद्यालय, लखनऊ | Photo not available |
| 29. | Contact Person : Address: | Jh , e- I h- V.Mu 63 पुरूष के. सी. इण्टर कॉलेज, कन्नौज एमएससी वनस्पति विज्ञान, प्रिंसिपल | Photo not available |

Annexure-5

कब्नौज में जनजीवन





































People Biodiversity Register PBR Formats Part-II



Floral Biodiversity











FORMAT- I Agro biodiversity (A) Vegetables



Vegetables Lady Finger (Abelmoschus esculentus) भिन्डी



Lady Finger (Abelmoschus esculentus) भिन्डी

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Malvaceae |
| Genus &Species (if kı | nown) | Abelmoschus esculentus |
| Local Name / Commo | n Name | Bhindi (भिन्डी) |
| Habit & Habitat | | Cultivated throughout the tropical & warmed temperate regions. |
| Description | | The species is an annual & perennial, growing to 2 m tall. The leaves are 10-20 cm long & broad. Flowers are white in colour & are 4-8 cm in diameter. The fruit is a capsule up to 18 cm long, containing numerous seeds. |
| Mythological Signific | ance | |
| I.U.C.N. Status | | |
| Source of seeds | | Government & shops. |
| Season when grown | | Summer season |
| Local Status: | Past | In abundance |
| | Present | In abundance |
| Uses | | It is used as food, as pickle, greenish yellow edible lady finger oil spreads from its seeds which ishigh in unsaturated fats. |
| Nutritional Value | | Carbohydrate, protein, Vit- C & A, Ca, Fe, Mg. |
| Associated Traditional Knowledge | | Weeds should be removed time to time. |
| Management Mechanism | | By insecticide & pesticides |
| Other Details | | Causes constipation |
| Community/Knowled | lge Holder | Mr. Avinash Dohrey |
| | | |

Lehsun (Allium sativum) लहसुन





Lehsun (Allium sativum) लहसुन

| Kingdom | | Plantae |
|----------------------------------|-----------|---|
| Unranked | | Angiosperm |
| Family | | Alliaceae |
| Genus and Species (If k | nown) | Allium sativum |
| Local Name / Common | Name | Garlic/Lehsun(लहसुन) |
| Habit & Habitat | | It is found in well- drained soil. |
| Description | | It is a bulbous plant. It grows upto height of 1.2 m. Bulbels are covered with a common tunic of white or purple colour. Leaves are broadly linear. Flowers are white . |
| Mythological Significance | | Hindus generally avoid using garlic in the preparing of foods for festive purposes. Jains avoid using garlic on daily basis. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | It is found throughout the year |
| Local Status : | Past – | In abundance |
| | Present – | In abundance |
| Uses | | It has various medicinal uses & important part of Indian cuisine. |
| Nutritional Value | | Various vitamins (B1, B2, B3, B5 etc.) are found in it. |
| Associated Traditional Knowledge | | Used in eye infection. |
| Management mechanism | | By insecticide &pesticide |
| Other Details | | It is very helpful in fungal & parasitic infection. It lower blood cholesterol & promotes circulatory function. |
| Community/Knowledg | e Holder | Mr. AvinashDohrey |

Gobhi (Brassica oleracea) फूलगोभी



Gobhi (Brassica oleracea) फूलगोभी

| Kingdom | | Plantae |
|----------------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Cruciferae |
| Genus and Species (| If known) | Brassica oleracea |
| Local Name / Comm | on Name | Gobhi (फूल गोभी) |
| Habit & Habitat | | It grow mainly in open fields. |
| Description | | It is the most ancient herbage vegetables. In this plant a short erect stem is produced with an undeveloped inflorescence. The whole inflorescence form a large head of abortive flowers on thick hypertrophied branches. Cultivated all over North India. Its fruit is creamy white in colour. |
| Mythological Signif | icance | |
| I.U.C.N. Status | | |
| Source of seeds | | Market & government retail shops. |
| Season when grown | l | October to March. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | The condensed inflorescence is eaten as vegetable. |
| Nutritional Value | | They contain a sufficient amount of mineral salts & vitamins. |
| Associated Traditional Knowledge | | It is used to make pickles also. |
| Management mechanism | | Pesticides must be sprayed. |
| Other Details | | Other varities of cauliflower is Pusa Deepali, Pusa Snowball, Improved Japanese etc. It is similar to cabbage. |
| Community/Knowl | edge Holder | Mr. Avinash Dohrey |

Palak (Spinacia oleracea) पालक





Palak (Spinacia oleracea) पालक

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Chenopodiaceae |
| Genus and Species (I | f known) | Spinacia oleracea |
| Local Name / Commo | on Name | Palak/Spinach(पालक) |
| Habit & Habitat | | This herb is commonly grown throughout India especially in cool regions. It grow on alluvial & sandy soil. |
| Description | | It is an edible herb. Leaves are edible. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Government & private shops. |
| Season when grown | | Throughout the year |
| Local Status: | Past – | Found in abundance |
| | Present – | Found in abundance |
| Uses | | The leaves are eaten raw or cooked as a vegetable. |
| Nutritional Value | | They are rich in iron (Fe), mineral salts & proteins. |
| Associated Traditional Knowledge | | Nitrogenous fertilizers are used. |
| Management mechanism | | Pesticides must be sprayed |
| Other Details | | |
| Community/Knowle | dge Holder | Mr. Avinash Dohrey |

Bathua (Chenopodium album) बथुवा



Bathua (Chenopodium album) बथुवा

| Kingdom | | Plantae |
|----------------------------------|-----------|---|
| Unranked | | Angiosperm |
| Family | | Chenopodiaceae |
| Genus and Species (If | known) | Chenopodium album |
| Local Name / Common | n Name | Bathua (बथुवा) |
| Habit & Habitat | | It is found in humid regions. |
| Description | | It is an annual shrub. It's height ranges from 2-4 ft. Leaves are arranged alternatively. Leaves are covered with tiny, white, granular scales. Flowers are globular & white to brown in colour. |
| Mythological Significa | ance | |
| I.U.C.N. Status | | |
| Source of seeds | | Government shops |
| Season when grown | | It is found in winter season. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | It has various medicinal uses & an important part of Indian cuisine. |
| Nutritional Value | | It is a rich source of protein & vitamin (A, B1, B2, B3, B5, B6, B8& C) |
| Associated Traditional Knowledge | | Good for stomach ache. |
| Management mechanism | | Pesticides must be sprayed |
| Other Details | | It is often used as a good source of proteins & vitamins. Included as an important part of cuisines by Indians. |
| Community/Knowled | ge Holder | Mr. Avinash Dohrey |

Bandgobhi (Brassica aleracea variety capitala) बंद गोभी



Bandgobhi (Brassica aleracea variety capitala) बंद गोभी

| Kingdom | | Plantae |
|------------------------|-------------|---|
| Unranked | | Angiosperm |
| | | |
| Family | | Cruciferae |
| Genus and Species (If | known) | Brassica aleracea variety capitala |
| Local Name / Common | n Name | Bandgobhi/Cabbage (बंद गोभी) |
| Habit & Habitat | | It grows mostly in open fields. Its grow on alluvial soil. |
| Description | | In this plant the stem is so short. The older leaves surround the younger smaller, more tender leaves & the cabbage resembles a huge bud. |
| Mythological Significa | ance | |
| I.U.C.N. Status | | |
| Source of seeds | | Government & private shops. |
| Season when grown | | Winter season |
| Local Status: | Past – | Found in abundance |
| | Present – | Found in abundance |
| Uses | | The tender leaves & tender shoots are used as vegetable. |
| Nutritional Value | | Cabbage contains 91% water with sugar & starch, considerable protein & valuable salts. |
| Associated Traditiona | l Knowledge | |
| Management mechanism | | Pesticides must be sprayed |
| Other Details | | Its cultivation is very old about 2500 B.C. Fields not filled with water. |
| Community/Knowled | ge Holder | Mr. Avinash Dohrey |

Mooli (Raphanus sativus) मूली





Mooli (Raphanus sativus) मूली

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Cruciferae |
| Genus and Species (I | f known) | Raphanus sativus |
| Local Name / Commo | on Name | Raddish/Mooli (मूली) |
| Habit & Habitat | | It grows on alluvial & sandy soil. They are grown over the world. In India, they are chiefly cultivated in Uttar Pradesh. |
| Description | | They are annual or biennial plants with a fleshy tap root. Edible part is root. It is highly esteemed for their pungent flavor. Leaves are green in colour. Root are white in colour. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | By stores & shops. |
| Season when grown | | October to June |
| Local Status: | Past – | Found in abundance |
| | Present – | Found in abundance |
| Uses | | The roots, young leaves & fruits are used as vegetable. Usually they are eaten raw, but may be cooked like other vegetables. |
| Nutritional Value | | Very low in food energy. |
| Associated Traditional Knowledge | | |
| Management mechanism | | By insecticide & pesticides |
| Other Details | | It should have more water seeds useful in gonorrhoea. |
| Community/Knowle | dge Holder | Mr. Avinash Dohrey |
| | | |

Mircha (Capsicum annum) मिर्चा



Mircha (Capsicum annum) मिर्चा

| Kingdom | | Plantae |
|--------------------------|--------------|--|
| Unranked | | Angiosperm |
| Family | | Solonaceae |
| Genus and Species (I | f known) | Capsicum annum |
| Local Name / Commo | on Name | Chilli / Mircha (मिर्चा) |
| Habit & Habitat | | Homegarden |
| Description | | It is a perrenial plant. It ranges from 2-3.5 ft. Leaves are simple. Flowers are singles to few in numbers. Flowers are of white colour. |
| Mythological Signific | cance | It is often used along with lemon in festive & sacred purposes. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | It is found in throughout the year. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | It has various medicinal uses & important part of Indian cuisine. |
| Nutritional Value | | Vit-C |
| Associated Tradition | al Knowledge | It is used to cure black magic in combination with lemon. |
| Management mechanism | | By insecticide & pesticides |
| Other Details | | It is also used in the making of various sauces. It's use in small amount helps in improving appetite. |
| Community/Knowled | dge Holder | Mr. Avinash Dohrey |

Pudina (Mentha arvensis) पुदीना



Pudina (Mentha arvensis) पुदीना

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Lamiaceae |
| Genus and Species (If known) | Mentha arvensis |
| Local Name / Common Name | Mentha/Pudina (पुदीना) |
| Habit & Habitat | It is found in wet & moist soil. |
| Description | It is a perennial herb. It has erect, square & branched stems. The leaves are arranged in opposite pairs. Leaf colour ranges from dark green & grey- green to purple, blue & sometimes pale yellow. The flowers are white to purple in colour. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nursery & garden |
| Season when grown | It is found throughout the year. |
| Local Status: Past – | In abundance |
| Present – | in abundance |
| Uses | It has various medicinal uses & also used in making sauce. |
| Nutritional Value | Cooling sensation. Vitamin, limorcene, dihydrochloric. |
| Associated Traditional Knowledge | In making pana to cure warm wind. |
| Management mechanism | By insecticide & pesticides |
| Other Details | The leaf, fresh or dried is the culinary source of mint, Mint was originally used as a medicinal herb to treat stomach ache & chest pains. |
| Community/Knowledge Holder | Mr. Avinash Dohrey |

Vegetables Lauki (Langenceia siceraria) लौकी



Lauki (Langenceia siceraria) लौकी

| Kingdom | | Plantae |
|----------------------------------|-----------|--|
| Unranked | | Angiosperm |
| Family | | Cucurbitaceae |
| Genus and Species (If | known) | Langenceia siceraria |
| Local Name / Commo | n Name | Lauki/Bottle ground (लोकी) |
| Habit & Habitat | | It is found in moist soil. |
| Description | | It is an annual climber. The plant length ranges from 9-10 m. The leaves are simple & alternate. The flowers are one to few in number. The flower are white or yellow in colour. The fruit is fleshy & green in colour. |
| Mythological Significa | ance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | | Flowering occurs from August to September. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | It has various medicinal uses& important part of Indian cuisine. |
| Nutritional Value | | Least caloric vegetable,it contains small quantity of foliates. |
| Associated Traditional Knowledge | | |
| Management mechanism | | By insecticide & pesticides |
| Other Details | | The whole plant in fresh condition is edible. The dried fruit is also used as bottles, containers for oil. |
| Community/Knowled | ge Holder | Mr. Avinash Dohrey |

Kaddu (Cucurbita maxima) कद्दू



Kaddu (Cucurbita maxima) कद्दू

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Cuccurbitaceae |
| Genus and Species (If known) | Cucurbita maxima |
| Local Name / Common Name | Kaddu/Pumpkin (कद्दू) |
| Habit & Habitat | It is found in home garden & fields. |
| Description | It is frost in tolerant annual herbaceous plant. Leaves are simple, alternate, shallow to deeply lobed. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | Summer |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | It can be roasted, baked & mashed into soups. |
| Nutritional Value | Phosphorous & magnesium present |
| Associated Traditional Knowledge | Story of cindrella. |
| Management mechanism | By insecticide & pesticides |
| Other Details | Dried fruit can be ornamentally used. |
| Community/Knowledge Holder | Mr. Avinash Dohrey |

Lobia (Vigna ungiculata) लोभिया



Lobia (Vigna ungiculata) लोभिया

| *** 1 | | |
|----------------------------------|-----------|--|
| Kingdom | | Plantae |
| Unranked | | Angiosperm |
| Family | | Fabaceae |
| Genus and Species (If | known) | Vigna ungiculata |
| Local Name / Commo | n Name | Lobia (लोभिया) |
| Habit & Habitat | | It is grown on alluvial & sandy soil. |
| Description | | It is a vigorous, climbing annual vine. A variety of cowpea, it is grown primarily for its strikingly long immature parts & has uses very similar to that of the green bean. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Government & private shops. |
| Season when grown | | Winter to autumn. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | Seeds are used as edible part. |
| Nutritional Value | | Carbohydrates, protein, small amount of vitamin & trace metals. |
| Associated Traditional Knowledge | | |
| Management mechanism | | By insecticide & pesticides |
| Other Details | | |
| Community/Knowled | ge Holder | Mr. Avinash Dohrey |
| | | |

Tamatar (Lycopersicum esculentum) टमाटर



Tamatar (Lycopersicum esculentum) टमाटर

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Solonaceae |
| Genus and Species (If | fknown) | Lycopersicum esculentum |
| Local Name / Commo | n Name | Tamatar / /Tomato (टमाटर) |
| Habit & Habitat | | Garden |
| Description | | The plant typically grow 1-3 meters in height & have a weakstem. |
| Mythological Significance | | In 19thcentury, there was a common tradition of throwing rotten tomatoes at bad perfomers. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery &retail shops |
| Season when grown | | Throughout the year |
| Local Status: | Past – | Found in abundance |
| | Present – | Found in abundance |
| Uses | | Fresh ripe fruits are refreshing & appetizing & are consumed in salads or after slow cooking. |
| Nutritional Value | | Canofene lycopene, natural antioxidants. |
| Associated Traditional Knowledge | | |
| Management mechanism | | By insecticide & pesticide |
| Other Details | | Tomato is used in canned tomatoes, tomato juice, tomato ketchup and in tomato soup. |
| Community/Knowled | lge Holder | Mr. Avinash Dohrey |

Sarso (Brassica nigra) राई



Sarso (Brassica nigra) राई

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Brassicaceae |
| Genus and Species (If known) | Brassica vigra |
| Local Name / Common Name | Sarso (राई) |
| Habit and Habitat | Agriculture Fields |
| Description | It is mostly grown along with rabi crops. The plant itself can grow from 2 to 8feet tall, with racemes of small yellow flowers. |
| Mythological Significance | It has significant role in Hindu religion. It has related proverb also "Rai ka pahad banana". |
| I.U.C.N. Status | |
| Source of seeds | Collected from freshly plucked fruits. |
| Season when grown | Grown along with Rabi crop. |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | Seed & oil are uses as contiments in the preparation of pickles & are flavouring curries & vegetables. Oil is also used as a cattle feed. |
| Nutritional Value | It has significant amount of fatty oils. |
| Associated Traditional Knowledge | It is significantly used in South Indian cuisine. Used for body massage, chest massage & remedy against cold. |
| Management mechanism | Pesticide are sprayed. |
| Other Details | Were used to treat respiratory infections before modern medicines. |
| Community/Knowledge Holder | Mr. Avinash Dohrey |

Pyaaz (Allium cepa) प्याज



Pyaaz (Allium cepa) प्याज

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Amaryllidaceae |
| Genus and Species (I | f known) | Allium cepa |
| Local Name / Commo | on Name | Pyaaz/Onion (प्याज) |
| Habit & Habitat | | Found in well-drained soil. |
| Description | | The onion is the food plant in which the food is stored in a bulb. It grows up to height of 1.2 m Leaves are broadly linear. Flowers are white & starry. |
| Mythological Significance | | Hindus generally avoid using onion in the preparation of food for festive purpose. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | It is found throughout the year. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | The bulbs are used as food, salad & as flavouring substance. |
| Nutritional Value | | Various vitamins (B1,B2,B3etc). Ca, Fe are found in it. |
| Associated Traditional Knowledge | | Used as medicine |
| Management mechanism | | Pesticides are sprayed |
| Other Details | | |
| Community/Knowle | dge Holder | Mr. Avinash Dohrey |

Chukander (Beta vulgaris) चुकन्दर



Chukander (Beta vulgaris) चुकन्दर

| Kingdom | | Plantae |
|----------------------------------|--------------|---|
| Unranked | | Angiosprem |
| Family | | Solanaceae |
| Genus and Species | (If known) | Beta vulgaris |
| Local Name / Common Name | | Chukander (चुकन्दर) |
| Habit & Habitat | | Agricultural fields |
| Description | | It is a herb. Leaves are large. Bulbs are under the soil and dark red in color. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Seed shop |
| Season when grown | | Summer |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | In medicines and sugar production. |
| Nutritional Value | | Rich source of various vitamins & Fe. |
| Associated Traditional Knowledge | | Used as salad |
| Management mechanism | | Pesticide are sprayed |
| Other Details | | Used for anaemic patient. |
| Community/Know | ledge Holder | Mr. Avinash Dohrey |
| | | |

Vegetables Neembu (*Citrus limon*) नींबू





Neembu (Citrus limon) नींबू

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | |
| | Angiosperm |
| Family | Rutaceae |
| Genus and Species (If known) | Citrus limon |
| Local Name / Common Name | Neembu (नींबू) |
| Habit & Habitat | In tropical and sub-tropical regions. |
| Description | The lemon is a small tree, 10 to 20 feet in height, with short spines & large white & purple flowers. |
| Mythological Significance | Used with chilli to cure black magic |
| I.U.C.N. Status | |
| Source of seeds | Nursery & garden |
| Season when grown | Rainy season |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | In making pickles, used in salad |
| Nutritional Value | Vit-C |
| Associated Traditional Knowledge | Good appetizer, lemon juice and turmeric used on face as cleanser |
| Management mechanism | Pesticide are sprayed |
| Other Details | In making medicine, in skin treatment |
| Community/Knowledge Holder | Mr. Avinash Dohrey |
| | |

Vegetables Chaptisem (Lablab purpurcus) चपटीसेम



Chapti sem (Lablab purpurcus) चपटीसेम

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Fabaceae |
| Genus and Species (If | fknown) | Lablab purpurcus |
| Local Name / Commo | n Name | Chapti sem (चपटी सेम) |
| Habit & Habitat | | In tropical and sub-tropical regions. |
| Description | | They are annual or short lived perennial vines. The thick stem can reach 6m in length. Flowers are purplish & blue & fruits are legume pod variable in shape, size & colour. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & retail shop |
| Season when grown | | July-Oct |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | The unripe seeds & pods are eaten as green vegetable. The green plants are used as fodder for cattle. |
| Nutritional Value | | Carbohydrates, proteins, vitamins & small amount of trace metals. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Pesticides are sprayed |
| Other Details | | It is used as an ornamental or medicinal plant. |
| Community/Knowled | lge Holder | Mr. Avinash Dohrey |
| | | |

Aalu (Solanum tuberosum) आलू



Aalu (Solanum tuberosum) आलू

| UnrankedAngiospermFamilySolonaceaeGenus and Species (If known)Solanum tuberosumLocal Name / Common NameAalu/Potato (आल्र्)Habit & HabitatThey can be cultivated in many soils & many climates. |
|--|
| Genus and Species (If known)Solanum tuberosumLocal Name / Common NameAalu/Potato (आलू) |
| Local Name / Common Name Aalu/Potato (आलू) |
| |
| Habit & Habitat They can be cultivated in many soils & many climates |
| mabit & mabitat filey can be cultivated in many sons & many chinates. |
| DescriptionThe plant is spreading annual. It has pinnately compound leaves, fibrous root & numerous rhizomes which are swollen at the tip to form the tubers. |
| Mythological Significance |
| I.U.C.N. Status |
| Source of seeds Government & private crops. |
| Season when grown October to March |
| Local Status: Past – In abundance |
| Present – In abundance |
| Uses The tubers are used as vegetable. Small tubers are utilized for the production of starch & industrial alcohol. |
| Nutritional ValuePotatoes contain about 78% water, carbohydrates, proteins |
| Associated Traditional Knowledge Rubbed at burnt area |
| Management mechanismPesticides are sprayed |
| Other Details Used in making papad and various Indian recepies |
| Community/Knowledge Holder Mr. Avinash Dohrey |

Vegetables Bankla (*Vicia faba*) ৰাকলা





Bankla (Vicia faba) बाकला

| Kingdom | | Plantae |
|---------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Leguminaceae |
| Genus and Species (If | known) | Vicia faba |
| Local Name / Commo | n Name | Bankla (बाकला) |
| Habit & Habitat | | Grown in alluvial soil |
| Description | | It is rigid, erect plant. The leaves are pinnate. The flowers have a strong & sweet scent which is attractive to bees & other pollinators. |
| Mythological Significance | | European Folklore also claims that they plant beans on Good Friday. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery and Retail shops. |
| Season when grown | | Summer |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | The seeds & young pods are eaten as vegetables. The plant is also used as a fodder. |
| Nutritional Value | | Rich source of protein |
| Associated Traditiona | l Knowledge | Eaten during fasting in Hindus |
| Management mechanism | | Pesticides are sprayed |
| Other Details | | In addition to its use as a food for human livestock. It plays a critical role in agriculture system due to nitrogen fixation. |
| Community/Knowled | lge Holder | Mr. Sarvesh Kumar |

Gajar (Daucus carota) गाजर



Gajar (Daucus carota) गाजर

| Kingdom | Plantae |
|--------------------------------|--|
| Unranked | Angiosperm |
| Family | Apiaceae |
| Genus and Species (If known) | Daucus carota |
| Local Name / Common Name | Gajar/Carrot (गाजर) |
| Habit & Habitat | It is mainly grown on alluvial or sandy soil. They are grown all over the world. |
| Description | It is a biennial plant. It is orange in colour. The leaves are compound, & arranged in a spiral. The stem, located just above the ground. Stem grow to 60-200 cm tall. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Government & private shops. |
| Season when grown | October to June |
| Local Status: Past – | In abundance |
| Presen | t – In abundance |
| Uses | Its root are edible part. Root are used as vegetables & salad also. |
| Nutritional Value | Carrots are a good source of dietry fibre, Vit-K, Vit-A, Vit-B6 but otherwise have modest content of other. |
| Associated Traditional Knowled | lge Used in sakat and chauth pooja |
| Management mechanism | Pesticides are sprayed |
| Other Details | It is used in making pickle and good for eyes |
| Community/Knowledge Holder | · Mr. Sarvesh Kumar |
| | |

Vegetables Shaljam (*Brassica rapa*) शलजम



Shaljam (Brassica rapa) शलजम

| Kingdom | | Plantae |
|----------------------------------|-----------------|--|
| Unranked | | Angiosperm |
| Family | | Brassicacese |
| Genus and Species (If | f known) | Brassica rapa |
| Local Name / Commo | n Name | Shaljam/Turnip (शलजम) |
| Habit & Habitat | | It isgrown in temperate climates. |
| Description | | It is mostly white-skinned apart from the upper 1-6 cm, which protrude above the ground & are purple, red, or greenish wherever sunlight has fallen. The entire root is roughly global. Leaves grow directly from the above ground shoulder of root. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Government & private shops. |
| Season when grown | | October to June |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | It is used as vegetable, salad. |
| Nutritional Value | | It's root is high in vitamin-C. Green leaves are good source of Vit- A,C,K, Ca, folate. Turnip greens are high in lutein. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Pesticides are sprayed |
| Other Details | | It is also used in medicinal way. |
| Community/Knowledge Holder | | Mr. Sarvesh Kumar |

Kundru (Coccinia indica) कुंदरू



Kundru (Coccinia indica) कुंदरू

| Kingdom | | Plantae |
|----------------------------------|----------|--|
| Unranked | | Angiosperm |
| Family | | Cucurbitaceae |
| Genus and Species (If known) | | Coccinia indica |
| Local Name / Common Name | | Jungli Kundru (कुंदरू) |
| Habit and Habitat | | It is found in warm & humid region. |
| Description | | It is an annual creeper. It is found spreading on ground & twilling around the trees & supports around it. Leaves are triangular or pentagonal in shape. Flowers are small & found in bunch of 2 to 4. Flowers are white in colour. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Summers |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal uses & also a part of Indian cusine. |
| Nutritional Value | | It is rich in beta-carotine. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Physical & chemical measures are there for its manage- ment. |
| Other Details | | Several researches have shown that it is helpful in controlling blood sugar level. |
| Community/Knowledge Holder | | Mr. Sarvesh Kumar |

Pea (Pisum sativum) मटर





Pea (Pisum sativum) मटर

Plantae

Kingdom Unranked Family Genus and Species (If known) Local Name / Common Name Habit and Habitat Description

Mythological Significance

I.U.C.N. Status

Source of seeds

Season when grown

Local Status Past-

Present-

Uses

Nutritional Value Associated Traditional Knowledge Management mechanism Other Details

Community/Knowledge Holder

Angiosperm Leguminosae *Pisum sativum* Matar/Garden Pea (मटर) In tropical and sub-tropical regions. It is a herbaceous, annual, glaucas, tendril bearing, climbing or trailing herb. It can grow up to 15-80 cm high. Leaves are alternate & opposite. Flowers are white or purple in colour. Fruit is a pod with about 6-8 round seeds of green colour.

. . . .

. . . .

Nursery & Government retail shops.

It is found throughout year.

In abundance.

In abundance.

It is used as food & also has various commercial uses as vegetable and pulses.

It is a rich source of protein & calories.

Used in Tilchauth and KarwaChauth pooja

Various pesticides are used to protect the crop.

It is a dual purpose legume, being used for vegetables, grain & hay/silage. It can be used as green manure.

Mr. Sarvesh Kumar

Baigun/Brinjal (Solanum melongena) बैंगन



Baigun/Brinjal (Solanum melongena) बेंगन

| Kingdom | | Plantae |
|----------------------------------|----------|---|
| Unranked | | Angiosperm |
| Family | | Solonaceae |
| Genus and Species (If known) | | Solanum melongena |
| Local Name / Common Name | | Baigun/Brinjal (बैंगन) |
| Habit and Habitat | | It is grown on alluvial or sandy soil in open fields. |
| Description | | The plant is an erect branching herb or small shrub, sometimes several feet in height. The fruit is large, ovoid, whitish or purple berry. Usually long & round types are found. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery and retail shops |
| Season when grown | | October to March |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | The fruit are eaten as vegetable. They are usually cut into slices & fried or broiled. |
| Nutritional Value | | Rich source of fat |
| Associated Traditional Knowledge | | (Proverb) Thali Ka Baigun. |
| Management mechanism | | Pesticides are sprayed |
| Other Details | | Fog is harmful for plant |
| Community/Knowledge Holder | | Mr. Sarvesh Kumar |

Vegetables Jack Bean (Canavalia gladiata) बड़ी सेम



Jack Bean (Canavalia gladiata) बड़ी सेम

| Kingdom | | Plantae |
|----------------------------------|----------|--|
| Unranked | | Angiosperm |
| Family | | Leguminaceae |
| Genus and Species (If known) | | Canavalia gladiata |
| Local Name / Common Name | | Bari Sem / Jack Bean (बड़ी सेम) |
| Habit and Habitat | | Tropical and sub topical regions |
| Description | | It is a twining nearly erect annual herb. Flowers are pink & white. Leaves are shiny trifoliate. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Legume |
| Season when grown | | April-October |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | The pods are used as vegetables. The whole plant is used as green forage. This also used as a green manure & a cover crop. |
| Nutritional Value | | Crude protein |
| Associated Traditional Knowledge | | |
| Management mechanism | | Pesticides are sprayed |
| Other Details | | It contains gibberelin A-15, A growth promoting hormone. |
| Community/Knowledge Holder | | Mr. Sarvesh Kumar |

Kathal (Artocarpus heterophtllus) कटहल



Kathal (Artocarpus heterophtllus) कटहल

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Moraceae |
| Genus and Species (If known) | Artocarpus heterophtllus |
| Local Name / Common Name | Kathal (कटहल) |
| Habit and Habitat | Non-marine. |
| Description | This is a tree reaching a height of 60-70 feet. It has entire leaves & huge fruits 1-2 feet long which are borne on the trunk. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Fruit/Nursery |
| Season when grown | Winter |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | The fruit & seeds are used as vegetable. |
| Nutritional Value | GoodCarbohydrate content. |
| Associated Traditional Knowledge | |
| Management mechanism | Pesticides are sprayed |
| Other Details | People prepare papad& sweet bread out of ripe fruit. |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |
| | |

Vegetables Bari Chaulai (*Amaranthus tricolor*) बड़ी चौलाई



Bari Chaulai (Amaranthus tricolor) बड़ी चौलाई

| Kingdom | | Plantae |
|----------------------|--------------|--|
| Unranked | | Angiosperm |
| Family | | Amaranthaceae |
| Genus and Species (I | f known) | Amaranthus tricolor |
| Local Name / Commo | on Name | Bari Chaulai (बड़ी चौलाई) |
| Habit and Habitat | | In fields tropical climate |
| Description | | Good green tender leaves cout spines, stem green mediun thick & tender, petioles green, inflorescence terminal & medium sized. |
| Mythological Signifi | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Dispersel/Retail shops |
| Season when grown | | Rainy season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Eaten as a spinach& in medicine also. Whole plant is astringent. |
| Nutritional Value | | Highly rich in Ca, other mineral & vitamin. |
| Associated Tradition | al Knowledge | |
| Management mechai | nism | Pesticides are sprayed |
| Other Details | | Yellow & green dye can be obtain from whole plant. |
| Community/Knowle | dge Holder | Mr. Sarvesh Kumar |
| | | |

Vegetables Taroi (*Luffa acutangula*) तरोई



Taroi (Luffa acutangula) तरोई

| Kingdom | | Plantae |
|-----------------------|-------------|---|
| Unranked | | Angiosperm |
| Family | | Cucurbitaceae |
| Genus and Species (If | known) | Luffa acutangula |
| Local Name / Commor | n Name | Taroi (तरोई) |
| Habit and Habitat | | Tropical habitats |
| Description | | It's a trailing herb, ridges sponge gourd is a tropical running vine with rounded leaves & yellow flowers. Both male & female flowers appear on the same plant. |
| Mythological Signific | ance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Rainy season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | The fruit are used as vegetable. The fibrous material obtained from the dried fruits is used as a substitute for bath sponge. |
| Nutritional Value | | Rich source of fibre, Ca |
| Associated Traditiona | l Knowledge | |
| Management mechanism | | Pesticides are sprayed |
| Other Details | | Cure for jaundice. Beneficial for diabetes.Anti- inflammatory&antibiotic. |
| Community/Knowled | ge Holder | Mr. Sarvesh Kumar |

Karela (Momordiea charantia) करेला



Karela (Momordiea charantia) करेला

| Kingdom | | Plantae |
|-------------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Cucurbitaceae |
| Genus and Species (1 | (f known) | Momordiea charantia |
| Local Name / Commo | - | Karela/Bittergourd (करेला) |
| Habit and Habitat | | Tropical habitat |
| Description | | A trailing herb. It bears simple alternate leaf. The fruit has distinct warty exterior. |
| Mythological Signif | icance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Winter season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | The fruit is eaten as vegetable. They are famous for their bitter taste. |
| Nutritional Value | | Carbohydrates |
| Associated Tradition | al Knowledge | Proverb " Karela upar se neem chadha " |
| Its juice purifies bloo | od | |
| Management mecha | nism | Pesticides are sprayed |
| Other Details | | Karela juice is helpful in diabetes. |
| Community/Knowle | dge Holder | Mr. Sarvesh Kumar |
| | | |

Arbi (Colocasia spp.) घुईया





Arbi (Colocasia spp.) घुईया

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Araceae |
| Genus and Species (If | known) | Colocasia spp. |
| Local Name / Commo | n Name | Arbi (घुईया) |
| Habit and Habitat | | Marshly wet soil |
| Description | | Herbaceous perennial plant leaves are very large. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Summer |
| Local Status | Past- | In Abundance |
| | Present- | In Abundance |
| Uses | | As a vegetable |
| Nutritional Value | | Starch rich, rich source of fibre. |
| Associated Traditional Knowledge | | It helps in the cure of heart diseases |
| Management mechan | ism | Pesticides are sprayed |
| Other Details | | The leaves are often boiled with coconut milk to make a soup which is rich in Fe. |
| Community/Knowled | lge Holder | Mr. Sarvesh Kumar |

Edible Mushroom (Agaricus benesil) मश्रूम



Edible Mushroom (Agaricus benesil) मश्रूम

| Kingdom | | Plantae |
|----------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Agaricaceae |
| Genus and Species (I | f known) | Agaricus benesil |
| Local Name / Commo | on Name | Mushroom (मङ्रूम) |
| Habit and Habitat | | Moist places |
| Description | | They are fleshy & edible. They can appear either below or above soil. |
| Mythological Signifi | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Orchard/Retail shops |
| Season when grown | | Rainy season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As avegetable |
| Nutritional Value | | Rich in protein& Ca. |
| Associated Tradition | al Knowledge | |
| Management mechanism | | Pesticides are sprayed |
| Other Details | | |
| Community/Knowle | dge Holder | Mr. Sarvesh Kumar |
| | | |

Drum Stick (Moringa oleifera) शहजन



Drum Stick (Moringa oleifera) शहजन

| Kingdom | | Plantae |
|-----------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Moringaceae |
| | 1) | Ŭ |
| Genus and Species (If | known) | Moringa oleifera |
| Local Name / Common | n Name | Sahjan / Drum Stick (शहजन) |
| Habit and Habitat | | Tropical & sub-tropical regions |
| Description | | It is fast growing deciduous tree with height of 10-12 m. Bark is whitish grey & build up a foliage of tripinnate leaves. Flowers are yellowish white in colour. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | It is found throughout the year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal & commercial uses. |
| Nutritional Value | | It is a rich source of protein, dietary fibres, Na, K, Ca, Mg, P&Vit. A, B & C. |
| Associated Traditiona | l Knowledge | Soup of leaves increase eyesight |
| Management mechani | ism | Pesticides are sprayed |
| Other Details | | It is most effective in eye diseases also helpful in asthma, arthritis, diabetes & heart problems etc. Oil is also extracted from its seeds. |
| Community/Knowled | ge Holder | Mr. Sarvesh Kumar |



FORMAT- I Agro biodiversity (B) Fruits



Fruits Ber (Ziziphus mauritiana) बेर





Ber (Ziziphus mauritiana) बेर

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Phamnaceae |
| Genus and Species (If known) | Ziziphus mauritiana |
| Local Name / Common Name | Ber (बेर) |
| Habit and Habitat | It is found in the dry tropic& sub-tropics. |
| Description | It is a evergreen small tree. Leaves are alternate ovate with rounded venation. Size 15m high & 40cm diameter. Flower white or green in colour. Fruits are soft & juicy. |
| Mythological Significance | It is offered to Lord Shiva. |
| I.U.C.N. Status | |
| Source of seeds | Fruititself |
| Season when grown | March-April |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Eaten as fruit |
| Nutritional Value | Vitamin-C, B6, Potassium, Mg. |
| Associated Traditional Knowledge | It is often called the poor man's fruit. Its seed are grinded & used. |
| Management mechanism | By insecticides and pesticides. |
| Other Details | Leaves are covered into spines. Ber is also used for wearing the insect <i>Tachardia lacca</i> which yield lac. |
| Community/Knowledge Holder | Mr Sarvesh Kumar |

Fruits Amla (*Phyllanthus emblier*) आंवला



Amla (Phyllanthus emblier) आंवला

| Kingdom | | Plantae |
|----------------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Euphorbiaceae |
| Genus and Species (I | f known) | Phyllanthus emblier |
| Local Name / Commo | on Name | Amla (आंवला) |
| Habit and Habitat | | Found in the deciduous forests in tropical& sub-tropical region. |
| Description | | Deciduous tree, growing upto 15 m tall. Bark smooth, leaves small, flowers unisexual, flowers numerous. Female flower few. Fruit spherical. |
| Mythological Signific | cance | This plant is used in a worship (Manchinta) |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & markets. |
| Season when grown | | March to August |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Used as detergent shampoo, cultivated for fruits & hair oil and dye. |
| Nutritional Value | | Richest source of vitamin C. |
| Associated Tradition | al Knowledge | In making patanjali drugs & Murabbas |
| Management mechanism | | By insecticides and pesticides. |
| Other Details | | In making amla candy, loss of appetite, anaemia, jaundice, used as a refrigerant, diuretic etc. |
| Community/Knowledge Holder | | Mr Sarvesh Kumar |

Fruits Bael (Aegle marmelos) बेल





Bael (Aegle marmelos) बेल

| Vingdom | Plantae |
|----------------------------------|--|
| Kingdom | |
| Unranked | Angiosperm |
| Family | Rutaceae |
| Genus and Species (If known) | Aegle marmelos |
| Local Name / Common Name | Bael (बेल) |
| Habit and Habitat | Throughout India in dry forests. |
| Description | It's a deciduous tree. Flower white in colour. Fruits berries variable in shape with hard. Seeds many, embedded in the fruit pulp. |
| Mythological Significance | It is planted as a sacred tree in temple premises. The tri- foliate form of leaves symbolize the trident that Shiva holds in his right hand. |
| I.U.C.N. Status | |
| Source of seeds | Nursery & markets. |
| Season when grown | Flowering in March &fruits persistent & ripening in Febuary. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | For making beverages, jelly, Murabba. |
| Nutritional Value | Rich source of protein, fibre, vitamin C & very refreshing. |
| Associated Traditional Knowledge | Its fruits are used in traditional medicine & as food . Nepal Bael tree is part of a fertility for girls. |
| Management mechanism | By insecticides and pesticides. |
| Other Details | Root bark, leaves & fruits used for joint pain, diarrhea, stomachache. Diabetes, vomiting, fever & also act as rejuvenator. |
| Community/Knowledge Holder | Mr Sarvesh Kumar |

Fruits Imli (*Tylophora indica*) इमली



Imli (Tylophora indica) इमली

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Asclepiadaceae |
| Genus and Species (If known) | Tylophora indica |
| Local Name / Common Name | Imli (इमली) |
| Habit and Habitat | Found almost throughout India from coastal plains to deciduous forest. |
| Description | A climber with watery latex & a short, knoty rootstock & numerous fine, brittle. Flowers small, yellow with pinkish strips. Fruits irregular contracted between the seeds. Seeds sub-square or inverted egg-shaped brownish, sour or sweet pulp. |
| Mythological Significance | Lord Rama, Laxman & Sita built a hut under it during vanvas. |
| I.U.C.N. Status | |
| Source of seeds | Nursery&retail shop |
| Season when grown | February to october |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | In eating etc. |
| Nutritional Value | Contain vitamin-C. Fruit pulp & seeds are good sources of calcium. |
| Associated Traditional Knowledge | Associated with Karva chauth story |
| Management mechanism | By insecticides and pesticides |
| Other Details | In medicine. Root leaves used to treat spider poisoning, asthma, bronchitis whooping cough. Stem bark is used to treat burns. |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |

Fruits

Kadam (Anthocephalus chinesis) कदम्ब



Kadam (Anthocephalus chinesis) कदम्ब

| Kingdom | Plantae |
|----------------------------------|---|
| 0 | |
| Unranked | Angiosperm |
| Family | Rubiaceae |
| Genus and Species (If known) | Anthocephalus chinesis |
| Local Name / Common Name | Kadam (कदम्ब) |
| Habit and Habitat | Homegarden |
| Description | It's a deciduous tree. Flowers are like marigold <i>i.e</i> round. Flowers are yellow leaves are broad. Its fruit is sweet sour in taste. |
| Mythological Significance | It has great religious significance with Lord Krishna. |
| I.U.C.N. Status | |
| Source of seeds | Nursery & retail shops |
| Season when grown | Flowering in May, July, fruitening in June-August. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Bark is used in making medicine. In making boats. |
| Nutritional Value | Protein, carbohydrate |
| Associated Traditional Knowledge | For rain, people rooted the stem in ground because they consider stem as "indradhawj". |
| Management mechanism | By insecticides and pesticides. |
| Other Details | It is the excellent source of beauty during rainy season. |
| Community/Knowledge Holder | Mr Sarvesh Kumar |
| | |

Fruits

Sharifa (Annona squamosa) शरीफा



Sharifa (Annona squamosa) शरीफा

| Kingdom | | Plantae |
|----------------------------------|----------|---|
| Unranked | | Angisperm |
| Family | | Annonaceae |
| Genus and Species (I | f known) | Annona squamosa |
| Local Name / Commo | on Name | Sharifa/sugar apple (शरीफा) |
| Habit and Habitat | | Tropical & sub tropical region |
| Description | | It's a small tree, leaves are small, flowers are green. Fruits are being segmented. Fruits are pale green to blue green. |
| Mythological Significance | | Sitaphala (the fruit of Sita) because of popular believe that Sita, while in exile, subsisted on the fruit of this tree. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Retail shops |
| Season when grown | | Rainy season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | In making beverages & squash |
| Nutritional Value | | Vitamin-C & manganese. |
| Associated Traditional Knowledge | | It symbolize fertility. |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | Eaten by diabetic patient |
| Community/Knowledge Holder | | Mr Sarvesh Kumar |

Fruits Pomegranate (*Punica granatum*) अनार



Pomegranate (Punica granatum) अनार

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Lythraceae |
| Genus and Species (If known) | Punica granatum |
| Local Name / Common Name | Pomegranate/anar (अनार) |
| Habit and Habitat | Tropical ⊂ tropical region |
| Description | It's a fruit bearing deciduous shrub. The flowers are bright red leaves are opposite or sub-opposite glossy narrow. |
| Mythological Significance | It is especially offered to Vaibhav Lakshmi. |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | Fruit in season from September to February. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Is used in cooking, baking, alcoholic beverages. |
| Nutritional Value | Protein, carbohydrate, Vit-C, B6, Ca. |
| Associated Traditional Knowledge | "Ek anar sau bimar". Grinded leaves of pomegranate helps in baldness. |
| Management mechanism | By insecticides and pesticides |
| Other Details | It is very refreshing fruit. The bark & fruitshells are used for tanning. |
| Community/Knowledge Holder | Mr Sarvesh Kumar |

Fruits Mango (*Mangifera indica*) आम



Mango (Mangifera indica) आम

| Kingdom | | Plantae |
|----------------------|---------------|---|
| Unranked | | Angiosperm |
| Family | | Anacardiaceae |
| Genus and Species (| If known) | Mangifera indica |
| Local Name / Comm | on Name | Aam/Mango (आम) |
| Habit and Habitat | | Tropical region of India, forests & gardens. |
| Description | | A large deciduous tree growing upto 30m tall, latex orange brown sticky, leaves elliptical lanceolate, flowers small, fruits drupes oblong-ovoid. |
| Mythological Signifi | icance | Leaves used in worship & in havan. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery/fruit itself |
| Season when grown | | January to August |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As a fruit, in making juice. |
| Nutritional Value | | Vit-A & C, Ca & Fe. |
| Associated Tradition | nal Knowledge | King of fruit/Dalbharie and Aam is a traditional cousine |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | Fruits laxative & diuretic, bark is to treat uterine haemorrhoea & seeds used in asthma, diarrhea & in indigestion. |
| Community/Knowle | edge Holder | Mr Sarvesh Kumar |

Fruits Banana (*Musa* sp.) केला





Banana (Musa sp.) केला

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Musaceae |
| Genus and Species (If known) | Musaccae Musa sp. |
| | |
| Local Name / Common Name | Kela/Banana (केला) |
| Habit and Habitat | Tropical region |
| Description | It is largest herbaceous flowering plant, they have fall system, stems are made up of leaves, leaves are grown in spiral, fruits are grown in clusters. |
| Mythological Significance | It is worshiped as Lord Vishnu on Thursday fasting in Hindureligion. |
| I.U.C.N. Status | |
| Source of seeds | Shops & stores |
| Season when grown | Summer |
| Season when grown | Summer |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Banana fibre is used to make paper. It is also used in textiles industry. |
| Nutritional Value | Fe, P, Vit-C, Vit-B6, K |
| Associated Traditional Knowledge | It is considered as pious, plant, leaves used in decoration of mandaps, good source of Fe. |
| Management mechanism | By insecticides and pesticides |
| Other Details | Leaves &peals of fruits is used to make color& juice of this tree is used to make ink. |
| Community/Knowledge Holder | Mr Sarvesh Kumar |

Fruits Guava (*Psidium guajava*) अमरूद



Guava (Psidium guajava) अमरूद

| Kingdom | | Plantae |
|----------------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Myrtaceae |
| Genus and Species (| If known) | Psidium guajava |
| Local Name / Comm | on Name | Amrood/Guava (अमरूद) |
| Habit and Habitat | | Tropical region, Forest & in poor alkaline soil. |
| Description | | A small tree growing up to 8 m tall. Leaves elliptic to egg- shaped to elliptic oblong with more or less rounded tip. Flowers large white, fruit green to light yellow. Seeds small & many in number. |
| Mythological Significance | | It was once considered a forbidden fruit in Philippines mythology |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | July- august |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Whole plant used to treat cardiac pain & for easy delivery & bark used for diarrhoea. |
| Nutritional Value | | Vit-C, A, B6 , Fe & protein. |
| Associated Traditional Knowledge | | "Kashi se jal or prayag se amrood lijie" & cleans stomach |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | Wood used in burning. |
| Community/Knowle | edge Holder | Mr Sarvesh Kumar |

Fruits Shehtoot (*Morus alba*) शहतूत



Shehtoot (Morus alba) शहतूत

| Kingdom | | Plantae |
|----------------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Moraceae |
| Genus and Species | (If known) | Morus alba |
| Local Name / Comm | | Shehtoot/Mulberry (शहतूत) |
| Habit and Habitat | | |
| | | Throughout tropical region of India. |
| Description | | It is a fast growing tree. The leaves are simple often lobed & rigid.The fruit grows in bunches. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & retail shops |
| Season when grown | 1 | Summer |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | The fruits are edible. The leaves are the source of food of silkworm. |
| Nutritional Value | | Carbohydrates, protein |
| Associated Traditional Knowledge | | It is cultivated for silkworm cultivation, fruits increases hunger |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | The primary used for the sport goods. For manufacture of hockey stick, in tennis racket etc. Now paper are made from its bark. |
| Community/Knowl | edge Holder | Mr Sarvesh Kumar |

Fruits Jamun (Syzygium cumini) जामुन



Jamun (Syzygium cumini) जामुन

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Myrtaceae |
| Genus and Species (If known) | Syzygium cumini |
| Local Name / Common Name | Jamun/Jumbolan (जामुन) |
| Habit and Habitat | Mostly located at the bank of river. |
| Description | A large evergreen tree, growing up to 30mtall. Bark pale brown or grayish. Leaves opposites, ovate or elliptical shaped. Fruits ellipsoidal or egg-shaped, smooth, dark purplish-black. Seeds single. Egg-shaped. |
| Mythological Significance | There is a short story on Jamun in Prem Chand Book "Jamun Ka Ped". It is said that Jamun flower is much liked by Lord Ganesha& Shiva. |
| I.U.C.N. Status | |
| Source of seeds | Fruit itself/Nursery |
| Season when grown | Fruit -feb-mar,Flower mar-apr |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Used in medicine. |
| Nutritional Value | Ca, Mg, P, Vit-C, carbohydrate. |
| Associated Traditional Knowledge | Jamun seeds are grinded & dried and used for diabetic patient. |
| Management mechanism | By insecticides and pesticides |
| Other Details | In folk medicine, the fruit is eaten as tonic & for strengthening the teeth and gums |
| Community/Knowledge Holder | Mr Sarvesh Kumar |

Fruits Kaitha (*Limonia accidissima*) कैथा





Kaitha (Limonia accidissima) कैथा

| Kingdom | | Plantae |
|----------------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Rutaceae |
| Genus and Species (| lf known) | Limonia accidissima |
| Local Name / Comm | on Name | Kaitha/Wood apple (कैथा) |
| Habit and Habitat | | Tropical regions of India |
| Description | | Large tree upto 9 m in length, with rough bark. The leaves are pinnate. The fruit is berry. Fruits look like bael. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Fruititself |
| Season when grown | | Springseason |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | In making utensils, in making (edible) gums. |
| Nutritional Value | | Protein &Vit-B. |
| Associated Traditional Knowledge | | Kaitha ki chatni |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | |
| Community/Knowle | edge Holder | Mr Sarvesh Kumar |
| | | |

Fruits Papaya (*Carica papaya*) पपीता



Papaya (Carica papaya) पपीता

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Cariceceae |
| Genus and Species (I | f known) | Carica papaya |
| Local Name / Commo | on Name | Papaya (पपीता) |
| Habit and Habitat | | Tropical & sub tropical region |
| Description | | It is a 1-3m long plant, contain palm type leaves. Fruits are large. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Through out year |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | The yellow pulp is eaten as fruit & papaya has many medicinal uses in making syrups for gastrointestine problems. |
| Nutritional Value | | Vit- A,C,B6, Mg, Ca, contain protein. Good source of pectin. |
| Associated Traditional Knowledge | | Leaves are used to wash clothes. Leaves of papaya are made in form of paste & given to dengue patient to increase their blood platelets. Helps in digestion. |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | It is very useful for stomach. Papaine enzyme helps in digestion |
| Community/Knowled | dge Holder | Mr Sarvesh Kumar |

Fruits Date (*Phoenix dactylifera*) खजूर



Date (Phoenix dactylifera) खजूर

| Kingdom | | Plantae |
|----------------------------------|----------|---|
| Unranked | | Angiosperm |
| Family | | Palmaceae |
| Genus and Species (If k | nown) | Phoenix dactylifera |
| Local Name / Common | Name | Date/Pindkhajur (खजूर) |
| Habit and Habitat | | Bushy forest |
| Description | | It is a tall tree reaching upto 110 feet in height. Plant is deciduous. The fruit is a one-seeded with fleshy pericarp. |
| Mythological Significance | | It is considered sacred in muslim religion during the holy month of Ramjan. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Throughout year |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As a table fruit & in jams, paste etc. |
| Nutritional Value | | Rich source of all elements mainly 75 to 80% sugar. |
| Associated Traditional Knowledge | | "Asman Se Gira, Khajur Pe Atka". |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | |
| Community/Knowledg | e Holder | Mr Sarvesh Kumar |

Fruits Cucumber (*Cucumis sativus*) खीरा



Cucumber (Cucumis sativus) खीरा

| Kingdom | | Plantae |
|----------------------------------|----------|---|
| 0 | | |
| Unranked | | Angiosperm |
| Family | | Cucurbitaceae |
| Genus and Species (If kno | own) | Cucumis sativus |
| Local Name / Common Na | ame | Kheera/Cucumber (खीरा) |
| Habit and Habitat | | Along river beds & moist land |
| Description | | The plant has large leaf, that form a canopy over the fruit. The fruit of cucumber is roughly cylindrical elongated with tappering end & may be as large 60cm & 10 cm in diameter. |
| Mythological Significance | e | In the festival of Janmaashtami cucumber is specially offered to Lord Krishna. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & retail shops |
| Season when grown | | February to March |
| Local Status | Past- | In abundance |
| I | Present- | In abundance |
| Uses | | Eaten fresh as salad & pickling. |
| Nutritional Value | | Water contain abundance, and contain trace metals & vitamins. |
| Associated Traditional Knowledge | | Good for kidneys (anti dehydrant). Rubbing on skin acts as cleanser |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | Cucumber are classified as accessory fruit. |
| Community/Knowledge I | Holder | Mr Sarvesh Kumar |
| | | |

Fruits Sweet potato (Ipomoea batatas) **शकरकन्द**



Sweet potato (Ipomoea batatas) शकरकन्द

| Kingdom | | Plantae |
|----------------------------|---------------|--|
| Unranked | | Angiosperm |
| Family | | Conrulrulaceae |
| Genus and Species | (If known) | Ipomoea batatas |
| Local Name / Comm | ion Name | Shakarkand / Sweet potato (शकरकन्द) |
| Habit and Habitat | | It grows in moderately fertile, well drained soil in full sun. |
| Description | | It is an annual tuberous- rooted plant The stems are forming a running vine upto 4 m long. Leaves are palmately veined & green or purplish in colour. The flowers are white or pale violet in colour. |
| Mythological Signif | ficance | It is used by hindus in worshipping Ganeshji in Ganesh Chaturthi. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shop. |
| Season when grown | 1 | It is grown throughout the year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal uses & also used as food. |
| Nutritional Value | | It is a rich source of carbohydrate, protein vitamin (A, B1, B2, B3, B5, B6, B9, C). |
| Associated Traditio | nal Knowledge | Good food during fastings |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | The edible tuberous root is long & trapped with a smooth skin whose colour ranges between yellow, orange, red, brown, purple & flesh ranges from red, pink or yellow in colour. |
| Community/Knowledge Holder | | Mr Sarvesh Kumar |

Fruits Musk melon (*Cucumis melo*) खरबूजा



Musk melon (Cucumis melo) खरबूजा

| Kingdom | Plantae |
|-------------------------------|---|
| Unranked | Angiosperm |
| Family | Cucurbitaceae |
| Genus and Species (If known) | Cucumis melo |
| Local Name / Common Name | Kharbuja / Musk melon (खरबूजा) |
| Habit and Habitat | It is grown in cultivated beds along rivers. |
| Description | It is a trailing pubescent vine. Leaves are alternate, simple & rounded. Flowers are yellow in colour. Leaves & flowers are hairy. The plant height ranges from 2 to 3 m. |
| Mythological Significance | It is used in worship by Hindu Vat savitri festival. |
| I.U.C.N. Status | |
| Source of seeds | Nursery & Government retail shop. |
| Season when grown | It is grown in summer season mainly. |
| Local Status Past- | In abundance |
| Preser | nt- In abundance |
| Uses | It has various medicinal & commercial uses. |
| Nutritional Value | It is a rich source of vitamin B&C. |
| Associated Traditional Knowle | dge Anti dehydrant |
| Management mechanism | By insecticides and pesticides |
| Other Details | The fruit is a flesh berry which is round & hairy during its early development. They are highly variable in colour. Leaves & flowers are hairy. The plant height ranges from 2- 3 m. |
| Community/Knowledge Holde | r Mr Sarvesh Kumar |

Fruits

Armenian cucumber (Cucumismelo var. fllexuosus) ककड़ी



Armenian cucumber (Cucumismelo var. fllexuosus) ककड़ी

| Kingdom | | Plantae |
|----------------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Cucurbitaceae |
| Genus and Species (I | f known) | Cucumismelo var. fllexuosus |
| Local Name / Commo | on Name | Kakadi / Armenian cucumber (ककड़ी) |
| Habit and Habitat | | It is found in cultivated beds along river sides. |
| Description | | It is a climber. Leaves are alternate, simple. Flowers are single & yellow in colour. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & government retail shop. |
| Season when grown | | It is grown in summer. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Used as salad |
| Nutritional Value | | It is a rich source of anti-oxidants & vitamin B, E & A. |
| Associated Tradition | al Knowledge | Antidehydrant (retain water in body) |
| Management mechanism | | Various herbicides are used to protect it from pests & parasites. |
| Other Details | | There is no need to peel it. Its thin skin makes it ideal fresh slicing cucumber. |
| Community/Knowledge Holder | | Mr Sarvesh Kumar |

Fruits Indian elm (*Holoptelea integrifolia*) चिलबिल



Indian elm (Holoptelea integrifolia) चिलबिल

| Kingdom | | Plantae |
|----------------------------------|-----------|--|
| Unranked | | Angiosperm |
| Family | | Ulmaceae |
| Genus and Species (| If known) | Holoptelea integrifolia |
| Local Name / Comm | on Name | Chilbil / Indian elm (चिलबिल) |
| Habit and Habitat | | Common, less in the plains. |
| Description | | It is a large deciduous tree, growing upto height upto 15-20 m. Leaves are alternate, wide, smooth & pointed tip |
| Mythological Significance | | It is believed that ghosts & spirits take rest in the tree hence used in exorcism by nailing the hair of a mentally ill person on the trunk. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shop. |
| Season when grown | | Flowers during January to February & fruiting during April to May. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal & commercial uses. |
| Nutritional Value | | It is rich source of fatty acids, protein, fibre. |
| Associated Traditional Knowledge | | It seeds oil is used in edible purposes. |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | It seeds & bark is used in treating ringworm. |
| Community/Knowledge Holder | | Mr Sarvesh Kumar |

Fruits Karaunda (*Carissa carandas*) करौंदा



Karaunda (Carissa carandas) करौंदा

| Kingdom | | Plantae |
|----------------------------------|-----------|--|
| Unranked | | Angiosperm |
| Family | | Аросупасеае |
| Genus and Species (If | known) | Carissa carandas |
| Local Name / Commor | n Name | Karaunda (करौंदा) |
| Habit and Habitat | | Throughout tropical & sub-tropical regions. |
| Description | | It is a branched large shrub or small tree with strong thorns. It attains a height of 10-15 feet. Leaves are evergreen, opposite, leathery in appearance. Flowers are white & pink in colour. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Flowers in March & fruiting from July to September. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal & commercial uses. |
| Nutritional Value | | It is a rich source of Fe, Ca, P&Vit. A |
| Associated Traditional Knowledge | | Used in making sauce and pickle |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | It is used in treatment of anaemia. Mature fruit is harvested for pickles. |
| Community/Knowled | ge Holder | Mr Sarvesh Kumar |

Fruits

Carambola (Averrhoa carambola) अमरख



Carambola (Averrhoa carambola) अमरख

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Oxalidaceae |
| Genus and Species (If known) | Averrhoa carambola |
| Local Name / Common Name | Amrakh / Carambola (अमरख) |
| Habit and Habitat | Tropical & sub-tropical regions. |
| Description | It is an attractive, small, slow growing evergreen tree with a short trunk. Plant height ranges from 25-30 feet. Leaves arte alternate & soft. Flowers are pink & borne in clusters. Fruits are light to dark yellow colour. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nursery & retail shops |
| Season when grown | Throughout the year |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It has various commercial & medicinal uses. |
| Nutritional Value | It is rich source of Ca, P, Ascorbic Acid &Vit. A, C & E. |
| Associated Traditional Knowledge | It is used to treat hangover from excessive indulgence of alcohol and its chatni. |
| Management mechanism | By insecticides and pesticides |
| Other Details | Ripe fruit is administered to halt haemorrhages. The acid types have been used to clean & polish metal, specially brass. |
| Community/Knowledge Holder | Mr Sarvesh Kumar |

Fruits Lemon (*Citrus limon*) नींबू





Lemon (Citrus limon) नींबू

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Rutaceae |
| Genus and Species (If known) | Citrus limon |
| Local Name / Common Name | Lemon (नींबू) |
| Habit and Habitat | Woodland garden, sunny edge. |
| Description | The lemon is a small tree, 10 to 20 feet in height, with short spines & large white & purple flowers. The small, light yellow, oval fruits end in a blunt point. The fruit is picked green, as it deteriorates if allowed to ripen on the tree. It is ripened in storage. |
| Mythological Significance | It is used along with chilli& considered sacred & used in various worship & black magic. |
| I.U.C.N. Status | |
| Source of seeds | Nursery & Government retail shops. |
| Season when grown | Throughout the year & flowers from January to December. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It has various medicinal & commercial uses. |
| Nutritional Value | It is rich source of water, Ca, P, K & Vit. A, B & C. |
| Associated Traditional Knowledge | Its juice with turmeric acts as cleanser, warms lemon plus kalanamak stops nausea |
| Management mechanism | By insecticides and pesticides |
| Other Details | It is used to treat scurvy, A semi-drying oil obtained from the seed is used in soap making. |
| Community/Knowledge Holder | Mr Sarvesh Kumar |

Fruits Pomelo (*Citrus maxima*) चकोतरा



Pomelo (Citrus maxima) चकोतरा

| Kingdom | | Plantae |
|----------------------------------|----------|--|
| Unranked | | Angiosperm |
| Family | | Rutaceae |
| Genus and Species (I | f known) | Citrus maxima |
| Local Name / Commo | on Name | Chakotra / Pomelo (चकोतरा) |
| Habit and Habitat | | Non-marine cultivated habitat. |
| Description | | It is an annual tree ranging from 5-9 m in height. Young branches are pubescent, leaves sparsely pubescent to glabrous on lower surface. Flowers are large & white in colour. Fruit is pale yellow & yellowish green in colour. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government shops |
| Season when grown | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal & commercial uses. |
| Nutritional Value | | It is a very rich source of dietary fibres, K & Vit. C . |
| Associated Traditional Knowledge | | Used in salad with kalanamak and black pepper |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | It large parts of South East Asia it is a popular dessert, often eaten raw sprinkled with or dipped in a salt mixture. It also eaten as salad. |
| Community/Knowledge Holder | | Mr Sarvesh Kumar |

Fruits Winter Melon (*Benincasa hispida*) पेठा कद्दू



Winter Melon (Benincasa hispida) पेठा कद्दू

| Vinadam | | Plantae |
|----------------------------|--------------|--|
| Kingdom | | |
| Unranked | | Angiosperm |
| Family | | Cucurbitaceae |
| Genus and Species (I | f known) | Benincasa hispida |
| Local Name / Commo | n Name | White Gourd / Winter Melon (पेठा कद्दू) |
| Habit and Habitat | | In cultivated beds along river sides. |
| Description | | It is a vine grown for its very large fruit eaten as a vegetable. The fruit is fuzzy when young but by maturity it looses hairs & develops waxy coating. Stem is much branched. Leaves stalks are long & hairy. Flowers are yellow in colour. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & government retail shop. |
| Season when grown | | Mostly is summers & flowering from July to September. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Various commercial uses. |
| Nutritional Value | | It is a rich source of Na, K, dietary fibres & Vit. C. |
| Associated Tradition | al Knowledge | Petha reduces thirst |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | It is also known as petha kaddu & used to prepare a candy called petha. Shoots, tendrils & leaves of plant may also be eaten as green. |
| Community/Knowledge Holder | | Mr Sarvesh Kumar |

Fruits Khirni (Manilkara hexandra) खिरनी



Khirni (Manilkara hexandra) खिरनी

| Kingdom | | Plantae |
|---------------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Sapotaceae |
| Genus and Species (I | f known) | Manilkara hexandra |
| Local Name / Commo | on Name | Khirni (खिरनी) |
| Habit and Habitat | | Dry evergreen forest. |
| Description | | It is a small to medium sized evergreen tree with height of 3-4 m. The bark is grayesh, black & rough. The wood is very hard, heavy & very durable. Leaves are simple & alternate. Flowers are yellowish. Fruit is small & bears one seed. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & retail stores |
| Season when grown | | Flowering occurs during August to December. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal & commercial uses. |
| Nutritional Value | | |
| Associated Tradition | al Knowledge | Increase hunger |
| Management mechanism | | By insecticides and pesticides |
| Other Details | | Seeds of it contain 25% oil which is considered demulcent. Leaves are used as fodder. |
| Community/Knowle | dge Holder | Mr Sarvesh Kumar |



FORMAT- I Agro biodiversity (C) Grains



Grains Rice / Paddy (*Oryza sativa*) धान



Rice / Paddy (Oryza sativa) धान

| *74 1 | | |
|----------------------------------|-------------|---|
| Kingdom | | Plantae |
| Unranked | | Angiosperm |
| Family | | Graminae |
| Genus and Species (| If known) | Oryza sativa |
| Local Name / Comm | on Name | Rice/Paddy (धान) |
| Habit & Habitat | | The plant grows in hot, moist tropics. |
| | | The area should be flooded with water |
| | | during early stages. |
| Description | | Plant is a large annual grass. Its branches ending into a grain, covered by husk. |
| Mythological Significance | | It is considered sacred in Hindu religion. |
| I.U.C.N. Status | | |
| Source of seeds | | Government & private shops. |
| Season when grown | | Rainy season |
| Local Status : | Past - | Less in number |
| | Present - | More in number |
| Uses | | This cereal is used as staple food. Fodder for cattle & it also forms a raw material for alcoholic beverages. |
| Nutritional Value | | Considerable amount of protein, fat & starch. |
| Associated Traditional Knowledge | | Boiled rice water used as starch for clothes |
| Management mechanism | | Insecticides& pesticides are sprayed. |
| Other Details | | Its straw are used for mushroom cultivation. |
| Community/Knowle | edge Holder | Mr. S. P. Singh |
| | | |

Grains

Gehu (Triticum aestivum) गेहूँ





Gehu (Triticum aestivum) गेहूँ

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Gramineae |
| Genus and Species (If known) | Triticum aestivum |
| Local Name / Common Name | Gehu/ Wheat (गेहूँ) |
| Habit & Habitat | On agriculture lands |
| Description | The grains are borne by an inflorescence which is spike of spikelet. A mature grain consists of embryo, starchy endosperm, proteinacious aleuronic layer &hook. |
| Mythological Significance | Its stalk is burnt in Holika fire. |
| I.U.C.N. Status | |
| Source of seeds | Government retail shops. |
| Season when grown | December-January (winter season) |
| Local Status: Past – | In abundance |
| Present - | In abundance |
| Uses | Wheat flour is used for breads, cakes, biscuit& other con- fectionary products. Wheat straw is used for weaving chairs, mattress, stuffing, baskets, packing, Cattle feed etc. |
| Nutritional Value | Starch, carbohydrates, dietary fibers. |
| Associated Traditional Knowledge | Roasted wheat & Gur Ladoo and Atta Ladoo |
| Management mechanism | Insecticides & pesticides are sprayed. Synthetic nitrogen fertilizer are also used. |
| Other Details | It is a major cereal in India. |
| Community/Knowledge Holder | Mr. S. P. Singh |

Grains Makka / Bhutta (Zeamays) मक्का





Makka / Bhutta (Zeamays) मक्का

| Kingdom | | Plantae |
|------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Poaceae |
| Genus and Species (If | known) | Zeamays |
| Local Name / Commo | n Name | Makka / Bhutta (मक्का) |
| Habit & Habitat | | It is cold intolerant, planted in spring. Plant is dependent on soil moisture. |
| Description | | The plant is an annual grass, possess both male & female on the same plant. |
| Mythological Significa | ance | Used in Lohri |
| I.U.C.N. Status | | |
| Source of seeds | | General Stores |
| Season when grown | | Kharif crop |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | Used as food for livestock; flour is used in preparation of corn bread other uses include corn cakes, corn starch, corn syrup, corn oil, industrial alcohol. |
| Nutritional Value | | Contains proteins besides starchy endosperm. |
| Associated Traditiona | l Knowledge | Roasted Makka & Chutney |
| Management mechanism | | Various pesticides are used to protect the crop from infestation. |
| Other Details | | Maize is a facultative short-day plant & flower in a certain number of growing degree days. |
| Community/Knowled | ge Holder | Mr. S. P. Singh |

Grains

Ragi / Millets (Eleusine coracana) रागी



Ragi / Millets (Eleusine coracana) रागी

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Poaceae |
| Genus and Species (If known) | Eleusine coracana |
| Local Name / Common Name | Ragi / Millets (रागी) |
| Habit and Habitat | It is an annual plant widely grown as cereals in the arid areas. |
| Description | It is a tufted annual grass that grows to a height of 50-6- cm. Leaf blades are shiny and strongly keeled. Leaves are green in colour. Inflorescence consists of spike like main branches that are open or contracted. The grains are globose. It is fast growing and drought resistant plant. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Selfgrowing |
| Season when grown | It is found throughout year. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Important part of Indian cuisine |
| Nutritional Value | Proteins, fat, carbohydrate, calcium, vitamins, fiber contains the amino acid methionine. |
| Associated Traditional Knowledge | Flour mixed with wheat flour for chapati. |
| Management mechanism | It is subjected to bird predators and fungus so use of manual labour required for management. |
| Other Details | It can be stored as grain for long periods without insecticides. It is non-toxic. |
| Community/Knowledge Holder | Mr. S. P. Singh |

Grains

Jwar (Sorghum bicolor) ज्वार





Jwar (Sorghum bicolor) ज्वार

| Kingdom | | Plantae |
|----------------------------------|----------|---|
| Unranked | | Angiosperm |
| Family | | Graminae |
| Genus and Species (If kno | wn) | Sorghum bicolor |
| Local Name / Common Na | me | Jwar (ज्वार) |
| Habit and Habitat | | Jwar is mainly crop of plains, and is grown as both a kharif & rabi crop. |
| Description | | The plants are tall annual growing to a height of 3 to 15 feet. The inflorescence is a dense head & panicle. The grains are small, round & pinkish white in colour. They can easily be grow in less irrigated & arid regions. |
| Mythological Significance | | Grown in Navratri |
| I.U.C.N. Status | | |
| Source of seeds | | By shops & nursery. |
| Season when grown | | Kharif crop- between May & June. Rabi Crop- between September & November. |
| Local Status: Pa | ast – | In abundance |
| P | resent - | In abundance |
| Uses | | The grain is eaten by breaking it & cooking it in the same way as rice or by grinding it into flour & preparing unleavened bread from it. The stem & leaves are used as cattle fodder especially in North India. |
| Nutritional Value | | It is richest in fiber& protein. |
| Associated Traditional Knowledge | | Useful for animals. |
| Management mechanism | | |
| Community/Knowledge H | older | Mr. S. P. Singh |

Grains Barley (Hordeum vulgare) जौ





Barley (Hordeum vulgare) जौ

| Kingdom | | Plantae |
|----------------------------------|-------------|---|
| 0 | | |
| Unranked | | Angiosperm |
| Family | | Poaceae |
| Genus and Species (| If known) | Hordeum vulgare |
| Local Name / Comm | on Name | Barley (जौ) |
| Habit and Habitat | | It is abundant in grassland & woodland. |
| Description | | It is a self pollinating, diploid species. |
| Mythological Significance | | In sacred 9 days of Hindus named "Navratri", holy kalash is placed over coil mixed with Barley. |
| I.U.C.N. Status | | Grown during NavratriPooja |
| Source of seeds | | Itself/Government retail shops |
| Season when grown | | Summer |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It is used as Algaecide, Animal feed, Fish feed, Alcoholic beverages & as food. |
| Nutritional Value | | Carbohydrates, Fat, Protein & Vitamins. |
| Associated Traditional Knowledge | | The Islamic Prophet Mohammad prescribed barley for seven diseases. Barley water is used in kidney problems. |
| Management mechanism | | |
| Other Details | | This plant is known to likely to be susceptible to barley mild mosaic as well as bacterial blight. |
| Community/Knowle | edge Holder | Mr. S. P. Singh |
| | | |

Grains Jai/Oat (Avena sativa) जई





Jai/Oat (Avena sativa) जई

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Poaceae |
| Genus and Species (I | f known) | Avena sativa |
| Local Name / Commo | on Name | Oat (जई) |
| Habit and Habitat | | Oats are grown in temperate regions. They have a lower summer heat requirement & greater tolerance of rain than other cereals. |
| Description | | Typically about 125 to 175 kg/hectare are shown either broadcast, drilled or planted using an air seeder. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Sown in spring or early summer in colder areas. |
| Local Status | Past- | Less abundant |
| | Present- | In abundance |
| Uses | | It has numerous uses in foods; they are rolled or crushed into oatmeal, or ground into fine oat flour. Chiefly eaten as porridge main ingredient in many cold cereals in muerli & granola. |
| Nutritional Value | | Fat, Na, K, carbohydrates, dietry fibres & protein. |
| Associated Traditional Knowledge | | Most commonly used as livestock feed. |
| Management mechanism | | Oats removes substantial amounts of nitrogen from soil. |
| Other Details | | It is known as breakfast cereal. |
| Community/Knowle | dge Holder | Mr. S. P. Singh |
| | | |

Grains

Bajra (Pennisptum glancum) बाजरा



Bajra (Pennisptum glancum) बाजरा

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Poaceae |
| Genus and Species (If | f known) | Pennisptum glancum |
| Local Name / Commo | n Name | Pearl millet (बाजरा) |
| Habit and Habitat | | It is well adapter to growing areas characterized by drought, low soil fertility & high temperature performs well in soils with high salinity or low pH. |
| Description | | Its height rages from 0.5 to 4 m, can be nearly white, pale yellow, brown, grey, slaty or purple. Grains are 3 to 4mm long. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Government shops. |
| Season when grown | | Grown as a kharif season crop in Northern India. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Its floor is used is mainly chapattis. It is used in wholesome in chronic fever, asthma, diarrhea, dysentery, common cold. |
| Nutritional Value | | Proteins, Carbohydrates, Fats & Fatty acids& vitamins. |
| Associated Traditional Knowledge | | As regular meal in places like Rajasthan &Gujarat. "BajrekiPithi" is a traditional cuisine of India. |
| Management mechanism | | |
| Other Details | | The most widely grown millet is pearl millet. |
| Community/Knowled | lge Holder | Mr. S. P. Singh |
| | | |

Grains

Kottu (Fagopyrum esculentum) कुट्टू





Kottu (Fagopyrum esculentum) कुट्टू

| Kingdom | | Plant |
|----------------------------------|----------|---|
| Unranked | | Angiosperm |
| Family | | Poygonaceae |
| Genus and Species (If | known) | Fagopyrum esculentum |
| Local Name / Commo | n Name | Kuttu/Buckwheat (कुट्टू) |
| Habit and Habitat | | In cultivated bed, obscure lands etc. |
| Description | | It is an annual growing plant. It reaches up to a height of 1- 1.5 m. It is a forest tender. It flowers from July to September & seeds ripen from august to October. Leaves are stalked & triangular. Flowers are in cluster & pink or white in colour. |
| Mythological Significance | | Its flour is used during various fasts by Hindus. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & retail shops. |
| Season when grown | | It is found throughout the year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various commercial & medicinal uses. |
| Nutritional Value | | It is a rich source of dietary fiber, protein, Mg, Fe& Vitamin- B6. |
| Associated Traditional Knowledge | | Kottu ki Roti |
| Management mechanism | | |
| Other Details | | It is also used as cover crop& as a wildlife attraction. It is also used as an alternate grain of barley for making beer. |
| Community/Knowledge Holder | | Mr. S. P. Singh |

Grains Singhada (*Trapa bispinosa*) सिंघाड़ा





Singhada (Trapa bispinosa) सिंघाड़ा

| Kingdom | | Plant |
|---------------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Trapaceae |
| Genus and Species (If | f known) | Trapa bispinosa |
| Local Name / Commo | n Name | Singhada (सिंघाड़ा) |
| Habit and Habitat | | It is a fresh aquatic herb, found in lakes & ponds. |
| Description | | It is a rooted floating, aquatic herb with ascending stems. Leaves are dimorphic, submerged, finely dissected & opposite. Flowers are white in colour, solitary axillary. Submerged stem can be 12 to 15 feet in length. |
| Mythological Significance | | It is used in form of flour during fast. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery and itself. |
| Season when grown | | It is found throughout the year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It is also used as a fruit & making various dishes during fasts. |
| Nutritional Value | | It is a good source of starch, Vit-C, P & K. |
| Associated Tradition | al Knowledge | To prepare Halwa & Pakori |
| Management mechanism | | Specialized methods of control are required to handle its infestation. Manual, mechanical & chemical techniques are used in its control. |
| Other Details | | It can form dense floating mats, severely limiting light. It can reduce oxygen levels. |
| Community/Knowled | lge Holder | Mr. S. P. Singh |

Grains Raamdana (Amranthus spp.) रामदाना



Raamdana (Amranthus spp.) रामदाना

| | -1 |
|----------------------------------|--|
| Kingdom | Plant |
| Unranked | Angiosperm |
| Family | Amaranthaceae |
| Genus and Species (If known) | Amranthus spp. |
| Local Name / Common Name | Ramdaana (राम दाना) |
| Habit and Habitat | Terrestrial habitats. |
| Description | It is an annual herb topped with clusters of dark pink flowers. The plant can grow up to 2 m in height & blooms in summer. The plant is usually green in colour. |
| Mythological Significance | It is used in fast. |
| I.U.C.N. Status | |
| Source of seeds | Nursery. |
| Season when grown | It is found throughout the year. |
| Local Status Past- | In abundance. |
| Present- | In abundance. |
| Uses | It has various medicinal & commercial uses. |
| Nutritional Value | It is a rich source of carbohydrate, fat, protein, P & K. |
| Associated Traditional Knowledge | To prepare Laddo and Patti |
| Management mechanism | Various pesticides are used to protect it. |
| Other Details | The leaf contains a small amount of vit-C & whole plant is used to make medicine. |
| Community/Knowledge Holder | Mr. S. P. Singh |

Grains

Kala til (Sesamun indicum nigrum) काला तिल



Kala til (Sesamun indicum nigrum) काला तिल

| Kingdom | | Plant |
|---------------------------|--------------|--|
| Unranked | | Angiosperm |
| Family | | Padaliaceae |
| Genus and Species (I | f known) | Sesamun indicum nigrum |
| Local Name / Commo | on Name | Kalatil (काला तिल) |
| Habit and Habitat | | In tropical regions. |
| Description | | It is a herbaceous annual plant. It has small taproot, a branching stem with opposite leaves & single light pinkish white flowers. The fruits an oblong brown capsule with small & flat teardrop shaped seeds. |
| Mythological Significance | | Its oil & roasted seeds are used in various fasts. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | | It is found throughout the year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various medicinal & commercial uses. |
| Nutritional Value | | It is a rich source of fat, K, carbohydrate, proteins, Ca, Fe, Vit-B6 & Mg. |
| Associated Tradition | al Knowledge | Laddo gives warmth |
| Management mechanism | | Various pesticides are used to protect the crop from infestation. |
| Other Details | | Its seeds have been used as medicine. They are considered to be antioxidant, anticancer & laxative properties. It is an efficient immunity enhancer. |
| Community/Knowled | dge Holder | Mr. S. P. Singh |

Grains Til/Sesame (Sesamum indicum) सफेद तिल





Til/Sesame (Sesamum indicum) सफेद तिल

| Kingdom | | Plant |
|----------------------|---------------|---|
| Unranked | | Angiosperm |
| Family | | Padaliaceae |
| Genus and Species | (If known) | Sesamun indicum |
| Local Name / Comm | ion Name | Til/Sesame (सफेद तिल) |
| Habit and Habitat | | In tropical regions. |
| Description | | It is a herbaceous annual plant. It has small taproot, a branching stem with opposite leaves & single light pinkish white flowers. The fruits an oblong brown capsule with small & flat teardrop shaped seeds. |
| Mythological Signif | ficance | Its oil & roasted seeds are used in various fasts. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | 1 | It is found throughout the year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various medicinal & commercial uses. |
| Nutritional Value | | It is a rich source of fat K, carbohydrate, proteins, Ca, Fe, Mgand Vit-B6. |
| Associated Traditio | nal Knowledge | Laddo gives warmth |
| Management mechanism | | Various pesticides are used to protect it from the infestation. |
| Other Details | | Its seeds have been used as medicine. They are considered to be antioxidant, anticancer & laxative properties. It is an efficient immunity enhancer. |
| Community/Knowl | edge Holder | Mr. S. P. Singh |
| | | |

Grains Peanuts (*Arachis hypogea*) मूंगफली



Peanuts (Arachis hypogea) मूंगफली

| KKingdom | | Plant |
|------------------------|-----------|--|
| 0 | | |
| Unranked | | Angiosperm |
| Family | | Fabaceae |
| Genus and Species (If | known) | Arachis hypogea |
| Local Name / Common | Name | Peanut / Groundnut (मूंगफली) |
| Habit and Habitat | | It is found in sub terrestrial habitat. |
| Description | | It is an annual herbaceous plant with trailing stem & grows to around .5 m long. The leaves are alternate & compound. The flowers are yellow & self-fertile. The fruits is an indehiscent legume typically containing 1-3 soft seeds with brown or red membrane. |
| Mythological Significa | nce | It is also used as alternative food in fasts. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | | It is found throughout the year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various commercial & medicinal uses. |
| Nutritional Value | | It is a rich source of fat, dietaryfiber, Fe,K, Ca, Mg & Vit-B6. |
| Associated Traditional | Knowledge | Peanut and Chura a good food |
| Management mechanism | | Various pesticides used to protect the crop. |
| Other Details | | It is rich source of oil & also used in making peanut butter. The whole plants are also a source of animal fodder & green fertilizer. |
| Community/Knowledg | ge Holder | Mr. S. P. Singh |

Grains Castor/Arandi (*Ricinus communis*) अरंडी

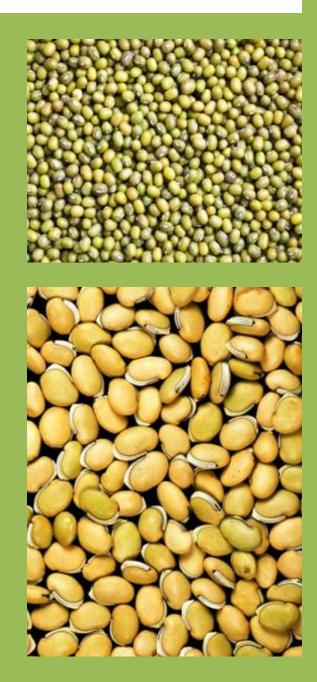


Castor/Arandi (Ricinus communis) अरंडी

| Kingdom | | Plant |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Euphorbiaceae |
| Genus and Species (I | f known) | Ricinus communis |
| Local Name / Commo | on Name | Arandi/Castor (अरंडी) |
| Habit and Habitat | | In tropical regions. |
| Description | | It is a large shrub or small tree. It is a fast growing tree that can reach the height of upto 12 m. The leaves are glossy, long, alternate & palmate with 5-12 lobes. The flowers are green or red in colour. The fruit is a spiny, greenish capsule containing large, oval, shiny bean like seeds. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery and itself. |
| Season when grown | | It is found throughout the year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various commercial uses. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Castor seed oil is good for hair |
| Management mechanism | | |
| Other Details | | The seeds from castor bean plant are poisonous to people, animal & insect. |
| Community/Knowle | dge Holder | Mr. S. P. Singh |



FORMAT- I Agro biodiversity (D) Pulses



Pigeon Pea (Cajanus cajan) अरहर



Pigeon Pea (Cajanus cajan) अरहर

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Fabaceae |
| Genus and Species (I | f known) | Cajanus cajan |
| Local Name / Commo | on Name | Arhar/Pigeon Pea (अरहर) |
| Habit and Habitat | | Common in plains, cultivated in open field. |
| Description | | It is an annual shrub. The stem is erect of about 1 to 2 meter in height. Leaves are alternate & compound. Flowers are in axillary cluster of 2-6. The flowers are yellow in colour. The pods contain 3-4 seeds which may be white, greyish or brown in colour. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Government retail shops. |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various medicinal uses & an important part of Indian cuisine. |
| Nutritional Value | | It is a rich source of various proteins & vitamins (B1, B2, B3, B5, B6)& trace metals like Ca, Fe, Mn, P, K, Na, Zn. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Various herbicides are used to protect crop from insects& diseases. |
| Other Details | | In some parts of world it is also used as optional food for animals. About 80% of its worldwide production is only from India. |
| Community/Knowle | dge Holder | Mr. Avinash Dohrey |

Lentil (Lens culinaris) मसूर





Lentil (Lens culinaris) मसूर

| Kingdom | | Plantae |
|-------------------------------|-----------|--|
| Unranked | | Angiosperm |
| Family | | Fabaceae |
| Genus and Species (If k | xnown) | Lens culinaris |
| Local Name / Common | Name | Masoor / Lentil (मसूर) |
| Habit and Habitat | | Non-marine habitat. |
| Description | | It is an annual herb. The plant height ranges from .5 to 1 meter. Stem is erect & branched. Leaves are alternate& compound. Flowers are in clusters of 2-4. Flowers are white, blue or purple in colour. Fruit a pod or legume with 2 seeds. |
| Mythological Significat | nce | |
| I.U.C.N. Status | | |
| Source of seeds | | Government retail shops. |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various medicinal uses & an important part of daily Indian cuisine. |
| Nutritional Value | | It is a rich source of protein & vitamin like B1, B2, B3, B5, B6, B9& C. |
| Associated Traditional | Knowledge | Used in preparing Dalmot |
| Management mechanism | | Various herbicides are used for the protection of plant from invasion. |
| Other Details | | It's flowering season is from March- May. Seeds are round in shape. |
| Community/Knowledg | e Holder | Mr. Avinash Dohrey |

Mung bean (Vigna radiata) मूंग



Mung bean (Vigna radiata) मूंग

| | | _1 |
|---------------------------|-------------|---|
| Kingdom | | Plantae |
| Unranked | | Angiosperm |
| Family | | Fabaceae |
| Genus and Species (If | known) | Vigna radiata |
| Local Name / Commo | n Name | Moong/Mungbean (मूंग) |
| Habit and Habitat | | Tropical, Sub tropics, Warm temperate. |
| Description | | It is an annual legume ranging in height from 15 cm to 1 meter. It branches freely. Leaves, stems & pods are slightly hairy. Pods contain about 7-20 seeds. Fruit is yellow or greenish in colour. Leaves are alternate. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Government retail shops. |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various medicinal uses & an important part of Indian cuisine. |
| Nutritional Value | | It is a rich source of proteins & vitamins (B1, B2, B3, B5, B6, B9, C, E, K) |
| Associated Traditiona | l Knowledge | Used in preparing Dalmot and Bari |
| Management mechanism | | Various herbicides are used to protect it from insect invasion. |
| Other Details | | It is a good green manure & can be used as a cover crop before or after cereal crops. |
| Community/Knowled | ge Holder | Mr. Avinash Dohrey |

Pulses Urad (Vigna mungo) उड़द





Urad (Vigna mungo) उड़द

| Kingdom | | Plantae |
|----------------------|---------------|---|
| Unranked | | Angiosperm |
| Family | | Fabaceae |
| - | (flyn orym) | |
| Genus and Species (| - | Vigna mungo |
| Local Name / Comme | on Name | Urad / Black lentil (उड़द) |
| Habit and Habitat | | Tropical, Sub tropics, warm temperate. |
| Description | | It is an annual herb. Stem is erect or sub erect. Plant is densely haired. The plant grows to a height of 30-100 cm. The leaves are large & hairy. The flowers are small 7 yellow in colour. The pod is hairy & contains 4-10 seeds. |
| Mythological Signifi | cance | Always prepared in "Shraad" ceremony |
| I.U.C.N. Status | | |
| Source of seeds | | Government retail shops. |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It is an important part of Indian cuisine. |
| Nutritional Value | | It is a good source of protein, vitamins & dietary fibers. |
| Associated Tradition | nal Knowledge | "Satpaita" is very nutritious recipe. To prepare Bari. |
| Management mechanism | | Various herbicides are used for its protection. |
| Other Details | | It has been historically used as cementing agent along with other ingredients in the construction of several historical buildings. |
| Community/Knowle | edge Holder | Mr. Avinash Dohrey |

Soybean (Glycine max) सोयाबीन



Soybean (Glycine max) सोयाबीन

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Leguminosae (Papilionaceae) |
| Genus and Species (If known) | Glycine max |
| Local Name / Common Name | Ramkurthi / Soybean (सोयाबीन) |
| Habit and Habitat | Since many years, soybean is being grown in india. Yet, only a few farmers grow it. The areas under this crop us small. |
| Description | Soybean can be grown in grief areas of the country where the rainfall is 35 species is 35 inches or less. It can be grown at elevations up to 6000 feet above sea level. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nursery and retail shops. |
| Season when grown | It is found throughout year. |
| Local Status Past- | In abundance. |
| Present- | In abundance. |
| Uses | The bean has high oil content & the oil can be used for cooking. Oil-cake is used as cattle feed. |
| Nutritional Value | It contains important minerals, more of calcium & phosphorous than any cereals. It is rich in iron, potassium & vitamins. |
| Associated Traditional Knowledge | Soybean "Bari" |
| Management mechanism | |
| Other Details | Soybean flour or cooked bean is very good for diabetic patients. |
| Community/Knowledge Holder | Mr. Avinash Dohrey |

Moth bean (Vigna aconitifola) मोथबीन



Moth bean (Vigna aconitifola) मोथबीन

| Kingdom | Plantae |
|--------------------------------|---|
| Unranked | Angiosperm |
| Family | Fabaceae |
| Genus and Species (If known) | Vigna aconitifola |
| Local Name / Common Name | Moth bean (मोथबीन) |
| Habit and Habitat | In arid & semi arid regions. |
| Description | It is an annual food legume. It is a trailing herb of about 30-40 cm in length. With hairy stem & dense packed branches reaching upto span of 150 cm. Flowers are of yellow colour & develop into brown pod with 4-9 seeds. Seeds are of variety in colours like yellow-brown, whitish green etc. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nursery & Government retail shops. |
| Season when grown | It is found throughout year. |
| Local Status Past- | In abundance. |
| Presen | t- In abundance. |
| Uses | It is both used by humans as food & for forage & cover crop. |
| Nutritional Value | It is a rich source of protein. |
| Associated Traditional Knowled | lge Soaked and eaten. Prepare Dalmot |
| Management mechanism | Various herbicides are used to prevent its crop. |
| Other Details | It can be grown on tall types of soils & is a drought resistant, hot season fodder plant. |
| Community/Knowledge Holder | Mr. Avinash Dohrey |

Pulses Lima bean (*Phaseolus lunatus*) बीन



Lima bean (Phaseolus lunatus) बीन

| Kingdom | | Plantae |
|----------------------------------|-----------|--|
| Unranked | | Angiosperm |
| Family | | Fabaceae |
| Genus and Species (If | known) | Phaseolus lunatus |
| Local Name / Commo | n Name | Lima bean (बीन) |
| Habit and Habitat | | In cultivated habitat, scrubland & subtropical regions. |
| Description | | It is perennial as well as annual shrub. The plant height ranges from 1-5 m in erect bush form. It has trifoliate compound leaves. The white to yellow flowers occur in loose form. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It is used as a pulse & included as a food. |
| Nutritional Value | | It is a rich source of K, dietary fiber, protein, Fe & Vitamin- B6. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Various herbicides are used to protect the crop. |
| Other Details | | It requires a long, warm growing season for beans to develop. |
| Community/Knowled | ge Holder | Mr. Avinash Dohrey |

Pulses Lablab (Dolichos lablab) सेम





Lablab (Dolichos lablab) सेम

Kingdom Plantae Unranked Angiosperm Family Fabaceae Dolichos lablab Genus and Species (If known) Lablab (सेम) Local Name / Common Name Habit and Habitat In diverse climatic conditions such as arid, semi arid, subtropical & humid regions etc. Description It is annual or short lived perennial. The thick stems can reach up to 6 m in length. Leaves may be hairy on undersides. The flowers are white or purple/blue in colour. The fruit is a legume pod with bright purple to pale green colour it contains four seeds. **Mythological Significance** I.U.C.N. Status Source of seeds Nursery & Government retail shops. Season when grown It is found throughout year. **Local Status** Past-In abundance. **Present-**In abundance. Uses It is used as food & cover crop. Nutritional Value It is a rich source of proteins. **Associated Traditional Knowledge** Management mechanism Various herbicides are used to protect the crop. **Other Details** It also has poisonous properties & so fruits & beans should be boiled with several changes of water. **Community/Knowledge Holder** Mr. Avinash Dohrey

Pulses Lobia (Vigna sinesis) लोबिया





Lobia (Vigna sinesis) लोबिया

Plantae

Angiosperm

Vigna sinesis

Fabaceae

Kingdom Unranked Family Genus and Species (If known) Local Name / Common Name Habit and Habitat Description

Mythological Significance

I.U.C.N. Status

Source of seeds

Local Status

Uses

Season when grown

Nutritional Value

Other Details

Lobia / Cowpea (लोबिया) In semi arid tropical habitat. It is a herbaceous, prostrate, climbing or sub erect to erect annual growing legume. It can grow up to 15-80 cm high. Leaves are alternate & opposite. Flowers are white, cream, yellow or purple in colour. Fruit is a pod with about 10-15 seeds of various colours like white, brown, maroon, cream etc.

. . . .

. . . .

Past-

Present-

Nursery & Government retail shops.

It is found throughout year.

Mr. Avinash Dohrey

In abundance.

In abundance.

It is used as food & also has various commercial uses.

It is a rich source of protein & calories.

. . . .

Various pesticides are used to protect the crop.

It is a dual purpose legume, being used for vegetables, grain & hay/silage. It can be used as green manure.

Community/Knowledge Holder

Associated Traditional Knowledge

Management mechanism

Pulses Pea (Pisum sativum) मटर



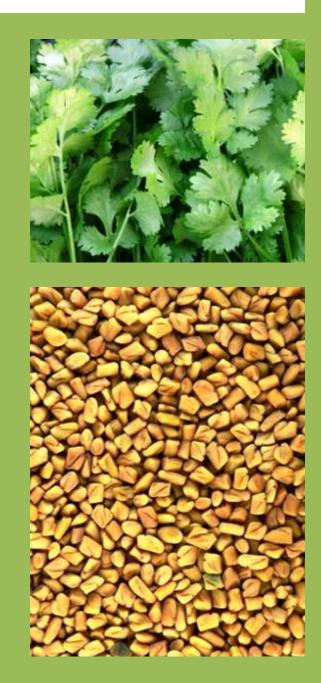


Pea (Pisum sativum) मटर

| Kingdom | | Plantae |
|----------------------------------|-----------|--|
| Unranked | | Angiosperm |
| Family | | Leguminosae |
| Genus and Species (If | known) | Pisum sativum |
| Local Name / Common | Name | Matar/ Garden Pea (मटर) |
| Habit and Habitat | | In tropical and sub-tropical regions. |
| Description | | It is a herbaceous, annual, glaucas, tendril bearing, climbing or trailing herb. It can grow up to 15-80 cm high. Leaves are alternate & opposite. Flowers are white or purple in colour. Fruit is a pod with about 6-8 round seeds of green colour. |
| Mythological Significance | | Offered to God on tilchauth and Karwa Chauth |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It is used as food & also has various commercial uses as vegetable and pulses. |
| Nutritional Value | | It is a rich source of protein & calories. |
| Associated Traditional Knowledge | | Soaked, boiled and eaten |
| Management mechanism | | Various pesticides are used to protect the crop. |
| Other Details | | It is a dual purpose legume, being used for vegetables, grain & hay/silage. It can be used as green manure. |
| Community/Knowled | ge Holder | Mr. Avinash Dohrey |



FORMAT- I Agro biodiversity (E) Spices



Spices Haldi/Turmeric (*Curcuma longa*) हल्दी



Haldi/Turmeric (Curcuma longa) हल्दी

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Zingiberaceae |
| Genus and Species (If | known) | Curcuma longa |
| Local Name / Commo | n Name | Haldi/Turmeric (हल्दी) |
| Habit & Habitat | | Garden/Open field |
| Description | | The plant is a robust perennial, short stem& tufted leaves. Pale-yellow flowers are found in dense spikes with pinkish bract. Rhizomes in colourful condition. Very aromatic, with a musky odour. |
| Mythological Significance | | Turmeric is used in several religious occasion in Hinduism. |
| I.U.C.N. Status | | |
| Source of seeds | | Government retail shop. |
| Season when grown | | It is mostly grown in winter. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | As antiseptic, as a condiment, used to flavor&colour pickles, and food stuff, principal ingredients of curry, also used to prepare kumkum & message. |
| Nutritional Value | | It is very rich source of many essential vitamins such as pyridoxine (Vit B6), choline, niacin &riboflavin etc. |
| Associated Traditional Knowledge | | Remedy for stomach diseases and haldi milk given during injury. |
| Management mechanism | | |
| Other Details | | Anti-inflammatory (pain pills), carminative, anti- flotalent&anti-microbial property. |
| Community/Knowled | lge Holder | Mr. AvinashDohrey |

Spices Mirchi (*Capsicum annum*) मिर्च





Mirchi (Capsicum annum) मिर्च

| Kingdom | | Plantae |
|----------------------------------|-------------|---|
| Unranked | | Angiosperm |
| Family | | Solonaceae |
| Genus and Species (| lf known) | Capsicum annum |
| Local Name / Common Name | | Mirchi/ Chilli (मिर्च) |
| Habit & Habitat | | Alluvial & sandy soil |
| Description | | It is a perennial plant. Its height ranges from 2-3.5ft. Leaves are simple. Flowers are single to few in number. Flowers are white in colour. |
| Mythological Significance | | It is often used along with lemon in festive and sacred purposes. |
| I.U.C.N. Status | | |
| Source of seeds | | By solves & shops. |
| Season when grown | | It is found throughout year. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | It has various medicinal uses and an important part of Indian cuisine. |
| Nutritional Value | | It is a rich source of Vit C, A, B6 and fiber. |
| Associated Traditional Knowledge | | Used in dog bites |
| Management mechanism | | |
| Other Details | | It is also used in the making of various sauces. Its use in small amount helps in improving appetite. |
| Community/Knowle | edge Holder | Mr. Avinash Dohrey |

Spices Dhania (Conandrum sativum) धनिया



Dhania (Conandrum sativum) धनिया

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Apiaceae |
| Genus and Species (If known) | Conandrum sativum |
| Local Name / Common Name | Dhania (धनिया) |
| Habit & Habitat | Alluvial & sandy soil |
| Description | 2 or 3 feet in height, white or pinkish flowers, lower leaves have broad segments, upper are very narrow. Fruits are small, oval & aromatic. |
| Mythological Significance | The powder form of coriander is made a "churan" & offerd to Goddess Laxmi in Hinduism. |
| I.U.C.N. Status | |
| Source of seeds | By sloves |
| Season when grown | It is found throughout year. |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | As a spice, for essential oils extraction. |
| Nutritional Value | Carbohydrate, fat, proteins & vitamins. |
| Associated Traditional Knowledge | Ayurvedic agent. |
| Management mechanism | |
| Other Details | Diabetes preventive. |
| Community/Knowledge Holder | Mr. Avinash Dohrey |
| | |

Spices Ginger (Zingiber officinale) अदरक



Ginger (Zingiber officinale) अदरक

| Vinadam | | Plantae |
|----------------------------------|-------------|---|
| Kingdom | | |
| Unranked | | Angiosperm |
| Family | | Zingiberaceae |
| Genus and Species | (If known) | Zingiber officinale |
| Local Name / Comm | ion Name | Ginger (अदरक) |
| Habit and Habitat | | Tropical regions. |
| Description | | It produces clusters of white & pink flower pod that gloom into yellow flowers. It is perennial reed like plant with annual leafy stem about a meter tall. Rhizome is gathered. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery/Government retail shop. |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It is used in making tea, pickled in vinegar& often used as spice in Indian recipe. Candid ginger or crystallized ginger is a type of confectionary. |
| Nutritional Value | | Carbohydrate & protein trace metals. |
| Associated Traditional Knowledge | | Role traditional ayurvedic medicine & role in traditional Indian drink 'masala chai'. |
| Management mechanism | | |
| Other Details | | It is consumed researchable quantities because it has few negative side effect also when taken in more quantities. It is used in gastric troubles. |
| Community/Knowl | edge Holder | Mr. Avinash Dohrey |

Spices Rai (black) (*Brassica nigra*) कालीराई



Rai (black) (Brassica nigra) कालीराई

| Kingdom | | Plantae |
|----------------------------------|-----------|---|
| Unranked | | Angiosperm |
| Family | | Brassicales |
| Genus and Species (If | known) | Brassica nigra |
| Local Name / Common Name | | Kali rai / Black mustard (काली राई) |
| Habit and Habitat | | In cultivated habitat, meadow, railway etc. |
| Description | | It is an annual herb & plant height ranges from 3-2 meter. Stems erect, branched above. Leaves are ovate, oblong & dentate. Flowers are yellow in colour. Fruits are tapering & black to dark brown in colour. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various commercial & homely uses. |
| Nutritional Value | | It is a rich source of Vit. E, Ca, Mn, Cu, Fe & Zn. |
| Associated Traditional Knowledge | | Used in pickles and "Kanji" preparation |
| Management mechanism | | Various pesticides are used to protect crop. |
| Other Details | | It has anti-bacterial &have been used to treat rheumatism. Also used as winter cover crop. |
| Community/Knowled | ge Holder | Mr. Avinash Dohrey |

Spices Rai (yellow) (*Brassica hirta*) पीलीराई



Rai (yellow) (Brassica hirta) पीलीराई

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Cruciferae (Brassicaceae) |
| Genus and Species (If known) | Brassica hirta |
| Local Name / Common Name | Safed rai / White mustard (पीली राई) |
| Habit and Habitat | In the cultivated beds. |
| Description | It is an annual herb growing upto 6 ft. in height it flowers from June to August. Leaves petiolate, altemate & ovate. Flowers are yellow in colour. Fruits are pod with 4-8 seeds per pod. |
| Mythological Significance | Used during Hawan |
| I.U.C.N. Status | |
| Source of seeds | Nursery & Government retail shops. |
| Season when grown | It is found throughout year. |
| Local Status Past- | In abundance. |
| Present- | In abundance. |
| Uses | It has various medicinal & commercial uses. |
| Nutritional Value | It is rich source of protein, fat, carbohydrate, fiber & vitamin A. |
| Associated Traditional Knowledge | Used in various preparations |
| Management mechanism | Various herbicides are used to protect the crop from infestation. |
| Other Details | The seed contains upto 35% semi drying oil used for lubricant & lightning etc. Plant is also used as manure crop. |
| Community/Knowledge Holder | Mr. Avinash Dohrey |

Spices Methi (*Trigonella foenum graecum*) मेथी



Methi (Trigonella foenum graecum) मेथी

| *** 1 | | |
|----------------------------------|------------|---|
| Kingdom | | Plantae |
| Unranked | | Angiosperm |
| Family | | Papilionaceae |
| Genus and Species | (If known) | Trigonella foenum graecum |
| Local Name / Comm | ion Name | Methi (मेथी) |
| Habit and Habitat | | In field verges, uncultivated ground, dry grasslands & hillsides. |
| Description | | It is an annual growing herb. Its height ranges from 4 to 6 meter. It flowers from June to August & fruits from August to September. Flowers are white in colour. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | 1 | It is found throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various medicinal & commercial uses. |
| Nutritional Value | | It is a rich source of Na, K, dietary fibre, Fe, Mg & Vitamin-C & B6. |
| Associated Traditional Knowledge | | Kacchi Methi eaten to cure diabetes |
| Management mechanism | | Various herbicides are used to protect the crop from infestation. |
| Other Details | | It has been used for controlling high blood sugar & also used as a spice in foods. |
| Community/Knowledge Holder | | Mr. Avinash Dohrey |

Spices

Saunf (Foeniculum vulgare) सौंफ





Saunf (Foeniculum vulgare) सौंफ

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Apiales |
| Genus and Species (I | f known) | Foeniculum vulgare |
| Local Name / Common Name | | Saunf (सौंफ) |
| Habit and Habitat | | In temperate regions. |
| Description | | It is a perennial, umbelliferous plant. It has thick, white rootstalk & hollow, striated stems. Leaves are feathery, alternate & triply pinnate. Flowers are yellow produced in large terminal umbels. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various medicinal & commercial uses. Also used in various food preparation. |
| Nutritional Value | | It is a rich source of Na, K, dietary fiber, Mg & Vitamin-A,C. |
| Associated Traditional Knowledge | | Helps in stomachache & Gastric problem with warm water |
| Management mechanism | | |
| Other Details | | It is most commonly used in treatments of gastrointestinal disorders & helpful in relieve of gas, indigestion & bloat. |
| Community/Knowle | dge Holder | Mr. Avinash Dohrey |

Spices Jeera (*Cuminum cyminum*) जीरा





Jeera (Cuminum cyminum) जीरा

| Kingdom Plantae | |
|--|---|
| Unranked Angiosperm | |
| Family Apiaceae | |
| Genus and Species (If known) Cuminum cymin | num |
| Local Name / Common Name Jeera/Cumin (ज | गीरा) |
| Habit and Habitat In tropical & ser | ni-tropical habitat. |
| branched stem plant has a unif in colour. Leav | nerbaceous plant with a slender, glaborous, & it grows up to a height of 30-50 cm. The form canopy. The stem is grey or dark green res are long & pinnate. Flowers are small, a colour. Fruits with one seed. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds Nursery & Gove | ernment retail shops. |
| Season when grown It is found through | ıghout year. |
| Local Status Past- In abundance. | |
| Present- In abundance. | |
| Uses It has various m | edicinal & commercial uses. |
| Nutritional ValueIt is a rich souVitamin-A,C & | rrce of fat, Na, k, dietary fiber, protein & Ca, Fe & Mg. |
| Associated Traditional Knowledge It is used as a su | pplement in Indian cuisine. |
| Management mechanism | |
| | sed in the treatment of minor digestive est conditions & cough, as a pain killer & to |
| complaints, che treat rotten teet | 0 1 |

Spices Clove (Syzygium aromaticum) लौंग



Clove (Syzygium aromaticum) लौंग

| Kingdom | | Plantae |
|----------------------|--------------|--|
| Unranked | | Angiosperm |
| Family | | Myrtaceae |
| Genus and Species (1 | f known) | Syzygium aromaticum |
| Local Name / Commo | on Name | Lavang/Clove (लोंग) |
| Habit & Habitat | | In tropical regions. |
| Description | | It is an evergreen tree that grows to a height of 8-12mt. Leaves are large, flowers are in terminal clusters. The flower buds initially have a pale hue, gradually turn green, then transition to bright red in colour. |
| Mythological Signifi | cance | It is also called "Flower of The Gods" in Asia. |
| I.U.C.N. Status | | |
| Source of seeds | | Retail shop. |
| Season when grown | | It is found throughout year. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | It has numerous medicinal and commercial uses. |
| Nutritional Value | | It is a rich source of Mn, Vit K, fiber, Fe, Mg and Ca. |
| Associated Tradition | al Knowledge | For black magic and clove tea during winters |
| Management mechanism | | |
| Other Details | | It is also used as a local anesthetic drug for toothache. Its oil is used in aromatherapy. It has various antiseptic and anti inflammatory properties. |
| Community/Knowle | dge Holder | Mr. Avinash Dohrey |

Spices Hing (Ferula asafoetida) हींग



Hing (Ferula asafoetida) हींग

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Apiaceae |
| Genus and Species (If known) | Ferula asafoetida |
| Local Name / Common Name | Hing (होंग) |
| Habit & Habitat | In rich loamy soil in the wet tropics. |
| Description | It is a perennial herb that can grow up to a height of 1-1.5 mt. with a circular mass of 30-40cm. leaves. Flowers are pale greenish yellow. Fruits are oval, flat, thin, reddish brown in colour with a milky juice. All parts of the plant have the distinct fetid smell. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Retail shop. |
| Season when grown | It is found throughout year. |
| Local Status: Past – | Less abundant |
| Present – | Moreabundant |
| Uses | It has various medicinal and commercial uses. Basically used to add flavor to food. |
| Nutritional Value | It contains resin, gum, volatile oil and ash. |
| Associated Traditional Knowledge | Taken during gastric troubles |
| Management mechanism | |
| Other Details | It is a resin like gum that comes from the dried sap extracted from the stem and roots and used as a spice. The resin is greyish white when fresh but dries to a dark amber colour. |
| Community/Knowledge Holder | Mr. Avinash Dohrey |



FORMAT- I Agro biodiversity (F) Oil Yielding Plants



Molshree (Mimusops elengi) मॉलश्री



Molshree (Mimusops elengi) मॉलश्री

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Sapotaceae |
| Genus and Species (I | f known) | Mimusops elengi |
| Local Name / Commo | on Name | Molshree (मॉलश्री) |
| Habit & Habitat | | It is grown in Gardens and fields. |
| Description | | Reaching a height of about 16 m. Its leaves are glossy, dark green, oval-shaped, 5-14 cm long & 2.5 to 6cm wide. Flowers are creamy, hairy and scentled. Upto 1 m circumference. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Throughout the year |
| Local Status: | Past – | In abundance |
| | Present – | In less abundance |
| Uses | | Bark, Flowers, fruits & seeds are used as trintgent, cooling, anti-helminthic & toxic. It is mainly used in dental oils, bleeding gums, pyoirrhea, dental cavities& loose teeth. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Ripened fruits facilitate a use for burning crination. |
| Management mechanism | | |
| Other Details | | |
| Community/Knowle | dge Holder | Mr. S. P. Singh |
| | | |

Arandi (Ricinus communis) आरण्डी



Arandi (Ricinus communis) आरण्डी

| Kingdom | | Plantae |
|----------------------------------|----------|--|
| Unranked | | Angiosperms |
| Family | | |
| - | | Euphorbiaceac |
| Genus and Species (If | - | Ricinus communis |
| Local Name / Common | Name | Arandi (आरण्डी) |
| Habit and Habitat | | In areas with a suitable climate castor establishes itself easily where it can become an invasive plant & often to be found on waterland. |
| Description | | It is a fast growing sucking perennial shrub that can reach the size of a small tree. Leaves are glossy. The flowers are born in terminal panicle like inflorescence. Fruit is spiny, greenish. |
| Mythological Significa | nce | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Annual plant, spring season. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Used as purgative. Being water resistant, it is used for making fabrics, for protective covering of air-planes, insulation etc. Also used in soap manufacture, inks, plastics, paints, varnishes, leather preservation etc. |
| Nutritional Value | | Several vitamins & minerals. |
| Associated Traditional Knowledge | | Known to be used as an excellent fertilizer. |
| Management mechanism | | |
| Other Details | | Oil is green in colour. Seeds have about 35-58 % oil content. |
| Community/Knowledge Holder | | Mr. S. P. Singh |

Eucalyptus (Eucalyptus globulus) यूक्लिपटस



Eucalyptus (Eucalyptus globulus) यूक्लिपटस

| Vinadam | | Plantae |
|----------------------------------|------------|--|
| Kingdom | | |
| Unranked | | Angiosperms |
| Family | | Myrtaceae |
| Genus and Species (| lf known) | Eucalyptus globulus |
| Local Name / Comme | on Name | Eucalyptus (यूक्लिपटस) |
| Habit & Habitat | | In forest& field |
| Description | | It is a forest tree and single stemmed & have a brownforming a minor proportion of the whole tree height. It may take a form of a very large tree. |
| Mythological Signifi | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Rainy season |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | As pulpwood, oil extraction, honey extraction, musical instruments, making dyes. |
| Nutritional Value | | Rich in protein |
| Associated Traditional Knowledge | | Ability to be met to drain in camps & thereby reduces the risk of malaria. Eucalyptus oil used as insecticide |
| Management mechanism | | In nursery herbicides are used. |
| Other Details | | Also known as gum tree. |
| Community/Knowle | dge Holder | Mr. S. P. Singh |
| | | |

Moongphali (Arachis hypogaea) मूंगफली



Moongphali (Arachis hypogaea) मूंगफली

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Leguminosae |
| Genus and Species (I | f known) | Arachis hypogaea |
| Local Name / Commo | on Name | Moongphali (मूंगफली) |
| Habit and Habitat | | In light, Sandy- loamy soil. |
| Description | | Herbarceous annual plant. Small usually erect, thin stemmed plants with feather like leaves. The flowers are yellow, orange, cream or white. |
| Mythological Signific | cance | It is considered so pure that it is eaten in fasting also. |
| I.U.C.N. Status | | |
| Source of seeds | | Seed shops |
| Season when grown | | Spring Season. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Used as filtered & refined oil (edible), in making margarine, shortening etc. Poorer grades are used for making soap, lubricants & illuminants. The residual oil cake is a good cattle feed & also as a fertilizer. |
| Nutritional Value | | Good source of protein & fat. |
| Associated Traditional Knowledge | | There is a poem on Moongphali.Chura & Moongphali is a good food |
| Management mechanism | | Increased production in areas of high rainfall or with the use of irrigation. |
| Other Details | | Oil is extracted by hydraulic pressures & expellers. |
| Community/Knowle | dge Holder | Mr. S. P. Singh |
| | | |

Menthol (Mentha piperita) पिपरमिंट



Menthol (Mentha piperita) पिपरमिंट

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Lamiaceae |
| Genus and Species (I | f known) | Mentha piperita |
| Local Name / Commo | on Name | Menthol (पिपरमिंट) |
| Habit & Habitat | | Typically in moist habitat, including stream sides & drainage ditches. |
| Description | | Herbaceous rhizomatous perennial plant growing to 30- 90 cm tall, with smooth stems. The leaves are from 4-9 cm long & 1.5-4 cm broad, dark green with reddish veins. Flowers are purple. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Market |
| Season when grown | | March-April |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | It is source of peppermint oil used in pharmacy, confectionary & for flavouring. |
| Nutritional Value | | Aromatic plant |
| Associated Traditional Knowledge | | The plant is used for allaying nausea & vomiting and used on blisters in mouth |
| Management mechanism | | |
| Other Details | | Large nectar producer. A mild, pleasant varietal honey can be produced if there is sufficient area of plants. |
| Community/Knowled | dge Holder | Mr. S. P. Singh |

Sarso (Brassica nigra) सरसों





Sarso (Brassica nigra) सरसों

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | |
| | | Angiosperm |
| Family | | Brassicaceae/ Cruciferae |
| Genus and Species (If | known) | Brassica nigra |
| Local Name / Commo | n Name | Sarso (सरसों) |
| Habit and Habitat | | In agricultural land. |
| Description | | The plant itself can grow from two to eight feet tall, with racemes of small yellow flowers. The leaves are covered in small hair; they can wilt on hot days but recover at night. |
| Mythological Signific | ance | Has significant role in Hindu religion. It has relates proverb also " Rai ka pahad banana". |
| I.U.C.N. Status | | |
| Source of seeds | | Collected from freshly plucked fruits. |
| Season when grown | | Grown along with Rabi crop. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | Seed & oil are uses as condiments in the preparation of pickles & are flavouring curries & vegetables. The leaves of young plants are used as green vegetables. |
| Nutritional Value | | It has significant amount of fatty oils. |
| Associated Traditional Knowledge | | It is significantly used in South Indian cuisine. Used in massage & gives warmth |
| Management mechanism | | Pesticides are sprayed. |
| Other Details | | Were used to treat respiratory infections before modern medicines. |
| Community/Knowled | lge Holder | Mr. S. P. Singh |

Sesime (Sesamum indicum) सफेद तिल



Sesime (Sesamum indicum) सफेद तिल

| Kingdom | Plantae |
|-----------------------------|--|
| Unranked | Angiosperm |
| Family | Petaliaccae |
| Genus and Species (If know | Sesamum indicum |
| Local Name / Common Name | Sesame/Til (सफेद तिल) |
| Habit and Habitat | It is very drought tolerant plant. However it requires adequate moisture for germination & early growth. |
| Description | It is an annual plant growing 50 to 100 cm tall; they are broad lanceolate. The flowers are yellow tabular 3 to 5cm. |
| Mythological Significance | Black sesame is offered to Lord Ganesha or "Ganesh Chaturthi" in a form of modak made by mixing it with Jaggerey "Gur" and to "Shani God". |
| I.U.C.N. Status | |
| Source of seeds | Seed shops |
| Season when grown | May-June |
| Local Status Pas | In abundance |
| Pre | In abundance |
| Uses | It is used in cooking, in medicine as a substitute for olive oil etc. the poor grades are used for soaps, perfumes etc. The oil cake is used as cattle feed while the seeds are used in baking. |
| Nutritional Value | Carbohydrates, fat, protein, vitamins & trace elements. |
| Associated Traditional Know | edge It is mostly fed in winters. |
| Management mechanism | Herbicides are used at early stage. |
| Other Details | Yields one of most important some drying oils. |
| Community/Knowledge Hol | er Mr. S. P. Singh |

Sunflower (Helianthus annus) सूरजमुखी





Sunflower (Helianthus annus) सूरजमुखी

| Vinadom | | Plantae |
|----------------------------------|-------------|---|
| Kingdom | | |
| Unranked | | Angiosperm |
| Family | | Asteraceae |
| Genus and Species (| If known) | Helianthus annus |
| Local Name / Comm | on Name | Sunflower (सूरजमुखी) |
| Habit & Habitat | | Fertile, moist & well drainedsoil. |
| Description | | Sunflowers are usually tall annuals that grows to a height of 50-390 cm. The rough & hairy stems is branches in the upper part in wild plant but is petiolate leaves are dentate & often sticky. |
| Mythological Signif | icance | The use of sunflower images as religious symbols has also documented in some native societies. |
| I.U.C.N. Status | | |
| Source of seeds | | Seed shops/ Nursery. |
| Season when grown | | Winter season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | The oil is used for constipation & lowering bad LDL cholesterol. It is also applied directly to the skin for poorly healing wounds and skin as massage oil. |
| Nutritional Value | | Vitamin E, B1, B6, B3, copper, magnese, selenium, phosphorus, magnesium &folate. |
| Associated Traditional Knowledge | | Anti-inflammatory & cardiovascular benefits from sunflower seeds. |
| Management mechanism | | Herbicides are used at early stage. |
| Other Details | | They are cultivated as food crop & as an ornamental plants. |
| Community/Knowle | edge Holder | Mr. S. P. Singh |
| | - | - |

Amla (Phyllanthus emblier) आंवला



Amla (Phyllanthus emblier) आंवला

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Euphorbiaceae |
| Genus and Species (If known) | Phyllanthus emblie |
| Local Name / Common Name | Amla (आंवला) |
| Habit and Habitat | Found in the deciduous forests in tropical & sub-tropical region. |
| Description | Deciduous tree, growing upto 15 m tall. Bark smooth, leaves small, flowers unisexual, flowers numerous. Female flower few. Fruit spherical. |
| Mythological Significance | This plant is used in a worship (Manchinta) |
| I.U.C.N. Status | |
| Source of seeds | Nursery & markets. |
| Season when grown | March to August |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Used as detergent shampoo, cultivated for fruits & hair oil and dye. |
| Nutritional Value | Richest source of vitamin C. |
| Associated Traditional Knowledge | Amla oil is good for hair. In making Patanjali drugs, Murabbas and Amla Juice |
| Management mechanism | By insecticides and pesticides. |
| Other Details | In making amla candy, loss of appetite, anaemia, jaundice, leucorrhoca, used as a refrigerant, diuretic etc. |
| Community/Knowledge Holder | Mr. S. P. Singh |

Til/Sesame (Sesamum indicum nigrum) काली तिल



Til/Sesame (Sesamum indicum nigrum) काली तिल

| Kingdom | | Plant |
|----------------------|-------------------|---|
| Unranked | | Angiosperm |
| Family | | Padaliaceae |
| Genus and Species (1 | l f known) | Sesamun indicum nigrum |
| Local Name / Commo | on Name | Til/Sesame (काली तिल) |
| Habit and Habitat | | In tropical regions. |
| Description | | It is a herbaceous annual plant. It has small taproot, a branching stem with opposite leaves & single light pinkish white flowers. The fruits an oblong brown capsule with small & flat teardrop shaped seeds. |
| Mythological Signifi | cance | Its oil & roasted seeds are used in various fasts. Offered to 'Shani' God. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | | It is found throughout the year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various medicinal & commercial uses. |
| Nutritional Value | | It is a rich source of fat, K, carbohydrate, proteins, Ca, Fe, Mg and Vit-B6. |
| Associated Tradition | al Knowledge | Til oil gives warmth |
| Management mechanism | | Various pesticides are used to protect from the infection. |
| Other Details | | Its seeds have been used as medicine. They are considered to be antioxidant, anticancer & laxative properties. It is an efficient immune enhancer. |
| Community/Knowle | dge Holder | Mr. S. P. Singh |

Rai (black) (Brassica nigra) कालीसरसों



Rai (black) (Brassica nigra) कालीसरसों

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Brassicales |
| Genus and Species (I | f known) | Brassica nigra |
| Local Name / Commo | on Name | Kali rai / Black mustard (काली सरसों) |
| Habit and Habitat | | In cultivated habitat, meadow, railway etc. |
| Description | | It is an annual herb & plant height ranges from 3-2 meter. Stems erect, branched above. Leaves are ovate, oblong & dentate. Flowers are yellow in colour. Fruits are tapering & black to dark brown in colour. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & Government retail shops. |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has various commercial & homely uses. |
| Nutritional Value | | It is a rich source of Vit. E, Ca, Mn, Cu, Fe & Zn. |
| Associated Traditional Knowledge | | Making pickle and "Kanji" (Rai water) |
| Management mechanism | | Various pesticides are used to protect crop. |
| Other Details | | It has anti-bacterial &have been used to treat rheumatism. Also used as winter cover crop. |
| Community/Knowled | dge Holder | Mr. S. P. Singh |



FORMAT- I Agro biodiversity (G) Fibre Yielding Plants



Cotton (Gossypium arborium) कपास



Cotton (Gossypium arborium) कपास

| Kingdom | | Plantae |
|----------------------------------|-------------|---|
| Unranked | | Angiosperm |
| Family | | Malvaceae |
| Genus and Species (I | f known) | Gossypium arborium |
| Local Name / Commo | on Name | Cotton (कपास) |
| Habit & Habitat | | Grows on sandy damp soil of humid regions. Black alluvial soil considered best. |
| Description | | Plant is perennial shrub or a small tree. The fibres are obtained from the seeds. The fibres are experimental hair, while oil is expressed from the seeds. The fibres are collected from seeds are after processing. |
| Mythological Signific | cance | Pure cottons are used to make "batti" for lightening deepak's for prayers. |
| I.U.C.N. Status | | |
| Source of seeds | | Collected from freshly plucked fruits. |
| Season when grown | | Perrenial shrub |
| Local Status: | Past – | In less abundance |
| | Present – | In More abundance |
| Uses | | Oil obtained from the seeds is used as salad& cooking oil, preparation of oleo-morgarine oil residues as raw material for soap, washing powder, roofing tar etc. It is important constituent of cotton fabrics. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Considered pure & holy. |
| Management mechanism | | Insecticedes & pesticides are sprayed & are protected against birds & animals. |
| Other Details | | |
| Community / Knowle | edge Holder | Mr. Kamalkant Katiyar |

Nalta jute (Corchorus olitorius) नालता जूट



Nalta jute (Corchorus olitorius) नालता जूट

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Malvaceae |
| Genus and Species (If | fknown) | Corchorus olitorius |
| Local Name / Commo | n Name | Nalta jute (नालता जूट) |
| Habit & Habitat | | It is best grown in humid region with moderate rains, on light, sandy, deltaic loams. |
| Description | | The plant is an annual shrub & is grown from seeds. The fibres are obtained from the secondary phloem by retting. These are then beaten & fibres separated. |
| Mythological Signific | ance | It is considered pure & holy. |
| I.U.C.N. Status | | |
| Source of seeds | | Seeds shop. |
| Season when grown | | June-July |
| Local Status: | Past – | In less abundance |
| | Present – | In abundance |
| Uses | | Used for manufacturing packing cloth, hessian, bags for transport & storage, rags, curtains, upholitry, linings, ropes, twines etc. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | It is most eco-friendly fibre yielding crop. |
| Management mechanism | | |
| Other Details | | It is most widely cultivated fibre after cotton. |
| Community / Knowle | dge Holder | Mr. Kamalkant Katiyar |
| | | |

Kenaf (Hibiscus cannabinus) केनफ



Kenaf (Hibiscus cannabinus) केनफ

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Malvaceae |
| Genus and Species (If | known) | Hibiscus cannabinus |
| Local Name / Common | Name | Kenaf (केनफ) |
| Habit & Habitat | | It is an annual or biennial herbaceous plant. |
| Description | | Plants growing to 1.5-3.5 m tall with woody ball. Stems are 1 to 2 cm diameter, often but not always branched. The leaves are 10-15 cm long, variable in shape. Flowers are 8 to 15 cm in diameter. White, yellow or purple. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Government shops. |
| Season when grown | | Wet season crop is sown in october and dry season crop is sown in May. |
| Local Status: | Past – | In less abundance |
| | Present – | In abundance |
| Uses | | It is used an edible vegetable oils which is used for cosmetics, industrial lubricants & for biofuel production. Nutritional ValueOil is high in Omya polyunsaturated fatty acids (PUFAs) |
| Associated Traditional Knowledge | | It produces fibre& edible oil from seeds. |
| Management mechanism | | Required as a fertilizers, pesticides & water in comparision to conventional row crops. |
| Other Details | | Most common process to make kenaf paper is using soda pulping. |
| Community / Knowled | lge Holder | Mr. Kamalkant Katiyar |

Roselle (Hibiscus sabdariffa) रोजेल



Roselle (Hibiscus sabdariffa) रोजेल

| Kingdom | | Plantae |
|---------------------------|-----------|--|
| Unranked | | Angiosperm |
| Family | | Malvaceae |
| Genus and Species (If k | xnown) | Hibiscus sabdariffa |
| Local Name / Common | Name | Roselle (रोजेल) |
| Habit & Habitat | | It found on moist soil & well drained soil. |
| Description | | It is an annual as perennial herb on woody-based subshrub, growing to 2-25 m (7-8 ft) tall. The leaves are deeply 3-5 cm, 8-15 cm, arranged alternately on the stems. Flowers are white to pale yellow with a dark red spot at the base of each petal. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Rainy season |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | It is used as vegetables, Beverage, jam & preserves& has several medicinal uses. |
| Nutritional Value | | |
| Other Details | | Edible oils are also produced &also has some medicinal value. |
| Community/KnowledgeHolder | | Mr. Kamalkant Katiyar |

Agave (Agares spp.) अगेव



Agave (Agares spp.) अगेव

| Kingdom | | Plantae |
|----------------------------------|-----------|---|
| Unranked | | Angiosperm |
| Family | | Asparagaceae |
| Genus and Species (If ki | nown) | Agave spp. |
| Local Name / Common N | lame | Agave (अगेव) |
| Habit & Habitat | | Dry land or water deficit soil |
| Description | | They are succulents with a large rossete of thick, fleshy leaves each ending generally in a sharp point and with a spiny margin, the stout stem is usually short, leaves apparently stringing from the roots |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery and market. |
| Local Status: | Past – | In abundance |
| | Present - | In abundance |
| Uses | | Fibre yielding leaves. They are sweet and can be chewed to extract aguameil like sugarcane. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | It is a succulent dessert plant with a similar appearance of aloe. |
| Community / Knowledg | e Holder | Mr. Kamalkant Katiyar |



FORMAT- I Agro biodiversity (H) Timber Yielding Plants



Sheesham / Indian Rosewood (Dalbergia sissoo) शीशम





Sheesham / Indian Rosewood (Dalbergia sissoo) शीशम

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Papilionaceae |
| Genus and Species (If known) | Dalbergia sissoo |
| Local Name / Common Name | Sheesham / Indian Rosewood (श्रीशम) |
| Habit & Habitat | Found where there is less water. |
| Description | A decidous tree, often with crooked trunk& light crown . Normally the tree attains a height of about 100 feet, a girth up to 8 feet. |
| Mythological Significance | The tree is generally planted by Hindus. It is held sacred by them. |
| I.U.C.N. Status | |
| Source of seeds | Nursery/Market |
| Season when grown | Rainy season |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | Used as teeth brush(tree twig) , wood &furniture's. |
| Nutritional Value | |
| Associated Traditional Knowledge | Offering water daily in good for family |
| Management mechanism | |
| Other Details | Considered best for making furniture's. |
| Community/Knowledge Holder | Mr. Kamalkant Katiyar |
| | |

Bamboo / Indi (Bambusa bambos) बॉंस



Bamboo / Indi (Bambusa bambos) बॉस

| Kingdom | | Plantae |
|----------------------------------|------------|---|
| Unranked | | Angiosperm |
| Family | | Poaceae (Gramineae) |
| Genus and Species (I | f known) | Bambusa bambos |
| Local Name / Commo | n Name | Bamboo / Indi (बॉस) |
| Habit & Habitat | | It prefers a humid tropical climate & grows best along river banks or river valleys with a rich, moist soil. |
| Description | | This is tall woody grass & have average diameter below 10- 18 cm & are below 20-30 m tall. The internodes are dark green colored with very thick walls. They measure below 15-30 cm long & 8-15 mm broad with about 10 leaves in each complement. |
| Mythological Significance | | In worshipping of Lord Satyanarayan. |
| I.U.C.N. Status | | |
| Source of seeds | | Market or Nursery. |
| Season when grown | | Starting between April to June |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | Leaf buds are administered for thread worms, and leaf juice is given with aromatics in vomiting of blood. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Used for making benches , shades or carpets. |
| Management mechanism | | |
| Other Details | | Fastest growing grass & the longest grass in the world. |
| Community/Knowled | lge Holder | Mr. Kamalkant Katiyar |

Pakad (Ficus virens) पाकड़





Pakad (Ficus virens) पाकड़

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Moraceae |
| Genus and Species (If | known) | <i>Ficus virens</i> |
| Local Name / Commo | n Name | Pakad (पाकड़) |
| Habit & Habitat | | Found at road side , fields |
| Description | | It is a medium sized tree which grows to height 24 to 27 m in water areas. |
| Mythological Significance | | Wood used in Hawan ceremony in Hindu mythology. |
| I.U.C.N. Status | | |
| Source of seeds | | From fresh seed and cutting. |
| Season when grown | | Febuary to early may, June to early September. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | Suited to parks and large garden as an ornamental tree. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Has medicinal significance. |
| Community/Knowled | lge Holder | Mr. Kamalkant Katiyar |
| | | |

Aam (Mangifera indica) आम





Aam (Mangifera indica) आम

| Kingdom | | Plantae |
|----------------------------------|-----------|---|
| Unranked | | Angiosperm |
| Family | | Anacardiaceae |
| Genus and Species (If l | known) | Mangifera indica |
| Local Name / Common | Name | Aam/Mango (आम) |
| Habit & Habitat | | In garden or orchards |
| Description | | A large green tree, upto 45 m high with a heavy dome- shaped crown, with a girth of 3.6 m & over. Bark rough, thick,dark grey & fibrous. Leaves crowded at the ends of branches. Flowering on shoots , flowers 0.4 cm across, greenish yellow, scented, male & bisexual on the same panicle. |
| Mythological Significance | | Their leaves are used in worshipping and used for Hawan. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | April to June |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | Fruits & wood. |
| Nutritional Value | | Vitamin C and folate are in significant amount. |
| Associated Traditional Knowledge | | "Aam ke aam guthliyo ke dam" proverb. |
| Management mechanism | | Several varieties are often crossed to improve pollination, must be propagated by cutting. |
| Other Details | | Dried mango skin and its seed are used as Ayurvedic medicines. |
| Community/Knowledg | ge Holder | Mr. Kamalkant Katiyar |

Shagaon /Teak (Tectona grandis) सागौन



Shagaon /Teak (Tectona grandis) सागौन

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Lamiales |
| Genus and Species (If | known) | Tectona grandis |
| Local Name / Commo | n Name | Shagon/Teak (सागौन) |
| Habit & Habitat | | Occur in places with dry atmosphere & more rain. |
| Description | | Length is 45 m. Pedicle is long, seeds are large size. Obtain red-yellow colour from leaf. Stem powder is used in headache and pancreatic disease. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Rainy season |
| Local Status: | Past – | Inabundance |
| | Present – | In abundance |
| Uses | | Used in medicine and in making furniture , frames and allied uses. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Herbicides or pesticides are used at early stage |
| Other Details | | Ash of stem is helpful in increasing vision. |
| Community/Knowled | lge Holder | Mr. Kamalkant Katiyar |
| | | |

Sal (Shorea robusta) साल





Sal (Shorea robusta) साल

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Malvales |
| Genus and Species (If known) | Shorea robusta |
| Local Name / Common Name | Sal (साल) |
| Habit & Habitat | Found in lower belt of hilly reason. |
| Description | Sal is moderate to slow growing and can attain heights of 30-35 m long and 5-10 m and a trunk diameter up to 2-2.5 m. The leaves are 10-25 cm long and 5-10 cm broad. |
| Mythological Significance | In hindu the sal tree said to favoured by Vishnu. In buddhist tradition it is said Queen Maya gives birth to buddha under a sal tree. |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | Dry season. |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | Used in medicinal and commercial value. Also used in construction, leaves are eaten by goats. |
| Nutritional Value | Sal tree resin is used as an astringent in ayurvedic medicines. |
| Associated Traditional Knowledge | Its seed oil is used for cooking after refining. |
| Management mechanism | |
| Other Details | State tree of Punjab state. |
| Community/Knowledge Holder | Mr. Kamalkant Katiyar |



FORMAT- I Agro biodiversity (I) Sugar Yielding Plants



Sugar Yielding Plant

Ganna (Saccharum officinarum) गन्ना





Ganna (Saccharum officinarum) गन्ना

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Poaceae |
| Genus and Species (If known) | Saccharum officinarum |
| Local Name / Common Name | Ganna (गन्ना) |
| Habit & Habitat | Alluvial & sandy soil. |
| Description | A perennial plant grown in clump, consisting of a number of strong unbranched stems. |
| Mythological Significance | It is considered Holy to eat sugar-cane on "Ekadashi" in Hinduism. |
| I.U.C.N. Status | |
| Source of seeds | Private shops & Goverment stores. |
| Season when grown | March to April |
| Loacal Status: Past – | In abundance |
| Present – | In abundance |
| Uses | It is used to make jaggery, sugar & in making alcohol. |
| Nutritional Value | Carbohydrate, Protein and trace metals. |
| Associated Traditional Knowledge | Its juice is very popular Indian drink with a touch of Lemon & Ice. Drug for jaundice. |
| Management mechanism | Water required 200-250 cm, 509 available soil moisture condition, need 10-12 irrigations weed management. Most commonly used herbicides are Simazine, Atrazine & Alachlor. |
| Other Detail1s | Other parts of plant are used as fertilizer. |
| Community/Knowledge Holder | Mr. Kamalkant Katiyar |



FORMAT- I Agro biodiversity (J) Perfume Yielding Plants





Bela (Jasminum auriculatum) बेला



Bela (Jasminum auriculatum) बेला

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Oleaceae |
| Genus and Species (If known) | Jasminum auriculatum |
| Local Name / Common Name | Bela (बेला) |
| Habit and Habitat | Garden |
| Description | It is a stunning, small climbing bushy plant with simple ovate dark green small leaves & powdery satin white flowers, Leaves are opposite. |
| Mythological Significance | The flower is held sacred to all forms of Goddess & is used as sacred offerings during Hindu religious ceremonies. |
| I.U.C.N. Status | |
| Source of seeds | From nursery |
| Season when grown | Summer season |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | The oil is used in the preparation of hair oils & also used in perfumery. |
| Nutritional Value | Aromatic plant |
| Associated Traditional Knowledge | Jasmine tea administered as a tincture to treat cuts and scrapes. |
| Management mechanism | |
| Other Details | It contains compounds such as salicylic acid, linalool, and other alkaloids, and these give its bitter, cooling, and astringent properties. |
| Communiy/Knowledge Holder | Mr. Sarvesh Kumar |

Rose (Rosa indica) गुलाब



Lady Finger (Abelmoschusesculentus) भिन्डी

| Kingdom | | Plantae |
|----------------------------------|-----------------|--|
| Unranked | | Angiosperm |
| Family | | Rosaeceae |
| Genus and Species (If | f known) | Rosa indica |
| Local Name / Commo | n Name | Gulab/Rose (गुलाब) |
| Habit and Habitat | | Homegarden |
| Description | | This is an erect shrub with climbing stem have height of about 7m. These have large & showy flowers, color ranging from white, yellow & red. |
| Mythological Significance | | Many cultures connect flowers with birth, with the return of spring after winter, with life after death, and with joyful youth and beauty. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery. |
| Season when grown | | Spring & summer season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It is used at commercial scale for perfumery. It is used in making ointments for burns due to its medicinal property of coolness. |
| Nutritional Value | | Rich in vitamin C. |
| Associated Traditional Knowledge | | For preparing Gulkand (an Indian traditional preserve) and rose water. |
| Management mechanism | | By using pesticides. Wild roses are host for a number of pests & disease. |
| Other Details | | These are often subject to severe damage from insect, arachnid & fungal pests & disease. |
| Communiy/Knowledge Holder | | Mr. Sarvesh Kumar |

Chameli (Jasminum officinale) चमेली



Chameli (Jasminum officinale) चमेली

| Kingdom | | Plantae |
|----------------------------------|----------|--|
| Unranked | | Angiosperm |
| Family | | Oleaceae |
| Genus and Species (If | known) | Jasminum officinale |
| Local Name / Common Name | | Chameli (चमेली) |
| Habit & Habitat | | Tropical & sub-tropical region |
| Description | | It is a vigorous, deciduous climber with sharply pointed pinnate leaves and clusters of starry, pure white flowers in summer, which are the source of its heady scent. |
| Mythological Significance | | It is used in rituals like marriages & festivals. In the chandan Yatra of Lord Jagannath, the diety is bathed with water flavored in sandalwood paste & Jasmine. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Throughout the year |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Its essential oil is used in aromatherapy and perfume making. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | It is used in dermatology. |
| Management mechanism | | |
| Other Details | | Jasmine absolute is known as the 'King of Oils' |
| Communiy/Knowledge Holder | | Mr. Sarvesh Kumar |

Mogra (Jasminum sambac) मोगरा





Mogra (Jasminum sambac) मोगरा

| Kingdom | | Plantae |
|----------------------------------|----------|--|
| Unranked | | Angiosperm |
| Family | | Oleaceae |
| Genus and Species (If | fknown) | Jasminum sambac |
| Local Name / Common Name | | Mogra (मोगरा) |
| Habit and Habitat | | Found in tropical regions. |
| Description | | It is small shrub or vine growing up to 0.5 to 3 m in height. The leaves are ovate. The flowers are produced in clusters of 3 to 12. |
| Mythological Significance | | The flower is held sacred to all forms of Goddess & is used as sacred offerings during Hindu religion ceremonies. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery. |
| Season when grown | | Grown throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It is widely cultivated for its attractive and sweetly fragrant flowers. The flowers are also used for perfumes and for making tea. The oil is used in the preparation of hair oils. |
| Nutritional Value | | Rich in several vitamins. |
| Associated Traditional Knowledge | | It is used for liver diseases and abdominal pain due to severe diarrhea. |
| Management mechanism | | Protection of plants from pests and diseases. |
| Other Details | | It is a national flower of Philippines. |
| Communiy/Knowledge Holder | | Mr. Sarvesh Kumar |
| | | |

Khus (Chrysopogon zizanioides) खस



Khus (Chrysopogon zizanioides) खस

| Kingdom | | Plantae |
|--|----------|---|
| Unranked | | Angiosperm |
| Family | | Poaceae |
| Genus and Species (If known) | | Chrysopogon zizanioides |
| Local Name / Commo | n Name | Khus (खस) |
| Habit and Habitat | | Khas (Vetiver) grass grows in wet and damp environments over marshy places and riverbanks |
| Description | | It can grow up to 1.5 m high and form clumps. Its stems are tall and the leaves are long, thin, and rather rigid. The flowers are brownish-purple. Its roots grow downward, 2–4 m in depth. |
| Mythological or Religious Significance | | Aritual designed to promote personal safety calls for inhaling Vetiver while visualizing one's body as being sealed off from negative energies. |
| I.U.C.N. Status | | |
| Source of seeds | | From nursery |
| Season when grown | | All season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Vetiver oil is used in perfumery, cosmetics and soaps and for flavoring sherbets (Indian cool drinks).Dried roots are also used to perfume the linen cloths. |
| Nutritional Value | | Vitamins and cooling agents |
| Associated Traditional Knowledge | | In India it has been used to make blinds necessary to keep out the intense heat. |
| Management mechanism | | |
| Other Details | | The plant has a unique characteristic of being xerophyte (tolerates prolonged drought) |
| Communiy/Knowledge Holder | | Mr. Sarvesh Kumar |

Perfume Yielding Plant

Champa (Plumeria) चम्पा





Champa (Plumeria) चम्पा

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Apocynaceae |
| Genus and Species (If known) | Plumeria spp |
| Local Name / Common Name | Champa (चम्पा) |
| Habit and Habitat | Tropical and sub tropical regions |
| Description | It contains primarily deciduous shrubs and small trees. They are most fragrant at night in order to lure sphinx moths to pollinate them. |
| Mythological Significance | The scent of the <i>Plumeria</i> has been associated with a vampire. These trees are often planted in cemeteries. They are associated with temples in both Hindu and Buddhist cultures. |
| I.U.C.N. Status | |
| Source of seeds | From nurseries or can even grow by stem planting. |
| Local Status Past- | In abundance |
| Present- | Inabundance |
| Uses | In making perfume |
| Nutritional Value | Aromatic plant |
| Associated Traditional Knowledge | The heart of the wood is part of a traditional medical preparation taken as a vermifuge or as a laxative. |
| Management mechanism | |
| Other Details | The flowers have no nectar, however, and simply dupe their pollinators. |
| Communiy/Knowledge Holder | Mr. Sarvesh Kumar |



FORMAT- II Ornamental Plants (A) Non-Flowering Ornamental Plants



Molshree (Mimusops elengi) मॉलश्री



Molshree (Mimusops elengi) मॉलश्री

| Kingdom | | Plantae |
|----------------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Sapotaceae |
| Genus and Species (I | f known) | Mimusops elengi |
| Local Name / Commo | on Name | Molshree (मॉलश्री) |
| Habit & Habitat | | It is found in tropical areas. |
| Description | | Reaching a height of about 16 m . Its leaves are glossy, dark green, oval-shaped, 5-14 cm long & 2.5 to 6cm wide. Flowers are creamy, hairy and scented. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Throughout the year |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | Bark, Flowers, fruits & seeds are used as trintgent, cooling, anthelmintic, toxic & febrifuge. It is mainly used in dental oilments like bleeting gums, pyorrhea, dental cories& loose teeth. |
| Nutritional Value | | It is rich in protein, vitamins and some minerals. |
| Associated Traditional Knowledge | | Ripened fruits facilitate a use for burning crination. |
| Management mechanism | | Insecticides should be sprayed. |
| Other Details | | Molshree is used for making Ayurvedic medicines. |
| Community / Knowle | edge Holder | Mr.Avinash Dohrey |
| | | |

Ashoka (Saraca longifolia) अशोका



Ashoka (Saraca longifolia) अशोका

| Kingdom | | Plantae |
|----------------------------------|-----------|---|
| Unranked | | Angiosperm |
| Family | | Caesalpiniaceae |
| Genus and Species (If I | known) | Saraca longifolia |
| Local Name / Common | Name | Ashoka (अशोका) |
| Habit & Habitat | | Found in central eastern Himalayan |
| Description | | An evergreen tree, growing up to 10 ml. Bark brown to grey or almost black,. Flowers orange or orange yellow with about 8, shining seeds. |
| Mythological Significance | | It is sacred for 'Hindus'. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery. |
| Season when grown | | February - September |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | Bark & flowers used to treat indigestion, burning sensation, ulcers, menstrual disorders etc. Leaves used as blood purifier. |
| Nutritional Value | | It is rich in carbohydrates, protein and some other substance. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Plantation should be done in more amount. |
| Other Details | | |
| Community / Knowled | ge Holder | Mr. Avinash Dohrey |
| | | |

Nagfani (Opuntia strictia) नागफनी



Nagfani (Opuntia strictia) नागफनी

| Kingdom | | Plantae |
|----------------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Cactaceae |
| Genus and Species (| lf known) | Opuntia strictia |
| Local Name / Comm | on Name | Nagfani (नागफनी) |
| Habit & Habitat | | In dry regions. |
| Description | | It is an erect or sprawling shrub up to 2m in height, producing lemon yellow flowers in the spring & summer followed by purplish-red fruits. |
| Mythological Signifi | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Through the own buds |
| Season when grown | | Summer and spring |
| Local Status | Past- | An abundance |
| | Present- | An abundance |
| Uses | | It is an ornamental plant. It is used as a barrier fence in some part of world. |
| Nutritional Value | | It is a poisonous plant. |
| Associated Traditional Knowledge | | It is the official flower of the city of Hiroshima, have been first to bloom following the atomic bombing. |
| Management mechanism | | Need to be timely removed from field by physical or mechanical measures |
| Other Details | | Flowering occurs only for one time in a year. |
| Community / Knowl | edge Holder | Mr. Avinash Dohrey |
| | | |

Neem (Azadirachta indica) नीम



Neem (Azadirachta indica) नीम

| Kingdom | Plantae |
|--------------------------------|--|
| Unranked | Angiosperm |
| Family | Meliaceae |
| Genus and Species (If known) | Azadirachta indica |
| Local Name / Common Name | Neem/Margosa (नीम) |
| Habit & Habitat | Grows throughout the Indian plains & also up to an altitude of 1000m in sub-himalayan tract. |
| Description | Tree, growing up to 15m high, with spreading branches. Bark grayish-black with vertical ridges. |
| Mythological Significance | It is used in worship. |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | January to July |
| Local Status Past- | In abundance |
| Presen | t- In abundance |
| Uses | Whole plant used to treat fever, bleeding piles, wound, gout, skin diseases. |
| Nutritional Value | It is rich in carbohydrates and other minerals. It is antibiotic. |
| Associated Traditional Knowled | dge Leaves, pulp, flower and whole plant is used in medicinal purposes. |
| Management mechanism | Insecticide and pesticide should be sprayed. |
| Other Details | Its soft twig is used for 'Datun'. |
| Community / Knowledge Holde | r Mr. Avinash Dohrey |

Croton (Croton californicus) करोटन



Croton (Croton californicus) करोटन

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Euphorbiaceae |
| Genus and Species (If known) | Croton californicus |
| Local Name / Common Name | Croton (करोटन) |
| Habit and Habitat | It grown in the desserts and along the coastline. |
| Description | This plant is a perennial or small shrub not exceeding a meter in height. The plant produces long oval-shaped leaves a few centimeters long & covered in a light-coloured coat of hairs. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nursery/Itself |
| Season when grown | Throughout the year |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It is a ornamental. |
| Nutritional Value | |
| Associated Traditional Knowledge | |
| Management mechanism | Use of insecticide and pesticides. |
| Other Details | It has many varities. |
| Community / Knowledge Holder | Mr. Avinash Dohrey |

Money plant (Epipremnum aureum) मनीप्लांट



Money plant (Epipremnum aureum) मनीप्लांट

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Araceae |
| Genus and Species (If known) | Epipremnum aureum |
| Local Name / Common Name | Money Plant (मनी प्लांट) |
| Habit and Habitat | It is grown on tropical and sub tropical forest worldwide |
| Description | It is an evergreen vine growing to 20m tall. The leaves are alternate, heart shaped. |
| Mythological Significance | Symbol of luck and wealth |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | Throughout the year |
| Local Status Past- | In abundance |
| Present- | Inabundance |
| Uses | The plant is used in aquariums and also used as a ornamental. |
| Nutritional Value | |
| Associated Traditional Knowledge | e Plants denseness represent prosperity |
| Management mechanism | Pesticide and insecticide should be sprayed. |
| Other Details | The plant is listed as toxic for 'cats and dogs' because of the presence of insoluble raphids. |
| Community / Knowledge Holder | Mr. Avinash Dohrey |

Mehndi (Laevsonia inermis) मेंहदी



Mehndi (Laevsonia inermis) मेंहदी

| Kingdom | | Plantae |
|----------------------------------|-------------|---|
| Unranked | | Angiosperm |
| Family | | Lythraceae |
| Genus and Species (1 | f known) | Laevsonia inermis |
| Local Name / Commo | on Name | Mehndi/Meena (मेंहदी) |
| Habit and Habitat | | Tropical regions |
| Description | | It is a large shrub 6 to 8 ft. in length. It is glabrous & multi- branced. The leaves grow opposite. |
| Mythological Significance | | It is used for cosmetic purpose. Bridal heena nights remain an important custom in many areas. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Through out the year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | For dyeing the hair, fingernails, palm etc. Heena is known as an Ayurvedic medicine. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Used from ancient age for hair conditioning and putting on hands and feet to cool. |
| Management mecha | nism | |
| Other Details | | Its an antiquity to dry skin, hair, fingernail. |
| Community / Knowl | edge Holder | Mr. Avinash Dohrey |
| | | |



FORMAT- II Ornamental Plants (B) Flowering Ornamental Plants





Amaltaas (Cassia fistula) अमलतास



Amaltaas (Cassia fistula) अमलतास

| Kingdom | | Plantae |
|----------------------------------|-----------|---|
| Unranked | | Angiosperm |
| Family | | Caesalpiniaceae |
| Genus and Species (If k | nown) | Cassia fistula |
| Local Name / Common | Name | Amaltaas (अमलतास) |
| Habit & Habitat | | Commonly planted in gardens & along roadsides. |
| Description | | Densely foliaceous, deciduous tree, growing up to 10m tall. Leaflets 4-5 pairs, long-pointed apex. Flowers attractive, golden yellow. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Season when grown | | Flowering in May-June, fruiting in June-September. |
| Local Status: | Past – | In abundance |
| | Present - | In abundance |
| Uses | | The root is a tonic febrifuge & a strong. The pulp from the pods is of great therapeutic value. |
| Nutritional Value | | Rich in carbohydrates and other minerals. |
| Associated Traditional Knowledge | | Yellow flowers are offered to lord Vishnu |
| Management mechanism | | Insecticide and pesticide should be sprayed. |
| Other Details | | It is an ornamental tree. |
| Community / Knowledge Holder | | Smt. Premlata |

Gurhal (Hibiscus rosa sinensis) गुड़हल



Gurhal (Hibiscus rosa sinensis) गुड़हल

| Kingdom | | Plantae |
|---------------------------|--------------|--|
| Unranked | | Angiosperm |
| Family | | Malvaceae |
| Genus and Species (I | f known) | Hibiscus rosa sinensis |
| Local Name / Commo | on Name | Gurhal (गुड़हल) |
| Habit and Habitat | | Homegarden |
| Description | | A shrub, growing upto 4m tall.Leaves simple alternate. Flowers red on colite, in the leaf axials, fruits capsules with many seeds. |
| Mythological Significance | | Sacred for 'Hindus'. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Throughout the year |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Flowers used to treat graying of hair, cardiac problems, gonorrhea& as contraceptive. |
| Nutritional Value | | Vitamins B1, B6 &P. |
| Associated Tradition | al Knowledge | Favourite flower of Maa Durga. |
| Management mechanism | | Insecticide and pesticide should be sprayed. |
| Other Details | | It is a bushy plant. Flower is used to make perfumery products and cosmetics. |
| Community / Knowle | edge Holder | Smt. Premlata |

Gulmohar (Delonix regia) गुलमोहर



Gulmohar (Delonix regia) गुलमोहर

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Fabaceae |
| Genus and Species (If known) | Delonix regia |
| Local Name / Common Name | Gulmohar (गुलमोहर) |
| Habit & Habitat | Found in tropical parts. |
| Description | Found in deciduous forest. It usually grows to a modest height upto 5 m. Flowers appear in corymbs along at the end of branches. Flowers are large with 4 spreading scalet. |
| Mythological Significance | It is believed that the blood of Jesus Christ was shed over the flowers of the tree & this is how the flower of Royal Poinciana got a sharp red color. |
| I.U.C.N. Status | |
| Season when grown | April-June |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It is used an ornamental flowers. |
| Nutritional Value | It is rich in carbohydrates, minerals and other substances. |
| Associated Traditional Knowledge | In many tropical parts of the world it is grown as an ornamental tree. |
| Management mechanism | Pesticide and insecticide should be sprayed. |
| Other Details | It is also one of several trees known as 'Flame tree'. |
| Community / Knowledge Holder | Smt. Premlata |

Chameli (Jasminum unifoliolatam) चमेली



Chameli (Jasminum unifoliolatam) चमेली

| Kingdom | | Plantae |
|---------------------------|-----------------|--|
| Unranked | | Angiosperm |
| Family | | Oleaceae |
| Genus and Species (If | f known) | Jasminum unifoliolatam |
| Local Name / Commo | n Name | Chameli (चमेली) |
| Habit & Habitat | | Tropical & sub-tropical region |
| Description | | It is deciduous, evergreen can be erect. Leaves opposite/ alternate, flowers round. |
| Mythological Significance | | In the chandan Yatra of Lord jagannath, the diety is bathed with water flavoured in sandalwood paste & Jasmine. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Throughout the year |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It is used in making syrup, oil, perfumes. |
| Nutritional Value | | |
| Associated Traditiona | al Knowledge | The flowers are worn by womens in their hairs. |
| Management mechanism | | Use of insecticide and pesticide. |
| Other Details | | In Syria, jasmine is the symbolic flower of Damaseus which is called the city of Jasmine. |
| Community / Knowle | dge Holder | Smt. Premlata |

Bottle Brush (Callistemon lanceolatus) चील



Bottle Brush (Callistemon lanceolatus) चील

| Kingdom | | Plantae |
|---------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Mystraceae |
| Genus and Species (If | known) | Callistemon lanceolatus |
| Local Name / Commo | n Name | Bottle Brush (चील) |
| Habit and Habitat | | Temperate region / Home garden |
| Description | | It is cylindrical in shape, flowers are brush like, leaves are linear to lanceolate& they are not deciduous. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seed | | Nursery |
| Season when grown | | In summer season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | A natural herbicide produced by the roots of bottle brush. |
| Nutritional Value | | |
| Associated Traditiona | l Knowledge | |
| Management mechanism | | Use of insecticide and pesticides. |
| Other Details | | The leaves have slovely fragrance which get released on crushing the leaves. |
| Community/Knowle | gde Holder | Smt. Premlata |

Marigold/Genda (Tagetes erecta) गेंदा



Marigold/Genda (Tagetes erecta) गेंदा

| ¥70 1 | |
|----------------------------------|--|
| Kingdom | Plantae |
| Unranked | Angiosperm |
| Family | Astereaceae |
| Genus and Species (If known) | Tageteserecta |
| Local Name / Common Name | Genda/Marigold (गेंदा) |
| Habit and Habitat | It is grown in home garden. |
| Description | Tagetes species vary in size from 0.1 to 2.2m tall. Leaves pinnate & green coloured. Flowers are golden, orange, yellow & white colored. |
| Mythological Significance | It is sacred for 'Hindus' |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | Rainy season |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It has been used as a source of essential oil for the perfume. |
| Nutritional Value | |
| Associated Traditional Knowledge | Symbol of Unity |
| Management mechanism | Insecticide and pesticide should be sprayed. |
| Other Details | The oil of the flower may be added to perfumes to infuse an apple scent into them. |
| Community / Knowledge Holder | Smt. Premlata |

Manokamini (Murraya paniculata) मनोकामनी



Manokamini (Murraya paniculata) मनोकामनी

| Kingdom | | Plantae |
|-----------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Rutaceae |
| Genus and Species (I | f known) | Murraya paniculata |
| Local Name / Commo | on Name | Manokamini (मनोकामनी) |
| Habit and Habitat | | Garden, besides road. |
| Description | | It is 1-1.5 meter in length. Leaves are green in colour. Flower are whitish in colour. |
| Mythological Signific | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery / Seed shops |
| Season when grown | | Throughout the year. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | Flowers are used for ornamental purpose an as a cosmetic and for Fragrance and luck. |
| Nutritional Value | | |
| Associated Tradition | al Knowledge | As an analgesic medicine and for wood. |
| Management mechanism | | Use of insecticides. |
| Other Details | | Used to treat oral problems as toothache and gum problems. |
| Community / Knowle | edge Holder | Smt. Premlata |

Sunflower (Helianthus annus) सूरजमुखी



Sunflower (Helianthus annus) सूरजमुखी

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Asteraceae |
| Genus and Species (If | known) | Helianthus annus |
| Local Name / Commo | n Name | Sunflower (सूरजमुखी) |
| Habit & Habitat | | Fertile, moist & well drained soil. |
| Description | | Sunflowers are usually tall annuals that grows to a height of 50-390 cm. The rough & hairy stems is branched in the upper part of wild plant. |
| Mythological Significance | | The use of sunflower images as religious symbols has also documented in some native societies& first to pay homage to sun |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery / Seed shop |
| Season when grown | | Winterseason |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | The oil is used for constipation & lowering bad LDL cholesterol. It is also applied directly to the skin for poorly healing wounds, skin injuries, psoriasis, arthritis& as massage oil. |
| Nutritional Value | | Vitamin E, B1, B6, B3, Cu, Mn, Se, P, Mg &folate. |
| Associated Traditional Knowledge | | Anti-inflammatory &Cardiovascular benefits from sunflower seeds. |
| Management mechanism | | Use of insecticide. |
| Other Details | | They are cultivated as food crop & as an ornamental plants. |
| Community / Knowle | dge Holder | Smt. Premlata |

Rose (Rosa indica) गुलाब





Rose (Rosa indica) गुलाब

| Kingdom | | Plantae |
|----------------------------------|----------|---|
| Unranked | | Angiosperm |
| Family | | Rosaeceae |
| Genus and Species (I | f known) | Rosa indica |
| Local Name / Commo | on Name | Gulab/Rose (गुलाब) |
| Habit and Habitat | | Homegarden |
| Description | | These an erect shrub with climbing stem have height of about 7m. These have large & showy flowers, color ranging from white, yellow red. |
| Mythological Signific | cance | It is very sacred for 'Hindus'. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Spring & summer season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | These as used for commercial perfumery purposes. These are used as landscape plant. These have minor medicinal value. Also used in making jam, jelly, soup etc. |
| Nutritional Value | | It is rich in carbohydrates, minerals,high vitamin C content. |
| Associated Traditional Knowledge | | For preparing Gulkand and Desi Gulab for perfume |
| Management mechanism | | By using pesticides. Wild roses are host for a number of pests & disease. |
| Other Details | | These are often subject to severe damage from insect, arachnid & fungal pests & disease. |
| Community/Knowledge Holder | | Smt. Premlata |

Champa (Plumeria) चम्पा



Champa (Plumeria) चम्पा

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Apocynaceae |
| Genus and Species (If known) | Plumeria |
| Local Name / Common Name | Champa (चम्पा) |
| Habit and Habitat | Tropical and sub tropical regions |
| Description | It contains primarily deciduous shrubs and small trees. They are most fragrant at night in order to lure sphinx moths to pollinate them. |
| Mythological Significance | The scent of the <i>Plumeri</i> a has been associated with a vampire. These trees are often planted in cemeteries. They are associated with temples in both Hindu and Buddhist cultures. |
| I.U.C.N. Status | |
| Source of seeds | From nurseries or can even grow by stem planting. |
| Season when grown | Throughout year |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | In making perfumes |
| Nutritional Value | Aromatic plant |
| Associated Traditional Knowledge | The heart of the wood is part of a traditional medical preparation taken as a vermifugeor as a laxative. |
| Management mechanism | |
| Other Details | The flowers have no nectar, however, and simply dupe their pollinators. |
| Community/Knowledge Holder | Smt. Premlata |

Chandini (Tabernaemontana divaricata) चाँदनी



Chandini (Tabernaemontana divaricata) चाँदनी

| Kingdom | | Plantae |
|---------------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Аросупасеае |
| Genus and Species (I | f known) | Tabernaemontana divaricata |
| Local Name / Commo | n Name | Chandini/Moon beam (चाँदनी) |
| Habit and Habitat | | Tropical regions |
| Description | | It grows upto 4m tall with silvery grey bark. Leaves opposite with pointed tip, smooth & glossy green. Flowers white, fruits follicles. |
| Mythological Significance | | It is used in rituals like marriages, religious ceremonies & festivals. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Throughout the year |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | In the treatment of eye disease. Latest fused from the leaf is used in treating wounds & roots in toothache. |
| Nutritional Value | | |
| Associated Tradition | al Knowledge | It is used in song 'Chandni raat dhal chuki hai ' |
| Management mechanism | | Use of insecticide and pesticides. |
| Other Details | | They are used in Ayurvedic medicines. |
| Community / Knowle | dge Holder | Smt. Premlata |
| | | |

Bela (Jasminum auriculatum) बेला



Bela (Jasminum auriculatum) बेला

| Kingdom | | Plantae |
|----------------------------------|-------------|---|
| Unranked | | Angiosperm |
| Family | | Oleaceae |
| Genus and Species (| If known) | Jasminum auriculatum |
| Local Name / Comm | on Name | Bela (बेला) |
| Habit and Habitat | | In home garden & open fields |
| Description | | It has a beautiful flower with extremely heavy gardenia type scent. It is a stunning, small climbing bushy plant with simple ovate dark green small leaves & powdery satin white flowers, Leaves are opposite. |
| Mythological Significance | | The flower is held sacred to all forms of Goddess& is used as sacred offerings during Hindu religion ceremonies. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | In summer season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | The oil is used in the preparation of hair oils & also used in perfumery. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Use of insecticide and pesticides. |
| Other Details | | It is found in India, Nepal and in some other countries. |
| Community / Knowl | edge Holder | Smt. Premlata |

Sadabahar (Vinea rosea) सदाबहार



Sadabahar (Vinea rosea) सदाबहार

| Kingdom | | Plantae |
|----------------------------------|-------------|---|
| Unranked | | Angiosperm |
| Family | | Аросупасеае |
| Genus and Species (I | f known) | Vinea rosea |
| Local Name / Commo | on Name | Sadabahar/Peri winkle (सदाबहार) |
| Habit and Habitat | | Garden & semi shaded places. |
| Description | | It is an important perennial plant, evergreen shrub. It grows to 3 feet in height, smooth, glossy, dark green leaves & flowers throughout year. |
| Mythological Significance | | It is sacred for 'Hindus'. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Rainy season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It is used in the treatment of diabetes, high BP, eye infections. |
| Nutritional Value | | It is rich in vitamins and in some other substances. |
| Associated Traditional Knowledge | | The leaves, flowers, roots are used in Ayurvedic medicine (anti-diabetics). |
| Management mechanism | | Insecticide and pesticide should be sprayed. |
| Other Details | | It has many varieties and it grow anywhere by itself. |
| Community / Knowle | edge Holder | Mr. Kamalkant Katiyar |

Mogra (Jasminum sambac) मोगरा



Mogra (Jasminum sambac) मोगरा

| Kingdom | | Plantae |
|----------------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Oleaceae |
| Genus and Species (1 | f known) | Jasminum sambac |
| Local Name / Commo | on Name | Mogra (मोगरा) |
| Habit and Habitat | | Found in tropical regions. |
| Description | | It is small shrub or vine growing up to 0.5 to 3 m in height. The leaves are ovate. The flowers are produced in clusters of 3 to 12. |
| Mythological Signifi | cance | The flower is held sacred to all forms of Goddess & is used as sacred offerings during Hindu religion ceremonies. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery. |
| Season when grown | | Grown throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It is widely cultivated for its attractive and sweet fragrant flowers. The flowers are also used for perfumes and for making tea. The oil is used in the preparation of hair oils. |
| Nutritional Value | | Rich in several vitamins. |
| Associated Traditional Knowledge | | It is used for liver disease and abdominal pain due to severe diarrhea. |
| Management mechanism | | Protection of plants from pests and diseases. |
| Other Details | | It is a national flower of Philippines. |
| Community / Knowle | edge Holder | Mr. Kamalkant Katiyar |
| | | |

Kaner (Nerium olander) कनेर



Kaner (Nerium olander) कनेर

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Аросупаесае |
| Genus and Species (If known) | Nerium olander |
| Local Name / Common Name | Kaner (कनेर) |
| Habit and Habitat | Tropical & Subtropical regions. |
| Description | Grows to 2-6 m tall, with erect stems that spread outwards as they mature; while mature stems have a grayish bark. The leaves are in pair of whorls of three. The flowers grow in clusters at the end of each branch. |
| Mythological Significance | It is sacred for 'Hindus'. |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | Throughout the year |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It is used as a ornamental plant. |
| Nutritional Value | It is rich in carbohydrates, minerals and in some other substance. |
| Associated Traditional Knowledge | It is planted besides road and also used in making perfumery product. |
| Management mechanism | Garden should be established. |
| Other Details | It is a bushy plant. It has many variety. |
| Community/ Knowledge Holder | Mr. Haneef Khan |



FORMAT- III Medicinal plants



Neem (Azadirachta indica) नीम





Neem (Azadirachta indica) नीम

| Vinadam | | Diamána |
|---------------------------|---------------|--|
| Kingdom | | Plantae |
| Unranked | | Angiosperm |
| Family | | Meliaceae |
| Genus and Species | (If known) | Azadirachta indica |
| Local Name / Comm | ion Name | Neem (नीम) |
| Habit & Habitat | | Easily found in fields & besides roads as a shade tree. |
| Description | | It has small composite leaves, white fragrant flowers & fruit has one seed. |
| Mythological Significance | | It's leaves & barks are considered as effective "Pitta" pacifier due to its bitter taste. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery/ market |
| Season when grown | | In rainy season. |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | Seeds are the source of morgosa oil used in skin diseases. It has antihelminthic & insecticidal properties. It is used in bathing soaps & toothpaste. Tender twigs are used to clean teeth. |
| Nutritional Value | | Neem gum has rich source of protein. |
| Associated Traditio | nal Knowledge | Used as herbal anti-biotics in villages. |
| Management mechanism | | |
| Other Details | | Almost every part of plant has found application in indigenous system of medicine. |
| Community/Knowl | edge Holder | Smt. Premlata |

Menthol (Mentha piperita) i h j feð



Menthol (Mentha piperita) पीपरमिंट

| Vinadam | | Plantae |
|----------------------------------|------------|--|
| Kingdom | | |
| Unranked | | Angiosperm |
| Family | | Lamiaceae |
| Genus and Species | (If known) | Mentha piperita |
| Local Name / Com | non Name | Peppemint (पीपरमिंट) |
| Habit & Habitat | | Typically in moist habitat, including streams sides & drainage ditches. |
| Description | | Herbaceous rhizomatous perennial plant growing to 30- 90 cm tall, with smooth stems. The leaves are from 4-9 cm long & 1.5-4 cm broad, dark green with reddish veins. Flowers are purple. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Market (propagated by seeds) |
| Season when grown | | Mint grows all year around. |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | It is source of peppermint oil used in pharmacy, confectionary & for flavouring. |
| Nutritional Value | | Aromatic plant |
| Associated Traditional Knowledge | | The plant is used for curing nausea & Vomiting and blister inside mouth. |
| Management mechanism | | |
| Other Details | | Large nectar producer. A mild, pleasant varietal honey can be produced if there is sufficient area of plants. |
| Community/Knowledge Holder | | Smt. Premlata |
| | | |

Tulsi (Ocimum tenuiflorum) तुलसी





Tulsi (Ocimum tenuiflorum) तुलसी

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| | | |
| Family | | Lamiaceae |
| Genus and Species | (If known) | Ocimum tenuiflorum |
| Local Name / Comm | non Name | Tulsi (तुलसी) |
| Habit & Habitat | | Widely cultured in temple premises & home gardens. |
| Description | | An erect, well-branched, softly hairy herb, growing upto 75 cm. Branches obscurely 4 angled. Flowers are purplish in elongated racemes enclosed in whorls. |
| Mythological Significance | | Tulsi leaves is an essential part in worship of God Vishnu. Tulsi is a sacred for Hindus & worshiped as goddess Lakshmi. |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | Summer |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | For essential oil, in herbal tea preparation & major ingredient in Ayurvedic medicines. |
| Nutritional Value | | Aromatic plant |
| Associated Traditional Knowledge | | Known to treat Bronchitis. |
| Management mechanism | | |
| Other Details | | It has significant importance around the world not just in India. |
| Community/Knowledge Holder | | Smt. Premlata |

Bhringraaj (Eclipta prostrata) Hài k





Bhringraaj (Eclipta prostrata) भृंगराज

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperms |
| Family | Asteraceae |
| Genus and Species (If known) | Eclipta prostrata |
| Local Name / Common Name | Bhringraaj (भृंगराज) |
| Habit & Habitat | Grows commonly in moist places. |
| Description | This plant has cylindrical, grayish roots. The solitary flower heads are 6-8 mm in diameter, with white florets. The achens are compressed & normally winged. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Plant itself/ Nursery |
| Season when grown | Late rainy season (kharif) |
| Local Status: Past - | In abundance |
| Present - | In abundance |
| Uses | It is used to improve hair growth & colour. |
| Nutritional Value | Antioxidant, anticancer and antileprosy and many other important agents. |
| Associated Traditional Knowledge | Used in Ayurveda. |
| Management mechanism | |
| Other Details | It is bitter, hot, sharp, dry in taste. |
| Community/Knowledge Holder | Smt. Premlata |
| | |

Tejpatta (Cinnamomum temala) तेजपत्ता



Tejpatta (Cinnamomum temala) तेजपत्ता

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Lauraceae |
| Genus and Species (If known) | Cinnamomum temala |
| Local Name / Common Name | Tejpatta (तेजपत्ता) |
| Habit & Habitat | In open fields. |
| Description | Bay laurel leaves are shorter & light to medium green in colour with one large vein down the length of the leaf. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | |
| Local Status: Past - | In abundance |
| Present - | In abundance |
| Uses | It has aromatic leaves which are used for taste & medicinal purpose, used as adjuvant therapy in diabetes. |
| Nutritional Value | Antioxidant enzymes |
| Associated Traditional Knowledge | Leaves used as a spice for food. |
| Management mechanism | |
| Other Details | Often labelled as Indian Bay leaves. |
| Community/Knowledge Holder | Mr. Haneef Khan |

Harrad/Baheda (*Terminalia chebula*) gj n



Harrad/Baheda (Terminalia chebula) हरद

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Combretaceae |
| Genus and Species | (If known) | Terminalia chebula |
| Local Name / Com | non Name | Harrad/Baheda (हरद) |
| Habit & Habitat | | In open fields |
| Description | | It is a tall handsome tree with characteristic ball, 12-50 m tall. Leaves are alternatively arranges or fascicled at the end of branches, elliptic or elliptic obovate, leathery, dotted, entire. Flowers are greenish yellow. Fruits is obovoid. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Market (Seed shop) |
| Season when grown | | Rainy season |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | Used in traditional Indian Ayurveda Medicine to improve digestion. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Tribes also smoke dried kernels. |
| Management mechanism | | |
| Other Details | | Too much of it can cause nausea & vomiting. |
| Community/Knowledge Holder | | Mr. Ravikant Dubey |

Eucalyptus (Eucalyptus obliqua) यूक्लिपटस



Eucalyptus (Eucalyptus obliqua) यूक्लिपटस

| ¥7* 1 | | |
|----------------------------------|------------|---|
| Kingdom | | Plantae |
| Unranked | | Angiosperms |
| Family | | Myrtaceae |
| Genus and Species | (If known) | Eucalyptus obliqua |
| Local Name / Com | mon Name | Eucalyptus (यूक्लिपटस) |
| Habit & Habitat | | In forest & open fields |
| Description | | It is a forest tree and single stemmed & have a brown forming a minor proportion of the whole tree height. It may take a form of a very large tree. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Rainy Season |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | As pulpwood, oil extraction, honey extraction, musical instruments, making dye. |
| Nutritional Value | | Rich in protein |
| Associated Traditional Knowledge | | Ability to be met to drain in camps & there by reduces the risk of malaria. |
| Management mechanism | | |
| Other Details | | Also known as gum tree. |
| Community/Knowledge Holder | | Smt. Premlata |
| | | |

Aloe vera (Aloe vera) घृतकुमारी





Aloe vera (Aloe vera) घृतकुमारी

| Vinadam | | Plantae |
|----------------------------------|------------|--|
| Kingdom | | |
| Unranked | | Angiosperm |
| Family | | Xanthorrhoeaceae |
| Genus and Species | (If known) | Aloe vera |
| Local Name / Com | mon Name | Aloe vera (घृतकुमारी) |
| Habit & Habitat | | Typically in dry habit and need less water |
| Description | | It is a stem less succulant plant growing to 60-100 cm tall, spreading offsets. The leaves are think and fleshy, green to grey-green margin with small white teeth. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Throughout the year |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | It is used as a medicine or beauty product to cure skin & hair problems, improve immune system, Treat Inflammation, wounds and burns, beneficial for females reproductive system, treats diabetes. |
| Nutritional Value | | Contains various minerals & vitamins such as Vit-A, B1, B2, B6, B12 & C. Contains Cu, Fe, Na, Ca, Zn, K, Cr & Mn |
| Associated Traditional Knowledge | | Drinking its juice regularly helps to detoxify the body |
| Management mechanism | | |
| Other Details | | Helps in weight loss and as an ingredient in beverages and dezzerts |
| Community/Knowledge Holder | | Smt. Premlata |

Molshree (Mimusops elengi) मॉलश्री



Molshree (Mimusops elengi) मॉलश्री

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Sapotaceae |
| Genus and Species (If known) | Mimusops elengi |
| Local Name / Common Name | Molshree/ Bakul (मॉलश्री) |
| Habit & Habitat | Garden and field |
| Description | Reaching a height of about 16 m . Its leaves are glossy, dark green, oval-shaped, 5-14 cm long & 2.5 to 6cm wide. Flowers are creamy, hairy and scented. Upto 1 m circumference. |
| Mythological Significance | It is frequently mentioned in the Mahabharat. |
| I.U.C.N. Status | |
| Source of seeds | Fruit itself. |
| Season when grown | Rainy season. |
| Local Status: Past - | In abundance |
| Present - | In abundance |
| Uses | Bark, Flowers, fruits & seeds are used as trintgent, cooling, anti helminthic & toxic. It is mainly used in dental ointments like bleeding gums, pyoirrhea, dental cavities & loose teeth. |
| Nutritional Value | |
| Associated Traditional Knowledge | Ripened fruits facilitate a use for burning condition. |
| Management mechanism | |
| Other Details | It is used in ayurvedic medicines. |
| Community/Knowledge Holder | Smt. Premlata |

Bhang (Cannabis sativa) भांग





Bhang (Cannabis sativa) भांग

| Kingdom | | Plantae |
|----------------------------------|------------|--|
| Unranked | | Angiosperm |
| Family | | Cannabaceae |
| Genus and Species | (If known) | Cannabis sativa |
| Local Name / Comm | non Name | Bhang (भांग) |
| Habit & Habitat | | Open fields |
| Description | | It is an annual deciduous, flowering herb. The leaves are palmately compound or digitate with serrate leaflets. |
| Mythological Significance | | It has religious significance in Hindu religion to worship Lord Shiva. |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself. |
| Season when grow | n | Found throughout year |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | It has many medicinal properties uses to make hemp seed oil which can be used for cooking, lamps or paints, used as cagged birfs feed. Tinctures, teas & ointments are also prepared. |
| Nutritional Value | | 100 components responsible for its characteristic aroma. |
| Associated Traditional Knowledge | | Consumed for recreational, medicinal & spiritual purposes. |
| Management mechanism | | |
| Other Details | | Each part of plant is harvested differently depending on purpose of use. |
| Community/Knowledge Holder | | Smt. Premlata |

Dhatura (Datura alba) धतूरा



Dhatura (Datura alba) धतूरा

| Vinadam | | Diamérica |
|----------------------------------|---------------|--|
| Kingdom | | Plantae |
| Unranked | | Angiosperm |
| Family | | Solonaceae |
| Genus and Specie | es (If known) | Datura alba |
| Local Name / Com | nmon Name | Dhatura (धतूरा) |
| Habit and Habita | t | It is found in open fields, road sides & even dump places. |
| Description | | It is an annual shrub. The plant height ranges from 1-1.5 m. Leaves are alternate & simple. The flowers are solitary. The fruits are in heavy form. Fruits bears thorns. Seeds are disperssed by water. |
| Mythological Significance | | It has religious significance & used in worshiping by hindus. |
| I.U.C.N. Status | | |
| Source of seeds | | Planted from the seed produced in spiny pods. |
| Season when grow | wn | It is seen throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has several religious & medicinal uses. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | It is used in a Hindi proverb. |
| Management mechanism | | |
| Other Details | | The dried leaves & flowering tips are the source of drug. The plant is one of the chief ingredients of the Ayurvedic preparation. |
| Community/Know | wledge Holder | Smt. Premlata |

Haldi/ Turmeric (Cucuma longa) हल्दी



Haldi/ Turmeric (Cucuma longa) हल्दी

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Zingiberaceae |
| Genus and Species (If known) | Cucuma longa |
| Local Name / Common Name | Haldi /Turmeric (हल्दी) |
| Habit & Habitat | Field/tropical regions |
| Description | The plant is a robust perennial, short stem & tufted leaves. Pale-yellow flowers are found in dense spikes with pinkish bract. Rhizomes in colourful condition. Very aromatic, with a musky odour |
| Mythological Significance | Turmeric is used in several religious `occasion in Hinduism. |
| I.U.C.N. Status | |
| Source of seeds | Government retail shop. |
| Season when grown | It is mostly grown in winter. |
| Local Status: Past - | In abundance |
| Present - | In abundance |
| Uses | As antiseptic, as a condiment, used to flavor & colour pickles, and food stuff, principal ingredients of curry, also used to prepare kumkum. |
| Nutritional Value | It is rich source of vitamin Vit B6, choline, niacin & riboflavin etc. |
| Associated Traditional Knowledge | Remedy for stomach diseases and haldi milk is given during injury. |
| Management mechanism | |
| Other Details | Anti-inflammatory (painpilles), carminative, anti- flotalent & anti-microbial property. |
| Community/Knowledge Holder | Smt. Premlata |

Ginger (Zingiber officinale) अदरक



Ginger (Zingiber officinale) अदरक

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Zingiberaceae |
| Genus and Species (If known) | Zingiber officinale |
| Local Name / Common Name | Ginger (अदरक) |
| Habit and Habitat | Tropical regions. |
| Description | Ginger produces clusters of white & pink flower pod that gloom into yellow flowers. It is perennial reed like plant with annual leafy stem about a meter tall. Rhizome is gathered. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Government retail shop. |
| Season when grown | It is found throughout year. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It is used in making tea, pickled in vinegar & often used as spice in Indian receipe. Candid ginger or crystallized ginger is a type of confectionary. |
| Nutritional Value | Carbohydrate & protein, trace metals. |
| Associated Traditional Knowledge | Role in traditional ayurvedic medicine & role in traditional Indian drink 'masala chai'. |
| Management mechanism | |
| Other Details | It is consumed researchable quantities because it has few negative side effect also when taken in more quantities. It is used in gastric troubles. |
| Community/Knowledge Holder | Smt. Premlata |

Clove (Syzygium aromaticum) लौंग



Clove (Syzygium aromaticum) लोंग

| Kingdom | | Plantae |
|----------------------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Myrtaceae |
| Genus and Species | (If known) | Syzygium aromaticum |
| Local Name / Com | mon Name | Lavang/Clove (लोंग) |
| Habit & Habitat | | In tropical regions. |
| Description | | It is an evergreen tree that grows to a height of 8-12 mt. Leaves are large, flowers are in terminal clusters. The flower buds initially have a pale hue, gradually turn green, then transition to bright red in colour. |
| Mythological Significance | | It is also called "Flower of The Gods" in Asia. |
| I.U.C.N. Status | | |
| Source of seeds | | Retail shop. |
| Season when grow | 'n | It is found throughout year. |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | It has numerous medicinal and commercial uses. |
| Nutritional Value | | It is a rich source of Mn, Vit K, fiber, Fe, Mg and Ca. |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | It is also used as a local anesthetic drug for toothache. Its oil is used in aromatherapy. It has various antiseptic and anti inflammatory properties. |
| Community/Know | ledge Holder | Smt. Premlata |

Bael (Aegle marmelos) बेल





Bael (Aegle marmelos) बेल

| Kingdom | | Plantae |
|----------------------------------|---------------|--|
| Unranked | | Angiosperm |
| Family | | Rutaceae |
| Genus and Specie | s (If known) | Aegle marmelos |
| Local Name / Com | nmon Name | Bael (बेल) |
| Habit and Habita | t | Throughout India in dry forests. |
| Description | | It's a deciduous tree. Flower white in colour. Fruits berries variable in shape with hard cover. Seeds many, embedded in the fruit pulp. |
| Mythological Sig | nificance | It is planted as a sacred tree in temple premises. The tri- foliate form of leaves symbolize the trident that Shiva holds in his right hand. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery & markets. |
| Season when grow | wn | Flowering in March &fruits persistent & ripening in February. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | For making beverages, jelly, Murabba. |
| Nutritional Value | | Rich source of protein, fibre, vitamin C and very refreshing. |
| Associated Traditional Knowledge | | Its fruits are used in traditional medicine and as food. Nepal Bael tree is part of a fertility for girls. |
| Management mechanism | | By insecticides and pesticides. |
| Other Details | | Root bark, leaves & fruits used for joint pain, diarrhea, stomachache. Diabetes, vomiting, fever & also act as rejuvenator. |
| Community/Knov | wledge Holder | Smt. Premlata |

Pomegranate (Punica granatum) अनार



Pomegranate (Punica granatum) अनार

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Lythraceae |
| Genus and Species (If known) | Punica granatum |
| Local Name / Common Name | Pomegranate/Anar (अनार) |
| Habit and Habitat | Tropical & sub tropical region |
| Description | It's a fruit bearing deciduous shrub. The flowers are bright red leaves are opposite or sub-opposite glossy narrow. |
| Mythological Significance | It is especially offered to 'Vaibhav Lakshmi'. |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | Fruit in season from September to Febuary. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Is used in cooking, baking, alcoholic beverages. |
| Nutritional Value | Protein, carbohydrate, Vit-C, B6, Ca. |
| Associated Traditional Knowledge | 'Ek anar sau bimar' proverb |
| Management mechanism | By insecticides and pesticides |
| Other Details | It is very refreshing fruit. The bark & fruit shells are used for tanning. |
| Community/Knowledge Holder | Smt. Premlata |

Jamun (Syzygium cumini) जामुन



Jamun (Syzygium cumini) जामुन

| KingdomPlantaeUnrankedAngiospermFamilyMyrtaceaeGenus and Species (If known)Syzygium cuminiLocal Name / Common NameJamun/Jumbolan (जामुन)Habit and HabitatMostly located at the bank of river.DescriptionA large evergreen tree, growing up to 30m tall. Bark pale brown or grayish. Leaves opposites, ovate or elliptical shaped. Fruits ellipsoidal or egg-shaped, smooth, dark purplish-black. Seeds single. Egg-shaped, smooth, dark purplish-black. Seeds single. Egg-shaped.Mythological SignificanceThere is a short story on Jamun in Prem Chandia Book "Jamun Ka Ped". It is said that Jamun flower is much liked by Lord Ganesha & Shiva.I.U.C.N. StatusSource of seedsFruit iself/NurserySeason when grownFruit Feb-Mar, Flower Mar-AprLocal StatusPast-In abundanceIn abundanceIsesUsed in medicine.Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated Traditional KnowledgeJamun seeds are grinded & dried and used for diabetic patient.Management mechanismBy insecticides and pesticidesOther DetailsIn folk medicine, the fruit is eaten as tonic and for | | | |
|--|----------------------------------|---------------|--|
| FamilyMyrtaceaeGenus and Species (If known)Syzygium cuminiLocal Name / Common NameJamun/Jumbolan (जामुन)Habit and HabitatMostly located at the bank of river.DescriptionA large evergreen tree, growing up to 30m tall. Bark pale brown or grayish. Leaves opposites, ovate or elliptical shaped. Fruits ellipsoidal or egg-shaped, smooth, dark purplish-black. Seeds single. Egg-shaped.Mythological SignificanceThere is a short story on Jamun in Prem Chandia Book "Jamun Ka Ped". It is said that Jamun flower is much liked by Lord Ganesha & Shiva.I.U.C.N. StatusSource of seedsFruit itself/NurserySeason when growFruit itself/NurserySeason when growFruit -Feb-Mar, Flower Mar-AprLocal StatusPast-In abundanceIn abundanceIsesUsed in medicine.Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated Traditi>KnowledgeJamun seeds are grinded & dried and used for diabetic patient.Management meck-ismBy insecticides and pesticides | Kingdom | | Plantae |
| Genus and Species (If known)Syzygium cuminiLocal Name / Common NameJamun/Jumbolan (जामुन)Habit and HabitatMostly located at the bank of river.DescriptionA large evergreen tree, growing up to 30m tall. Bark pale brown or grayish. Leaves opposites, ovate or elliptical shaped. Fruits ellipsoidal or egg-shaped, smooth, dark purplish-black. Seeds single. Egg-shaped.Mythological SignifanceThere is a short story on Jamun in Prem Chandia Book "Jamun Ka Ped". It is said that Jamun flower is much liked by Lord Ganesha & Shiva.I.U.C.N. StatusInter es a short story on Jamun in Prem Chandia Book "Jamun Ka Ped". It is said that Jamun flower is much liked by Lord Ganesha & Shiva.Source of seedsFruit telf/NurserySeason when growFruit refb-Mar, Flower Mar-AprLocal StatusPast- In abundanceIsesUsed in medicine.Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated Traditi>TsBy insecticides and pesticides | Unranked | | Angiosperm |
| Local Name / Common NameJamun / Jumbolan (जामुन)Habit and HabitatMostly located at the bank of river.DescriptionA large evergreen tree, growing up to 30m tall. Bark pale brown or grayish. Leaves opposites, ovate or elliptical shaped. Fruits ellipsoidal or egg-shaped, smooth, dark purplish-black. Seeds single. Egg-shaped.Mythological SignificanceThere is a short story on Jamun in Prem Chandia Book "Jamun Ka Ped". It is said that Jamun flower is much liked by Lord Ganesha & Shiva.I.U.C.N. StatusSource of seedsFruit itself/NurserySeason when grow-Fruit Feb-Mar, Flower Mar-AprLocal StatusPast-In abundanceItsesUsed in medicine.Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated Traditive KnowledgeJamun seeds are grinded & dried and used for diabetic patient.Management mechariesBy insecticides and pesticides | Family | | Myrtaceae |
| Habit and Habitat Mostly located at the bank of river. Description A large evergreen tree, growing up to 30m tall. Bark pale brown or grayish. Leaves opposites, ovate or elliptical shaped. Fruits ellipsoidal or egg-shaped, smooth, dark purplish-black. Seeds single. Egg-shaped. Mythological Significance There is a short story on Jamun in Prem Chandia Book "Jamun Ka Ped". It is said that Jamun flower is much liked by Lord Ganesha & Shiva. I.U.C.N. Status | Genus and Specie | es (If known) | Syzygium cumini |
| DescriptionA large evergreen tree, growing up to 30m tall. Bark pale brown or grayish. Leaves opposites, ovate or elliptical shaped. Fruits ellipsoidal or egg-shaped, smooth, dark purplish-black. Seeds single. Egg-shaped.Mythological SignificanceThere is a short story on Jamun in Prem Chandia Book "Jamun Ka Ped". It is said that Jamun flower is much liked by Lord Ganesha & Shiva.I.U.C.N. StatusSource of seedsFruit itself/NurserySeason when grownFruit -Feb-Mar, Flower Mar-AprLocal StatusPast-In abundanceIn abundanceUsed in medicine.Used in medicine.Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated Traditional KnowledgeJamun seeds are grinded & dried and used for diabetic patient.Management mecharismBy insecticides and pesticides | Local Name / Con | nmon Name | Jamun/Jumbolan (जामुन) |
| brown or grayish. Leaves opposites, ovate or elliptical shaped. Fruits ellipsoidal or egg-shaped, smooth, dark purplish-black. Seeds single. Egg-shaped. There is a short story on Jamun in Prem Chandia Book "Jamun Ka Ped". It is said that Jamun flower is much liked by Lord Ganesha & Shiva. I.U.C.N. Status Source of seeds Source of seeds Source of seeds Source of seeds Source of seeds Fruit itself/Nursery Fruit -Feb-Mar, Flower Mar-Apr Local Status Past- In abundance Ises Nutritional Value Nutritional Value Associated Traditio-I Knowledge Management mech-IISM | Habit and Habita | t | Mostly located at the bank of river. |
| 'Jamun Ka Ped". It is said that Jamun flower is much liked by Lord Ganesha & Shiva.I.U.C.N. Status | Description | | brown or grayish. Leaves opposites, ovate or elliptical shaped. Fruits ellipsoidal or egg-shaped, smooth, dark |
| Source of seedsFruit itself/NurserySeason when growFruit -Feb-Mar, Flower Mar-AprLocal StatusPast-In abundancePresent-In abundanceUsed in medicine.Used in medicine.Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated TraditiveJamun seeds are grinded & dried and used for diabetic patient.Management mech-ismBy insecticides and pesticides | Mythological Sig | nificance | "Jamun Ka Ped". It is said that Jamun flower is much liked |
| Season when grownFruit -Feb-Mar, Flower Mar-AprLocal StatusPast-In abundancePresent-In abundanceUsed in medicine.Used in medicine.Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated Traditional KnowledgeJamun seeds are grinded & dried and used for diabetic patient.Management mechanismBy insecticides and pesticides | I.U.C.N. Status | | |
| Local StatusPast- Present-In abundancePresent-In abundanceUsesUsed in medicine.Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated Traditional KnowledgeJamun seeds are grinded & dried and used for diabetic patient.Management mechanismBy insecticides and pesticides | Source of seeds | | Fruit itself/Nursery |
| Present-In abundanceUsesUsed in medicine.Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated Traditional KnowledgeJamun seeds are grinded & dried and used for diabetic patient.Management mechanismBy insecticides and pesticides | Season when gro | wn | Fruit -Feb-Mar, Flower Mar-Apr |
| UsesUsed in medicine.Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated Traditional KnowledgeJamun seeds are grinded & dried and used for diabetic patient.Management mechanismBy insecticides and pesticides | Local Status | Past- | In abundance |
| Nutritional ValueCa, Mg, P, Vit-C, carbohydrate.Associated Traditional KnowledgeJamun seeds are grinded & dried and used for diabetic patient.Management mechanismBy insecticides and pesticides | | Present- | In abundance |
| Associated Traditional KnowledgeJamun seeds are grinded & dried and used for diabetic patient.Management mechanismBy insecticides and pesticides | Uses | | Used in medicine. |
| Management mechanismpatient.By insecticides and pesticides | Nutritional Value | | Ca, Mg, P, Vit-C, carbohydrate. |
| | Associated Traditional Knowledge | | |
| Other Details In folk medicine, the fruit is eaten as tonic and for | Management mechanism | | By insecticides and pesticides |
| strengthening the teeth and gums | Other Details | | , |
| Community/Knowledge Holder Smt. Premlata | Community/Kno | wledge Holder | Smt. Premlata |
| | | | |

Doob grass (Cynodon dactylon) दूब घास



Doob grass (Cynodon dactylon) दूब घास

| Kingdom | | Plantae |
|----------------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Gramineae |
| Genus and Species (| If known) | Cynodon dactylon |
| Local Name / Comm | on Name | Doob grass (दूब घास) |
| Habit and Habitat | | It is found in open fields, parks & road sides. |
| Description | | It is an annual herb. It's height ranges from 5-7 cm. leaves are long & narrows. Leaves are tapering to a fine point. The venation is parallel. Flowers are of light brown colour & found in group or clusters. |
| Mythological Signif | icance | It has high religious significance in various festivals. |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | It is seen throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various religious & medicinal uses. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Doob ghas is a valuable herbal medicine and used as first aid for minor injuries. |
| Management mechanism | | Various herbicides are used to manage its cultivation. |
| Other Details | | It is used as fodder for domestic animals. It is also used as decorative in sport areas. |
| Community/ Knowl | edge Holder | Smt. Premlata |

Arandi (Ricinus communis) आरण्डी



Arandi (Ricinus communis) आरण्डी

| Kingdom | | Plantae |
|----------------------------------|--------------|---|
| Unranked | | Angiosperms |
| Family | | Euphorbiaceac |
| Genus and Species | (If known) | Ricinus communis |
| Local Name / Comm | non Name | Arandi (आरण्डी) |
| Habit and Habitat | | In areas with a suitable climate it establishes itself easily where it can become an invasive plant & often to be found on waterland. |
| Description | | It is a fast growing sucking perennial shrub that can reach the size of a small tree. Leaves are glossy. The flowers are borne in terminal panicle like inflorence. Fruit is spiny, greenish. |
| Mythological Signi | ficance | |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grow | n | Annual plant, spring season. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Uses as purgative. Being water resistant, it is used for making fabrics, for protective covering of air-planes, insulation etc. also used in soap manufacture, inks, plastics, paints, varnishes, leathers preservation etc. |
| Nutritional Value | | Several vitamins & minerals. |
| Associated Traditional Knowledge | | Known to be used as an excellent fertilizer. |
| Management mechanism | | |
| Other Details | | Oil is green in colour. Seeds have about 35-58 % oil content. |
| Community/ Know | ledge Holder | Smt. Premlata |

Lehsun (Allium sativum) लहसुन





Lehsun (Allium sativum) लहसुन

| Kingdom | | Plantae |
|----------------------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Alliaceae |
| Genus and Species | (If known) | Allium sativum |
| Local Name / Comn | 10n Name | Garlic/Lehsun (लहसुन) |
| Habit & Habitat | | It is found in well- drained soil. |
| Description | | It is a bulbous plant. It grows upto height of 1.2 m. Bulbels are covered with a common tunic of white or purple colour. Leaves are broadly linear. Flowers are white . |
| Mythological Significance | | Hindus generally avoid using garlic in the preparing of foods for festive purposes. Jains avoid using garlic on daily basis. |
| I.U.C.N. Status | | |
| Source of seeds | | Seed Shop |
| Season when grown | | It is found throughout the year |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | It has various medicinal uses & important part of Indian cuisine. |
| Nutritional Value | | Various vitamins (B1, B2, B3, B5 etc.) are found in it. |
| Associated Traditional Knowledge | | Used in eye infection. |
| Management mechanism | | By insectiside & pesticide |
| Other Details | | It is very helpful in fungal & parasitic infection. It lower blood cholesterol & promotes circulatory function. |
| Community/ Know | ledge Holder | Smt. Premlata |

Makoi (Solanum nigrum) मकोई



Makoi (Solanum nigrum) मकोई

| Kingdom | | Plantae |
|----------------------------------|-------------|--|
| Unranked | | Angiosperm |
| Family | | Solonaceae |
| Genus and Species (| lf known) | Solanum nigrum |
| Local Name / Commo | on name | Makoi (मकोई) |
| Habit & Habitat | | It is mostly found in moist places. |
| Description | | It is a common annual herb. The stems are prickly. Leaves are alternate, simple with reticulate venation. Flowers have greenish to whitish petals. The fruits in cultures, round in shape. Green in colour before opening & turn red after ripening. |
| Mythological Signifi | cance | |
| I.U.C.N. Status | | |
| Source of seeds | | Plantitself |
| Season when grown | | It is found in throughout year. |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | It has various medicinal uses and also used as food. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Leaves & roots are used in treatment of various stomach diseases. |
| Management mechanism | | |
| Other Details | | It also has anticancer properties. |
| Community/ Knowle | edge Holder | Smt. Premlata |

Mehndi (Laevsonia inermis) 🗠 🕄 🔊



Mehndi (Laevsonia inermis) मेंहदी

| Kingdom | | Plantae |
|----------------------------------|-----------|---|
| Unranked | | Angiosperm |
| Family | | Lythraceae |
| Genus and Species (If | known) | Laevsonia inermis |
| Local Name / Common | Name | Mehndi/Meena (मेंहदी) |
| Habit and Habitat | | Tropical reguibs |
| Description | | It is a large shrub 6 to 8 ft. in length. It is glabrous & multi- branhed. The leaves grow opposite. |
| Mythological Significance | | It is used for cosmetic purpose. Bridal heena nights remain an important custom in many areas. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Through out the year. |
| Local Status I | Past- | In abundance |
| I | Present- | In abundance |
| Uses | | For dyeing the hair, fingernails, palm etc. Heena is known as an Ayurvedic medicine. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Used from ancient age for hair conditioning. |
| Management mechanism | | |
| Other Details | | Its an antiquity to dry skin, hair, fingernail. |
| Community/ Knowled | ge Holder | Smt. Premlata |
| | | |

Amla (Phyllanthus emblier) आंवला



Amla (Phyllanthus emblier) आंवला

| TZ: 1 | |
|----------------------------------|--|
| Kingdom | Plantae |
| Unranked | Angiosperm |
| Family | Euphorbiaceae |
| Genus and Species (If known) | Phyllanthus emblie |
| Local Name / Common Name | Amla (आंवला) |
| Habit and Habitat | Found in the deciduous forests in tropical & sub-tropical region. |
| Description | Deciduous tree, growing upto 15 m tall. Bark smooth, leaves small, flowers unisexual, flowers numerous. Fruit spherical. |
| Mythological Significance | This plant is used in a worship (Manchinta) |
| I.U.C.N. Status | |
| Source of seeds | Nursery & markets. |
| Season when grown | March to August |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Used as detergent shampoo, cultivated for fruits & hair oil and dye. |
| Nutritional Value | Richest source of vitamin C. |
| Associated Traditional Knowledge | In making patanjali drugs |
| Management mechanism | By insecticides and pesticides. |
| Other Details | In making amla candy, loss of appetite, anaemia, jaundice, leucorrhoea, used as a refrigerant, diuretic etc. |
| Community/Knowledge Holder | Smt. Ram Murti Devi |

Curry Tree (Murraya koenigii) मीठी नीम



Curry Tree (Murraya koenigii) मीठी नीम

| Kingdom | Plantae |
|----------------------------------|---|
| C C | |
| Unranked | Angiosperm |
| Family | Rutaceae |
| Genus and Species (If known) | Murraya koenigii |
| Local Name / Common Name | Curry Tree/Sweet Neem (मीठी नीम) |
| Habit and Habitat | Tropical & Sub Tropical regions |
| Description | It is a small tree, growing up to 4-6 mm with a trunk up to 40 cm in diameter. The leaves are pinnate, with 11-21 leaflets. Flowers are white which can self pollinate. |
| Mythological Significance | Leaves are used in Black-magic |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | Throughout the year |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Use for good hair growth, pre mature hair whitening, maintains blood sugar level and protect lever for damage. |
| Nutritional Value | Source of primary Alkaloids like Mahanimbine, Girinim- bine, Koenimbine, Isomahanine, Indicolactone |
| Associated Traditional Knowledge | It cures diarrhea, cures chest pain |
| Management mechanism | |
| Other Details | It inhibits growth and induce apoptosis in human hepatocellular Carcinoma |
| Community / Knowledge Holder | Smt. Rammurti |

Rose (Rosa indica) गुलाब





Rose (Rosa indica) गुलाब

| Kingdom | | Plantae |
|----------------------------------|--------------|---|
| Unranked | | Angiosperm |
| Family | | Rosaeceae |
| Genus and Species | s (If known) | Rosa indica |
| Local Name / Com | mon Name | Gulab/Rose (गुलाब) |
| Habit and Habitat | | Homegarden |
| Description | | These an erect shrub with climbing stem have height of about 7m. These have large & showy flowers, color ranging from white, yellow red. |
| Mythological Significance | | It is very sacred for 'Hindus'. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grow | 'n | Spring & summer season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | These as used for commercial perfumery purposes. These are used as landscape plant. These have minor medicinal value. Also used in making jam, jelly, soup etc. |
| Nutritional Value | | It is rich in carbohydrates, minerals, high vitamin C content. |
| Associated Traditional Knowledge | | For preparing Gulkand. |
| Management mechanism | | By using pesticides. Wild roses are host for a number of pests & disease. |
| Other Details | | These are often subject to severe damage from insect, arachnid & fungal pests & disease. |
| Community/Know | ledge Holder | Smt. Rammurti |

Gurhal (Hibiscus rosa sinensis) गुड़हल





Gurhal (Hibiscus rosa sinensis) गुड़हल

| Kingdom | | Plantae |
|----------------------------------|---------------|--|
| Unranked | | Angiosperm |
| Family | | Malvaceae |
| Genus and Species | (If known) | Hibiscus rosa sinensis |
| Local Name / Comm | non Name | Gurhal (गुड़हल) |
| Habit and Habitat | | Homegarden |
| Description | | A shrub, growing upto 4m tall. Leaves simple alternate. Flowers red on colite, in the leaf axils, fruits capsules with forms rarely & with many seeds. |
| Mythological Significance | | Sacred for 'Hindus'. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | | Throughout the year |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Flowers used to treat graying of hair, cardiac problems, gonorrhoea & as contraceptive. |
| Nutritional Value | | Vitamins B1, B6, & P. |
| Associated Traditional Knowledge | | Favourite flower of Maa Durga |
| Management mechanism | | Insecticide and pesticide should be sprayed. |
| Other Details | | It is a bushy plant. Flower is used to make perfumery products and cosmetics. |
| Community / Know | vledge Holder | Smt. Rammurti |

Sadabahar (Vinea rosea) सदाबहार



Sadabahar (Vinea rosea) सदाबहार

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Аросупасеае |
| Genus and Species (If known) | Vinea rosea |
| Local Name / Common Name | Sadabahar/Peri winkle (सदाबहार) |
| Habit and Habitat | Garden & semi shaded places. |
| Description | It is an important perennial plant, evergreen shrub. It grows to 3 feet in height smooth, glossy, dark green leaves & flowers throughout year. |
| Mythological Significance | It is sacred for 'Hindus'. |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | It is found throughout the year |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It is used in the treatment of diabetes, high BP, eye infections. |
| Nutritional Value | It is rich in vitamins and in some other substances. |
| Associated Traditional Knowledge | The leaves, flowers roots are used in Ayurvedic medicine. |
| Management mechanism | Insecticide and pesticide should be sprayed. |
| Other Details | It has many varieties and it grow anywhere by itself. |
| Community / Knowledge Holder | Mr. Jai Singh |



FORMAT- IV Wild Plants



Kakrona (Ageratum conzyoides) कक्सौंना



Kakrona (Ageratum conzyoides) कक्सेंना

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Compositae |
| Genus and Species (If known) | Ageratum conzyoides |
| Local Name / Common name | Kakrona/ Goat weed (कक्सेंना) |
| Habit & Habitat | Field or wastelands. |
| Description | It is an annual herb leaves are simple and have reticulate venation. Few to many flowers. It grows to approximately 1m in height. The flowers are purple, blue, pinkish or white. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Plantitself |
| Season when grown | Throughout year |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It has various medicinal uses. |
| Nutritional Value | |
| Associated Traditional Knowledge | Its goat like odour. |
| Management mechanism | Various herbicides are used to control it. Short period of flooding can be used to control this weed. |
| Other Details | It is an alternative host of some economically important crop pathogens and nematodes. |
| Community/ Knowledge Holder | Mr. Ashok Kumar Tripathi |

Jangli Palak (Rumex nepalensis) जंगली पालक



Jangli Palak (Rumex nepalensis) जंगली पालक

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Polygonaceae |
| Genus and Species (If known) | Rumex nepalensis |
| Local Name / Common name | Jangli Palak (जंगली पालक) |
| Habit & Habitat | It is found in open fields as well as on road sides. |
| Description | Leaves are simple with recticular venation. Leaves are leathery and fleshy. Flowers are of yellow colours & found in cluster. Few spines are also seen on nodes. Whole plant is green in colour. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Plant itself |
| Season when grown | They grow in summer season. |
| Local Status: Past - | In abundance |
| Present - | In abundance |
| Uses | It has various medicinal uses. |
| Nutritional Value | Carbohydrates, proteins and many trace metals. |
| Associated Traditional Knowledge | Leaves are rubbed on affected part for relief from irritation by bichchhoo plant. |
| Management mechanism | |
| Other Details | Root extract have antimicrobial property. |
| Community/ Knowledge Holder | Mr. Jai Singh |

Makoi (Solanum nigrum) मकोई



Makoi (Solanum nigrum) मकोई

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Solonaceae |
| Genus and Species (If known) | Solanum nigrum |
| Local Name / Common name | Makoi (मकोई) |
| Habit & Habitat | It is mostly found in moist places. |
| Description | It is a common annual herb. The stems are prickly. Leaves are alternate, simple with reticulate venation. Flowers have greenish to whitish petals. The fruits are in clusters round in shape. Green in colour before opening & turn red after ripening. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Plant itself |
| Season when grown | It is found throughout year. |
| Local Status: Past - | In abundance |
| Present - | In abundance |
| Uses | It has various medicinal uses and also used as food. |
| Nutritional Value | |
| Associated Traditional Knowledge | Leaves & roots are used in treatment of various stomach diseases. |
| Management mechanism | |
| Other Details | It also has anticancer properties. |
| Community/ Knowledge Holder | Mr. Jai Singh |

Wild Plant Jalkumbhi (*Eichhornia crassipes*) t y d d th



Jalkumbhi (Eichhornia crassipes) जलकुम्भी

| Kingdom | | Plantae |
|----------------------------------|---------------|--|
| Unranked | | Angiosperms |
| Family | | Pontederiaceae |
| Genus and Specie | s (If known) | Eichhornia crassipes |
| Local Name / Com | mon name | Jalkumbhi (जलकुम्भी) |
| Habit & Habitat | | It is found in fresh water ponds & rivers. |
| Description | | It is a very rapidly grown aquatic plant. It is a surface floater plant. Flowering occurs during September to November. Flowers are of purple colour |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | It is seen throughout the year. |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Menace to water body |
| Management mechanism | | Various physical, chemical & biological control mechanism are there for its management. |
| Other Details | | Rapidly growing plant/research being done to extract fuel from it. |
| Community/ Kno | wledge Holder | Mr. Jai Singh |

Wild Plant Culantro (*Eryngium foetidum*) कुलांत्रो



Culantro (Eryngium foetidum) कुलांत्रो

| Vingdom | Plantae |
|----------------------------------|--|
| Kingdom | |
| Unranked | Angiosperms |
| Family | Apiaceae |
| Genus and Species (If known) | Eryngium foetidum |
| Local Name / Common Name | Culantro (कुलांत्रो) |
| Habit and Habitat | It is found on stream banks & moist places. |
| Description | Whole plant is green in colour. Leaves are long, simple & reticulate venation. Leaves are somewhat spiny at the margins. Flowers are found in clusters. Mostly flowers are white in colour. Plant height mostly ranges from 1 to 2 feet. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Plant itself |
| Season when grown | It is found throughout the year. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It has several medicinal uses. |
| Nutritional Value | |
| Associated Traditional Knowledge | Paste of leaves is applied on burns, ear ache, fever etc. |
| Management mechanism | |
| Other Details | It is found worldwide & has taste 10 times stronger than coriander. |
| Community/ Knowledge Holder | Mr. Jai Singh |

Gokharu (Tribulus terrestris) गोखरू



Gokharu (Tribulus terrestris) गोखरू

| T71 1 | | |
|----------------------------------|---------------|--|
| Kingdom | | Plantae |
| Unranked | | Angiosperms |
| Family | | Zygophyllaceae |
| Genus and Species | s (If known) | Tribulus terrestris |
| Local Name / Com | mon Name | Gokharu (गोखरू) |
| Habit and Habitat | | It is found in open fields & dump places also. |
| Description | | It is a short heighted plant of upto 1m height. Thorns are found on plant. Fruits are heavily thorned. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | It is seen throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal uses. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | It has diuretic properties. |
| Management mechanism | | Management is best accomplished by removing plants before they produce seeds. |
| Other Details | | Various researches show that it has some chemicals which can produce significant increase in testosterone level. |
| Community/ Know | vledge Holder | Mr. Jai Singh |

Congress grass (Parthenium hysterophurus) गाजर घास



Congress grass (Parthenium hysterophurus) गाजर घास

| Kingdom | | Plantae |
|---------------------------|-----------------|--|
| Unranked | | Angiosperm |
| Family | | Compositae |
| Genus and Specie | s (If known) | Parthenium hysterophurus |
| Local Name / Common Name | | Congress grass (गाजर घास) |
| Habit and Habitat | t | It is found in open fields & dump places also. |
| Description | | It is very common grass. It is found easily in the crops like wheat, potato, brinjal etc. It's flowering season is from September to December. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | It is seen throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance. |
| Uses | | |
| Nutritional Value | | |
| Associated Tradit | ional Knowledge | |
| Management mechanism | | Ploughing before flowering. |
| Other Details | | It is helpful in skin allergy. |
| Community/ Kno | wledge Holder | Mr. Rohit Yadav |
| | | |

Doob grass (Cynodon dactylon) दूब घास



Doob grass (Cynodon dactylon) दूब घास

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Gramineae |
| Genus and Species (If known) | Cynodon dactylon |
| Local Name / Common Name | Doob grass (दूब घास) |
| Habit and Habitat | It is found in open fields, parks & road sides. |
| Description | It is an annual herb. It's height ranges from 5-7 cm. leaves are long & narrows. Leaves are tapering to a fine point. The venation is parallel. Flowers are of light brown colour & found in group or clusters. |
| Mythological Significance | It has high religious significance in various festivals and offered to Lord Ganesha |
| I.U.C.N. Status | |
| Source of seeds | Plant itself |
| Season when grown | It is seen throughout year. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It has various religious & medicinal uses. |
| Nutritional Value | |
| Associated Traditional Knowledge | Doob grass is a valuable herbal medicine and used as first aid for minor injuries. |
| Management mechanism | Various herbicides are used to manage its cultivation. |
| Other Details | It is used as fodder for domestic animals. It is also used as decorative in sport areas. |
| Community/ Knowledge Holder | Mr. Jai Singh |

Wild Plant Doodhi (*Euphorbia hirta*) दूधी घास



Doodhi (Euphorbia hirta) दूधी घास

| Kingdom | | Plantae |
|----------------------------------|---------------|---|
| Unranked | | |
| unranked | | Angiosperm |
| Family | | Euphorbiaceae |
| Genus and Species (If known) | | Euphorbia hirta |
| Local Name / Common Name | | Doodhi/ (दूधी घास) |
| Habit and Habitat | | It is found in open fields, parks & road sides. |
| Description | | It is an annual erect herb. Plant height ranges from 50-60 cm tall. Leaves are simple, short & wide. Flowers are solitary. Flowers are greenish yellow in colour. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | It is seen throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal uses. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | |
| Management mech | anism | It is easily managed by hand or hoe & by cultivation. |
| Other Details | | It is used as an antiseptic lotion and also used in fever. |
| Community/ Know | vledge Holder | Mr. Jai Singh |
| | | |

Dhatura (Datura alba) धतूरा



Dhatura (Datura alba) धतूरा

| *** 1 | | |
|---------------------------|----------------|--|
| Kingdom | | Plantae |
| Unranked | | Angiosperm |
| Family | | Solonaceae |
| Genus and Species | s (If known) | Datura alba |
| Local Name / Common Name | | Dhatura (धतूरा) |
| Habit and Habitat | | It is found in open fields, road sides & even dump places. |
| Description | | It is an annual shrub. The plant height ranges from 1-1.5 m. Leaves are alternate & simple. The flowers are solitary. The fruits are in heavy form. Fruits bear thorns. Seeds are dispersed by water. |
| Mythological Significance | | It has religious significance & used in worshipping by Hindus. |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | It is seen throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has several religious & medicinal uses. |
| Nutritional Value | | |
| Associated Traditi | onal Knowledge | It is used in a Hindi proverb. |
| Management mecl | hanism | |
| Other Details | | The dried leaves & flowering tops are the source of drug. The plant is one of the chief ingredients of the Ayurvedic preparation. |
| Community/ Know | wledge Holder | Mr. Jai Singh |

Madaar (Calotropis procera) मदार



Madaar (Calotropis procera) मदार

| Kingdom | | Plantae |
|------------------------------|-----------|--|
| Unranked | | Angiosperms |
| Family | | Apocynaceaea / Asclepiadaceae |
| Genus and Species (If known) | | Calotropis procera |
| Local Name / Common | Name | Madaar (मदार) |
| Habit and Habitat | | It is found abundantly in sandy soil with low-rainfall. |
| Description | | It is an annual shrub. The plant reaches upto 4m height. It has a waxy appearance & copious milky sap. The stem is grey-green in colour. The leaves are grey-green & opposite. The flowers are white with deep purple blotch at the base of each lobe. |
| Mythological Significance | | It has religious significance & used in worshipping by Hindus and plant white Madaar for wealth |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | It is seen throughout year. |
| Local Status I | Past- | In abundance |
| I | Present- | In abundance |
| Uses | | It has various medicinal uses. |
| Nutritional Value | | |
| Associated Traditional | Knowledge | This plant is used in the cure of leprosy. |
| Management mechanism | | It is managed by regular cultivation and use of some herbicides. |
| Other Details | | The stem yield a fiber useful for making ropes, bags, net and paper. |
| Community/ Knowled | ge Holder | Mr. Jai Singh |

Jaldhania (Ranunculus scrleratus) जलधनिया



Jaldhania (*Ranunculus scrleratus*) जलधनिया

| Kingdom | | Plantae |
|------------------------------|----------------|---|
| Unranked | | Angiosperm |
| Family | | Ranunculaceae |
| Genus and Species (If known) | | Ranunculus scrleratus |
| Local Name / Com | mon Name | Jaldhania (जलधनिया) |
| Habit and Habitat | | It grows in wet & moist habitats. |
| Description | | It is an annual herb. It grows upto a height of 1.5 to 2 feet. The leaves are alternate and glaborous. Flowers are several on stalks. Flowers are yellowish & greenish-yellow in colour. Fruits are achenes. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | It was found throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Nutritional Value | | |
| Associated Traditi | onal Knowledge | |
| Management mechanism | | Manual removal or use of herbicides is effective in management. |
| Other Details | | It has various poisonous properties. Whole plant is poisonous when fresh but toxins destroy by heat or when plant dries. |
| Community/ Know | vledge Holder | Mr. Jai Singh |

Wild Plant Jungli Kundru (Coccinia indica) जंगली कुन्दरू



Jungli Kundru (Coccinia indica) जंगली कुन्दरू

| Kingdom | | Plantae |
|------------------------------|----------------|--|
| Unranked | | Angiosperm |
| Family | | Cucurbitaceae |
| Genus and Species (If known) | | Coccinia indica |
| - | | Jungli Kundru (जंगली कुन्दरू) |
| Local Name / Com | | |
| Habit and Habitat | | It is found in warm & humid region. |
| Description | | It is an annual creeper. It is found spreading on ground & twilling around the trees & supports around it. Leaves are triangular or pentagonal in shape. Flowers are small & found in bunch 0f 2 to 4. Flowers are white in colour. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | It is found throughout year. |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal uses & also a part of Indian cuisine. |
| Nutritional Value | | It is rich in beta-carotene. |
| Associated Traditi | onal Knowledge | |
| Management mechanism | | Physical & chemical measures are there for its management. |
| Other Details | | Several researches have shown that it is helpful in controlling blood sugar level. |
| Community/ Know | vledge Holder | Mr. Jai Singh |

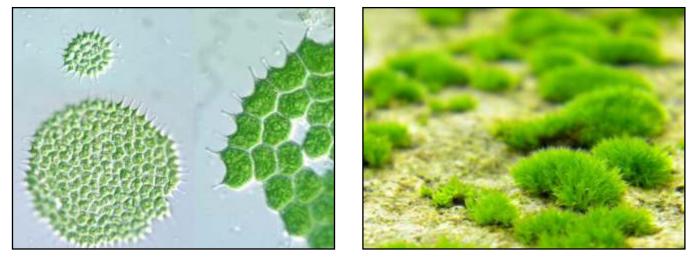


FORMAT- V Aquatic Plants





Aquatic Plants Green Algae (Pediastrum boryanum) हरित शैवाल



Green Algae (Pediastrum boryanum) हरित शैवाल

| | | _1 |
|------------------------------|----------------|--|
| Kingdom | | Plantae |
| Unranked | | Angiosperm |
| Family | | Hydrodictyaceae |
| Genus and Species (If known) | | Pediastrum boryanum |
| Local Name / Com | mon Name | Green Algae (हरित शैवाल) |
| Habit and Habitat | | Freshwater, ponds, streams, river, lakes. |
| Description | | It is a unicellular algae, eolontes usually forms in multiples of 8, height 10 micrometers. It is photoautotropic, nonmotile coenobial. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Nature/Itself |
| Season when grown | | Throughout the year |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As a bio-fuel & in waste water management. Used as a cover for newly born like Salamander. As a food for aquatic animals. Grows best in full sun. It is able to undergo photosynthesis & fix N2. |
| Nutritional Value | | It is a good source of protein and minerals. |
| Associated Tradition | onal Knowledge | |
| Management mech | anism | It can be controlled by herbicides |
| Other Details | | Cell wall of green algae usually contain cellulose and store carbohydrate in the form of starch. |
| Community/know | ledge holder | Mr. Kamal Kant Katiyar |

Aquatic Plants Jalkumbhi (*Eichornia* sp.) t ydd∰h





Jalkumbhi (Eichornia sp.) जलकुम्भी

| Kingdom | | Plantae |
|---------------------------|----------------|---|
| Unranked | | Angiosperm |
| Family | | Pontederiaceae |
| Genus and Species | s (If known) | Eichornia sp. |
| Local Name / Com | mon Name | Jalkumbhi (जलकुम्भी) |
| Habit and Habitat | | Tals, ponds, ditches, lakes |
| Description | | A perennial floating herb, leaves 5-10 cm in diameter. Flowers are violet-blue. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Plant itself |
| Season when grown | | May-October |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Strings of dried fibers are woven together to form a braid with is used for making bag. Footwear, hart & other decorative materials. For making basket & paper. |
| Nutritional Value | | In Eichornia sp. some minerals and carbohydrates are found. |
| Associated Traditi | onal Knowledge | Act as menace in water. |
| Management mechanism | | Manual removal or Insecticide should be sprayed. |
| Other Details | | Capsule is the oblong or linear, very thin. Research for making fuel |
| Community / Know | wledge Folder | Mr. Sunil Yadav |

Aquatic Plants Water Lily (*Nymphea*) U**hy** dey



Water Lily (Nymphea) नील कमल

| Kingdom Plantae | |
|---|------|
| Unranked Angiosperm | |
| Family Nymphaceae | |
| Genus and Species (If known) Nymphea | |
| Local Name / Common Name Water Lily (नील कमल) | |
| Habit and HabitatAquatic; lakes, tals; ponds & water reservoirs. | |
| Description It is adequate herb, leaves are 14-28 cm & pinkish color. | red |
| Mythological SignificanceWhite water lily is the national flower of Bangladesh state flower of Andhra Pradesh. Symbol of Goddess Later | |
| I.U.C.N. Status | |
| Source of seeds Nature/Itself | |
| Season when grown Throughout the year | |
| Local Status Past- In abundance | |
| Present- In abundance | |
| Uses Water lily is used as a food for birds. | |
| Nutritional ValueIt could be a good source of protein for incorporatiofish diet. | n in |
| Associated Traditional Knowledge | |
| Management mechanismInsecticide should be sprayed. | |
| Other Details The sacred lotus was once thought to be a water lily. | |
| Community / Knowledge Folder Mr. Sunil Yadav | |

Aquatic Plants Kamalgatta (Nelumbo nucifera) कमलगट्टा



Kamalgatta (Nelumbo nucifera) कमलगट्टा

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Nelumbonaceae |
| Genus and Species (If known) | Nelumbo nucifera |
| Local Name / Common Name | Kamalgatta (कमलगट्टा) |
| Habit and Habitat | It is grown in rivers, lakes, ponds. |
| Description | A large perennial aquatic herb, leaves 30-35cm across or bieula. Flowers 12-24 cm India, solitary, scented. |
| Mythological Significance | Flowers are sacred for both 'Hindus' & 'Buddhists'. |
| I.U.C.N. Status | |
| Source of seeds | Nursery/nature |
| Season when grown | June-October |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Its seed & fruits are food for birds. They are used in treatment of skin diseases & diarrhoea. |
| Nutritional Value | It is rich in dietry fibre, vitamin-C, B6, Cu, K, Mg and saturated fat. |
| Associated Traditional Knowledge | Traditional cuisine (Kamalgatte ki sabji) |
| Management mechanism | Insecticide should be sprayed. |
| Other Details | It is used as a vegetable in soups, deep- fried and braised dishes. |
| Community / Knowledge Folder | Mrs. Annapurna |

Aquatic Plants Jalrani (*Nymphoides indica*) t yj kuh



Jalrani (Nymphoides indica) जलरानी

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Gentianaceae |
| Genus and Species (If known) | Nymphoides indica |
| Local Name / Common Name | Jalrani (जलरानी) |
| Habit and Habitat | It is grown in river, ponds, lakes. |
| Description | An aquatic floating herb, leaves fleshy, orbicular, cordately. Flower white, capsule sub-globose. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nursery / Nature |
| Season when grown | April-December |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It is a good source of food for birds. |
| Nutritional Value | It is rich in protein and many types of minerals. |
| Associated Traditional Knowledge | |
| Management mechanism | It can be controlled by herbicides. |
| Other Details | Non-native species N.cristata reportedly occur in Florida. |
| Community / Knowledge Folder | Mr. Kamalkant Katiyar |
| | |

Aquatic Plants Lajalu (*Neptunic oleraeca*) लजालु



Lajalu (Neptunic oleraeca) लजालु

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Fabaeceae |
| Genus and Species (If known) | Neptunic oleraeca |
| Local Name / Common Name | Lajalu/Water Mimosa (लजालु) |
| Habit and Habitat | Floating in lakes, nullah, puddles. |
| Description | A prostrate, marshy or floating aquatic perennial herb, leaves bipinnate, sessile enline. Flower yellow. Seeds transversely compressed. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | July-November |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | The plant is refrigerant & astringent. It is used as a food for birds. |
| Nutritional Value | It is rich in many types minerals carbohydrates, protein. |
| Associated Traditional Knowledge | |
| Management mechanism | Insecticide should be sprayed. |
| Other Details | Juice of the stem and roots are used for various purposes. |
| Community / Knowledge Folder | Mr. Kamalkant Katiyar |
| | |

Aquatic Plants Big Duck Weed (Spirodela polyrhiza) CMA d KoZ



Big Duck Weed (Spirodela polyrhiza) बड़ी काई

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Lemnaceae/Araceae |
| Genus and Species (If known) | Spirodela polyrhiza |
| Local Name / Common Name | Big Duck Weed / Badi kai (बड़ी काई) |
| Habit and Habitat | Found in ponds, ditches, tals, sometimes covering a large area of water surface. |
| Description | A minute floating gregarious aquatic with numerous root, 1-3 mm in diameter, ovate or orbicular, green above, purplish beneath. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nature/itself |
| Season when grown | September-December |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It is better food for birds. |
| Nutritional Value | It contain up to 43% crude protein,5% dietry digestable dry matter. |
| Associated Traditional Knowledge | |
| Management mechanism | Timely removed. |
| Other Details | The top part dies in the fall and the plant often overwinters as a turion. |
| Community / Knowledge Folder | Mr. Kamalkant Katiyar |

Aquatic Plants Van laung (Jussiaeaa repens) वन लौंग



Van laung (Jussiaeaa repens) वन लौंग

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Onagraceae |
| Genus and Species (If known) | Jussiaea repens |
| Local Name / Common Name | Van laung (वन लौंग) |
| Habit and Habitat | It grow along with the margins of lakes and in muddy soils. |
| Description | An aquatic floating herb. Stem rooting at the nodes with numerous, spongy, white air roots in aquatic habitat. Leaves ovate, obtuse narrowed into the short petiole. |
| Mythological Significance | |
| I.U.C.N. Status | Red list (threatened species) |
| Source of seeds | Nature |
| Season when grown | September-January |
| Local Status Past- | Less in number |
| Present- | More in number |
| Uses | It is good source of food for birds. |
| Nutritional Value | It is rich in fibre and protein. |
| Associated Traditional Knowledge | |
| Management mechanism | By using insecticide |
| Other Details | In windy or high traffic areas the flowers may hold their petals on a short time. |
| Community / Knowledge Folder | Mr. Kamalkant Katiyar |

Aquatic Plants Fasai Grass (*Oryza rufipogon*) फसई घास



Fasai Grass (Oryza rufipogon) फसई घास

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Poaceae |
| Genus and Species (If known) | Orya rufipogon |
| Local Name / Common Name | Fasai Grass / Red Rice/ (फसई घास) |
| Habit and Habitat | It grows frequently in swampy places & in ditches. |
| Description | An erect annual grass, upto 1.5 m high. Leaves linear lanceolate caudate-acuminate, margin scabrid with minute bristles. Spikelets lossely arranges on the branches. |
| Mythological Significance | It is sacred for 'Hindus'. It is worshiped 'Harchath Pooja' in 'Hindus'. |
| I.U.C.N. Status | Red listed (endangered species) |
| Source of seeds | Nature / Itself |
| Season when grown | July-November |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Used as a food for bird. |
| Nutritional Value | It is higher protein content & from nitrogen fertilizer. |
| Associated Traditional Knowledge | |
| Management mechanism | Insecticide and pesticide should be sprayed. |
| Other Details | It is endangered wild rice species |
| Community / Knowledge Folder | Mr. Kamalkant Katiyar |
| | |

Aquatic Plants Hydrilla (*Hydrilla verticillata*) हाइड्रिला



Hydrilla (Hydrilla verticillata) हाइड्रिला

| 1 | |
|----------------------------------|--|
| Kingdom | Plantae |
| Unranked | Angiosperm |
| Family | Hydrochauritaceae |
| Genus and Species (If known) | Hydrilla verticillata |
| Local Name / Common Name | Khaya Mooti patti/ Hydrilla / (हाइड्रिला) |
| Habit and Habitat | Hydrilla grows abundant in lake, pond, ditches & nullahs. |
| Description | A delicate, much branched, submerged aquatic leaves sessile, opposite on vericillate. Flowers minute deciduous, white dioecious. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Itself / Nature |
| Season when grown | July-December |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Seeds and flower of Hydrilla are eaten by birds. |
| Nutritional Value | Its powder is loaded with Ca, vitamin-b12, protein, minerals and more. |
| Associated Traditional Knowledge | It is a carbon capturing plant. |
| Management mechanism | Hydrilla can be controlled by herbicides. |
| Other Details | It is monoceous with male and female flowers produced separately on a single plant. |
| Community / Knowledge Folder | Mr. Kamalkant Katiyar |

Aquatic Plants Sment Weed (Polygonum limbatum) खर पतवार



Sment Weed (Polygonum limbatum) खर पतवार

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Polygonaceae |
| Genus and Species (If known) | Polygonum limbatum |
| Local Name / Common Name | Sment Weed (खर पतवार) |
| Habit and Habitat | Frequent along the margin of ponds nullahs & lakes. |
| Description | An erect, stout, hairy, annual herb, lanceolate, base acute, scabrous on both surface. Flowers white in stout panicled spikes. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Itself |
| Season when grown | September-June |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It attracts aquatic birds. Its seeds & bud are eaten by birds & shrew. |
| Nutritional Value | Rich in carbohydrates and some minerals. |
| Associated Traditional Knowledge | |
| Management mechanism | It can be controlled by herbicides. |
| Other Details | |
| Community/Knowledge Folder | Mr. Kamalkant Katiyar |
| | |

Aquatic Plants Chinese Water Chestnut (Eleocharis dulcis) सिंघाड़ा





Chinese Water Chestnut (Eleocharis dulcis) सिंघाड़ा

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Cyperaceae |
| | Eleocharis dulcis |
| Genus and Species (If known) | |
| Local Name / Common Name | Chinese Water Chestnut (सिंघाड़ा) |
| Habit and Habitat | Abundant in tals. |
| Description | A caespibose, annual sedge 60-90 cm high with elongated stolons. Sheath brown, membranous. Spikes oblong sub- acute, straw coloured. Glumes ovate. Nut orbiculas ovoid. |
| Mythological Significance | Used in fast |
| I.U.C.N. Status | |
| Source of seeds | Nature / Itself |
| Season when grown | September-January |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Used for birds. |
| Nutritional Value | It is rich in carbohydrate, are also good dietry, riboflavin, vitamin-B6. Cu, Mg etc. |
| Associated Traditional Knowledge | Traditional fast cuisine Singharaka Halwa & Pakori |
| Management mechanism | For saving insecticide and should be sprayed. |
| Other Details | Raw Chinese Water Chestnut are slightly sweet and very crunchy. |
| Community / Knowledge Folder | Mr. KamalkantKatiyar |

Aquatic Plants Motha patera / Cyperus (Cyperus rotundus) मोथा





Motha patera / Cyperus (Cyperus rotundus) मोथा

| Kingdom | | Plantae |
|-------------------|-----------------|--|
| Unranked | | Angiosperm |
| Family | | Cyperaceae |
| Genus and Specie | es (If known) | Cyperus rotundus |
| Local Name / Con | nmon Name | Motha patera / Cyperus (मोथा) |
| Habit and Habita | t | It grows frequently along & in the ponds, lake & nullahs in paddy fields. |
| Description | | An erect annual sedge upto 45 cm high. Leaves as long as or longer than the stem. Spikelets patent. Glimes ovate. Nut ovoid, reddish-brown, apiculate. |
| Mythological Sig | nificance | |
| I.U.C.N. Status | | Red listed (threatened species) |
| Source of seeds | | Natuer |
| Season when grow | wn | August-November |
| Local Status | Past- | In abundance |
| | Present- | Less abundant |
| Uses | | It's a food for aquatic birds. It attracts birds also. |
| Nutritional Value | 2 | It is rich in different vitamins minerals. |
| Associated Tradit | ional Knowledge | |
| Management mec | hanism | By using herbicides and pesticides. |
| Other Details | | It was part of a set of starchy tuberous sedges that may have been eaten by Pilocene hominins. |
| Community / Kno | owledge Folder | Mr. Kamalkant Katiyar |

Aquatic Plants Kamli Shak (Ipomea aquatica) कमली शाक

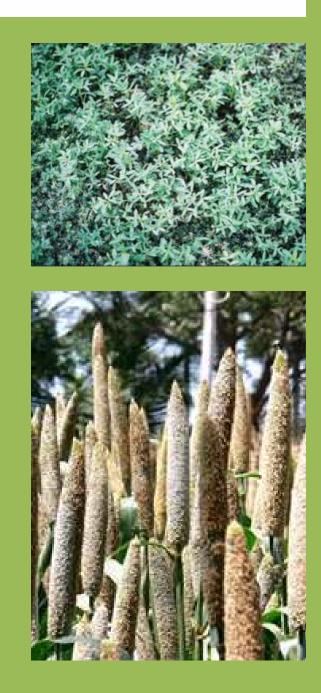


Kamli Shak (Ipomea aquatica) कमली शाक

| Kingdom | | Plantae |
|---------------------------|----------|--|
| Unranked | | Angiosperm |
| Family | | Convolvulaceae |
| Genus and Species (If kno | own) | Ipomea aquatic |
| Local Name / Common Na | ame | Kamli Shak/Water Spinach/ (कमली शाक) |
| Habit and Habitat | | Common on muddy soil along the margins of ponds. |
| Description | | An amphibious, glabrous, annual herb, stem- hollow rooting at the nodes. Leaves ovate-oblong, acuminate. Flowers pink, solitary. |
| Mythological Significant | ce | |
| I.U.C.N. Status | | |
| Source of seeds | | Nature / Itself |
| Season when grown | | July-November |
| Local Status Pas | t- | In abundance |
| Pre | sent- | In abundance |
| Uses | | It is used as a food for birds. It act as a raflon for birds. |
| Nutritional Value | | It is rich in carbohydrates, fat, protein, vitamins and trace metals. |
| Associated Traditional K | nowledge | |
| Management mechanism | | It can be controlled by herbicides. |
| Other Details | | It grows in water and moist soil. |
| Community / Knowledge | Folder | Khurseeda Begum |
| | | |



FORMAT- VI Fodder Plants



Fodder Plants Jwar (Sorghum bicolor) ज्वार





Jwar (Sorghum bicolor) ज्वार

| Vinadam | Plantae |
|----------------------------------|---|
| Kingdom | |
| Unranked | Angiosperm |
| Family | Graminae |
| Genus and Species (If known) | Sorghum vulgare |
| Local Name / Common Name | Jwar (ज्वार) |
| Habit and Habitat | Jwar is mainly crop of plains, and is grown as both a kharif & rabi crop. |
| Description | The plants are tall annual growing to a height of 3 to 15 feet. The inflorescence is a dense head & panicle. The grains are small, round & pinkish white in colour. They can easily be grow in less irrigated & arid regions. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | By shops & nursery. |
| Season when grown | Kharif crop- between May & June. Rabi Crop- between September & November. |
| Local Status : Past – | In abundance |
| Present - | less abundant |
| Uses | The grain is eaten by breaking it & cooking it in the same way as rice or by grinding it into flour & preparing unleavened bread from it. The stem & leaves are used as cattle fodder especially in North India. |
| Nutritional Value | It is richest in fiber & protein. |
| Associated Traditional Knowledge | Useful for animals. |
| Management mechanism | |
| Other Details | India is one of the leading countries in the world for the production of sorghum. |
| Community/Knowledge Holder | Mr. Jai Singh |

Fodder Plants Barley (*Hordeum vulgare*) † K





Barley (Hordeum vulgare) जौ

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Poaceae |
| Genus and Species (If known) | Hordeum vulgare |
| Local Name / Common Name | Barley (जौ) |
| Habit and Habitat | It is abundant in grassland & woodland. |
| Description | It is a self pollinating, diploid species. |
| Mythological Significance | In sacred 9 days of Hindus named "Navratri", holy kalash is placed over coil mixed with Barley. |
| I.U.C.N. Status | |
| Source of seeds | Itself. |
| Season when grown | Summer |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It is used as Algaecide, Animal feed, Fish feed, Alcoholic beverages & as food. |
| Nutritional Value | Carbohydrates, Fat, Protein & Vitamins. |
| Associated Traditional Knowledge | The Islamic Prophet Mohammad prescribed barley for seven diseases. Barley water is used in kidney problems. |
| Management mechanism | |
| Other Details | This plant is known likely to be susceptible to barley mild mosaic as well as bacterial blight. |
| Community/Knowledge Holder | Mr. Jai Singh |
| | |

Fodder Plants

Barseem (Trifolium alexandrinum) बरसीम



Barseem (Trifolium alexandrinum) बरसीम

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Fabaceae |
| Genus and Species (If known) | Trifolium alexandrinum |
| Local Name / Common Name | Barseem (बरसीम) |
| Habit and Habitat | In open fields |
| Description | It is leguminious forage. It is an annual, sparsely hairy, erect forage legume. It ranges from 30 to 80 cm high. Barseem has shallow taproot. Its stems are hollow & branching at the base with alternate leaves. Flowers are yellowish white. The fruit is a pod. |
| Mythological Significance | |
| I.U.C.N. Status | Not evaluated |
| Source of seeds | In shops & stores |
| Season when grown | During winters & summers. |
| Loacal Status : Past – | In abundance |
| Present - | In abundance |
| Uses | As hay & fodder crop. |
| Nutritional Value | Rich source of protein. |
| Associated Traditional Knowledge | Useful for animals. |
| Management mechanism | It dies when exposed to temperature below 20 degree F for several height. It is sown in early autumn. It can be sown alone or in combination with other species or with rye grass. |
| Other Details | Also called as Egyptian cloves. It is also used as green mannure. |
| Community/Knowledge Holder | Khurseeda Begum |

Fodder Plants

Jai/Oat (Avenas sativa) जई





Jai/Oat (Avenas sativa) जई

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Poaceae |
| Genus and Species (If known) | Avena sativa |
| Local Name / Common Name | Oat (जई) |
| Habit and Habitat | Oats are grown in temperate regions. They have a lower summer heat requirement & greater tolerance of rain than other cereals. |
| Description | Typically about 125 to 175 kg/hectare are sown either drilled or planted using an air seeder. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nursery |
| Season when grown | Sown in spring or early summer in colder areas. |
| Local Status Past- | Less abundant |
| Present- | In abundance |
| Uses | It has numerous uses in foods; they are rolled or crushed into oatmeal, or ground into fine oat flour. Chiefly eaten as porridge main ingredient in many cold cereals in muerli & granola. |
| Nutritional Value | Fat, Na, K, carbohydrates, dietry fibres & protein. |
| Associated Traditional Knowledge | Most commonly used as livestock feed. |
| Management mechanism | Oats removes substantial amounts of nitrogen from soil. |
| Other Details | It is known as breakfast cereal. |
| Community/Knowledge Holder | Mr. Jai Singh |

Fodder Plants

Bajra (Pennisptum glancum) बाजरा





Bajra (Pennisptum glancum) बाजरा

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Poaceae |
| Genus and Species (If known) | Pennisptum glancum |
| Local Name / Common Name | Pearl millet (बाजरा) |
| Habit and Habitat | It is well adapter to growing areas characterized by drought, low soil fertility & high temperature performs well in soils with high salinity or low pH. |
| Description | Its height rages from 0.5 to 4 m, can be nearly white, pale yellow, brown, grey, slaty or purple. Grains are 3 to 4mm long. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Government shops. |
| Season when grown | Grown as a kharif season crop in Northern India. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Its floor is used is mainly chapattis. It is used in wholesome in chronic fever, asthma, diarrhoea, dysentery, common cold. |
| Nutritional Value | Proteins, Carbohydrates, Fats & Fatty acids & vitamins. |
| Associated Traditional Knowledge | As regular meal in places like Rajasthan & Gujarat. "Bajre ki Pithi" is a traditional cuisine of India. |
| Management mechanism | |
| Other Details | The most widely grown millet is pearl millet. |
| Community/Knowledge Holder | Mrs. Nisha |
| | |



FORMAT- VII Grasses



Grasses Plants Bari Chaulai (Amaranthus tricolor) बड़ी चौलाई





Bari Chaulai (Amaranthus tricolor) बड़ी चौलाई

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Amaranthaceae |
| Genus and Species (If known) | Amaranthus tricolor |
| Local Name / Common Name | Bari Chaulai (बड़ी चौलाई) |
| Habit and Habitat | In fields. |
| Description | Good green tender leaves, cout spines, stem green, medium thick & tender, petioles green, inflorescence terminal & medium sized. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Dispersal |
| Season when grown | Rainy season |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Eaten as a spinach & in medicine also. Whole plant is astringent. |
| Nutritional Value | Highly rich in Ca, other mineral & vitamin. |
| Associated Traditional Knowledge | |
| Management mechanism | Pesticides are sprayed |
| Other Details | Yellow & green dye can be obtain from whole plant. |
| Community/Knowledge Holder | Smt. Premlata |

Grasses Plants

Kakrona (Ageratum conzyoides) कक्रौना



Kakrona (Ageratum conzyoides) कक्रौना

| Kingdom | | Plantae |
|----------------------------------|---------------|---|
| Unranked | | Angiosperm |
| Family | | Compositae |
| Genus and Species | s (If known) | Ageratum conzyoides |
| Local Name / Com | mon name | Kakrona/ Goat weed (कक्सैना) |
| Habit & Habitat | | Field & or unused land. |
| Description | | It is an annual herb, leaves are simple and have reticulate venation. Few to many flowers. It grows to approximately 1m in height. The flowers are purple, blue, pinkish or white. |
| Mythological Significance | | |
| I.U.C.N. Status | | |
| Source of seeds | | Plantitself |
| Season when grown | | Throughout year |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It has various medicinal uses. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Its goat like odour. |
| Management mechanism | | Various herbicides are used to control it. Short period of flooding can be used to control this weed. |
| Other Details | | It is an alternative host of some economiacally important crop pathogens and nematodes. |
| Community/ Know | vledge Holder | Smt. Premlata |

Grasses Plants

Gajar grass (Parthenium hysterophurus) गाजर घास



Gajar grass (Parthenium hysterophurus) गाजर घास

| ¥7• 1 | |
|----------------------------------|--|
| Kingdom | Plantae |
| Unranked | Angiosperm |
| Family | Compositae |
| Genus and Species (If known) | Parthenium hysterophurus |
| Local Name / Common Name | Gajar grass (गाजर घास) |
| Habit and Habitat | It is found in open fields & dump places also. |
| Description | It is very common grass. It is found easily in the crops like wheat, potato, brinjal etc. It's flowering season is from September to December. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Plant itself |
| Season when grown | It is seen throughout year. |
| Local Status Past- | In abundance |
| Present- | In abundance. |
| Uses | |
| Nutritional Value | |
| Associated Traditional Knowledge | |
| Management mechanism | Ploughing before flowering. |
| Other Details | It is helpful in skin allergy. |
| Community/ Knowledge Holder | Smt. Premlata |
| | |

Grasses Plants

Doob grass (Cynodon dactylon) दूब घास





Doob grass (Cynodon dactylon) दूब घास

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Gramineae |
| Genus and Species (If known) | Cynodon dactylon |
| Local Name / Common Name | Doob grass (दूब घास) |
| Habit and Habitat | It is found in open fields, parks & road sides. |
| Description | It is an annual herb. It's height ranges from 5-7 cm. leaves are long & narrow. Leaves are tapering to a fine point. The venation is parallel. Flowers are of light brown colour & found in group or clusters. |
| Mythological Significance | It has high religious significance in various festivals. Offered to Lord Ganesha |
| I.U.C.N. Status | |
| Source of seeds | Plant itself |
| Season when grown | It is seen throughout year. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It has various religious & medicinal uses. |
| Nutritional Value | |
| Associated Traditional Knowledge | Doob ghas is a valuable herbal medicine and used as first aid for minor injuries. |
| Management mechanism | Various herbicides are used to manage its cultivation. |
| Other Details | It is used as fodder for domestic animals. It is also used as decorative in sport areas. |
| Community/ Knowledge Holder | Mrs. Archana Shakya |



FORMAT- VIII Sacred Plants



Sacred Plants Peepal (Fiscus religiosa) पीपल



Peepal (Fiscus religiosa) पीपल

| 17. 1 | |
|--------------------------------------|---|
| Kingdom | Plantae |
| Unranked | Angiosperm |
| Family | Moraceae |
| Genus and Species (If known) | Fiscus religiosa |
| Local Name / Common Name | Peepal (पीपल) |
| Habit & Habitat | Side of road & canals. |
| Description | Tall tree, mainly deciduous & grows very fast, bark is light grey & peels of in patches. Long pointed leaves tips. |
| Mythological or Religious Significan | ce This is bodhi tree under which Buddha received enlightenment at Bodhgaya. |
| I.U.C.N. Status | |
| Source of seeds | Easily propagated through the seeds or through the cuttings. |
| Season when grown | All season |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | Wood are used for burning/fuel, shady. |
| Nutritional Value | Full of nutrition. |
| Associated Traditional Knowledge | Used in ayurvedic medicine, to treat jaundice, skin diseases etc. |
| Management mechanism | |
| Other Details | Peepal tree can grow from wall of houses or even from gutter. |
| Community/Knowledge Holder | Smt. Premlata |

Sacred Plants Banyan (Ficus benghalensis) बरगद





Banyan (Ficus benghalensis) बरगद

| Kingdom | Plantae |
|---------------------------------------|---|
| Unranked | |
| | Angiosperm |
| Family | Moraceae |
| Genus and Species (If known) | Ficus benghalensis |
| Local Name / Common Name | Banyan (बरगद) |
| Habitat | On the side of roads & lake lands. |
| Description | Tall, fast growing, branches hang-roots. Dark grey bark that peels in patches., a white sticky liquid (sap) oozes out in all fig trees. Flowers grow in pairs just below the leaves, look like cherries. |
| Mythological or Religious Significanc | e In Hinduism it is considered as a tree that provides fulfillment of wishes. It symbolizes Trimurti, Lord Vishnu – the bark, Lord Brahma – the roots and Lord Shiva- the branches. |
| I.U.C.N. Status | |
| Source of seeds | Itself |
| Season when grown | Summerseason |
| Local Status: Past – | In abundance |
| Present – | Less abundant |
| Uses | Woods used as fuel/burning. |
| Nutritional Value | Fibre, calcium, iron and phosphorus. |
| Associated Traditional Knowledge | Its fruits are eaten at times of drought. Bark is used against rheumatism. |
| Management mechanism | |
| Other Details | 'Vadodra' was named after this tree as a large number of banyan tree were found here. |
| Community/Knowledge Holder | Mr. Dharmendra Kumar |

Sacred Plants Shami (Prosopis cinereria) शमी





Shami (Prosopis cinereria) शमी

| Kingdom | | Plantae |
|--|-------------|--|
| Unranked | | Angiosperm |
| Family | | Fabaceae |
| Genus and Species | (If known) | Prosopis cinereria |
| Local Name / Comn | non Name | Shami (शमी) |
| Habit & Habitat | | Beside roads & fields. |
| Description | | Thorny tree with deeply fiscussed grey bark. Prickles broad based, conical, leaves two pinnate, pinnae 1-2 pairs, leaflets 7-12, Flowering spikes 5-19 cm. Flowers creamy white, petals, yellow, 2-4 mm. |
| Mythological or Religious Significance | | Prayers are offered to ask the shami tree to cleanse us from our sins and help us to lead a happy life. |
| I.U.C.N. Status | | |
| Source of seeds | | Nursery |
| Season when grown | n | Rainy season |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | In burning as fuel |
| Nutritional Value | | |
| Associated Traditional Knowledge | | People consider it to be a symbol of goodluck. |
| Management mech | anism | Herbicides are used during early stage. |
| Other Details | | It is a state tree of Rajasthan. |
| Community/Know | edge Holder | Mr. Dharmendra Kumar |

Sacred Plants Dhatura (Datura alba) / K j/K





Dhatura (Datura alba) धतूरा

| Kingdom | | Plantae |
|--|-------------|---|
| Unranked | | Angiosperm |
| Family | | Solonaceae |
| Genus and Species (| lf known) | Datura alba |
| Local Name / Comm | on Name | Dhatura (धतूरा) |
| Habit and Habitat | | It is found in open fields, road sides & even dump places. |
| Description | | It is an annual shrub. The plant height ranges from 1-1.5 m. Leaves are alternate & simple. The flowers are solitary. The fruits are in heavy form. Fruits bear thorns. Seeds are dispersed by water. |
| Mythological or Religious Significance | | It has religious significance & used in worshipping by Hindus. |
| I.U.C.N. Status | | |
| Source of seeds | | Plantitself |
| Season when grown | l | It is seen throughout year. |
| Local Status | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | It has several religious & medicinal uses. |
| Nutritional Value | | |
| Associated Traditional Knowledge | | Famous Hindi proverb is named after it. |
| Management mechanism | | |
| Other Details | | The dries leaves & flowering tops are the source of drug. It is one of the chief ingredients of the ayurvedic preparation. |
| Community/Knowle | edge Holder | Smt. Premlata |

Sacred Plants Madaar (Calotropis procera) मदार





Madaar (Calotropis procera) मदार

| Kingdom | Plantae |
|--------------------------------|--|
| Unranked | Angiosperm |
| Family | Apocynaceaea / Asclepiadaceae |
| Genus and Species (If known) | Calotropis procera |
| Local Name / Common Name | Madaar (मदार) |
| Habit and Habitat | It is found abundantly in sandy soil with low-rainfall. |
| Description | It is an annual shrub. The plant reaches upto 4m height. It has a waxy appearance & copious milky sap. The stem is grey-green in colour. The leaves are grey-green & opposite. The flowers are white with deep purple blotch at the base of each lobe. |
| Mythological Significance | It has religious significance & used in worshipping by hindus. |
| I.U.C.N. Status | |
| Source of seeds | Plant itself |
| Season when grown | It is grown throughout year. |
| Local Status Past- | In abundance. |
| Present- | In abundance. |
| Uses | It has various medicinal uses. |
| Nutritional Value | |
| Associated Traditional Knowled | lge This plant is used in the cure of leprosy. |
| Management mechanism | It is managed by regular cultivation and uses of some herbicides. |
| Other Details | The stem yields fiber useful for making ropes, bags, net & paper. |
| Community/Knowledge Holder | Mr. Premnath |

Sacred Plants Mango (*Mangifera indica*) आम



Mango (Mangifera indica) आम

Plantae

Angiosperm

Aam (आम)

Anacardiaceae

Mangifera indica

Kingdom Unranked Family Genus and Species (If known) Local Name / Common Name Habit & Habitat Description

In garden. A large green tree, upto 45 m high with a heavy domeshaped crown, with a girth of 3.6 m & over. Bark rough, thick, dark grey & fibrous, leaves crowded at the ends of branches 10-30*2-10 cm. flowering shoots conical, flowers 0.4 cm across, greenish yellow, scented, male & femals on the same panicle.

Mythological or Religious Significance Their leaves are used in worshipping.

| I.U.C.N. Status | | |
|----------------------------------|-----------|--|
| Source of seeds | | Nursery |
| Season when grown | L | April to June |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | As Fruit & wood. |
| Nutritional Value | | Vitamin C and Folate are in significant amount. |
| Associated Traditional Knowledge | | "Aam ke aam guthliyon ke daam" proverb. |
| Management mechanism | | Several varieties are often crossed to improve pollination, must be propagated by cutting. |
| Other Details | | Dried mango skin and its seed are used as Ayurvedic medicines. |
| Community/Knowledge Holder | | Mr. Premnath |

Sacred Plants Bael (Aegle marmelos) C§





Bael (Aegle marmelos) बेल

| 17: | |
|----------------------------------|--|
| Kingdom | Plantae |
| Unranked | Angiosperm |
| Family | Rutaceae |
| Genus and Species (If known) | Aegle marmelos |
| Local Name / Common Name | Bael (बेल) |
| Habit and Habitat | Throughout India in dry forests. |
| Description | It's a deciduous tree. Flower white in colour. Fruits berries variable in shape with hard cover. Seeds many, embedded in the fruit pulp. |
| Mythological Significance | It is planted as a sacred tree in temple premises. The tri- foliate form of leaves symbolize the trident that Shiva holds in his right hand. |
| I.U.C.N. Status | |
| Source of seeds | Nursery & markets. |
| Season when grown | Flowering in March &fruits persistent & ripening in February. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | For making beverages, jelly, preserves. |
| Nutritional Value | Rich source of protein, fibre, vitamin C & very refreshing. |
| Associated Traditional Knowledge | Its fruits are used in traditional medicine & as food . Nepal Bael tree is part of a fertility ritual for girls. |
| Management mechanism | |
| Other Details | Root bark, leaves & fruits used for joint pain, diarrhea, stomachache. Diabetes, vomiting, fever & also act as rejuvenator. |
| Community/Knowledge Holder | Smt. Premlata |

Sacred Plants Tulsi (*Ocimum tenuiflorum*) r g | h



Tulsi (Ocimum tenuiflorum) तुलसी

| Vinadam | | Plantae |
|--------------------------|----------------------|---|
| Kingdom | | |
| Unranked | | Angiosperm |
| Family | | Lamiaceae |
| Genus and Species | (If known) | Ocimum tenuiflorum |
| Local Name / Com | non Name | Tulsi (तुलसी) |
| Habit & Habitat | | Widely cultured in temple premises & home gardens. |
| Description | | An erect, well-branched, softly hairy herb, growing upto 75 cm high. Branches obscurely 4 angled. Flowers bi-lipid. Fruits are nutlets. |
| Mythological or Re | ligious Significanco | e Tulsi leaves is an essential part in worship of God Vishnu. Tulsi is a sacred for Hindus & worshiped as goddess Lakshmi. |
| I.U.C.N. Status | | |
| Source of seeds | | |
| Season when grow | n | Throughout the year |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | For essential oil, in herbal tea preparation & major ingredient in ayurvedic medicine. |
| Nutritional Value | | Aromatic plant |
| Associated Tradition | onal Knowledge | Known to treat Bronchitis. |
| Management mech | anism | ····- |
| Other Details | | It has significant importance around the world not just in India. |
| Community/Know | ledge Holder | Smt. Premlata |

Sacred Plants Bhang (*Cannabis sativa*) भांग





Lehsun (Allium sativum) लहसुन

| Kingdom | | Plantae |
|------------------------------|----------------------|---|
| Unranked | | Angiosperm |
| Family | | Cannabaceae |
| Genus and Species (If known) | | Cannabis sativa |
| Local Name / Common Name | | Bhang (भांग) |
| Habit & Habitat | | Open fields |
| Description | | It is an annual deciduous, flowering herb. The leaves are palmately compound or digitate with serrate leaflets. |
| Mythological or Re | ligious Significance | e It has religious significance in Hindu religion to worship Lord Shiva. |
| I.U.C.N. Status | | |
| Source of seeds | | Government retail shops only. |
| Season when grow | n | Annual herbaceous plant |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | It has many medicinal properties uses to make hempseed oil which can be used for cooking, lamps or paints, used as caged birds feed. Tinctures, teas & aliments are also prepared. |
| Nutritional Value | | 100 components responsible for its characteristic aroma. |
| Associated Traditio | onal Knowledge | Consumed for recreational, medicinal & spiritual purposes. |
| Management mechanism | | |
| Other Details | | Each part of plant is harvested differently depending on purpose of is use. |
| Community/Know | ledge Holder | Smt. Premlata |

Sacred Plants

Sita Ashoka (Saraca asoca/indica) अशोक



Sita Ashoka (Saraca asoca/indica) अशोक

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Caesalpiniaceae |
| Genus and Species (If known) | Saraca asoca/indica |
| Local Name / Common Name | Sita Ashoka (अशोक) |
| Habit & Habitat | Tropical & Subtropical regions |
| Description | An evergreen tree, growing up to 10 mt. Bark brown to grey or almost black, warty. Junenile leaves coppery in colour, older leaves about 25 cm long leaflets about 6 pairs. Flowers orange or orange yellow. Fruits pods, flat, leathery about 25 cm long, with about 8, shining seeds. |
| Mythological Significance | It is believed to be part of Ramayana and it is also described in Charaka Samhita. |
| I.U.C.N. Status | |
| Source of seeds | From fruits. |
| Season when grown | February - September |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | Bark & flowers used to treat indigestion, burning sensation, ulcers, menstrual disorders etc. Leaves as blood purifier. |
| Nutritional Value | |
| Associated Traditional Knowledge | It can fight fever, cold and infections as it possess anti- bacterial properties. |
| Management mechanism | |
| Other Details | It is state symbol of Uttar Pradesh. |
| Community/Knowledge Holder | Mr. Premnath |

Sacred Plants Neem (Azadirachta indica) नीम





Neem (Azadirachta indica) नीम

| Kingdom | Plantae |
|----------------------------------|---|
| Unranked | Angiosperm |
| Family | Meliaceae |
| Genus and Species (If known) | Azadirachta indica |
| Local Name / Common Name | Neem/Margosa (नीम) |
| Habit & Habitat | Native to India, China, Myanmar. Grows throughout the Indian plains & also up to an altitude of 1000m in sub- himalayan tract. |
| Description | Tree, growing up to 15m high, with spreading branches. Bark grayish-black with vertical ridges. Leaves divided into several shining leaflets arranged along a central stalk. Flowers many small, cream, fragnant, arise in branches in between the leaves. Fruits berries, egg-shaped to oblong, yellow when ripe, with single seed. |
| Mythological Significance | Planting neem tree in house ensures a passage to heaven. It is believed that their leaf keeps the evil spirits away. It is mentioned in Varaha Purana. |
| I.U.C.N. Status | |
| Source of seeds | Government retail shops/itself |
| Season when grown | January to July |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | Whole plant used to treat fever, bleeding piles, wound, gout, skin diseases, diabetes, eye diseases. |
| Nutritional Value | Protein and Dietary fibers. |
| Associated Traditional Knowledge | To treat Inflammation, fever and malaria. |
| Management mechanism | |
| Other Details | This tree is called 'symbol of truth'. |
| Community/Knowledge Holder | Mr. Premnath |

Sacred Plants Bamboo / Indi (*Bambusa bambos*) बांस



Bamboo / Indi (Bambusa bambos) बांस

| Kingdom | Plantae |
|-------------------------------|---|
| Unranked | Angiosperm |
| Family | Poaceae (Gramineae) |
| Genus and Species (If known) | Bambusa bambos |
| Local Name / Common Name | Bamboo/Indi (बांस) |
| Habit & Habitat | It prefers a humid tropical climate & grows best along river banks or river valleys with a rich, moist soil. |
| Description | This is tall woody grass & fast growing and have average diameter below 10-18 cm & are below 20-30 m tall. The internodes are dark green colored with very thick walls. They measure below 15-30 cm long & 8-15 mm broad with about 10 leaves in each complement. |
| Mythological Significance | It is sacred to both Shiva and Vishnu. |
| I.U.C.N. Status | |
| Source of seeds | Market or Nursery. |
| Season when grown | June-July |
| Local Status: Past – | In abundance |
| Present | – In abundance |
| Uses | Leaf buds are administered for thread worms, leaf juice is given with aromatics in vomiting of blood. |
| Nutritional Value | High in dietary fiber and has proteins, carbohydrate and fat. |
| Associated Traditional Knowle | edge Used for making baskets, bows and arrows, and agricultural implements. |
| Management mechanism | |
| Other Details | Fastest & longest grass in world. |
| Community/Knowledge Hold | er Smt. Premlata |
| | |

Sacred Plants

Sandalwood (Santalum paniculatum) चन्दन



Sandalwood (Santalum paniculatum) चन्दन

| Kingdom | Plantae |
|-------------------------------|--|
| Unranked | Angiosperm |
| Family | Santalaceae |
| Genus and Species (If known | Santalum paniculatum |
| Local Name / Common Name | sandalwood (चन्दन) |
| Habit and Habitat | In tropical region |
| Description | It is a shrub or small tree 3 to 10 meters in height. Its greenish-blue leaves are ovate to elliptic, 2.5-8 cm long and 2-4.5 cm wide. |
| Mythological or Religious Sig | gnificance Sandalwood paste is integral to rituals and ceremonies, to mark religious utensils, and to decorate the icons of the deities. It is also distributed to devotees, who apply it to their foreheads. |
| I.U.C.N. Status | |
| Source of seeds | From nursery |
| Season when grown | Rainy season |
| Local Status Past- | Less abundant |
| Presen | t- Less abundant |
| Uses | Sandalwood is distilled to extract essential oils for perfume industry. The process is known as steam distillation and is widely carried out industrially at Kannauj, India. |
| Nutritional Value | |
| Associated Traditional Know | Aledge Sandalwood essential oil was popular in herbal medicine, mostly as a urogenital (internal) and skin (external) antiseptic. |
| Management mechanism | |
| Other Details | Sandalwood oil is a precious-wood scent. It imparts a long-lasting, woody base to perfumes. |
| Community/Knowledge Hol | der Mr. Pramod Kumar Mishra |

Sacred Plants Lotus (*Nelumbo nucifera*) ক**म**ल



Lotus (Nelumbo nucifera) कमल

| *** 1 | | |
|--------------------------|-----------------------|---|
| Kingdom | | Plantae |
| Unranked | | Angiosperm |
| Family | | Nelumbonaceae |
| Genus and Species | (If known) | Nelumbo nucifera |
| Local Name / Com | mon Name | Lotus (कमल) |
| Habit and Habitat | | It is commonly cultivated in water gardens |
| Description | | The roots are planted in the soil of the pond or river bottom, while the leaves float on top of the water surface or are held well above it. The flowers are usually found on thick stems. |
| Mythological or Re | eligious Significance | Hindus revere it with the divinities Vishnu and Lakshmi often portrayed on a pink lotus in iconography |
| I.U.C.N. Status | | |
| Source of seeds | | From its fruit |
| Season when grow | 'n | Rainy season |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | The flowers, seeds, young leaves, and roots are all edible. |
| Nutritional Value | | Carbohydrate, sugar and Dietary fibers. |
| Associated Tradition | onal Knowledge | The Padma Shri, a civilian award given by the Government of India, has the words Padma ("lotus"). |
| Management mech | anism | |
| Other Details | | It is also the national flower of India and Vietnam. |
| Community/Know | ledge Holder | Mr. Pramod Kumar Mishra |

Sacred Plants Sugarcane (Saccharum officinarum) गन्ना



Sugarcane (Saccharum officinarum) गन्ना

| Kingdom | | Plantae |
|-------------------|-----------------|---|
| Unranked | | Monocot |
| Family | | Poaceae |
| Genus and Specie | s (If known) | Saccharum officinarum |
| Local Name / Com | nmon Name | Ganna (गन्ना) |
| Habit & Habitat | | Alluvial & sandy soil. |
| Description | | A perennial plant grown in clump, consisting of a number of strong unbranched stems. |
| Mythological Sig | nificance | The plant signifies fertility and is associated with Lord Ganesha, who is sometimes depicted holding sugarcane, Ikshu-karmukha. |
| I.U.C.N. Status | | |
| Source of seeds | | Private shops & government stores. |
| Season when grow | wn | June-July |
| Loacal Status: | Past – | In abundance |
| | Present - | In abundance |
| Uses | | It is used to make jaggery, sugar & in making alcohol. |
| Nutritional Value | | Carbohydrate, Protein, trace metals. |
| Associated Tradit | ional Knowledge | Its juice is very popular Indian drink with a pinch of Lemon & Ice. |
| Management mec | hanism | Water required 200-250 cm, 509 available soil moisture condition, need 10-12 irrigations weed management. Most commonly used herbicides are Simazine, Atrazine & Alachlor. |
| Other Detail1s | | Other parts of plant are used as fertilizer. |
| Community/Know | wledge Holder | Smt. Premlata |
| | | |

Sacred Plants Rice / Paddy (*Oryza saliva*) धान





Rice / Paddy (Oryza saliva) धान

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| | |
| Family | Gramineae |
| Genus and Species (If known) | Oryza saliva |
| Local Name / Common Name | Rice/Paddy (धान) |
| Habit & Habitat | The plant grows in hot, moist tropics. The area should be floored with water during early stages. |
| Description | Plant is a large annual grass. The inflorescence is a panicle, its branches ending into a grain, covered by husk. |
| Mythological Significance | According to the Shatapatha Brahmana, rice originated from the body of Indra: from his drink, the soma juice flowed and become rice. |
| I.U.C.N. Status | |
| Source of seeds | Government & private shops. |
| Season when grown | June-July |
| Loacal Status: Past – | In abundance |
| Present - | In abundance |
| Uses | This cereal is used as staple food. Fodder for cattles & it also forms a raw material for alcoholic beverages. |
| Nutritional Value | Considerable amount of protein, fat & starch. |
| Associated Traditional Knowledge | Rice is main staple food so it is worshipped all over India and it is nutritionally superior. |
| Management mechanism | Insecticides & pesticides are sprayed. |
| Other Details | Its straw are used for mushroom Cultivation. |
| Community/Knowledge Holder | Smt. Premlata |

Sacred Plants Haldi/ Turmeric(*Cucuma longa*) हल्दी



Haldi/ Turmeric(Cucuma longa) हल्दी

| Kingdom | | Plantae |
|----------------------------------|------------------|--|
| Unranked | | Angiosperm |
| Family | | Zingiberaceae |
| Genus and Specie | s (If known) | Cucuma longa |
| Local Name / Com | mon Name | Haldi/Turmeric (हल्दी) |
| Habit & Habitat | | Open fields |
| Description | | The plant is a robust perennial, short stem & tufted leaves. Pale-yellow flowers are found in dense spikes with pinkish bract. Rhizomes in colourful condition. Very aromatic, with a musky odour |
| Mythological Sigr | nificance | Tumeric is used in several religious and traditional occasions like wedding in Hinduism. |
| I.U.C.N. Status | | |
| Source of seeds | | Government retail shop. |
| Season when grow | wn | Rainy season. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | As antiseptic, as a condiment, used to flavor & colour pickles, and food stuff, principal ingredients of curry, also used to prepare kumkum. |
| Nutritional Value | | It is very rich source of vitamins Vit B6, choline, niacin & riboflavin etc. |
| Associated Traditional Knowledge | | Remedy for cough, cold and skin diseases. |
| Management mechanism | | |
| Other Details | | Anti-inflammatory ,carminative, anti-flotalent & anti- microbial property. |
| Community/Know | • | Mr. Premnath |
| | It is the Bringh | |



FORMAT- IX Thorny Plants



Thorny Plants

Masqcut / Jungli keekar (Prosopis juliflora) जंगली कीकट





Masqcut / Jungli keekar (Prosopis juliflora) जंगली कीकट

| Kingdom | Plantae |
|---|---|
| Unranked | Angiosperm |
| Family | Fabaceae |
| Genus and Species (If known) | Prosopis juliflora |
| Local Name / Common Name | Jungli keekar (जंगली कीकट) |
| Habit and Habitat | It is found in rocky, poor & saline soils with low water capacity. |
| Description | It grows to a height of up to 39 ft and has a trunk with a diameter of up to 3.9 ft. Its leaves are deciduous, bipinnate, light green, compounded with 12 to 20 leaflets. Flowers shortly after leaf development. |
| Mythological or Religious Significance | Its existence and recognition even as a holy tree in ancient India. |
| I.U.C.N. Status | |
| Source of seeds | Plant itself |
| Season when grown | Throughout year. |
| Local Status Past- | In abundance |
| Present- | In abundance |
| Uses | It's wood is used as a fuel. |
| Nutritional Value | |
| Associated Traditional Knowledge | It causes land erosion due to the loss of the grasslands that are habitats for native plants and animals. It also provides shelter for feral animals such as pigs and cats. |
| Management mechanism | Manual removal is not very effective but use of herbicides & fire is effective for management. |
| Other Details | |
| Community/Knowledge Holder | Mrs. Malti Devi |
| 5.2 Littar Bradach Stata Riadiyarcity Roard | |

252 Uttar Pradesh State Biodiversity Board

Thorny Plants

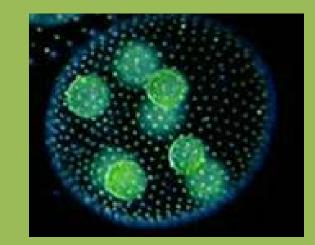
Cactus (Opuntia ficus indica) नागफनी



Cactus (Opuntia ficus indica) नागफनी

| Kingdom | Plantae |
|---------------------------------------|---|
| Unranked | Angiosperm |
| Family | Cactaceae |
| Genus and Species (If known) | Opuntia ficus indica |
| Local Name / Common Name | Cactus (नागफनी) |
| Habit & Habitat | Water deficit land/dry land |
| Description | It is a succulent shrub or tree. It's height ranges from 1.5 to 3 m. It's branches are flattened, grey to grey-green in colour. The leaves are minute & shed early. Flowers are bright yellow or orange, red in colour. |
| Mythological or Religious Significanc | e |

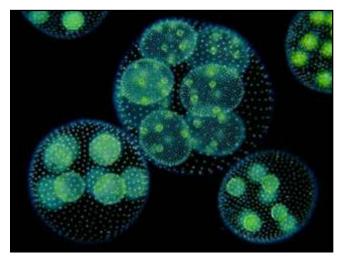
| Mythological of Keligious | Significance | e |
|---------------------------|--------------|--|
| I.U.C.N. Status | | |
| Source of seeds | | Plantitself |
| Season when grown | | It is found in throughout year. |
| Local Status: Past | t - | In abundance |
| Pres | sent – | In abundance |
| Uses | | Used as fodder, commercial & medicinal. |
| Nutritional Value | | Good source of water, Carbohydrates, Protein and minerals. |
| Associated Traditional Kn | owledge | White milk have medicinal value |
| Management mechanism | | Manual removal of plants before flowering is very effective in management. |
| Other Details | | Fruit resemble to strawberries but bear spines. |
| Community/Knowledge H | Iolder | Mrs. Malti Devi |

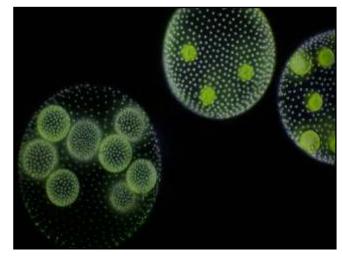


FORMAT- X Microscopic Algae



Microscopic Algae _{Volvox} शैवाल



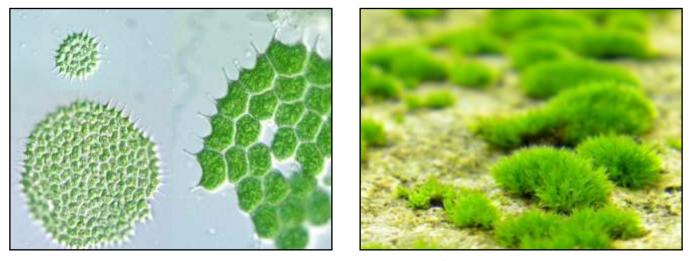


Volvox शैवाल

| Phylum | |
|------------------------------------|---|
| Class | Mastigophora |
| Order | Phytomonadina |
| Genus and Species (If known) | <i>Volvox</i> (शैवाल) |
| Local Name / Common Name | |
| Habit and Habitat | Pelagic, fresh water, colonial phytomonadina, found in ponds & lakes. |
| Description | Mother colony found by a large hollow sphere composed of thousand of somatic cells called as daughter coeno- bium. Coenobium embedded in water jelly cup like chloroplast. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Slide preparation in practical. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Co-ordination of flagella of all zooids in swimming con- tain mother daughter coenobium. Gives green look to water |
| Community/Knowledge Holder | Mr. Prem Chandra Sagar |

Microscopic Algae

Green Algae (Pediastrum boryanum) हरित शैवाल



Green Algae (Pediastrum boryanum) हरित शैवाल

| Kingdom | Plantae |
|----------------------------------|--|
| Unranked | Angiosperm |
| Family | Hydrodictyaceae |
| Genus and Species (If known) | Pediastrum boryanum |
| Local Name / Common Name | Green Algae (हरित शैवाल) |
| Habit and Habitat | Freshwater, ponds, streams, river, lakes. |
| Description | It is a unicellular algae, eolontes usually forms in multiples of 8, height 10 micrometers. It is photoautotropic, nonmotile coenobial. |
| Mythological Significance | |
| I.U.C.N. Status | |
| Source of seeds | Nature/Itself |
| Season when grown | Throughout the year |
| Local Status Past- | abundance |
| Present- | abundance |
| Uses | As a bio-fuel & in waste water management. Used as a cover for newly born like Salamander. As a food for aquatic animals. Grows best in full sun. It is able to undergo photosynthesis & fix N2. |
| Nutritional Value | It is a good source of protein and minerals. |
| Associated Traditional Knowledge | |
| Management mechanism | It can be controlled by herbicides |
| Other Details | Cellwall of green algae usually contain cellulose and store carbohydrate in the form of starch. Gives green look to water |
| Community/knowledge holder | Mr. Prem Chandra Sagar |

Faunal Biodiversity













FORMAT- XI Protozoa (A) Fresh Water Protozoa

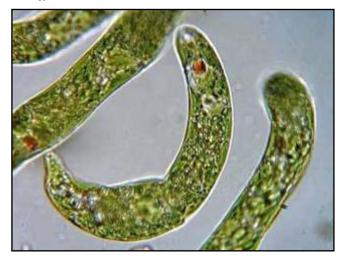




Fresh Water Protozoan

(Euglena viridis) यूग्लीना





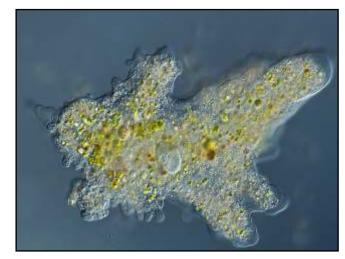
Euglena viridis (यूग्लीना)

| Phylum | Protozoa |
|------------------------------------|---|
| Class | Mastigophora |
| Order | Euglenoidina |
| Genus and Species (If known) | Euglena viridis |
| Local Name / Common Name | Euglena (यूग्लीना) |
| Habit and Habitat | Solitary flagellate found in fresh water pond, slow running streams or in brakish water. |
| Description | Body is fusiform, spindle shaped plump like green or red colour. anterior end is funnel shaped, photosensitive animal & has chloroplast |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Practical research. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Euglena has both floral mode of nutrition & faunal mode of reproduction. |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

Fresh Water Protozoan

(Amoeba proteus) अमीबॉ

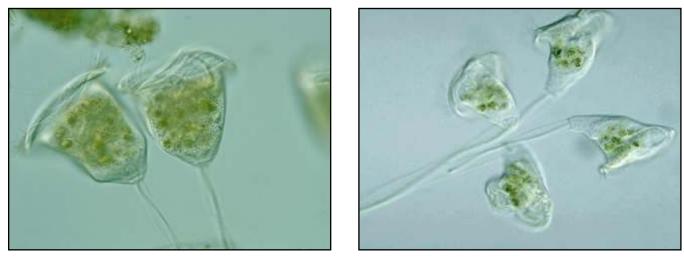




(Amoeba proteus) अमीबॉ

| Phylum | Protozoa |
|------------------------------------|---|
| Class | Rhizopoda |
| Order | Lobosa |
| Genus and Species (If known) | Amoeba proteus |
| Local Name / Common Name | Amoeba (अमीबॉ) |
| Habit and Habitat | Aquatic vegetation in fresh water pond and rich in organic bacteria . |
| Description | Irregular shaped , single or branched pseudopodia, 250- 600 micron in diameter nutrition is holozoic repro- duction by fission and encystment . |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Practical research. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Free living Amoeba pathogenic causing meningo encephalitis. |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

Fresh Water Protozoan Bell-animalcule. (Vorticella) बेल-एनीमलक्यूल



Bell-animalcule. (Vorticella) बेल-एनीमलक्यूल

| Phylum | Protozoa |
|------------------------------------|--|
| Class | Ciliata |
| Order | Peritricha |
| | Vorticella |
| Genus and Species (If known) | |
| Local Name / Common Name | Bell-animalcule (बेल—एनीमलक्यूल) |
| Habit and Habitat | It is commonly found in fresh water ponds attached to some objects like weeds or leaves etc. |
| Description | It has an inverted bell-shaped body with a long, simple, slender stalk for attachment. The free broad end of the oral & opposite narrow in aboral end. The body consist of thin pellicle, ectoplasm & endoplasm. Below the pellicle lies myonemes. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | Used as a slide preparation in practicals. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Mouth is situated at the bottom of vestibule leading into the cytopharynx ending into protoplasm. Nutrition is holozoic. Reproduction by longitudinal binary fission & conjugation. |
| Community/Knowledge Holder | Ms. Gracy Rawat |

Fresh Water Protozoan

Slipper animalcule (Paramecium) स्लीपर—एनीमलक्यूल



Slipper animalcule (Paramecium) स्लीपर-एनीमलक्यूल

| Phylum | Protozoa |
|------------------------------------|---|
| Class | Ciliata |
| Order | Holotricha |
| Genus and Species (If known) | Paramecium caudatum |
| Local Name / Common Name | Slipper animalcule (स्लीपर—एनीमलक्यूल) |
| Habit and Habitat | Best known ciliate , found in lakes and ponds. |
| Description | Elongated slipper spindle cigar shaped . clear form and elastic cuticular membrane interciliary system consists basal bodies and kinetodesmeta. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | In slide preparation for practical. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other details | It occurs in two strains one with Kappa particles kills the other sensitive strain with kappa particles taken cyto-plasmic inheritence |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

Fresh Water Protozoan

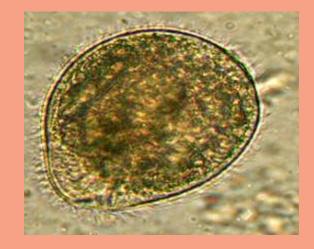
(Arcella vulgaris) आरसेला



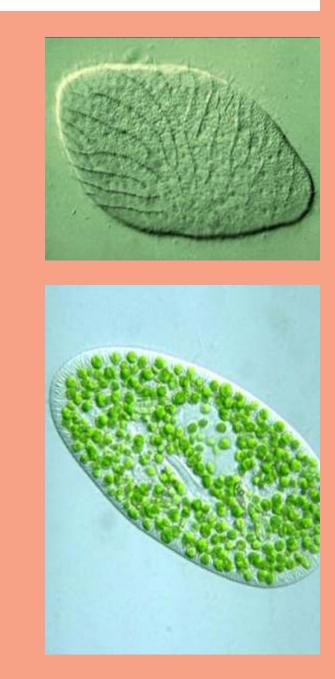


(Arcella vulgaris) आरसेला

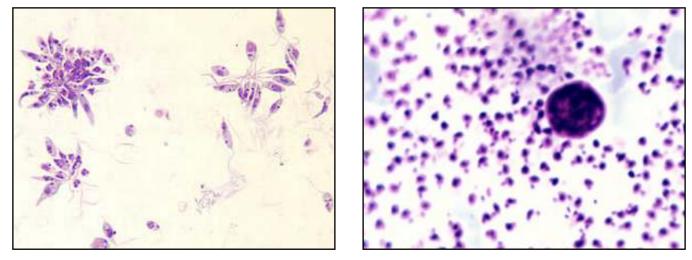
| Phylum | | Protozoa |
|------------------------------------|----------|---|
| Class | | Rizopoda |
| Order | | Lobosa |
| Genus and Species (If | f known) | Arcella vulgaris |
| Local Name / Commo | n Name | Arcella (आरसेला) |
| Habit and Habitat | | Found in stagnant fresh water , moist forest soil . |
| Description | | It contain light yellow to dark brown shell or test made up of silicious prisms. Funnel like depression on ventral side. 1 to 6 hyaline, finger like lobopodia. chromidium or a reticular cytoplasm present. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Nutrition is holozoic, reproduction is asexual by binary fission. |
| Community/Knowledge Holder | | Mr. Zameel Ahmed |



FORMAT- XI Protozoa (B) Parasitic Protozoa



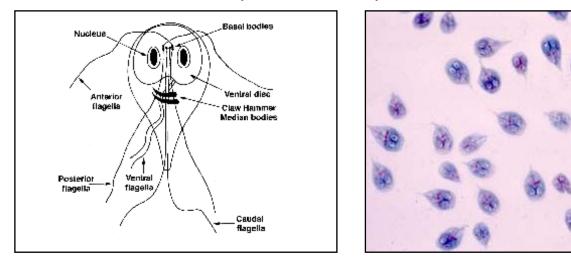
(Leishmania spp.) लीसमानिया



(Leishmania spp.) लीसमानिया

| Phylum | Protozoa |
|------------------------------------|--|
| Class | Mastigophora |
| Order | Protomonadina |
| Genus and Species (If known) | Leishmania spp. |
| Local Name / Common Name | Leishmania (लीसमानिया) |
| Habit and Habitat | It is found as a parasite in the endothelial cells of bone marrow, spleen, liver of man & in the gut of blood sucking fly <i>Phlebotomus</i> . |
| Description | It has 3 different species i.e. <i>L. donovani, L. tropica, L. brassiliensis</i> . Reproduction by binary fission. <i>L. tropica</i> causes oriental sore or Delhi boils. <i>L. donovani</i> cause Kala azar. <i>L. brassiliensis</i> causes American leishmaniasis. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | Use in practical research. |
| Associated Traditional Knowledge | |
| Management mechanism | The insect vectors should be destroyed by insecticides. |
| Other Details | It causes sleeping sickness in which person goes on sleeping and ultimately dies. |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

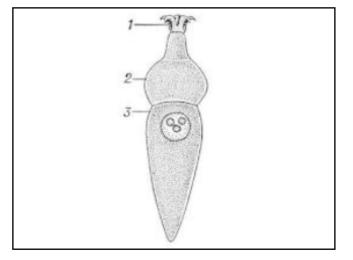
(Giardia intestinalis) जिआरडिया

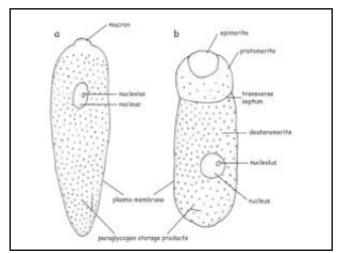


(Giardia intestinalis) जिआरडिया

| Phylum | Parasites |
|-------------------------------|---|
| Class | Mastighopora |
| Order | Polymastigina |
| Genus and Species (If known | Giardia intestinalis |
| Local Name / Common Name | Giardia (जिआरडिया) |
| Habit and Habitat | It is found as a parasite in the digestive tract of vertebrates. |
| Description | Its body is bilaterally symmetrical & pear shaped in appearance. Axostyles form the median longitudinal axis of the body. Four pairs of flagella arise from four pairs of basal granules. Reproduction takes place by longitudinal binary fission & cyst formation. |
| Mythological Significance (if | Sany) |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance. |
| Presen | t- In abundance. |
| Uses | Used in practical research. |
| Associated Traditional Know | ledge |
| Management mechanism | Avoidance of contaminated food & water. |
| Other Details | The infection also causes chronic, enteritis, acute entero colitis, fever, anaemia. |
| Community/Knowledge Hol | der Mr. Zameel Ahmed |

(Gregarina) ग्रीगरेना

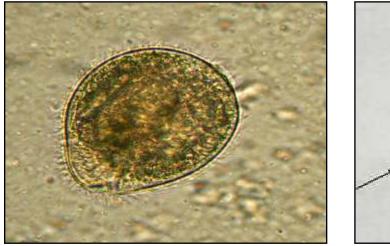




(Gregarina) ग्रीगरेना

| Phylum | | Protozoa |
|------------------------------------|--------------|---|
| Class | | Sporozoa |
| Order | | Gregarinida |
| Genus and Species | s (If known) | Gregarina |
| Local Name / Com | mon Name | Gregarina (ग्रीगरेना) |
| Habit and Habitat | | It is an intracellular parasite in the digestive tract of cock- roaches, grasshoppers, crickets, mealworms, crayfishes etc. |
| Description | | The adult or trophozoite is extracellular. When the tro- phozoite is attached to the gut it acquires an anterior epimerite having radiating spines. The trophozoites become rounded & are then often called gametocytes which divide by multiple fission to form gametes. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | Used as a slide preparation in practicals in science laboratories. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Parasites destroy intestinal epithelial cells of the hosts. |
| Other Details | | Developing young trophozoites are seen in the intestine. |
| Community/Knowledge Holder | | Mr. Zameel Ahmed |

Balantidium 1/29 SIVHIV,1 e1/2

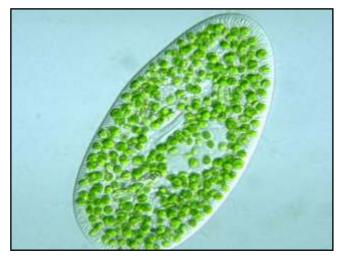


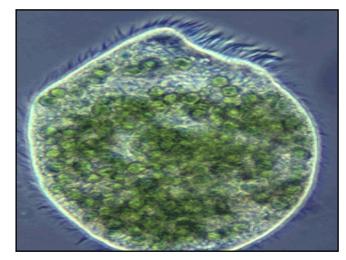


Balantidium (बेलेनटीडियम)

| Phylum | Protozoa |
|------------------------------------|---|
| Class | Ciliata |
| Order | Spirotricha |
| Genus and Species (If known) | Balantidium coli |
| Local Name / Common Name | Balantidium (बेलेनटीडियम) |
| Habit and Habitat | Found in rectal content of frog, intestine of sheep, camels & opossum. |
| Description | Body spherical covered by spiral row of cilia. Endoplasm include spherical micronucleus attached to sausage – shaped macronucleus. Nutrition is holozoic. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | In slide preparation & practical research. |
| Associated Traditional Knowledge | |
| Management mechanism | Biological control for nematode larvae. |
| Other Details | Found in colon of man, monkey, cause ulcer and dysentery. |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

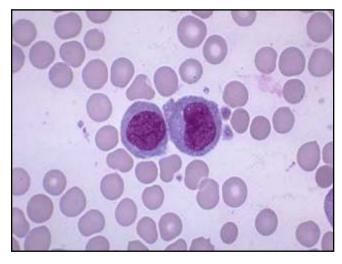
Nyctotherus ¼uDVkskj | ½

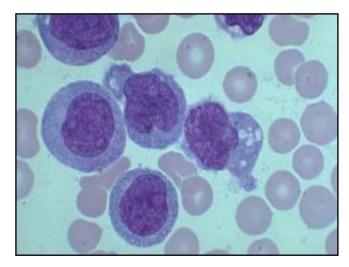




Nyctotherus (निक्टोथीरस)

| Phylum | | Protozoa |
|------------------------------------|------------|--|
| Class | | Ciliata |
| Order | | Pirotricha |
| Genus and Species | (If known) | Nyctotherus cardiformis |
| Local Name / Com | mon Name | Nyctotherus (निक्टोथीरस) |
| Habit and Habitat | | Found in alimentary canal of cockroach , crickets , fishes, amphibian, mammals, mainly found in rectum. |
| Description | | Bean shaped ,flattened,60-120 micron in length. Permanent cytopyge is present. Cyclostomes leads into cytopharynx contains long cilia. Reproduction by binary fission and conjugation |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As slide preparation in practical. |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Multiplies in the rectum of frog tadpole |
| Community/Knowledge Holder | | Mr. Devesh Kumar |

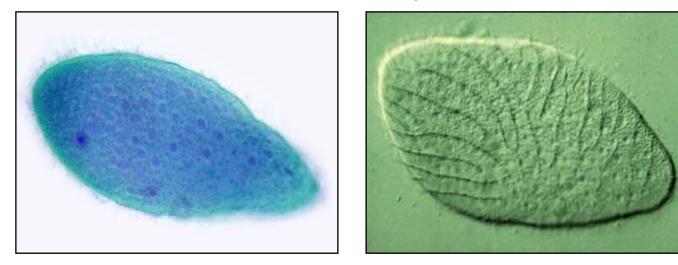




Monocystis (मोनोसिस्टिस)

| Phylum | Protozoa |
|------------------------------------|--|
| Class | Spirozoa |
| Order | Gregarinidea |
| Genus and Species (If known) | Monocystis |
| Local Name / Common Name | Monocystis (मोनोसिस्टिस) |
| Habit and Habitat | Parasite in the seminal vesicle of earthworms. |
| Description | Large acephaline form ,4mm in length. Youn trophozoite with sperm tail. Mature trophozoite is cigar shaped . |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | In practical. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Monocystis is sporozoic, moves by rythemic contraction and exapansion of myonemes. |
| Community/Knowledge Holder | Mr. Devesh Kumar |

(Opalina ranurum) ¼ks§kbuk½



(Opalina ranurum) (ओपैलाइना)

| Phylum | | Protozoa |
|------------------------------------|--------------|--|
| Class | | Opalinata |
| Order | | Opalinida |
| Genus and Species | s (If known) | Opalina ranurum |
| Local Name / Com | mon Name | Opalina (ओपैलाइना) |
| Habit and Habitat | | It is found in rectum of frog and cold blooded vertebrates |
| Description | | Oval, flattened, 100-500 micron in length. Mouth and contractile vacuole absent. Multinucleated , several small nuclei contained in endoplasm. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Slide preparation in practical. |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | At the time of egg laying it divide, the encysted form pass- out in the faeces and ingeststed by tadpoles. |
| Community/Knowledge Holder | | Mr. Devesh Kumar |



FORMAT- XII Porifera



Porifera Bath sponge (*Euspongia*) CKFk Li å





Bath sponge (Euspongia) बाथ स्पंज

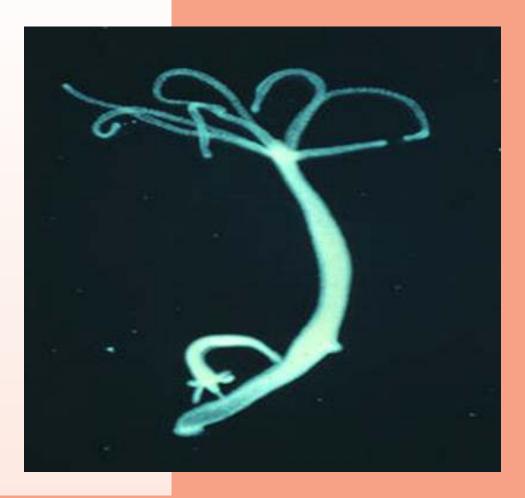
| Phylum | | Prorifera |
|----------------------------------|------------------|---|
| Class | | Desmospongiae |
| Order | | Keratosa |
| Genus and Species | (If known) | Euspongia |
| Local Name / Comm | non Name | Bath sponge (बाथ स्पंज) |
| Habit and Habitat | | Sedentry form. Found attached with rocky bottomin warm shallow water of tropical & subtropical regions. |
| Description | | The sponge is massive & rounded in form ,dark black color with a number of oscula . Skeleton composed of network of spongin fibres without spicules. Common bath sponge consists of mainly spongin fiber which has the capacity of holding water. |
| Mythological Signi | ficance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Used in offices, for counting postal stamps and counting currency notes or papers etc. |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Pore bearing animal . |
| Community/Knowledge Holder | | Mr. Zameel Ahmed |

Porifera Fresh water sponge (Spongilla) फ्रेश वॉटर स्पंज



Fresh water sponge (Spongilla) फ्रेश वॉटर स्पंज

| Phylum | | Porifera |
|------------------------------------|----------|---|
| Class | | Desmospongia |
| Order | | Monaxonida |
| Genus and Species (If known) | | Spongilla |
| Local Name / Common Name | | Fresh water sponge (फ्रेश वॉटर स्पंज) |
| Habit and Habitat | | Abundantly found in ponds and streams. |
| Description | | Colony branched, green colour due to presence of green alage called as zoochlorellae. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Found throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | It develops on floating submerged twigs or sticks . |
| Community/Knowledge Holder | | Mr. Rakesh Kumar |
| | | |



FORMAT- XIII Coelentrata



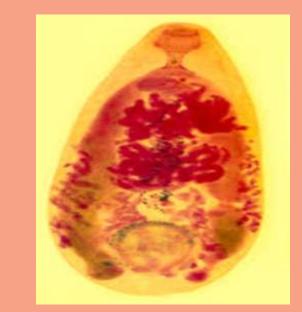
Coelentrata

(Hydra littoralis) हाइड्रा



(Hydra littoralis) हाइड्रा

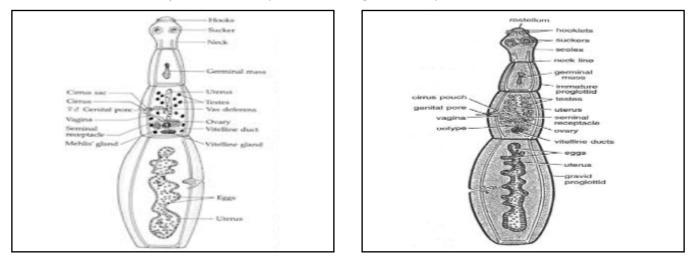
| Phylum | | Coelentrata |
|------------------------------------|----------|---|
| Class | | Hydrozoa |
| Order | | Hydeoidea |
| Genus and Species (If known) | | Hydra littoralis |
| Local Name / Common Name | | Hydra (हाइड्रा) |
| Habit and Habitat | | Solitary, sedentary, attached to stones & weeds. |
| Description | | Body tube like cylindrical, 1.3 cm in length. Hypostome covered by 6-10 filiform nematocyst bearing tentacles . In female ovary and bud found in sides in mid position. Male have 3-4 pairs of testes anteriorly. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Slide preparation in practical. |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | It contains symbiotic green algae Zoochlorellae, division of labour present. Regenerator and grafting experiments concluded on it. |
| Community/Knowledge Holder | | Mr. Zameel Ahmed |



FORMAT- XIV Parasitic Helminths



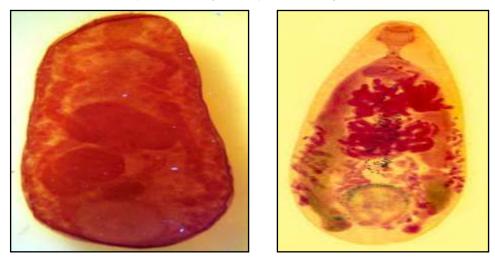
Hydatid worm (Echinococcus granulosus) हाईडेटिड वर्म



Hydatid worm (Echinococcus granulosus) हाईडेटिड वर्म

| Phylum | | Platyhelminthese |
|------------------------------------|---------------|---|
| Class | | Cestoda |
| Order | | Taenioidea |
| Genus and Specie | s (If known) | Echinococcus granulosus |
| Local Name / Com | mon Name | Hydatid worm (हाईडेटिड वर्म) |
| Habit and Habitat | t | Endoparasite occur in intestine of dogs, cat & foxes. |
| Description | | 2-8 mm length consist of scolex, neck, and proglottids (3- 4). Hermaphrodite, maturesegment contains single set of genital organs. Gravid segment elongated contain branched uterus with onchospheres. Hydatid cyst or larval stage occur in man, monkey, cattle. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | 1 | Throughout the year |
| Local Status | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | In practical & research. |
| Management mechanism | | Playing with dogs should be avoided for preventing the infection. |
| Other Details | | Man acquires infection by playing with dogs. Cosmo- politan distribution specially in cattle & sheep. |
| Community/Know | wledge Holder | Mr. Pankaj Kumar |

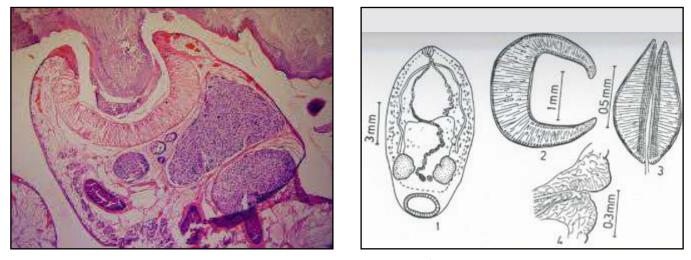
Amphistome (Paramphistomum) एम्फीस्टोम



Amphistome (Paramphistomum) एम्फीस्टोम

| Phylum | Platyhelminthese |
|------------------------------------|---|
| Class | Trematoda |
| Order | Digenia |
| Genus and Species (If known) | Paramphistomum |
| Local Name / Common Name | Amphistome (एम्फीस्टोम) |
| Habit and Habitat | Endoparasite in the rumen of sheep, deer cattle etc. |
| Description | Body red colour with black coloured villi. Oral sucker Large at posterior end. Intestine forked & unbranched. Two testes with tendem. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | In practical & research. |
| Associated Traditional Knowledge | |
| Management mechanism | Avoidance of infected consumption of food. |
| Other Details | Acetabulum is large and found near posterior end of the body. |
| Community/Knowledge Holder | Mr. Pankaj Kumar |

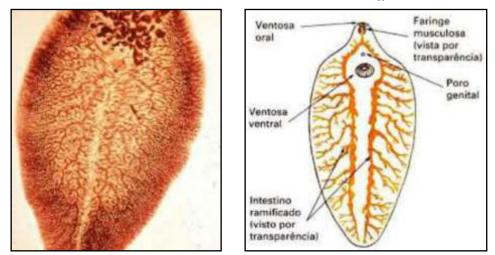
Amphistome (Gastrothylax) एम्फीस्टोम



Amphistome (Gastrothylax) एम्फीस्टोम

| Phylum | Platyhelminthese |
|------------------------------------|---|
| | - |
| Class | Trematoda |
| Order | Digenea |
| Genus and Species (If known) | Gastrothylax |
| Local Name / Common Name | Amphistome parasite (एम्फीस्टोम) |
| Habit and Habitat | Found in rumen of buffalo. |
| Description | Body elongated covered by tegument. Deep ventral pouch differ from other digenea. Male contain 2 rounded testes. Pasterior end has large adhesive sucker or acetabulum. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Avoidance of consumption of raw food. |
| Associated Traditional Knowledge | |
| Management mechanism | Avoidance of contaminated food. |
| Other Details | This is the endoparasite of herbivores animals. |
| Community/Knowledge Holder | Ms. Kiran Kannaujia |
| | |

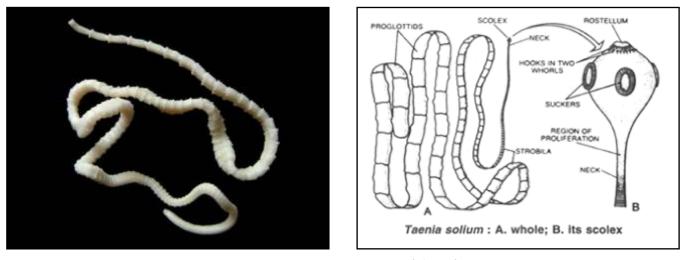
Liver fluke (Fasciola hepatica) लीवर फ्लूक



Liver fluke (Fasciola hepatica) लीवर फलूक

| Dhalum | | Plat the alminthese |
|------------------------------------|-------------|---|
| Phylum | | Platyhelminthese |
| Class | | Trematoda |
| Order | | Digenea |
| Genus and Species (| If known) | Fasciola hepatica |
| Local Name / Comm | on Name | Liver fluke (लीवर फ्लूक) |
| Habit and Habitat | | Found in bile ducts of liver of sheep. |
| Description | | Body leaf like, dorso-ventrally flattened 25-30 mm in length & 4-5 mm in breadth. An oral sucker anteriorly & acetabulum at posterior side. Mouth surrounded by oral sucker. Life cycle completed in intermediate host, Iymnea a mollusc. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | Slide preparation & research in practical. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Destroying the contaminated snails. |
| Other Details | | It also causes metabolic disturbances in the host. |
| Community/Knowle | edge Holder | Ms. Sneh Lata |

Parasitic Helminths Pork tape warm (*Taenea solium*) पॉर्क टेप वर्म

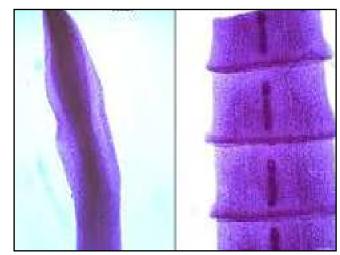


Pork tape warm (Taenea solium) पॉर्क टेप वर्म

| Phylum | | Platyhelminthese |
|------------------------------------|---------------|---|
| Class | | Cestoda |
| Order | | Cyclophyllidea |
| Genus and Species (| lf known) | Taenea solium |
| Local Name / Comme | on Name | Pork tape warm (पॉर्क टेप वर्म) |
| Habit and Habitat | | Found in intestine of man. Endemic in the pork consuming areas. |
| Description | | Body divided into scolex, neck & proglottids. Rostellum contain 28-32 hooks. Neck region is areas of proli- feration. Gravid segment contain branched uterus. Cysti- cercus encyst in thigh, chest, shoulder called measly pork. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | Use in practical research. |
| Associated Tradition | nal Knowledge | |
| Management mechanism | | |
| Other Details | | Eating of measly pork should be avoided. The hot dogs are very common. |
| Community/Knowle | edge Holder | Ms. Sneh Lata |

Parasitic Helminths (Diphyllobothrium) डाईफिलोबोथरियम

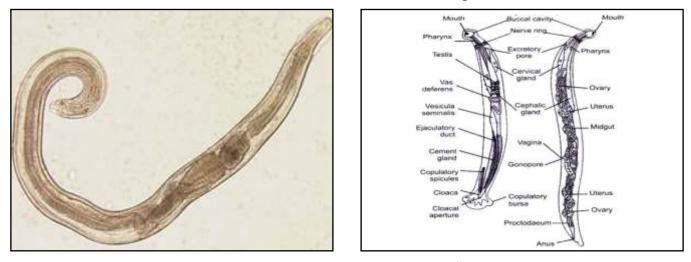




(Diphyllobothrium) डाईफिलोबोथरियम

| Phylum | | Platyhelminthese |
|------------------------------------|-------------|--|
| Class | | Cestoda |
| Order | | Pseudophyllidea |
| Genus and Species | (If known) | Diphyllobothrium |
| Local Name / Comm | ion Name | Diphyllobothrium (डाईफिलोबोथरियम) |
| Habit and Habitat | | Found as a parasite in the intestine of man. |
| Description | | Broad fish tapeworm & largest most injurious cestode in the intestine of man. Body length 60feet have 3000 to 4000 proglottids. Hermaphroditic, life-cycle involves two intermediate hosts. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | Use in practical research. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Avoidance of contaminated food & water. |
| Other Details | | Excretory system protonephridia type. |
| Community/Knowl | edge Holder | Ms. Sneh Lata |
| | | |

Hookworm (Ancylostoma duodenales) हुकवर्म

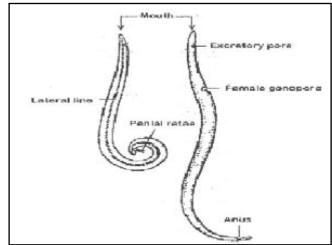


Hookworm (Ancylostoma duodenales) हुकवर्म

| Phylum | | Nemathelminthes |
|------------------------------------|--------|--|
| Class | | Srongyloidea |
| Order | | Ancylostoma |
| Genus and Species (If kr | nown) | Ancylostoma duodenale |
| Local Name / Common N | lame | Hookworm (हुकवर्म) |
| Habit and Habitat | | Man and other domesticated animals |
| Discription | | Tail end of female is pointed. Male contains copulatory bursa. Migratory larvae in skin cause creeping eruption dermatitis and allergic reactions Adult parasites implant their buccal capsule in the mucosa of the intestine, suck blood and destroy haemoglobin causing anaemia. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Found throughout the year |
| Local Status: Pa | st- | In abundance |
| Pre | esent- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Avoidence of walking bare foot on the faecaly contaminated soil. |
| Other Details | | Mode of infection is skin penetration. |
| Community/Knowledge | Holder | Mr. Pankaj Kumar |
| | | |

Round worm (Ascaris lumbricoides) राउण्ड वर्म





Round worm (Ascaris lumbricoides) राउण्ड वर्म

| Phylum | | Aschelminthes |
|----------------------|-------------------|---|
| Class | | Nematoda |
| | | |
| Order | | Ascaroidea |
| Genus and Species | s (If known) | Ascaris lumbricoides |
| Local Name / Com | mon Name | Round worm (राउण्ड वर्म) |
| Habit and Habitat | | Intestine of man & the pig. |
| Description | | Shows sexual dimorphism with separate male & female individuals. Tail end of male is ventrally curved. Tail end of female is bluntly pointed. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | L | Found throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditi | ional Knowledge | |
| Management mechanism | | Avoid eating raw unwashed and inadequately cooked vegetables and food. |
| Other Details | | No intermediate host in life. Body is elongated & cylindrical. |
| Community/Know | vledge Holder | Mr. Pankaj Kumar |

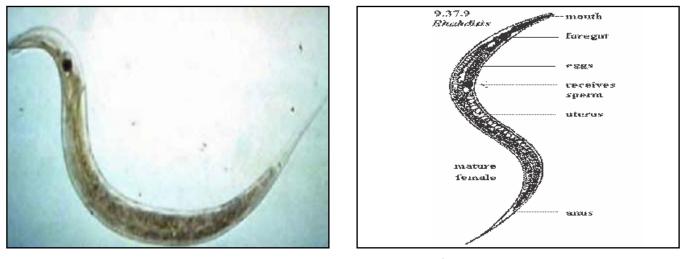
Planaria (Dugesia) प्लेनेरिया



Planaria (*Dugesia*) प्लेनेरिया

| Phylum | | Platyhelminthes |
|------------------------------------|---------------|---|
| Class | | Turbellaria |
| Order | | Trichadida |
| Genus and Specie | es (If known) | Dugesia |
| Local Name / Con | nmon Name | Planaria (प्लेनेरिया) |
| Habit and Habita | t | Fresh water, springs, ponds, lakes, caves. |
| Description | | Dark brown, elongated cylindrical 15 mm. Ventral surface contains adhesive & ciliated zones. Mouth encircled by proboscis pore. It reproduces sexually & asexually. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Found throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | It contains auricles & two semicircular ocelli. |
| Community/Kno | wledge Holder | Mr. Pankaj Kumar |
| | | |

Pinworm (Entrobius vermicularis) पिनवर्म



Pinworm (Entrobius vermicularis) पिनवर्म

| Phylum | | Aschelminthes |
|------------------------------------|--------------|--|
| Class | | Nematoda |
| Order | | Oxyuroidea |
| Genus and Species | s (If known) | Entrobius vermicularis |
| Local Name / Com | mon Name | Pinworm / Seatworm (पिनवर्म) |
| Habit and Habitat | | Most common parasitic of man & reported in Chimpanzee also. |
| Description | | Worms are slender, cream colour. Sexual d i m o r p h i s m . Anterior end have 3 lips & a pair of cephalic expansions. Male is curved, blunt & bursa like expansion & a single spicules. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Found throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | No gubernaculums. |
| Community/Knowledge Holder | | Mr. Pankaj Kumar |



FORMAT- XV Annelids



Annelids

Earthworm (Pheretima posthuma) केचुआ



Earthworm (Pheretima posthuma) केंचुआ

| Phylum | Annelida |
|------------------------------------|---|
| Class | Oligochaeta |
| Order | Neo-oligochaeta |
| Genus and Species (If known) | Pheretima posthuma |
| Local Name / Common Name | Earthworm (केचुआ) |
| Habit & Habitat | Cosmopolitan in distribution, terrestrial especially in mud. |
| Description | Body consist of 100-120ring like segments depicting true metamerism. Dorsal surface dark brown in colour. It is easily recognized by dark median line of dorsal blood vessel. Cross fertilization occurs in earth worms. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Prevalent in rainy season. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Economically very important as it is used as fishing bait. |
| Associated Traditional Knowledge | Earthworms are beneficial to agriculture. |
| Management mechanism | Keep & rear in wormicompose hatchery. |
| Other Details | It is hermaphrodite. It's development takes place in cocoons. |
| Community/knowledge holder | Mr. Zameel Ahmed |

Annelids

Leech (Hirudinaria granulosa) जोंक

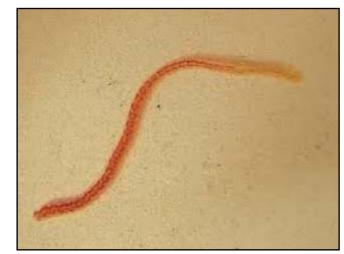


Leech (Hirudinaria granulosa) जोंक

| Phylum | | Annelida |
|----------------------------------|-------------------|--|
| Class | | Hirudinea |
| Order | | Gnathobdellida |
| Genus and Species | (If known) | Hirudinaria granulosa |
| Local Name / Com | mon Name | Leech (जोंक) |
| Habit & Habitat | | In fresh water ponds, lakes & swamps. |
| Description | | Body is soft, segmented, vermiform, dorsoventrally flattened measuring 30-35 cm in length. Anterior & posterior suckers are well developed. Dorsal surface is olive green, ventral surface orange-yellow or red. Both surfaces have black stripes. It is a sanguivorous ectoparasite. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout year, mostly rainy season. |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | It prevents coagulation of blood. |
| Associated Traditional Knowledge | | In old days, genus Hirudo was used by physicians to suck the blood of some ill person. Numerous small salivary glands around mouth secrete Hirudin which prevents coagulation of blood. |
| Management mechanism | | |
| Other Details | | They suck blood of animals. Reproduction is sexual. Development through cocoons. |
| Community/know | ledge holder | Mr. Zameel Ahmed |

Annelids (Tubifex) ट्यूबीफैक्स





(Tubifex) ट्यूबीफैक्स

| Phylum | Annelida |
|------------------------------------|---|
| | |
| Class | Clitellata |
| Order | Oligochaeta |
| Genus and Species (If known) | Tubifex |
| Local Name / Common Name | Tubifex (ट्यूबीफैक्स) |
| Habit and Habitat | Inhabit the sediments of lakes, rivers & occasionally sewer lines. |
| Description | They are hermaphrodite. Species are not easily distinguishable. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Rainy season |
| Local Status: Past- | Commonly found |
| Present- | Commonly found |
| Uses | Used as fish food. It can become established as a pest species in poorly clean aquaria. |
| Associated Traditional Knowledge | |
| Management mechanism | Raising can be done commercially mainly for fish food. |
| Other Details | These worms have good quality proteins. |
| Community/knowledge holder | Mr. Zameel Ahmed |



FORMAT- XVI Arthropods



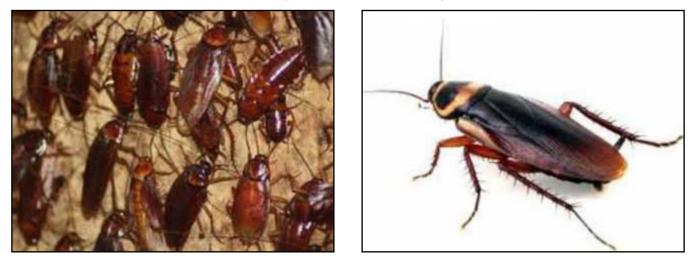
Ant (Solenos ispgeminate) चींटी



Ant (Solenos ispgeminate) चींटी

| Phylum | | Arthropoda |
|------------------------------------|----------------|---|
| Class | | Insecta |
| Order | | Hymenoptera |
| Genus and species | s (If known) | Solenos ispgeminate |
| Local Name / Com | mon Name | Ant/Chiti (चींटी) |
| Habit & Habitat | | On land and in moist places. |
| Description | | Size (0.5 to 25mm), Red or black in colour, body is divided into head, thorax & abdomen. They are polymorphic. Queen ant mated once in her lifetime. |
| Mythological Significance (if any) | | The ants working together for the common good is to be taken as a lesson to men, who should work in unity. |
| I.U.C.N Status | | |
| Season when seen | L | Throughout year |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | As a harvester. Serve as a food for several animals & humans. |
| Associated Traditi | onal Knowledge | As a pest & weather forecast |
| Management mec | hanism | Spraying pesticide & malathion. |
| Other Details | | Sugar & sugary materials are usually destroyed by most of the species. Ant bites have curative properties. Used in biological experiment for sex determination. |
| Community / Kno | wledge Holder | Mr. Zameel Ahmed |

Cockroaches (Periplanata americana) कॉकरोंच



Cockroaches (Periplanata americana) कॉकरोंच

| Phylum | | Arthropoda |
|----------------------|--------------------|--|
| Class | | Insecta |
| Order | | Orthoptera |
| Genus and Species | s (If known) | Periplaneta americana |
| Local Name / Com | mon Name | Cockroaches / Tilchatta (कॉकरोंच) |
| Habit & Habitat | | Nocturnal, in kitchens, bakeries, stores, godouris etc. |
| Description | | Body reddish brown in colour. 2.5 cm in length. Body differentiated into head, thorax & abdomen. A pair of antennae & compound eye is present. Abdomen contains 10 segments. Male cockroaches has a pair of segmented anal cerci & a pair of unsegmented anal styles in 10 th abdominal segments. |
| Mythological Sign | uificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | l | Throughout year |
| Local Status: | Past – | In abundance |
| | Present - | In abundance |
| Uses | | In practical. |
| Associated Traditi | ional Knowledge | Live in dump places |
| Management mec | hanism | By spraying emulsion of chlordane. |
| Other Details | | Used in research. |
| Community / Kno | wledge Holder | Mr. Zameel Ahmed |
| | | |

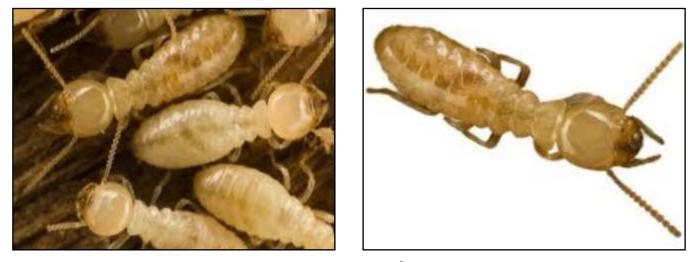
Housefly (Musca domestica) मक्खी



Housefly (Musca domestica) मक्खी

| Phylum | Arthroproda |
|------------------------------------|---|
| Class | Insecta |
| Order | Diptera |
| Genus and Species (If known) | Musca domestica |
| Local Name / Common Name | Housefly (मक्खी) |
| Habit & Habitat | Damp places, in human habitation. |
| Description | Size (5 to 8mm), breed in spring & summer. Blue or black thorax with dark lines, hair like projections & much larger red compound eye. Have a pair wings. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout year |
| Local Status: Past – | In abundance |
| Present - | In abundance |
| Uses | It gives honey, wax. |
| Associated Traditional Knowledge | Spread disease. |
| Management mechanism | By spraying pesticide, by sanitation. |
| Other Details | Show commensalism with human, spread diseases. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

Termite (Odontotermes) दीमक



Termite (Odontotermes) दीमक

| Phylum | Arthoproda |
|------------------------------------|--|
| Class | Insecta |
| Order | Biattodea / Isoptera |
| Genus and Species (If known) | Odontotermes |
| Local Name / Common Name | Deemak/Odontotermas (दीमक) |
| Habit & Habitat | Woods, plastic, wallpapers. |
| Description | Body is divisible into head, thorax and abdomen, light coloured, soft body. |
| Mythological Significance (if any) | Social insect. |
| I.U.C.N. Status | |
| Season when seen | Throughout year |
| Local Status: Past – | In abundance |
| Present - | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Spraying, powder & salt (anti-termite treatment) |
| Other Details | It's a harmful insect destroying household goods, furnitures, clothes & books etc. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

Kankhajura (Scutigera coleoprata) खनखजूरा



Kankhajura (Scutigera coleoprata) खनखजूरा

| Phylum | | Arthropoda |
|-------------------|--------------------|---|
| Class | | Insecta |
| Order | | Sculigeridae |
| Genus and Species | s (If known) | Scutigera coleoprata |
| Local Name / Com | mon Name | Kankhajura/Centipede (खनखजूरा) |
| Habit & Habitat | | Cool , Damp places, Nocturnal. |
| Description | | Size (few mm to 30cm).Yellowish grey with upto 15 pairs of legs, insectivorous & rounded head. |
| Mythological Sign | uificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | l | Througout year |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | They are used by vertebrate & invertebrate as mongoose, mice, snail, beetle as food. |
| Associated Tradit | ional Knowledge | If you enjoy frightened others, you will be reborn as a centipede. |
| Management mec | hanism | Use of pesticides. |
| Other Details | | Feed on insect & live in crevices & damp places. It as venomous forcipules, as well as the secretion of defensive chemicals like hydrogen cyanide & Benzoic acid. |
| Community / Kno | wledge Holder | Ms. Meena Kumari |

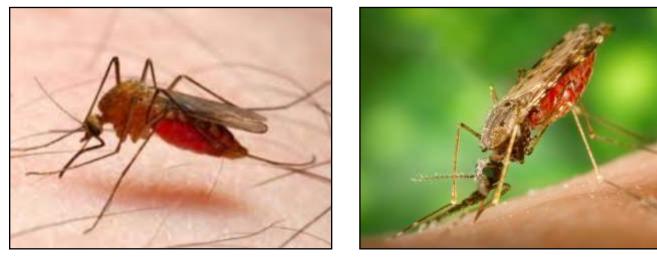
Gubraila (Scarabaeus sacer) गुबरैला



Gubraila (Scarabaeus sacer) गुबरैला

| Phylum | | Arthropoda |
|---------------------|------------------|---|
| Class | | Insecta |
| Order | | Coleoptera |
| Genus and Species | (If known) | Scarabaeus sacer |
| Local Name / Comn | non Name | Gubraila (गुबरैला) |
| Habit & Habitat | | Coastal dunes , marshes , damp places. |
| Description | | Destructive array of six projection, resembling rays. Vestigial claw like structure for digging & forming balls of dungs. |
| Mythological Signi | ficance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout year |
| Local Status: | Past – | Easily seen |
| | Present – | Easily seen |
| Uses | | |
| Associated Traditio | onal Knowledge | |
| Management mech | anism | |
| Other Details | | It feeds on dung / faeces. They posses exceptional dung disposal capacity. |
| Community / Know | vledge Holder | Ms. Meena Kumari |

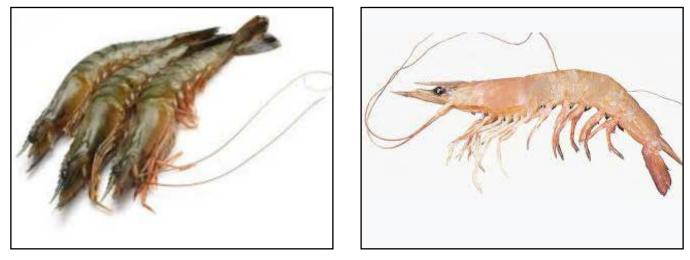
Mosquito (Anopheles) ePNj



Mosquito (Anopheles) मच्छर

| Phylum | | Arthropoda |
|--------------------------|-------------|--|
| Class | | Insecta |
| Order | | Diptera |
| Genus and Species (If kn | own) | Anopheles |
| Local Name / Common N | ame | Mosquito/Macchar (मच्छर) |
| Habit & Habitat | | Dark & damp places, around dumped & waste water bodies. |
| Description | | Slender bodies with head, thorax & abdomen. Three pairs of leg & paired wings. |
| Mythological Significand | ce (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout year |
| Local Status: Pas | st – | In abundance |
| Pre | esent – | In abundance |
| Uses | | |
| Associated Traditional K | nowledge | Spread diseases like malaria. |
| Management mechanisn | 1 | Spraying, kerosene oil & anti mosquito ointments. |
| Other Details | | Head with elongated proboscis, fed on blood, only females bite. |
| Community / Knowledge | Holder | Ms. Meena Kumari |

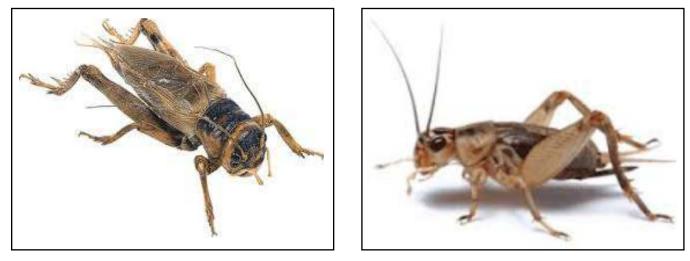
Prawn (Palaemon malcolmsonii) झींगा



Prawn (Palaemon malcolmsonii) झींगा

| Phylum | | Arthropoda |
|----------------------------------|-------------------|---|
| Class | | Crustacea |
| Order | | Decapoda |
| Genus and Specie | s (If known) | Palaemon malcolmsonii |
| Local Name / Com | mon Name | Prawn (झींगा) |
| Habit & Habitat | | In freshwater river streams. |
| Description | | It is of dark red to orange-red or pink. Juveniles are green or brown. They have a smooth glossy body with an abdomen divided into several segment. 1 st and 5 th bearing a distinctive bright spot. |
| Mythological Sigr | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | l | Throughout year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As a food and laboratory purposes. |
| Associated Traditional Knowledge | | Used as food |
| Management Mec | hanism | |
| Other Details | | It has edible importance and used in practicals. |
| Community / Kno | wledge Holder | Ms. Meena Kumari |
| | | |

Arthropoda Mole cricket (*Gryllotalpa*) झींगुर



Mole cricket (Gryllotalpa) झींगुर

| DII | | |
|----------------------|-------------------|--|
| Phylum | | Anthropoda |
| Class | | Insecta |
| Order | | Orthoptera |
| Genus and Species | s (If known) | Gryllotalpa |
| Local Name / Com | mon Name | Mole cricket (झींगुर) |
| Habit and Habitat | | They are nocturnal & found burrowing in the grounds. |
| Description | | Mostly covered with short, fine hairs & is divisible into head, thorax & abdomen. Well developed head, bears antennae & compound eyes. Mouth part are bitting & chewing type. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | In late winters & summers. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditi | onal Knowledge | |
| Management mech | nanism | By spraying pesticides. |
| Other Details | | Mole cricket damages the cultivated crops. |
| Community/Know | vledge Holder | Ms. Meena Kumari |

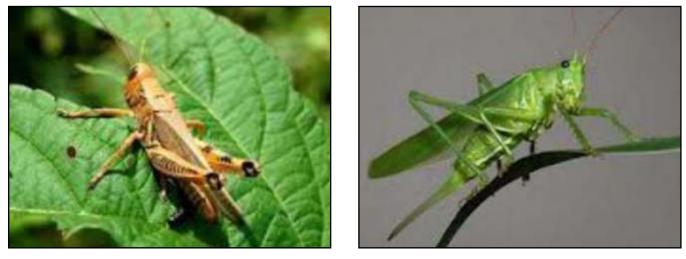
Bedbug (Cimex sp. lectularius) खटमल



Bedbug (Cimex sp. lectularius) खटमल

| Phylum | Artropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Hemiptera |
| Genus and Species (If known) | Cimex sp. lectularius |
| Local Name / Common Name | Bedbug (खटमल) |
| Habit and Habitat | Warm houses, nearby or inside of beds, active at night. |
| Description | Parasitic light brown to reddish- brown, flattened, oval- shaped, size (4-5mm), obligatory haematophagous. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | In forensic purposes in identifying on whom the bed bugs have fed. |
| Associated Traditional Knowledge | |
| Management mechanism | Various antifungal and antibug powders. |
| Other Details | Nocturnal & sucks human blood, carrier for several diseases. Bed bugs use pheromones to communicate regarding nesting locations, feeding & reproduction. |
| Community/Knowledge Holder | Ms. Meena Kumari |

Grasshopper (Melanopus or Poecilocenus) टिड्डा



Grasshopper (Melanopus or Poecilocenus) टिड्डा

| Phylum | | Arthropoda |
|--------------------------|-------------|--|
| Class | | Insecta |
| Order | | Orthoptera |
| Genus and Species (If ki | nown) | Melanopus banian |
| Local Name / Common N | Name | Grasshopper (टिड्डा) |
| Habit and Habitat | | Commonly found in green fields, vegetation & trees. |
| Description | | Green in colour. Body is divided into head thorax & abdomen. Head bears short antennae & well developed compound eyes. Thorax bears 3 pairs of legs & 2 pairs of wings. Abdomen is compound of 10 segments mouth parts are bitting & chewing type. |
| Mythological Significan | ce (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Mostly in rainy season. |
| Local Status: Pa | st- | In abundance |
| Pr | esent- | In abundance |
| Uses | | Harmful |
| Associated Traditional I | Knowledge | |
| Management mechanisı | n | Trapping & Spraying |
| Other Details | | A grasshopper uses camouflage to aid its survival. Majority of grasshopper are polyphagous. |
| Community/Knowledge | Holder | Mr. Zameel Ahmed |

Blue Tiger (Tirumala limniace) ब्लू टाइगर



Blue Tiger (Tirumala limniace) ब्लू टाइगर

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Tirumala limniace |
| Local Name / Common Name | Blue Tiger (ब्लू टाइगर) |
| Habit and Habitat | Seen in gardens as well as forest, also seen in communal roosts. |
| Description | Strikingly marked with pale blue streaks with black or dark brown back round. Pale or almost white under hind wing, forked streak in the middle. Male smaller with under hindwing pouch containing scent gland. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, trans- formation and time. |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | Commonly found |
| Present- | Commonly found |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Butterfly parks should be established. |
| Other Details | |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Common Rose (Atrophaneura aristolochiae) कॉमन रोज़



Common Rose (Atrophaneura aristolochiae) कॉमन रोज़

| Phylum | | Arthropoda |
|----------------------------|----------|---|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species (If know | wn) | Atrophaneura aristolochiae |
| Local Name / Common Nar | ne | Common Rose (कॉमन रोज़) |
| Habit and Habitat | | Occurs in open cultivatd areas & deciduous forests. |
| Description | | Slow but straight fluttering flight, not more than 3-4 above the ground, but at times does fly higher. Wingspan 80-110 nm. Mimicked by female common Mormon in stichius form. Adult-Black-red-bodies swallow tail. Five elongate spots around end cell. |
| Mythological Significance | (if any) | In Indian mythology it is a symbol of softness, transformation and time. |
| I.U.C.N. Status | | |
| Season when seen | | Seen throughout the year at different localities. |
| Local Status: Past- | | Commonly found |
| Prese | ent- | Commonly found |
| Uses | | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Kno | owledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | | Butterfly parks should be established. |
| Other Details | | Both sides of tailed hindwing have large white area made up of five elongate spot around end cell. A series of deep red or brownish red spots on outer margin. |
| Community/ Knowledge H | older | Mr. Pankaj Kumar |

Arthropoda Common gull (*Cepora nerissa*) d 🏧 xy



Common gull (Cepora nerissa) कॉमन गल

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Cepora nerissa |
| Local Name / Common Name | Common Gull (कॉमन गल) |
| Habit and Habitat | Seen mainly in dries plains, around ill-kept farmlands & forests. |
| Description | Wingspan 40-65 mm. Male with grey scaling at the base of upper fore wing with black terminal outer border bearing white spots. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, trans- formation and time. |
| I.U.C.N. Status | |
| Season when seen | Dry season |
| Local Status: Past- | Commonly found |
| Present- | Commonly found |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | In dry season black markings reduce in both sexes. Hind wings may be pale to pale-brown. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Common Mormon (*Papilio polytes*) d Kelu eKj/eks



Common Mormon (Papilio polytes) कॉमन मॉरमोन

| Phylum | | Arthropoda |
|--------------------------|-------------------|---|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | (If known) | Papilio polytes |
| Local Name / Common Name | | Common Mormon (कॉमन मॉरमोन) |
| Habit and Habitat | | Flowers, damp patches & dung. |
| Description | | Male have fast flight while females fly slowly when they mimic. Wingspan 90-100 mm. Male velvety black with a row of white spots along central region of upper hind wing. Upper forewing broad, irregular white band from mid-cell to tornus. |
| Mythological Signi | ificance (if any) | In Indian mythology it is a symbol of softness, trans- formation and time. |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | Commonly found |
| | Present- | Commonly found |
| Uses | | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditio | onal Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | | Differs from Crimson rose in having body without red markings & no red markings in & around cell. |
| Community/ Know | vledge Holder | Mr. Pankaj Kumar |

Arthropoda Chocolate Pansy (Junonia iphita) pkWy ⅔ i ឱh



Chocolate Pansy (Junonia iphita) चॉकलेट पैंसी

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Junonia iphita |
| Local Name / Common Name | Chocolate Pansy (चॉकलेट पैंसी) |
| Habit and Habitat | Wet wooded regions of the hills, flowers, shady places. |
| Description | Wingspan 55-80 mm. Upperwing pale to dark brown with darker brown bands. Upper hindwing with row of small eye spots. Forewing apex & hindwing tornus slightly produced. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, transfor- mation and time. |
| I.U.C.N. Status | |
| Season when seen | January to December |
| Local Status: Past- | Commonly found |
| Present- | Commonly found |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | Forewings apex square cut & termen concave. Wings leaf- like. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Pink bollworm (Pectinophora gossypiella) पिंक बॉलवमZ



Pink bollworm (Pectinophora gossypiella) पिंक बॉलवर्म

| Phylum | | Arthropoda |
|-----------------------------|--------------------|--|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | s (If known) | Pectinophora gossypiella |
| Local Name / Com | mon Name | Pink bollworm (पिंक बॉलवर्म) |
| Habit and Habitat | - | Flowers, seeds & cottons. |
| Description | | Dark brown coloured moth with black patches. They fly swiftly. Adults lay 100 cream coloured eggs. Pupates inside cotton boll or soil. |
| Mythological Sign | uificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | l | May-November |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditi | ional Knowledge | |
| Management mec | hanism | |
| Other Details | | Feeds on causing opened flowers damages bhindi fruits. |
| Community/ Knowledge Holder | | Mr. Pankaj Kumar |
| | | |

Common Jay (Graphium doson) कॉमन जे



Common Jay (Graphium doson) कॉमन जे

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Graphium doson |
| Local Name / Common Name | Common Jay (कॉमन जे) |
| Habit and Habitat | Seen in the plains as well as hills. |
| Description | Swift flier, hovers over flowers while probing for nector. Black with pale-blue, partially transparent central bands consisting of large spots. Wingspan 70-80 mm. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, transformation and time. |
| I.U.C.N. Status | |
| Season when seen | March to December |
| Local Status: Past- | Commonly found |
| Present- | Commonly found |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | Under hindwing bar from costa red centred,not joining dark-basal band. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Common Jezebel (*Delias eucharis*) कॉमन जैज़ेबेल



Common Jezebel (Delias eucharis) कॉमन जेज़ेबेल

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Delias eucharis |
| Local Name / Common Name | Common Jezebel (कॉमन जैज़ेबेल) |
| Habit and Habitat | Seen on tress, along city roads to forests & flowers. |
| Description | Wingspan 60-83 mm. Fairly slow, fluttering flight. Egg laid in batches. Red spots which are pointed towards the outer margin in both sexes. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, transfor- mation and time. |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | Commonly found |
| Present- | Commonly found |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | Marking similar but upper hind wings more heavily than male. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

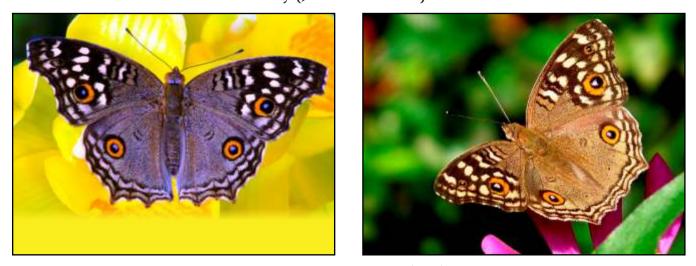
Arthropoda Asian Cabbage White (Pieris canidia) गोभी की तितली



Asian Cabbage White (Pieris canidia) गोभी की तित्तली

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Pieris canidia |
| Local Name / Common Name | Asian Cabbage White (गोभी की तितली) |
| Habit and Habitat | Mostly in hills, low in open plains around bushes & shrubs. |
| Description | Wing span 45-60 mm. Upper forewing with black spot with black toothed inner margin. Female has an additional black spot on upper forewing. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, transfor- mation and time. |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | Commonly found |
| Present- | Commonly found |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | Both sexes have unmarked under hind wing with base of costa yellow. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Lemon Pansy (Junonia lemonias) लैमन पैंसी



Lemon Pansy (Junonia lemonias) लैमन पैंसी

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Junonia lemonias |
| Local Name / Common Name | Lemon Pansy (लैमन पैंसी) |
| Habit and Habitat | Flowering shrubs & herbs, gardens, agricultural forests. |
| Description | Brown with several eye spots & black & lemon yellow spots on upper wing. Wing span 40-60mm. Upper forewing eye spot in space 2 & upper hind wing eye spot in space 5 prominent. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, transfor- mation and time. |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | Commonly found |
| Present- | Commonly found |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | Upper forewing with many lemon yellow spots. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Yellow pansy (Junonia hierta) येलो पैंसी



Yellow pansy (Junonia hierta) येलो पैंसी

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Junonia hierta |
| Local Name / Common Name | Yellow pansy (येलो पैंसी) |
| Habit and Habitat | Found all over India upto 2000 m in the Himalayas all year round. Prefers day, stony & grassy rocky areas. |
| Description | Upperside yellow, with black flowering apex with yellow markings & border. Distinct oval blue patch on upper hindwing which is larger in male. Female duller, with 2 small eyespots in spaces 2 & 5 on upperside of both wings. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, trans- formation and time. |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | Commonly found |
| Present- | Commonly found |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. Play an important role in food chain. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | Its larval food plants are Barberia spp etc |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda White Orange Tip (*Ixias marianne*) सफेद नारंगी तितली



White Orange Tip (Ixias marianne) सफेद नारंगी तितली

| Phylum | | Arthropoda |
|------------------------------------|---------------|---|
| , | | X |
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | s (If known) | Ixias marianne |
| Local Name / Com | mon Name | White Orange Tip (सफेद नारंगी तितली) |
| Habit and Habitat | | Flies rapidly & prefers opens areas in mixed deciduous forest & scrub. |
| Description | | White butterfly with black apical half in upper-forewing enclosing large orange patch. Terminal border of hind- wing also black. In female, orange patch narrower & bearing 4 black spots. |
| Mythological Significance (if any) | | In Indian mythology it is a symbol of softness, transfor- mation and time. |
| I.U.C.N. Status | | |
| Season when seen | | Spring season. |
| Local Status: | Past- | Commonly found |
| | Present- | Commonly found |
| Uses | | Used as pollinator. Can be used to enhance the beauty of nature. Play an important role in food chain. |
| Associated Traditional Knowledge | | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | | Its larval food plants are Capparis spp., Maervao oblongi- folia. |
| Community/ Know | vledge Holder | Mr. Pankaj Kumar |

Blue Pansy (Junonia orithiya) ब्लू पैंसी



Blue Pansy (Junonia orithiya) ब्लू पैंसी

| Phylum | Arthropoda |
|------------------------------------|--|
| • | * |
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Junonia orithiya |
| Local Name / Common Name | Blue Pansy (ब्लू पैंसी) |
| Habit and Habitat | Prefers drier open grassy plains, close to the ground. Seen along forest clearings. |
| Description | Flight swift, wingspan 45-60 mm. Flies upto 2,100 meter. Visits flowers, damp patches & animal urine. Color of adult is brilliant blue, inner area velvety vlack. Variegated eyespots (2-5) on both wings. Female larger. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, transfor- mation and time. |
| I.U.C.N. Status | |
| Season when seen | Throughout the year . |
| Local Status: Past- | Commonly found |
| Present- | Commonly found |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. Play an important role in food chain. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | Eyespots more prominent then male. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |
| | |

Arthropoda Common Crow (*Euploea core*) कॉमन क्रो



Common Crow (Euploea core) कॉमन क्रो

| Phylum | | Arthropoda |
|------------------------------------|---------------|--|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | (If known) | Euploea core |
| Local Name / Com | non Name | Common Crow (कॉमन क्रो) |
| Habit and Habitat | | Occurs in forest to open country. |
| | | Flowers & wet mud. |
| Description | | Weak, sailing flight. Wingspan 85-95 mm. Flies upto 2,500 m. dark velvety brown on upper. Wings bordered two rows of small white spots. Thorax black with white spots. |
| Mythological Significance (if any) | | In Indian mythology it is a symbol of softness, transfor- mation and time. |
| I.U.C.N. Status | | |
| Season when seen | | |
| Local Status: | Past- | Commonly found |
| | Present- | Commonly found |
| Uses | | Used as pollinator. Can be used to enhance the beauty of nature. Play an important role in food chain. |
| Associated Traditional Knowledge | | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | | Butterfly parks should be established. Flowering plants should be planted. |
| Other Details | | Male has a dark band & a white streak under forewing. |
| Community/ Know | vledge Holder | Mr. Pankaj Kumar |

Arthropoda Striped Tiger (Danaus genutia) सिट्रप टाइगर



Striped Tiger (Danaus genutia) स्ट्रिप टाइगर

| Phylum | | Arthropoda |
|------------------------------------|---------------|--|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | (If known) | Danaus genutia |
| Local Name / Com | non Name | Striped Tiger (स्ट्रिप टाइगर) |
| Habit and Habitat | | Prefers all types of habitats. Files low over bushes & under- growth. Migrates to higher hills in summer. |
| Description | | Tawny butterfly, with prominent blackened veins & with white apical spots on black apex of forewings. |
| Mythological Significance (if any) | | In Indian mythology it is a symbol of softness, transfor- mation and time. |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mech | anism | Flowering plants should be planted |
| Other Details | | Its larvae food plants are <i>Asclepias curassavica, ceropegia</i> spp. |
| Community/ Know | vledge Holder | Mr. Pankaj Kumar |

Ditch Jewel (Branchythemis contaminata) डिच् ज्वेल



Ditch Jewel (Branchythemis contaminata) डिच् ज्वेल

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Odonata |
| Genus and Species (If known) | Branchythemis contaminata |
| Local Name / Common Name | Ditch Jewel (डिच् ज्वेल) |
| Habit and Habitat | Adults found in & near contaminated water bodies& along ponds & tanks, marshes. |
| Description | It is about 20-25mm, clear, transparent wings, with a tiny of yellow in hindwing dark brown wingspot. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Used as pollinator |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Indicator of water quality, found near polluted water. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |
| | |

Trumpet Tail (Acisoma panorpoides) VE 🖇 V§



Trumpet Tail (Acisoma panorpoides) ट्रम्पेट टेल

| Phylum | | Arthropoda |
|-----------------------------|-------------------|--|
| Class | | Insecta |
| Order | | Odonta |
| Genus and Species | (If known) | Acisoma panorpoides |
| Local Name / Common Name | | Trumpet Tail (ट्रम्पेट टेल) |
| Habit and Habitat | | Found near water bodies like ponds & tanks. |
| Description | | Small, trumpet-shaped with broad segments 1-5 which becomes slim towards segments 6-10, blue abdomen, with black markings. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | Commonly found |
| | Present- | Commonly found |
| Uses | | The play crucial role as pollinators of flora. |
| Associated Tradition | onal Knowledge | |
| Management mech | anism | |
| Other Details | | Thorax is blue-dusted with black markings. |
| Community/ Knowledge Holder | | Mr. Pankaj Kumar |
| | | |

Arthropoda Water Flea (*Daphnia*) वॉटर फ्ली

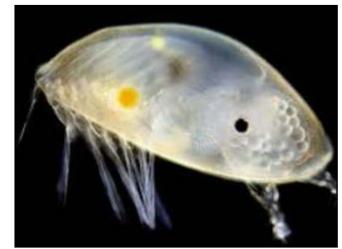


Water Flea (Daphnia) वॉटर फ्ली

| Phylum | Arthropoda |
|----------------------------------|---|
| Class | Crustacea |
| Order | Cladoura |
| Genus and Species (If known) | Daphnia |
| Local Name / Common Name | Water Flea (वॉटर फ्ली) |
| Habit and Habitat | It is found in fresh water ponds, streams & ditches. |
| Description | Its body except the head is enclosed in a brailed shell or a large fold of carapace. Body is soft, laterally compressed measuring 1-2 mm in length. Body segmentation is very imperfect. Abdomen is devoid of appendages. Sexes are separate. |
| Mythological Significance (if an | ny) |
| I.U.C.N. Status | |
| Season when seen | It is found throughout year. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Used in practical for research. |
| Associated Traditional Knowled | lge |
| Management mechanism | |
| Other Details | Head is rounded & bears a pair of antennae & compound eye. Large biramous antennae are the chief organ of locomotion. |
| Community/ Knowledge Holde | r Mr. Pankaj Kumar |

Arthropoda (Cypris) सिप्रिस





(Cypris) सिप्रिस

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Crustacea |
| Order | |
| Genus and Species (If known) | Cypris |
| Local Name / Common Name | Seed shrimp (सिप्सि) |
| Habit and Habitat | It is a free-swimming & occur in fresh water stagnant ponds. |
| Description | Its body is unsegmented & laterally compressed. Body is completely enclosed in a bivalve carapace. Compound eye & heart are absent. There are only seven pair of appendages. Attenuales & antennae are large biramous & help in swimming. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | It is found in throughout the year |
| Local Status: Past | In abundance |
| Present | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Development by parthenogenesis & abdomen is devoid of appendages. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Silver Fish (*Lepisma*) fl Yoj fQ' k





Silver Fish (Lepisma) सिल्वर फिश

| Phylum | | Arthropoda |
|------------------------------------|--------------|---|
| Class | | Insecta |
| Order | | Thysanura |
| Genus and Species | s (If known) | Lepisma |
| Local Name / Com | mon Name | Silver Fish (सिल्वर फिश) |
| Habit and Habitat | | It is found in damp places like basement in books, under pictures, clothes & wall paper etc. |
| Description | | It is a common household pest. It is commonly known as silver fish. It is a delicate glistening silver white & fish shaped insect. Adults are wingless. It is c o n s i d e r a b l e damage to the books & clothing by chewing off the starch or any other articles containing glue. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Thoughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Neem spray |
| Other Details | | Destroys books and articles |
| Community/ Knowledge Holder | | Mr. Pankaj Kumar |

Earwig (Forficula) bℤj fOX



Earwig (Forficula) ईअरविग

| Phylum | | Arthropoda |
|------------------------------------|--------------|---|
| Class | | Insecta |
| Order | | Dermaptera |
| Genus and Species | s (If known) | Forficula |
| Local Name / Com | mon Name | Earwig (ईअरविग) |
| Habit and Habitat | | It is a nocturnal, omnivorous, predaceous. It is mostly found in tropical regions. |
| Description | | It is commonly called as earwig. It a ctively feeds on decaying vegetation & plant tissues. Mouth parts are biting & chewing type. It is a harmful insect as it is destructive to ornamental plants & mainly a feeder around garden & home. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Spraying should be done |
| Community/ Knowledge Holder | | Mr. Pankaj Kumar |

Arthropoda Aphid (*Aphis* spp.) एफिड



Aphid (Aphis spp.) एफिड

| Phylum | | Arthropoda |
|------------------------------------|--------------|--|
| Class | | Insecta |
| Order | | Hemiptera |
| Genus and Species | s (If known) | Octopus |
| Local Name / Com | mon Name | <i>Aphis</i> spp. (एफिड) |
| Habit and Habitat | | It is a small insect infecting every kind of plant, sucking the juice. It occurs specially on mustard, wheat & cotton plants. |
| Description | | It is commonly called as plant lice. They are dull yellow, green and black coloured insects. Mouth parts are sucking & piercing type. Aphids are economically i m p o r t a n t . Some aphids show hyperparasitism as they live inside the body of other aphids. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | |
| Community/ Knowledge Holder | | Mr. Jagmohan Dixit |

Arthropoda (Cicada) सिकाडा





(Cicada) सिकाडा

| Phylum | | Arthropoda |
|------------------------------------|------------|--|
| Class | | Insecta |
| Order | | Hemiptera |
| Genus and Species | (If known) | Cicada |
| Local Name / Com | non Name | Cicada (सिकाडा) |
| Habit and Habitat | | It is dependent upon tress for food & occurs mostly in forests & well wooded moist localities. |
| Description | | It is a large insect measuring upto several inches. Wing are large & often coloured. Sound is produced by male only & it is capable of producing loud, shrill, vibrating sound. Nymph burrows in soil, feeds on plants & emerges as adult after 2 to 17 years so also called as "seventeen year locust". |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | |
| Community/ Knowledge Holder | | Mr. Pankaj Kumar |

Scarce bordered straw moth (Helicoverpa armigera) स्कार्स बॉडर्ड स्ट्रा मोथ



Scarce bordered straw moth (Helicoverpa armigera) स्कार्स बॉडर्ड स्ट्रा मोथ

| Arthropoda |
|--|
| Insecta |
| Lepidoptera |
| Helicoverpa armigera |
| Scarce bordered straw moth (स्कार्स बॉडर्ड स्ट्रा मोथ) |
| Tropical & subtropical pest of vegetable of crops such as artichoke, bean, cucumber & tomato. |
| 30-40 mm wingspan. Forewings mainly achreous, greenish-grey to reddish brown with darker markings. Hind wings creamish-white with brackish border. |
| |
| |
| April to October |
| In abundance |
| In abundance |
| Important contaminants in crops sent for processing. |
| |
| |
| |
| Mr. Jagmohan Dixit |
| |

Tobacco caterpillar (Spodoptera litura) तम्बाकू की गिदार





Tobacco caterpillar (Spodoptera litura) तम्बाकू की गिदार

| Phylum | | Arthropoda |
|------------------------------------|--------------|---|
| Class | | Insecta |
| | | |
| Order | | Lepidoptera |
| Genus and Species | s (If known) | Spodoptera litura |
| Local Name / Com | mon Name | Tobacco caterpillar (तम्बाकू की गिदार) |
| Habit and Habitat | | Hide in soil day & feeds in night, cotton, castor, ground- nut. |
| Description | | Dark brown coloured moths with patterned wings. Egg laid in groups (300-500) covered with body scalar. Larvae are green & later instars dark coloured with green black patterns. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Summer |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Showing trap crop caster on field, border crop & barriers crop-maize sorghum around fields. |
| Other Details | | Feeds on leaves scraping gregariously result in died up leaves. |
| Community/ Knowledge Holder | | Mr. Jagmohan Dixit |

Pink bollworm (Pectinophora gossypiella) पिंक बॉलवर्म



Pink bollworm (Pectinophora gossypiella) पिंक बॉलवर्म

| Phylum | | Arthropoda |
|------------------------------------|--------------|--|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Specie | s (If known) | Pectinophora gossypiella |
| Local Name / Common Name | | Pink bollworm (पिंक बॉलवर्म) |
| Habit and Habitat | | Flowers, seeds & cottons. |
| Description | | Dark brown coloured math with black patches. They fly swiftly. Adults lay 100 cream coloured eggs. Pupates inside cotton boll or soil. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | May-November |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Feeds on causing opened flowers damages bhendi fruits. |
| Community/ Knowledge Holder | | Mr. Jagmohan Dixit |
| | | |

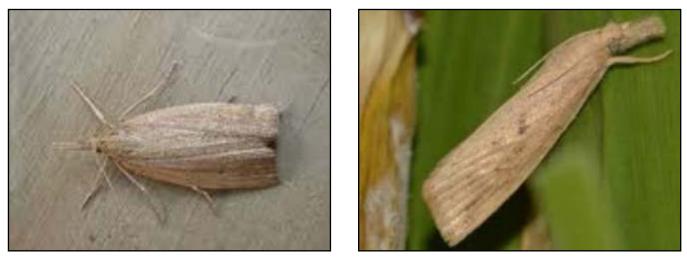
Arthropoda Castor Semilooper (*Achaea janata*) कैस्टर सेमीलूपर



Castor Semilooper (Achaea janata) कैस्टर सेमीलूपर

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Achaea janata |
| Local Name / Common Name | Castor Semilooper (कैस्टर सेमीलूपर) |
| Habit and Habitat | Castor |
| Description | Dark brown colored with white & black patterns on hind wings. Egg laid singly or in batches. Brown larvae with black lateral lines or black larvae with white spots. Pupats in loosely woven silken cocoon in soil among fallen leaves. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | February - October |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Putting bird perches @ 10 per acre to attract birds to controlling larvae stages. |
| Other Details | Severe defoliation in caster leaving veins. |
| Community/ Knowledge Holder | Mr. Jagmohan Dixit |

Arthropoda Sorghum Shoot Borer (*Chilo partellus*) बाजरे का कीड़ा



Sorghum Shoot Borer (Chilo partellus) बाजरे का कीड़ा

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Chilo partellus |
| Local Name / Common Name | Sorghum Shoot Borer (बाजरे का कीड़ा) |
| Habit and Habitat | Shoot tip of Sorghum plants |
| Description | Dark brown moths, female 1.5 times larger than male. Lays about 500 flat fish scale like egg in groups under sides of leaves. Light yellow coloured larvae with spots. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | April-October |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Resistant varities- CSH-1, ASH-1 & PSH-1. |
| Other Details | Resistant of larvae into shoot tip results in dead heart which does not come out easily on pulling out. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Cabbage Butterfly (Pieris brassicae) गोभी की तित्तली



Cabbage Butterfly (Pieris brassicae) गोभी की तितली

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Pieris brassicae |
| Local Name / Common Name | Cabbage Butterfly (गोभी की तितली) |
| Habit and Habitat | |
| | Cabbage, cauliflower & other cruciferous plants. |
| Description | Butterfly is big size, white in colour with two black spots on forewings. Eggs hatch in 4-5 days & small green caterpillars with black heads comes out. In 14 days a caterpillar becomes full grown with bluish green color with grey shades mingled with yellow. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, transformation and time. |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Dust the plants with 5% BHC & 5% malathion. |
| Other Details | When caterpillars are In abundance they leave only the bare stalks of the leaves standing on the fields. |
| Community/ Knowledge Holder | Mr. Jagmohan Dixit |

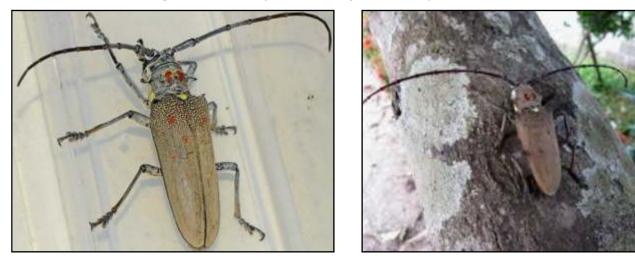
Mexican bean beetle (Epilachna varivestis) मैक्सीकन बीन कीट



Mexican bean beetle (Epilachna varivestis) मैक्सीकन बीन कीट

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Coleoptera |
| Genus and Species (If known) | Epilachna varivestis |
| Local Name / Common Name | Mexican bean beetle (मैक्सीकन बीन कीट) |
| Habit and Habitat | Great variety of bean plants. |
| Description | Oval shaped, eight black spot bearing 8 black spots on each elytron. 6-7 mm long. Eggs are glued in clusters. Larvae are usually yellow spiny & pill shaped. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | In areas of high economic impact. |
| Associated Traditional Knowledge | |
| Management mechanism | Insecticides are still routinely in areas of high economic impact. |
| Other Details | |
| Community/ Knowledge Holder | Mr. Jagmohan Dixit |

Mangostem borer (Bactocera rufamaculata) आम का तनाभेदक



Mangostem borer (Bactocera rufamaculata) आम का तनाभेदक

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Bactocera rufamaculata |
| Local Name / Common Name | Mangostem borer (आम का तनाभेदक) |
| Habit and Habitat | The grubs funnel I to the branches & trunks of tree, mango tree on it crack's. |
| Description | It has long horn & brownish grey in colour, with cellular creamy spots on its back. The grub is legless, with a black head. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Spray the DDT on trunk & the shoots. |
| Other Details | Beetles are nocturnal in habitat. Feed on the bark on living twigs. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Common Castor (Ariadne merione) कॉमन केस्टर



Common Castor (Ariadne merione) कॉमन कैस्टर

| Dhylum | | Arthropoda |
|------------------------------------|--------------|---|
| Phylum | | Arthropoda |
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | s (If known) | Ariadne merione |
| Local Name / Com | mon Name | Common castor (कॉमन कैस्टर) |
| Habit and Habitat | : | Garden, forest. |
| Description | | Wingspan ranges between 30-35 mm. Two legs are small & unused, effectively making them four- legged. Smaller appendages are covered with long hairs. Larvae cylindrical, slender, segment armed with two dorsal two lateral rows of spines. |
| Mythological Significance (if any) | | In Indian mythology it is a symbol of softness, transfor- mation and time. |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | | Butterfly parks should be established. |
| Other Details | | Male upperside brown ocharaceous. Female upperside the transverse line border. |
| Community/ Knowledge Holder | | Mr. Pankaj Kumar |

Arthropoda Three spot Grass yellow (Eurema blanda) श्री स्पॉट ग्रास येलो



Three spot Grass yellow (Eurema blanda) थ्री स्पॉट ग्रास येलो

| Phylum | | Arthropoda |
|------------------------------------|--------------|--|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | (If known) | Eurema blanda |
| Local Name / Comn | non Name | Three spot Grass yellow (थ्री स्पॉट ग्रास येलो) |
| Habit and Habitat | | Open forests, gardens, scrubs. |
| Description | | It is a small butterfly, yellows & whites in colour. Forewing outer black border in the apical area. Hindwing with a marginal narrow black line or band. |
| Mythological Significance (if any) | | In Indian mythology it is a symbol of softness, trans- formation and time. |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | | Butterfly Parks should be established. |
| Other Details | | Wingspan 35-45 mm. The food plant is caesalpinia mimo- soides & Bauhinia Purpurea plant. |
| Community/ Know | ledge Holder | Mr. Pankaj Kumar |

Arthropoda Crimson Marsh Glider (*Trithemis aurora*) क्रिमसन मार्श ग्लाईडर





Crimson Marsh Glider (Trithemis aurora) क्रिमसन मार्श ग्लाईडर

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Odonata |
| Genus and Species (If known) | Trithemis aurora |
| Local Name / Common Name | Crimson Marsh Glider (क्रिमसन मार्श ग्लाईडर) |
| Habit and Habitat | Wetlands, Marshes, Ponds. |
| Description | In male eye red, thorax reddish- purple. Crimson-red, swollen abdominal base. In female brown eye, thorax olive- brown reddish- brown with black markings that go along the sides. Wingspan 25-35 mm. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Use as a bioindicator of wetlands. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Males transparent , with crimson- red & females transparent wings with brown tips. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Coromandel Marsh Dart (Ceriagron coromandelianum) कोरोमंडल मार्श डार्ट



Coromandel Marsh Dart (Ceriagron coromandelianum) कोरोमंडल मार्श डार्ट

| Phylum | | Arthropoda |
|------------------------------------|---------------|---|
| Class | | Insecta |
| Order | | Odonata |
| Genus and Species | (If known) | Ceriagron coromandelianum |
| Local Name / Com | mon Name | Coromandel Marsh Dart (कोरोमंडल मार्श डार्ट) |
| Habit and Habitat | | Shallow-marshes/ponds with a lot of aquatic vegetation. |
| Description | | 20 mm, transparent wings. Abdomen is yellow in colour in males, while in female abdomen colour is dull, yellowish brown/ yellowish green. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | They are used as common pollinators. |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | They are predators. Eyes olive-green in colour. |
| Community/ Know | vledge Holder | Mr. Pankaj Kumar |
| | | |

Rufous baked marsh hawk (Brachydiplax chalybea) रूफस बेक्ड मार्श हॉक



Rufous baked marsh hawk (Brachydiplax chalybea) रूफस बेक्ड मार्श हॉक

| Phylum | | Arthropoda |
|-------------------|--------------------|---|
| Class | | Insecta |
| Order | | Odonata |
| Genus and Specie | es (If known) | Brachydiplax chalybea |
| Local Name / Con | nmon Name | Rufous baked marsh hawk (रूफस बेक्ड मार्श हॉक) |
| Habit and Habita | t | Aquatic vegetation |
| Description | | Small black & ochre coloured dragonfly with dense bluish white on thorax. The males have bluish abdomen. The females have a more ochreous colour. They are less often seen & only appear at the water for oviposition. |
| Mythological Sig | nificance (if any) | |
| I.U.C.N. Status | | |
| Season when see | n | Throughout the year . |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As common pollinators. |
| Associated Tradit | ional Knowledge | |
| Management mec | chanism | |
| Other Details | | They are often seen perched by the water every now & then and flying out to challenge any intruder that wanders into their small territory. |
| Community/ Kno | wledge Holder | Mr. Pankaj Kumar |

Arthropoda Wandering Glider (*Pantala flavercens*) वॉनडरिंग ग्लाईडर



Wandering Glider (Pantala flavercens) वॉनडरिंग ग्लाईडर

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Odonata |
| Order | Odonata |
| Genus and Species (If known) | Pantala flavercens |
| Local Name / Common Name | Wandering Glider (वॉनडरिंग ग्लाईडर) |
| Habit and Habitat | Permanent & temporary ponds, pools & other water bodies. |
| Description | It has a pale yellow colour face that becomes reddish in older males. The thorax is olivaceous brown & largely unmarked. The wings clear with brown a pices in the males. The total length about 44-51 mm, abdomen 25-34 mm, hindwing 35-42 mm. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year . |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | They are used as common pollinators. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Females lay eggs in temporary ponds or rainpools by tapping their accompanied by the male. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Green mustard aphid (*Lipaphis erysimi*) माहुम



Green mustard aphid (Lipaphis erysimi) माहुम

| Phylum | | Arthropoda |
|------------------------------------|--------------|--|
| Class | | Insecta |
| | | |
| Order | | Hemiptera |
| Genus and Species | s (If known) | Lipaphis erysimi |
| Local Name / Com | mon Name | Mahun / Green mustard aphid (माहुम) |
| Habit and Habitat | | Mustard & other crucifers. |
| Description | | These are small sucking insects less than 0.25cm. Some adults have long whitish wings but other are wingless. Antennae are short & six jointed. Sexual dimorphism found. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | December to February |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Spray the plant with nicotine sulphate, malathione. |
| Other Details | | Produces young once parthenogenetically . Female are viviparous. |
| Community/ Knowledge Holder | | Mr. Pankaj Kumar |

Arthropoda Mustard Sawfly (Athalia proxima) | j | kadheD[kh





Mustard Sawfly (Athalia proxima) सरसों की मक्खी

| Phylum | | Arthropoda |
|------------------------------------|-----------------|---|
| Class | | Insecta |
| Order | | Hymenoptera |
| Genus and Species | s (If known) | Athalia proxima |
| Local Name / Com | mon Name | Sarso ki illi / Mustard Sawfly (सरसों की मक्खी) |
| Habit and Habitat | : | Mustard, cabbage & other crucifers. |
| Description | | Adults sawfly has a short thick set body marked in black & orange with 2 pairs of dark colored wings. They are active during day. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | October to March |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditi | ional Knowledge | |
| Management mechanism | | By handpicking of the youngones & destroying by placing them in kerosinised water. By spraying diazinon, endrin, thiodon. |
| Other Details | | |
| Community/ Know | wledge Holder | Mr. Pankaj Kumar |
| | | |

Cowpea aphid (Aphis craccivora) काऊपी एफिड



Cowpea aphid (Aphis craccivora) काऊपी एफिड

| Phylum | Arthropoda |
|------------------------------------|---|
| | * |
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Aphis craccivora |
| Local Name / Common Name | Cowpea aphid (काऊपी एफिड) |
| Habit and Habitat | Acting as hosts on bean family (cucurbits, butroat, ground-nut, cotton, cowpeas). |
| Description | It is a small species of aphid. Female has a glossy black or dark brown body with prominent cauda (tail like prot- rusion). Antennae have six segments, cauda is pale colour. Adult do not have wax on their dorsal surface. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Warmer climates (summer), spring also. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Field rotation & sampling also. |
| Other Details | Unsigned females are up to 2.2 mm (0.1 in) long have cross-barring on the abdomen. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Water scorpion (*Nepa cinerea*) वॉटर स्कार्पियन



Water scorpion (Nepa cinerea) वॉटर स्कार्पियन

| DI 1 | | |
|------------------------------------|------------|--|
| Phylum | | Arthropoda |
| Class | | Insecta |
| Order | | Hemiptera |
| Genus and Species | (If known) | Nepa cinerea |
| Local Name / Com | non Name | Water scorpion (वॉटर स्कार्पियन) |
| Habit and Habitat | | Aquatic insect especially lives in ponds & stagnant water. |
| Description | | It is a large aquatic insect. Its body is flattened which is greyish brown on the upper surface. The abdomen below the wings are pink. Their first pair of legs are very powerful & are used to seize prey. It uses its tail as a siphon, to take air. |
| Mythological Significance (if any) | | ····- |
| I.U.C.N. Status | | |
| Season when seen | | April to May |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | By spraying insecticide. |
| Other Details | | Development shows incomplete metamorphosis. |
| Community/ Knowledge Holder | | Ms. Anita Devi |

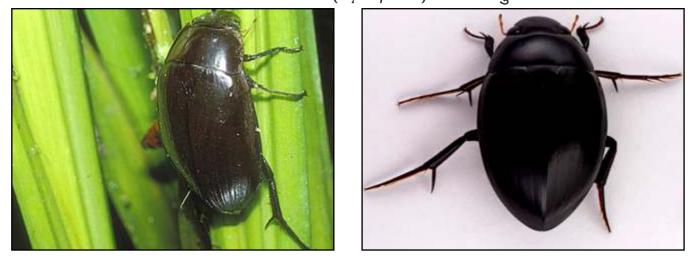
Water stick-insect (Ranatra spp.) जलकीट



Water stick-insect (Ranatra spp.) जलकीट

| Phylum | | Arthropoda |
|------------------------------------|------------|--|
| Class | | Insecta |
| Order | | Hemiptera |
| Genus and Species | (If known) | Ranatra spp. |
| Local Name / Comn | non Name | Water stick-insect (जलकीट) |
| Habit and Habitat | | Polluted & deoxygenated water. |
| Description | | They are generally slender predatory insects. Their front legs are strong & are used to grasp prey. They eat tadpoles, small fishes & other insects. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Winter |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | By spraying insecticide. |
| Other Details | | They lack metamorphosis. |
| Community/ Knowledge Holder | | Ms. Anita Devi |

Arthropoda Giant Black Water Beetle (*Hydrophilus*) पानी का गुबरैला



Giant Black Water Beetle (Hydrophilus) पानी का गुबरेला

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Coleoptera |
| Genus and Species (If known) | Hydrophilus |
| Local Name / Common Name | Giant Black Water Beetle (पानी का गुबरैला) |
| Habit and Habitat | Marshy lakes |
| Description | These are water scavenger beetles & herbivore, predator. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | April to August |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | By spraying insecticide. |
| Other Details | Their larval stages are carnivorous. |
| Community/ Knowledge Holder | Ms. Anita Devi |
| | |

Chilli thrips or yellow tea thrips (Scirtothrips dorsalis) चिली थ्रिप्स



Chilli thrips or yellow tea thrips (Scirtothrips dorsalis) चिली थ्रिप्स

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Thysanoptera |
| Genus and Species (If known) | Scirtothrips dorsalis |
| Local Name / Common Name | Chilli thrips (चिली थ्रिप्स) |
| Habit and Habitat | Chilli, mango, ctitrus, grapes, cotton, tea, blue berry etc. |
| Description | These are small sized, yellow colored, dark antennae & dark striping on the lower abdomen. It can be identified & confirmed through the presence of forked sense cones on antennal segments. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | April to May |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | By using insecticides & pesticides. Neem based products can also be used against this pest. |
| Other Details | These develop resistance against pesticides. |
| Community/ Knowledge Holder | Ms. Anita Devi |

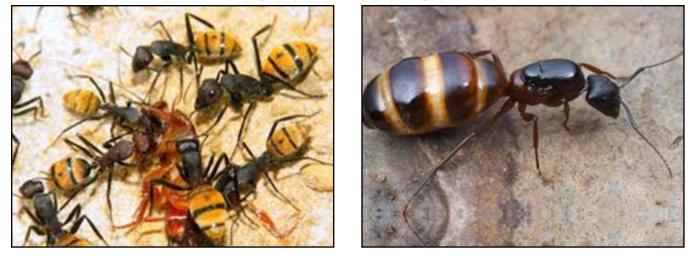
Arthropoda (Trichogramma sp.) ट्राईकोग्रेमा



(Trichogramma sp.) ट्राईकोग्रेमा

| Phylum | | Arthropoda |
|------------------------------------|---------------|---|
| Class | | Insecta |
| Order | | Hymenoptera |
| Genus and Species | s (If known) | Trichogramma sp. |
| Local Name / Com | mon Name | Trichogramma (ट्राईकोग्रेमा) |
| Habit and Habitat | | Endoparasite on insect eggs. |
| Description | | These insect shows sexual dimorphism. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Summer |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | These are used to control insect which belongs to order Lepidoptera. |
| Associated Traditional Knowledge | | |
| Management mechanism | | By spraying insecticide. |
| Other Details | | A single female can parasitize 1 to 10 host eggs a day . These are mostly used for biological control. |
| Community/ Know | wledge Holder | Ms. Anita Devi |

Ant (Componotus compressus) चींटा



Ant (Componotus compressus) चींटा

| Phylum | | Arthropoda |
|------------------------------------|-----------------|---|
| Class | | Insecta |
| Order | | Hymenoptera |
| Genus and Species | s (If known) | Componotus compressus |
| Local Name / Com | mon Name | Ant (चींटा) |
| Habit & Habitat | | On land and in moist places. |
| Description | | Size (0.5 to 25mm), Red or black in colour, body is divided into head, thorax & abdomen. They are polymorphic. Queen ant mated once in her lifetime. |
| Mythological Significance (if any) | | The ants working together for the common good is to be taken as a lesson to men, who should work in unity. |
| I.U.C.N Status | | |
| Season when seen | l | Throughout year |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | As a harvester. Serve as a food for several animals & humans. |
| Associated Traditi | ional Knowledge | Act as a pest. |
| Management mechanism | | Spraying pesticide & malathion. |
| Other Details | | Sugar & sugary materials are usually destroyed by most of the species. Ant bites have curative properties. Used in biological experiment for sex determination. |
| Community/ Know | wledge Holder | Ms. Anita Devi |

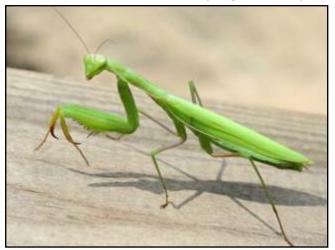
Dwarf honey bee or Red dwarf honey bee (Apis florea) मधुमक्खी



Dwarf honey bee or Red dwarf honey bee (Apis florea) मधुमक्खी

| Phylum | | Arthropoda |
|------------------------------------|--------------|---|
| Class | | Insecta |
| Order | | Hymenoptera |
| Genus and Species | (If known) | Apis florea |
| Local Name / Comm | non Name | Dwarf honey bee (मधुमक्खी) |
| Habit and Habitat | | They live in forest & in the tropical fruit crops. |
| Description | | Body divisible into head, trunk & abdomen. Their young ones work with in the nest. They do maintenance, older ones are responsible for protection & foraging. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As a pollinator, it also has economic value as it produces honey. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Bee hives should be used to extract honey time to time. |
| Other Details | | Division of labour is found. |
| Community/ Know | ledge Holder | Ms. Anita Devi |
| | | |

Arthropoda Praying mantis (*Mantis religiosa*) प्रेईंग मेंटिस





Praying mantis (Mantis religiosa) प्रेईंग मेंटिस

| DI 1 | | |
|------------------------------------|------------|--|
| Phylum | | Arthropoda |
| Class | | Insecta |
| Order | | Mantoptera |
| Genus and Species | (If known) | Mantis religiosa |
| Local Name / Com | non Name | Praying Mantis (प्रेईंग मेंटिस) |
| Habit and Habitat | | Found in strawberry, highly predaceous & cannibalistic species. |
| Description | | Predominantly green, rarely brown. Female is highly cannibalistic. Males are preyed up on at the time of mating. |
| Mythological Significance (if any) | | In south Africa mythology refers to the mantis as a God. |
| I.U.C.N. Status | | |
| Season when seen | | |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Spraying the insecticides. |
| Other Details | | Excellent biocontrol agents. |
| Community/ Knowledge Holder | | Mr. Pankaj Kumar |

Arthropoda Common scorpion (*Pandinus* sp.) बिच्छू



Common scorpion (Pandinus sp.) बिच्छू

| Phylum | | Arthropoda |
|------------------------------------|------------|--|
| Class | | Chelicerata |
| Order | | Scorpiones |
| Genus and Species (If | f known) | Pandinus sp. |
| Local Name / Commo | n Name | Common scorpion (बिच्छू) |
| Habit and Habitat | | In humid tropical lowland regions. |
| Description | | These are large sized. It shows gregarious behaviour & partly diurnal activity. They have a pair of pincers which are used for capturing prey. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year, breeding in summer season. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As a parasitic insect |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | More active during day time. |
| Community/ Knowle | dge Holder | Mr. Pankaj Kumar |

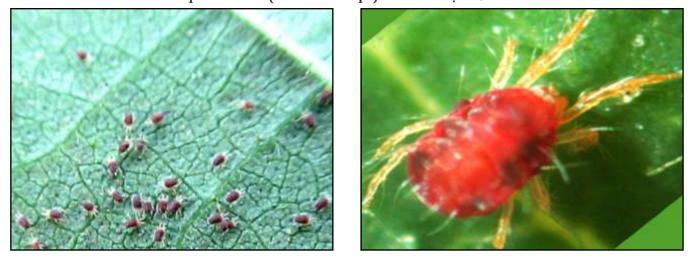
Rust mite (Aceria cajani) रस्ट माईट



Rust mite (Aceria cajani) रस्ट माईट

| Phylum | | Arthropoda |
|----------------------------------|--------------------|---|
| Class | | Insecta |
| Order | | Prostigmata |
| Genus and Specie | es (If known) | Aceria cajani |
| Local Name / Con | nmon Name | Rust mite (रस्ट माईट) |
| Habit and Habita | t | Plants |
| Description | | Fusiform shape and range in colour depending upon stager of life. They are 170 mm wide and are almost invisible to naked eye. |
| Mythological Sig | nificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | By spraying tetradifon, kelthane. |
| Other Details | | |
| Community/ Kno | wledge Holder | Mr. Pankaj Kumar |
| | | |

Arthropoda Spider mite (Tetranchus sp.) लाल मकड़ी दीमक



Spider mite (Tetranchus sp.) लाल मकड़ी दीमक

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Trombidiformes |
| Genus and Species (If known) | Tetranchus sp. |
| Local Name / Common Name | Spider mite (लाल मकड़ी दीमक) |
| Habit and Habitat | Flowers & ornamental plants |
| Description | Adults females are 1/50 inch long, reddish & more or less elliptical. Males are slightly smaller & wedge shaped. They have a black spot on either side of their colorless bodies. Adult female may live for upto 24 days & lay 200 egg. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Hot & dry weather. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Can be controlled by a number of predatory thrips that feed on these mites. |
| Other Details | By using sulphur. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Garden centipede or Pseudocentipede (Scutigera immaculata) कनखजूरा



Garden centipede or Pseudocentipede (Scutigera immaculata) कनखजूरा

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Symphyla |
| Order | |
| Genus and Species (If known) | Scutigera immaculate |
| Local Name / Common Name | Garden centipede or Pseudocentipede (कनखजूरा) |
| Habit and Habitat | In deep soil, under stones & decaying wood. |
| Description | Body is soft 2-10 mm long divided into head & trunk. Head has long segmented antennae. Trunk comprises of 15-24 segments. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Spring & autumn season |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | These are herbivores & detritus feeders. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |
| | |

Arthropoda (Telonomus remus) टीलोनोमस





(Telonomus remus) टीलोनोमस

| Phylum | | Arthropoda |
|------------------------------------|---------------|--|
| Class | | Insecta |
| Order | | Hymenoptera |
| Genus and Species | s (If known) | Telonomus remus |
| Local Name / Com | mon Name | Telonomus (टीलोनोमस) |
| Habit and Habitat | | Plants & some other arthropods |
| Description | | It has 2 larval instar in its developmental stages. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As biological control agent. |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Telanomus remus is a biocontrol agent as their eggs are parasitoid as pests. |
| Community/ Know | vledge Holder | Mr. Pankaj Kumar |

White grubs (Holotrichia serrata) व्हाईट ग्रब



White grubs (Holotrichia serrata) व्हाईट ग्रब

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Coleoptera |
| Genus and Species (If known) | Holotrichia serrata |
| Local Name / Common Name | Whitegrubs (व्हाईट ग्रब) |
| Habit and Habitat | As a pest on sugarcane. Found under soil & feed on the roots of plants. |
| Description | Holotrichia serrata is yellow colored 'C; shaped having last abdominal segment swollen & is dark colored. These are found close to the base of clump. Adults are dark brown in color. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | It can be controlled by mechanical means. By sparying carbaryl & fenitrothion. |
| Other Details | |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Carabid Beetle (Carabus olympiae) कैराबिड बीटल



Carabid Beetle (Carabus olympiae) कैराबिड बीटल

| Phylum | | Arthropoda |
|------------------------------------|---------------|--|
| Class | | Insecta |
| Order | | Coleoptera |
| Genus and Species | (If known) | Carabus olympiae |
| Local Name / Com | mon Name | Carabid Beetle (कैराबिड बीटल) |
| Habit and Habitat | | Believed to have originally been a forest dweller ranging from beech forest to open shrubland. |
| Description | | A large colourful beetle, carabus olympiae is unusual is being endemic to just one small area of Italian Alps. The body is rather long & flattened, with clearly differentiated head, thorax, abdomen. Long, slender legs & quite prominent mandibles & palps. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It generate electrical potential, it help to supply energy far digging. |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Carabus olympiae is still an attractive insect, with a dark purplish blue head & pronotum. |
| Community/ Know | vledge Holder | Mr. Pankaj Kumar |

Rice ear-culting (Mythimna separata) राइस ईयर कलटिंग



Rice ear- culting (Mythimna separata) राइस ईयर कलटिंग

| DI 1 | | |
|------------------------------------|----------------|---|
| Phylum | | Arthropoda |
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | (If known) | Mythimna separata |
| Local Name / Comm | non Name | Rice ear- culting caterpillar (राइस ईयर कलटिंग) |
| Habit and Habitat | | Agricultural plants like Zea mays, Sorghum bicolor & Oryza sativa. |
| Description | | The wingspan is 35-50 mm. Sexual dimorphism is not expressed. External wing margin blackened obliquely from top backward. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | January to April depending on the location. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Monitoring is possible with use of sex pheromone traps. |
| Associated Tradition | onal Knowledge | |
| Management mechanism | | Deep autumn ploughing, cultivation of resistant varieties, insecticide treatments of crops. |
| Other Details | | They also called as Northern armyworm. Oriental armyworm is used because of their habit to spread out in a line across a lawn or pasture. |
| Community/ Know | ledge Holder | Mr. Pankaj Kumar |

Common Emigrant or Lemon Emigrant (Catopsilia pomona) कॉमन इमीग्रन्ट



Common Emigrant or Lemon Emigrant (Catopsilia pomona) कॉमन इमीग्रन्ट

| Phylum | | Arthropoda |
|------------------------------------|--------------|---|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | s (If known) | Catopsilia pomona |
| Local Name / Con | nmon Name | Common Emigrant or Lemon Emigrant (कॉमन इमीग्रन्ट) |
| Habit and Habitat | | Gardens & forests |
| Description | | The upperside of the male is chalky-white. The female upperside is ground-colour varies as in the male. The caterpillar when fully grown produces 2 morphs. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Strongly migratory in habit. Seen flying in undulating 'strings' of a dozen or so. |
| Community/ Knowledge Holder | | Mr. Pankaj Kumar |

Pea pod borer (Etiella zinckenella) मटर का कीड़ा



Pea pod borer (Etiella zinckenella) मटर का कीड़ा

| Phylum | | Arthropoda |
|------------------------------------|---------------|--|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | s (If known) | Etiella zinckenella |
| Local Name / Com | mon Name | Legume Pod Moth, Pea Pod Borer (मटर का कीड़ा) |
| Habit and Habitat | | |
| Description | | Body length 8-11 mm. Wingspan 19-27 mm. Wings longer than abdomen, folding as roof. Life span of adult is 20 days. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | May-June |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Insecticide treatments soon before larva penetration into beans, use of resistant varities. |
| Other Details | | Larva overwinters with in a cocoon in soil at depth of 2-5 cm, pupates in spring. |
| Community/ Know | vledge Holder | Mr. Pankaj Kumar |

Arthropoda Ladybird (*Adonia variegata*) मोगरी



Ladybird (Adonia variegata) मोगरी

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Coleoptera |
| Genus and Species (If known) | Adonia variegata |
| Local Name / Common Name | Ladybird (मोगरी) |
| Habit and Habitat | Herbaceous & shrub layers on well drained soils. |
| Description | Leg is black colour. Pronotum white with black pattern. Basic colour is red. Size 4-5 mm. The adults grow upto 3-6 milimeters (0.12-0.24). |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | March through October |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | They mainly feed on Aphids. Smaller & more elongate. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Three- striped Lady beetle (Brumoids suturalis) थ्री स्ट्रिप्ड लेडी बीटल



Three- striped Lady beetle (Brumoids suturalis) थ्री स्ट्रिप्ड लेडी बीटल

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Coleoptera |
| Genus and Species (If known) | Brumoids suturalis |
| Local Name / Common Name | Three Stripped Lady Beetle (थ्री स्ट्रिप्ड लेडी बीटल) |
| Habit and Habitat | It is more polyphagous & largely predatory on aphids, whiteflies, scales, mites. |
| Description | Length 4.0 mm, width 2.7 mm. Form oval, dorsal convex head & pronotum orange yellow. Scutellum black. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Last visible abdominal segment with posterior margin emarginated in male & narrowly rounded in female. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

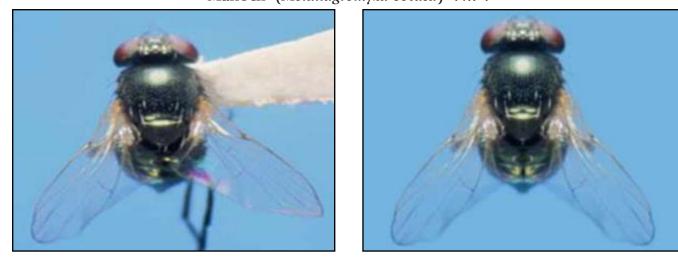
Chinese blister beetle (Mylabrus phalerata) चाइनीज ब्लिस्टर बीटल



Chinese blister beetle (Mylabrus phalerata) चाइनीज ब्लिस्टर बीटल

| Phylum | | Arthropoda |
|----------------------|-----------------|--|
| | | A |
| Class | | Insecta |
| Order | | Coleoptera |
| Genus and Species (| If known) | Mylabrus phalerata |
| Local Name / Comm | on Name | Spanish fly (चाइनीज ब्लिस्टर बीटल) |
| Habit and Habitat | | Dry & arid areas. |
| Description | | Mylabrus phalerata is a species of blister beetle belonging to the meloidae family. A fatality from cantharidin poisoning has been reported, where dried beetles had been used as an abortifacient. |
| Mythological Signif | icance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Summer & autumn. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Dried beetle had been used as an abortifacient. It's used in traditional Chinese medicine. |
| Associated Tradition | nal Knowledge | |
| Management mechanism | | It is contraindicated during pregnancy. |
| Other Details | | When applied to the skin, Mylaris may causes redness & blisters, therefore it should be taken with care. |
| Community/ Knowl | edge Holder | Mr. Pankaj Kumar |

Arthropoda Malloch (Melanagromyza obtusa) मैलोच



Malloch (Melanagromyza obtusa) मैलोच

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Diptera |
| Genus and Species (If known) | Melanagromyza obtusa |
| Local Name / Common Name | Pod fly, bean pod fly, pigeon pea pod fly. (मैलोच) |
| Habit and Habitat | It occur on groundnut tree, neem ttree, soyabean tomato & potato plant. |
| Description | In cases of attck by adult beetles the affected plants are defoliated. The Malloch feed on plant roots, causing yellowing. Large sized (723 mm). Dark brown, pronotum with or without setae on the puncture. Abdomen beelged ventrally & chest nut brown. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | 2 |
| Management mechanism | Various workers have reported that hand collection of beetles after emergence is one of the cheapest method. |
| Other Details | In case of attack by adult beetles the affected plants are defoliated. |
| Community/ Knowledge Holder | Mr. Pankaj Kumar |

Arthropoda Melon fly (*Dacus cucurbitae*) सोनमक्खी



Melon fly (Dacus cucurbitae) सोनमक्खी

| Phylum | | Arthropoda |
|------------------------------------|------------|--|
| Class | | Insecta |
| Order | | Diptera |
| Genus and Species | (If known) | Dacus cucurbitae |
| Local Name / Com | mon Name | Melon fly (सोनमक्खी) |
| Habit and Habitat | | They are major pest of beans, bitter melon, winter melon, eggplant, green beans, zucchini. |
| Description | | The adult melon fly is 6-2 mm in length. Its long third antennae segment, the reddish yellow dorsum of the thorax with light yellow markings, & yellowish head with black spots. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Distruction of all infested & unmarketable fruit. |
| Other Details | | Eggs are generally laid in young fruit. |
| Community / Knowledge Holder | | Mr. Zameel Ahmed |
| | | |

Diamond back moth (Plutella xylostella) डायमण्ड ब्लेक मोथ



Diamond back moth (Plutella xylostella) डायमण्ड ब्लेक मोथ

| Phylum | | Arthropoda |
|------------------------------------|---------------|--|
| Class | | Insecta |
| | | |
| Order | | Lepidoptera |
| Genus and Species | s (If known) | Plutella xylostella |
| Local Name / Com | mon Name | Cabbage moth (डायमण्ड ब्लेक मोथ) |
| Habit and Habitat | | European moth believed to ariginate in Mediterranean region, cruciferous crops, cabbage, mustard, radish turnip. |
| Description | | Wingspan of adult about 15 mm & body length of 6 mm. Forewings are narrow, brownish-gray & lighter along anterior margin, with the dark speckles. Eggs are oval & flattened (0.44 mm long & 0.26 mm wide) which is yellow or pale green. Larvae have a few short black hairs. Purpae are about 8 mm long & are wrapped in a loose silk cocoon. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Summer |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Wing winter cress as a buffer plant around agricultural fields. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Use of chemical insecticides. |
| Other Details | | Moths are active at night but they also fly in the afternoon during mass outbreaks. |
| Community / Kno | wledge Holder | Mr. Zameel Ahmed |

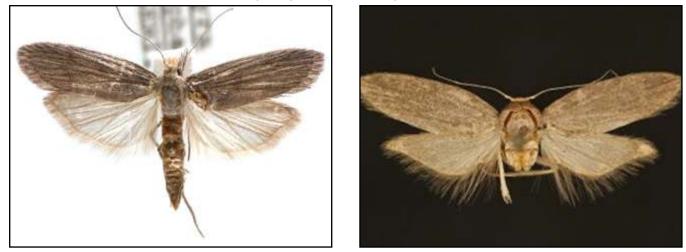
Arthropoda Cotton leaf roller (Sylepta derogata) बन की सुरही



Cotton leaf roller (Sylepta derogata) बन की सुरही

| Phylum | | Arthropoda |
|----------------------|-------------------|--|
| | | * |
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | (If known) | Sylepta derogata |
| Local Name / Com | mon Name | Ban ki Surhi (बन की सुरही) |
| Habit and Habitat | | Cotton, Lady- finger, hollyhock. |
| Description | | The moth is of a whitish colour, with a faint yellow tinge. The wings with manyfine dark lines, an irregular pattern. It is less than 2 cm in length & 3 cm across when the wings are open. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | October to November |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Tradition | onal Knowledge | |
| Management mechanism | | Regular hand picking of rolled cotton leaves. Catterpillars should be killed in kerosinised water. |
| Other Details | | The catterpillars becomes full grown in about twoweeks. The pest is active from March to November after which it hibernates. |
| Community / Know | wledge Holder | Mr. Ganesh Chandra |

Rice moth (Corcyra cephalonica) चावल का कीड़ा



Rice moth (Corcyra cephalonica) चावल का कीड़ा

| Phylum | | Arthropoda |
|------------------------------------|---------------|---|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | s (If known) | Corcyra cephalonica |
| Local Name / Com | mon Name | Rice moth (चावल का कीड़ा) |
| Habit and Habitat | | In cereals (rice) |
| Description | | Rice moth is a pyraloid moth. The only living species of the genus corcyra. Its caterpillars feed on dry plantstuffs such as seeds, cereals, food are flour & dried fruits. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | July-August |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Insecticides are used. |
| Other Details | | Rice moth is a significant pest. |
| Community / Know | wledge Holder | Mr. Ganesh Chandra |
| | | |

Snout moth (Euzophora perticella) रनाउट मॉथ



Snout moth (Euzophora perticella) रनाउट मॉथ

| Phylum | | Arthropoda |
|------------------------------------|---------------|---|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | s (If known) | Euzophora perticella |
| Local Name / Com | mon Name | Snout moth (स्नाउट मॉथ) |
| Habit and Habitat | | Pest on solanum melongena (Solanaceae) |
| Description | | Euzopher a pericella is a species of snout moths in the genus euzophera. Their larvae are a pest on Solanum melongena (Solanaceae). |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | This species is known from India & Sri Lanka. |
| Community / Kno | wledge Holder | Mr. Ganesh Chandra |
| | | |

Orange shoot borer (Inderbella tetaonis) संतरे का कीड़ा



Orange shoot borer (Inderbella tetaonis) संतरे का कीड़ा

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Inderbella tetaonis |
| Local Name / Common Name | Orange shoot borer (संतरे का कीड़ा) |
| Habit and Habitat | It can be seen at the junction of two branches hanging on bark of Infested trees. |
| Description | Adult of insect are pale brown with head & thorax dark brown, forewing pale with numerous dark brown band. Caterpillar are about 50-60 mm long. Pupae are 16-2 0 mm long stout, reddish-brown with two rows of spines on each abdominal segment. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | April- December |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Avoid overcrowding of trees & branches. |
| Other Details | Female lay about 20000 egg in cluster, only 1 generation in a year. |
| Community / Knowledge Holder | Mr. Ganesh Chandra |

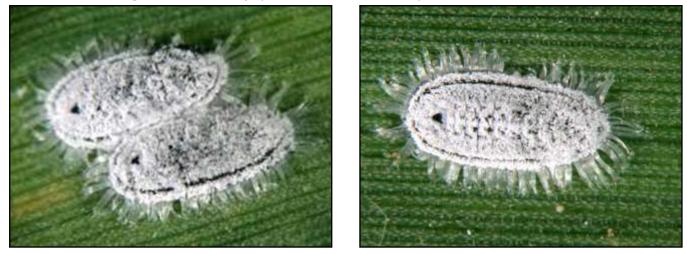
Arthropoda Moth (*Antigastra catalaunalis*) शलभ



Moth (Antigastra catalaunalis) शलभ

| Phylum | | Arthropoda |
|------------------------------------|------------|---|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | (If known) | Antigastra catalaunalis |
| Local Name / Com | mon Name | Moth (शलभ) |
| Habit and Habitat | | A catalaunalis is a species of moth of family crambidae. |
| Description | | It is endemic to tropical & subtropical areas but is also found in other areas due to its migratory nature. The wingspan is 19-22 mm. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Insecticides are used to control. |
| Other Details | | The larvae feed on Antirrhinum, linaria, vulgaris sesame & Scrophulariaceae & pedaliaceae species. |
| Community/KnowledgeHolder | | Mr. Ganesh Chandra |

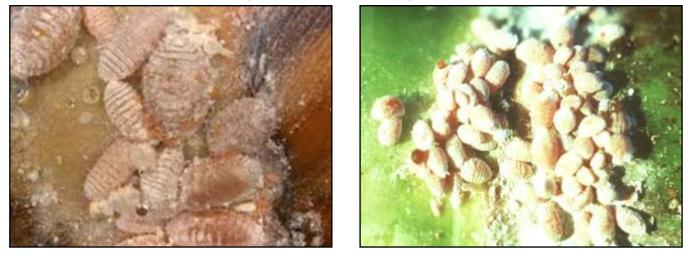
Sugarcane white fly (Aleurolobus barodensis) गन्ने की सफेद मक्खी



Sugarcane white fly (Aleurolobus barodensis) गन्ने की सफेद मक्खी

| Dhylum | Arthropoda |
|------------------------------------|---|
| Phylum | Arthropoda |
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Aleurolobus barodensis |
| Local Name / Common Name | Sugarcane white fly (गन्ने की सफेद मक्खी) |
| Habit and Habitat | Sugarcane but feeds also on wheat barley. |
| Description | Adult are very minute fragile insect. 0.32 cm long with pale yellow body. Blackish eyes & two pair of whitish wings. Life-cycle completed about 25 days. Number of egg laid 3 to 51. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | November to March |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Harvesting of the invested crop, Ratoon crops should be given proper manuring. |
| Other Details | The female is larger & more robust than male & sluggish in her movement. |
| Community / Knowledge Holder | Mr. Ganesh Chandra |

Kockerell (Saccharicoccus sacchari) गन्ने का कीड़ा



Kockerell (Saccharicoccus sacchari) गन्ने का कीड़ा

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Saccharicoccus sacchari |
| Local Name / Common Name | Sugarcane mealybug (गन्ने का कीड़ा) |
| Habit and Habitat | Several graminae, especially sorghum & phragmites, Saccnarum afficinarum. |
| Description | Body of female is 4-5 mm long, pink the antennae with seven segments. There are two ostiales & the circulus is large medially considered (drumbdell shaped). Cerarrii are present on posterior segment. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | It transmit bug virus. |
| Associated Traditional Knowledge | |
| Management mechanism | The encyrtid endoparasitoid anagyries kills 14-21 % of pest in autumn. |
| Other Details | |
| Community / Knowledge Holder | Mr. Ganesh Chandra |

Mango leaf hopper (Amritodus atkinsoni) आम की चनंपा



Mango leaf hopper (Amritodus atkinsoni) आम की चनंपा

| Phylum | | Arthropoda |
|------------------------------------|------|--|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species (If kno | wn) | Amritodus atkinsoni |
| Local Name / Common Na | me | Mango leaf hopper (आम की चनंपा) |
| Habit and Habitat | | Found on ficuscarica, mango, uriman. |
| Description | | Nymphs & adults suck the phloem sap from inflorescence & leaves of host plants. This affects photosynthesis. Egg lay on leaves & flower stems. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: Past | - | In abundance |
| Pres | ent- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Several fungal pathogens may prove useful for biological control. |
| Other Details | | Flower losses of 20-100 % have been recorded. |
| Community/KnowledgeHolder | | Mr. Ganesh Chandra |

Arthropoda Scarab beetle (Heliocorpris) स्कार्ब बीटल



Scarab beetle (Heliocorpris) स्कार्ब बीटल

| Phylum | | Arthropoda |
|------------------------------------|---------------|---|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Speci | es (If known) | Heliocorpris spp. |
| Local Name / Cor | nmon Name | Scarab beetle (स्कार्ब बीटल) |
| Habit and Habita | it | |
| Description | | Heliocorpris is a genus of scarabaeidae or scarab beetles in the superfamily scarabaeoidea. They are found in Africa. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Field monitoring. |
| Other Details | | |
| Community / Knowledge Holder | | Mr. Ganesh Chandra |
| | | |

Arthropoda (Dasyneura lini) डेसीन्यूरा

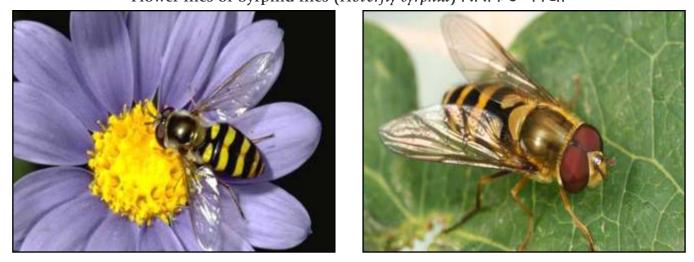




(Dasyneura lini) डेसीन्यूरा

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Diptera |
| Genus and Species (If known) | Dasyneura lini |
| Local Name / Common Name | Dasyneura (डेसीन्यूरा) |
| Habit and Habitat | Carthamus tinctorius (safflower, Linum usitatissimum flax) |
| Description | Female ovipositor retractable with using terminal cercifused into a single median lobe. Female antennae formula 2+9-2+18 with short neck. Female antennae formula 2+11-2+18 with long neck & simple circumfila. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Integration of potential methods by resistant verieties. Mechanical & chemical method in the form of IPM modules which may ecofriendly & co-effective to control pest. |
| Other Details | Female with elongate- cylindrical with short neck. |
| Community / Knowledge Holder | Mr. Ganesh Chandra |

Arthropoda Flower flies or Syrphid flies (Hoverfly syrphid) सिरफिड मक्खी



Flower flies or Syrphid flies (Hoverfly syrphid) सिरफिड मक्खी

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Diptera |
| Genus and Species (If known) | Hoverfly syrphid |
| Local Name / Common Name | Flower flies (सिरफिड मक्खी) |
| Habit and Habitat | Found in stagnant water. Found in bumble bee nests found in ant or termite nests & decomposing vegetation. |
| Description | They are small, elongate & slender, single functional pair of wings. Brightly coloured with spots, stripes & bands of yellow or brown covering their bodies. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Insecticides used |
| Other Details | They exihibits Batesion mimicry. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

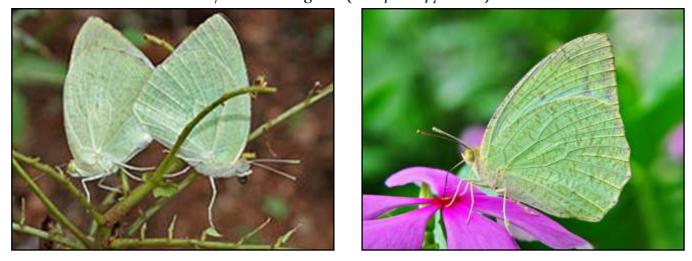
Southern green stink bug (Nezara viridula) हरा बग



Southern green stink bug (Nezara viridula) हरा बग

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Hemiptera |
| Genus and Species (If known) | Nezara viridula |
| Local Name / Common Name | Southern green stink bug/green vegetable bug (हरा बग) |
| Habit and Habitat | Legumes, beans, soyabeans. |
| Description | Body length of male 12.1 mm (0.48 in) while female are bigger 13.1 mm (0.52 in). body is bright green & shield shaped & eyes are usually raddish, but they may also be black. |
| Mythological Significance (if any) | In Indian mythology it is a symbol of softness, transformation and time. |
| I.U.C.N. Status | |
| Season when seen | Winter |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | Crop rotation. |
| Other Details | Several distinct marphs can be distinguished by the pattern of their exoskeleton colouration. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

Arthropoda Motted/African emigrant (Catopsilla pyranthe) पतंगा



Motted/African emigrant (Catopsilla pyranthe) पतंगा

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Catopsilla pyranthe |
| Local Name / Common Name | Motted/African emigrant (पतंगा) |
| Habit and Habitat | Found in most habitats; avoids hot & dry habitats. |
| Description | Wingspan 55-80 mm. Black margin at t h e a p e x o f forewing & the basses of all wings are yellow. Male having black margin of forewing is narrow. Female having black margin of forewing is broad. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | During monsoon months. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Larvae green with a lateral, white spiral line bounded by a black line above & a green line below. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

Moth (Exelastis atomosa) पतंगा



Moth (Exelastis atomosa) पतंगा

| Phylum | | Arthropoda |
|------------------------------------|--------------|---|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Specie | s (If known) | Exelastis atomosa |
| Local Name / Com | imon Name | Moth (पतंगा) |
| Habit and Habitat | t | |
| Description | | Adults are small with yellowish brown wings. The forewings are cut into two plumes & hind wings into three. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | The larvae are a serious pest of pigeon pea. They damage seeds as well as cause flowers, buds & pods to drop. |
| Community / Knowledge Holder | | Mr. Zameel Ahmed |
| | | |

Arthropoda Orange Oakleaf (*Kallima* spp.) कालिमा



Orange Oakleaf (Kallima spp.) कालिमा

| Phylum | | Arthropoda |
|------------------------------------|--------------|--|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | s (If known) | Kallima spp. |
| Local Name / Com | mon Name | Mud-puddle / Orange Oakleaf (कालिमा) |
| Habit and Habitat | | Orange oakleaf is a powerful flier & usually flies in dense forest with good rainfall, attached to tree sap & over ripe fruit. |
| Description | | Wingspan of butterfly ranges from 85-110 mm (3.3-4.3 inch) the butterfly wing shaped like leaf consist of irregular pattern & striation in many shades of biscuit, buff, brown, yellow & black. Hind wing is more uniformly blue but diffused with brown patches along the termen. Female is larger than male. |
| Mythological Significance (if any) | | In Indian mythology it is a symbol of softness, transformation and time. |
| I.U.C.N. Status | | |
| Season when seen | | Summer season. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Used as pollinator. Can be used to enhance the beauty of nature. |
| Associated Traditional Knowledge | | The soil from spots selected by butterfly is used as traditional medicine both internally and externally. |
| Management mechanism | | Butterfly parks should be established |
| Other Details | | The butterfly exhibits polyphenism |
| Community / Knowledge Holder | | Mr. Zameel Ahmed |

Red Pumkin Beetles/Torai Ka Kira (Raphidopalpa foveicollis) तोरई का कीड़ा



Red Pumkin Beetles/Torai Ka Kira (Raphidopalpa foveicollis) तोरई का कीड़ा

| _1 1 | | |
|------------------------------------|--------------|--|
| Phylum | | Arthropoda |
| Class | | Insecta |
| Order | | Coleoptera |
| Genus and Species | s (If known) | Raphidopalpa foveicollis |
| Local Name / Com | mon Name | Torai Ka Kira & Pumkin Beetles (तोरई का कीड़ा) |
| Habit and Habitat | | Cucurbitaceous plants e.g. cucumber, melon, torai, tinda, louki. |
| Description | | The adult beetles measures 6.5 to 7 mm. Upper surface of the body is brilliant orange, but abdomen is entirely black. Each female can lay about 300 eggs. The eggs hatch in about 7-15 days. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | During April to end of September or middle of October. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Collection of the beetles by means of hand, nets & destroying them in kerosinised water. |
| Other Details | | The total life- cycle occupies 30-35 days & there are 5 generations during the year. |
| Community / Knowledge Holder | | Mr. Zameel Ahmed |

Arthropoda

Indian bee (Apis cerena indica) मधुमक्खी



Indian bee (Apis cerena indica) मधुमक्खी

| Phylum | | Arthropoda |
|------------------------------------|----------------|---|
| Class | | Insecta |
| Order | | Hymenoptera |
| Genus and Species | (If known) | Apis cerena indica |
| Local Name / Com | mon Name | Indian Bee (मधुमक्खी) |
| Habit and Habitat | | It establishes itself in closed covered places such as hollowed trees trunks, burrows in ground, boxes of pots etc. |
| Description | | The bee is smaller in size than rock bee. It can be lived artificially. The workers are bigger in size & darker in colour. Bees of hill type are shy but tritables. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Honey may be annually obtained from colony. |
| Associated Tradition | onal Knowledge | |
| Management mechanism | | Broad rearing is restricted to the central comb & honey pollen are stored in ones. |
| Other Details | | It is fairly good, good honey gathers on an average 9-10 ponds of honey may be obtained annually from colony. |
| Community / Knowledge Holder | | Mr. Zameel Ahmed |



FORMAT- XVII Moliuscs



Molluscs Pila / Apple Snail / Ghonga (*Pila globosa*) घोंघा



Pila / Apple Snail / Ghonga (Pila globosa) घोंघा

| Phylum | Mollusca |
|------------------------------------|--|
| Class | Gastropoda |
| Order | Pectinobranchiata |
| Genus and Species (If known) | Pila globosa |
| Local Name/Common Name | Pila / Apple Snail / Ghonga (घोंघा) |
| Habit & Habitat | It is a fresh water gastropod abundantly found in ponds, tanks, rice fields. |
| Description | It is also called as fresh water apple snail. Body covered with thick yellow colored or brown globular univalve shell, comprising of body whorl. Each division is separated by sutures. Mouth of the shell is wide and covered by operculum. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | In rainy season |
| Local Status: Past – | In abundance |
| Present - | In abundance |
| Uses | It can be a good source of food for birds so helps in maintaining food chain. It can be used as good laboratory specimen in zoology. |
| Associated Traditional Knowledge | The shell is used as medicine for weakness. |
| Management mechanism | |
| Other Details | Has great medicinal, experimental value. |
| Communiy/Knowledge Holder | Mr. Kamalkant Katiyar |

Molluscs Garden Slug (*Laevicaulis*) सीपिया



Garden Slug (Laevicaulis) सीपिया

| Phylum | | Mollusca |
|----------------------------------|-------------------|--|
| Class | | Gastropoda |
| Order | | Eupulmonata |
| Genus and Species | s (If known) | Laevicaulis |
| Local Name/Com | non Name | Garden Slug (सीपिया) |
| Habit & Habitat | | Garden & agricultural fields. |
| Description | | Tropical land slugs, terrestrial pulmonate gastropod mollusk. Elongated body with two small nuchal lobes at the anterior of the body |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | In rainy season |
| Local Status: | Past – | In abundance |
| | Present - | In abundance |
| Uses | | It helps in plouging the soil. |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | |
| Communiy/Know | ledge Holder | Mr. Kamalkant Katiyar |
| | | |

Molluscs

Slug (Acochlidium) स्लग



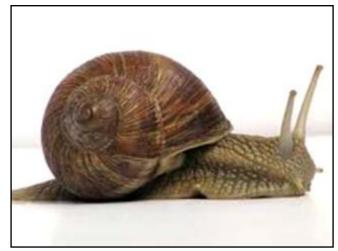
Slug (Acochlidium) स्लग

| Phylum | Mollusca |
|------------------------------------|--|
| Class | Gastropoda |
| Order | Stylommatophora |
| Genus and Species (If known) | Acochlidium |
| Local Name / Common Name | Slug (स्लग) |
| Habit & Habitat | Live in land & in saltwater. |
| Description | Shell-less terrestrial gastropod mollusc. The shell is coiled. Two pair of feelers or tentacles on their head. Mucus secreted by foot contains fibres that prevent the slug from slipping down vertical surfaces. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | In rainy season |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Can be used as food. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | They can be serious pest of agriculture & horticulture. |
| Communiy/Knowledge Holder | Mr. Kamalkant Katiyar |

Molluscs

(Helix) घोंघा





(Helix) घोंघा

| Phylum | | Mollusca |
|------------------------------------|----------------|---|
| Class | | Gastropoda |
| Order | | Stylommatophora |
| Genus and Species | (If known) | (Helix) |
| Local Name/Comr | non Name | Ghongha (घोंघा) |
| Habit and Habitat | | Native to Europe & the regions around the Mediterranean Sea. |
| Description | | It is a genus of large air breathing land snails, terrestrial pulmonate gastropod molluscs. The mouth has a tongue called a radula. The head & food region can be observed when the snails are fully extended. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | During rainy season. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Can be used as edible snails. The process of snails farming is called hericulture. They are rich in nutrients like fat, calcium, Vit-B1 & E. |
| Associated Tradition | onal Knowledge | |
| Management mechanism | | |
| Other Details | | Snails in this genus create & use love darts during mating. They also have a specialized crop. They have developed a simple lung for respiration. |
| Communiy/Knowl | edge Holder | Mr. Kamalkant Katiyar |



Giant African Snail (Achatina fulica) एकैटिना फ्यूलिका

| Phylum | | Mollusca |
|------------------------------------|-----------------|--|
| Class | | Gastropoda |
| Order | | · · · · · |
| Genus and Specie | s (If known) | Achatina fulica |
| Local Name Com | non Name | Giant African Snail or Giant African Land Snail (एकैटिना फ्यूलिका) |
| Habit and Habita | t | Humid tropics agricultural areas, coastland, natural forest, planted forests. |
| Description | | The shell has a conical shape, being about twice as high as it is broad. Shell colouration is highly variable & dependent on diet. Hermaphrodite. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seer | ı | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It is used by some practitioners of for religious purposes in Brazil as an offering to the diety. They are also edible if cooked properly. |
| Associated Tradit | ional Knowledge | |
| Management mec | hanism | |
| Other Details | | It is a Macrophytophagous herbivore; it eats a wide range of plant material, fruits & vegetables. It is a pest of agriculture & households with the ability to transmit both human & plant pathogens. |
| Communiy/Know | ledge Holder | Mr. Kamalkant Katiyar |

Molluscs

(Macrochlamys indica) घोंघा



(Macrochlamys indica) घोंघा

| Phylum | | Mollusca |
|--------------------|-------------------|--|
| Class | | Gastropoda |
| Order | | |
| Genus and Species | s (If known) | Macrochlamys indica |
| Local Name/Com | mon Name | Ghongha (घोंघा) |
| Habit and Habitat | | Land, terrestrial. |
| Description | | The shell is perforate, depressed, smooth, polished throughout and translucent. The suture is slightly impressed. The animal is purplish grey not black and elongate. Basal side gives off a short tongue like process. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | Less abundant |
| Uses | | Species are edible |
| Associated Traditi | onal Knowledge | |
| Management mecl | hanism | |
| Other Details | | It is considered to represent a potentially serious threat as a pest. It could negatively affect agriculture, natural ecosystem human health or commerce. |
| Communiy/Know | ledge Holder | Mr. Kamalkant Katiyar |

Molluscs

Great Pond Snail (Lymnaea stagnails) तालाबी घोंघा



Great Pond Snail (Lymnaea stagnails) तालाबी घोंघा

| Dhylum | | Mollusca |
|------------------------------------|----------------|--|
| Phylum | | |
| Class | | Gastropoda |
| Order | | |
| Genus and Species | s (If known) | Lymnaea stagnails |
| Local Name/Com | non Name | Great Pond Snail (तालाबी घोंघा) |
| Habit and Habitat | | Aquatic, found in fresh water and, stagnant water. |
| Description | | The upper whorls are pointed, the last whorl is suddenly inflated, shell is brown in colour. It has simple nervous system consisting of a total around 20,000 neurons. Hermaphroditic. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | It is widely used for the study of learning, memory & neurobiology. |
| Associated Traditi | onal Knowledge | |
| Management mechanism | | |
| Other Details | | It is an intermediate host for Diplostomum pseudospathaceum. In it the umbilicus is closed. It is large air- breathing freshwater snail. |
| Communiy/Know | ledge Holder | Mr. Kamalkant Katiyar |

Molluscs Ram's Horn Snail (*Planorbis*) घोंघा



Ram's Horn Snail (Planorbis) घोंघा

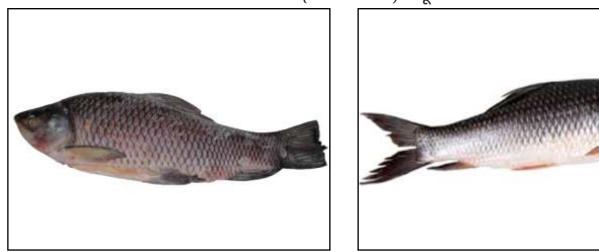
| Phylum | | Mollusca |
|------------------------------------|----------------|---|
| Class | | Gastropoda |
| Order | | Hydrophila |
| Genus and Species | (If known) | Planorbis |
| Local Name/Comm | ion Name | Ram's Horn Snail (घोंघा) |
| Habit and Habitat | | Freshwater, aquatic. |
| Description | | Shells are flat coiled & sinistral. It is known from the Jurassic to the recent periods. The width of the shell is 15-20 mm. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditio | onal Knowledge | |
| Management mech | anism | |
| Other Details | | It shows tremendous variety of shapes, based primarily upon the logarithmic spiral. They can coil flatly in one plane. It become globose with whorls and increase rapidly in size. |
| Communiy/Knowle | edge Holder | Mr. Ganesh Chandra |



FORMAT- XVIII Pisces



Pisces Rohu (Labeo rohita) रोहू



Rohu (Labeorohita) रोहू

| Phylum | Chordata |
|------------------------------------|---|
| Class | Teleostomi |
| Order | Clupeiformes |
| Genus and Species (If known) | Labeo rohita |
| Local Name / Common Name | Rohu (रोहू) |
| Habit and Habitat | Found all over Northern & Central India. Now found in Godawari& Krishna rivers. |
| Description | Body is elongated, rounded abdomen upto 1 m in length. Brownish grey to black above in colour. A peculiar weberian apparatus connecting the ear with air bladder is present. Body is covered with scales. Scale are large, arranged to reddish in colour in the centre. |
| Mythological Significance (if any) | Believed that it is symbol of good luck |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout year |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | It is economically important due to its food value.Relished very much in food. Source of cod liver oil |
| Associated Traditional Knowledge | Some fishes may be used for preparation of medicines. |
| Management mechanism | Induced breeding programmes should be enhanced in our country. |
| Other Details | It is the most famous carp. As it belongs to Gnathostomata so jaws & paired appendages are present. |
| Community / Knowledge Holder | Ms. SheelaKumari |

Pisces Singhi (Heteropneustes fossilis) सिंघी

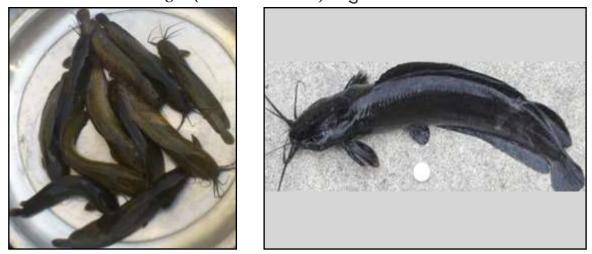




Singhi (Heteropneustes fossilis) सिंघी

| Phylum | Chordata |
|------------------------------------|--|
| Class | Teleostomi |
| Order | Cypriniformes |
| Genus and Species (If known) | Heteropneustes fossilis |
| Local Name / Common Name | Singhi (सिंघी) |
| Habit and Habitat | Found in freshwaters. |
| Description | Body is elongated, laterally compressed, about 30 cm in length. Long Barbles are present (4 pairs). Body is naked (without scales). There is gill opening. |
| Mythological Significance (if any) | Symbol of good luck. |
| I.U.C.N. Status | Least concern. |
| Season when seen | Throughout the year |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | Edible fish & source of cod liver oil |
| Associated Traditional Knowledge | Can be used in preparation of medicines. |
| Management mechanism | Induced breeding programmes should be promoted. |
| Other Details | Accessory breathing organs are present. |
| Community / Knowledge Holder | Ms. Sheela Kumari |

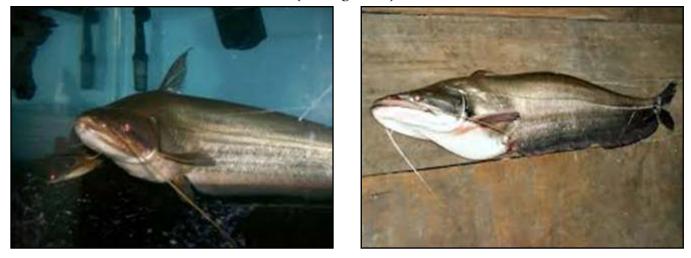
Pisces Mangur (Clarias batrachus) मांगुर



Mangur (Clarias batrachus) मांगुर

| Phylum | | Chordata |
|----------------------|------------------|---|
| Class | | Teleostomi |
| Order | | Cypriniformes |
| Genus and Species | (If known) | Clarias batrachus |
| Local Name / Comm | ion Name | Mangur (मांगुर) |
| | | Habit and HabitatOccurs in fresh water & brackish waters. |
| Description | | Body is elongated &scaleless, upto 45 cm in length. General colour of body is uniform brown or greyish black. Head depressed with top & sides covered with osseus plates 4 pair sensory barbles are present. |
| Mythological Signif | ficance (if any) | Symbol of good luck |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: | Past – | Commonly found |
| | Present – | PresentIn abundance |
| Uses | | It is highly nourishing & esteemed as food& source of cod liver oil. |
| Associated Traditio | nal Knowledge | Medicinal importance |
| Management mechanism | | Same as before |
| Other Details | | Accessory respiratory organs are branched tree like, especially designed to take in oxygen from the air. Also used in laboratories for experimental purposes. |
| Community / Knowl | edge Holder | Ms. Sheela Kumari |

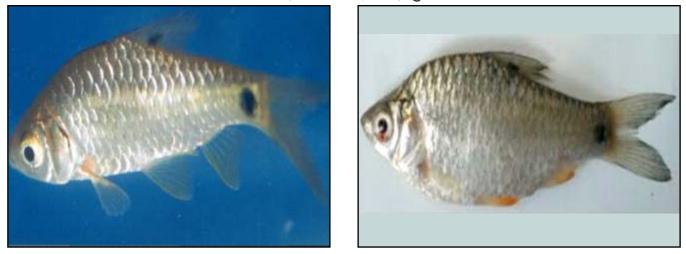
Pisces Lachi (*Wallago attu*) लच्छी



Lachi (Wallago attu) लच्छी

| Phylum | | Chordata |
|------------------------------------|----------------|--|
| Class | | Teleostomi |
| Order | | Siluriformes |
| Genus and Species | (If known) | Wallago attu |
| Local Name / Com | mon Name | Lachi (लच्छी) |
| Habit and Habitat | | It is found in large rivers and lakes in much of the Indian Subcontinent and in parts of Southeast Asia. |
| Description | | The species can reach 2.4 m (8 feet) total length. Itis common to find huge frogs and fishes inside its stomach, when cut open for cooking. |
| Mythological Significance (if any) | | It was a common story amongst local Iban native of Sarawak that they speared several fishes weighing more than 50 kg each. |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | Experimental use, eaten as food and source of cod liver oil, medicinal importance |
| Associated Tradition | onal Knowledge | |
| Management mech | anism | Predacious / feeder young crops. |
| Other Details | | Just like salmon, these fish do their annual upstream journey to lay their eggs during the monsoon season before returning to the deeper part of the river for the rest of the year. |
| Community / Know | wledge Holder | Ms. SheelaKumari |

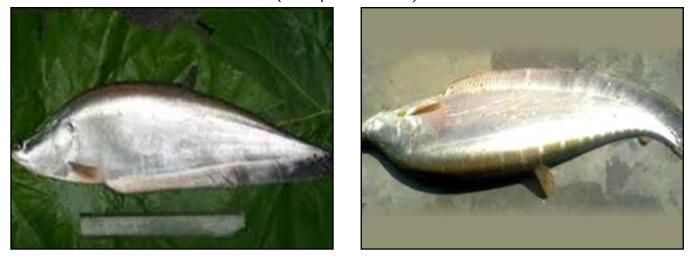
Pisces Puntius (Puntius sophore) पुंटीयस



Puntius (Puntius sophore) पुंटीयस

| Phylum | Chordata |
|------------------------------------|---|
| Class | Actinopterygii |
| Order | Cyprinifornmes |
| Genus and Species (If known) | Puntius sophore |
| Local Name / Common Name | Puntius (पुंटीयस) |
| Habit and Habitat | Inhabitants of a warm water aquarium. |
| Description | The maximum size for an adult of this genus is less than 25 cm (9.8 in), typically 7–15 cm (2.8–5.9 in), and many species only achieve around 5 cm (2.0 in) adult length. They resemble miniature carp and are often brightly coloured or patterned. These fishes are omnivorous. |
| Mythological Significance (if any) | Symbol of good luck |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses | Food, medicine and cod liver oil |
| Associated Traditional Knowledge | As a medicine in Tamil Nadu |
| Management mechanism | Fish breeding programmes should be encouraged. |
| Other Details | Breeding is by egg scattering and takes place close to the bottom, near or within areas of dense plant growth. They do not show parental care, and adults may eat the young. |
| Community / Knowledge Holder | Ms. Sheela Kumari |

Pisces Chital (Nototpterus chitala) चीतल



Chital (Nototpterus chitala) चीतल

| Phylum | Chordata |
|------------------------------------|--|
| Class | Teleostomi |
| Order | Artiodactyla |
| Genus and Species (If known) | Nototpterus chitala |
| Local Name / Common Name | Chital (चीतल) |
| Habit and Habitat | Lives in marshes & lakes of fresh water & brackish water.Notopteruschitala exclusively found in fresh waters of India. |
| Description | Body is strongly compressed & covered with minute scales. It measuredupto a metre in length. Colour is coppery brown or greyish along the back with 15 or 16 silvery transverse bars. It is carnivorous. Food chiefly comprises worms & insects. |
| Mythological Significance (if any) | Symbol of good luck. |
| I.U.C.N. Status | Near threatened in I.U.C.N status. |
| Season when seen | Breeding season |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | It is commercially important as fish food. It's flesh is said to be uncommonly rich & well flavoured.Source of cod liver oil. |
| Associated Traditional Knowledge | It has medicinal significance. |
| Management mechanism | Fish breeding programmes should be encouraged. |
| Other Details | Musciferous channels on the head are well developed. |
| Community / Knowledge Holder | Mr. Avinash Dohrey |

Pisces Mystus (Mystus singhala) मिस्टस



Mystus (Mystus singhala) मिस्टस

| Phylum | Chordata |
|------------------------------------|---|
| Class | Teleostomi |
| Order | Cypriniformes |
| Genus and Species (If known) | Mystus singhala |
| Local Name / Common Name | Mystus (मिस्टस) |
| Habit and Habitat | Widely distributed in India found in river waters. |
| Description | Body is elongated, measuring 1m in length. The colour is brownish above with silvery sides. The snout is distinctly long. Barbles 8, 2 nasal, 2 maxcilary & 4 mandibular. |
| Mythological Significance (if any) | Symbol of good luck. |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Employed as food by the poor natives and source of cod liver oil |
| Associated Traditional Knowledge | Same as before. |
| Management mechanism | Fish breeding programmes should be encouraged. |
| Other Details | It is predatory in habit, attacks small carps, teleostomi, teleosts & prawns. Pectoral fin with a strong spine is present. |
| Community / Knowledge Holder | Mr. Avinash Dohrey |

Pisces Catla catla *(Katla)* কলো–কলো



Catla catla (Katla) कत्ला—कत्ला

| Phylum | | Chordata |
|------------------------------------|------------|---|
| Class | | Teleostomi |
| Order | | Cypriniformes |
| Genus and Species | (If known) | Catla |
| Local Name / Comm | non Name | Katla (कत्ला—कत्ला) |
| Habit and Habitat | | Found throughout India. |
| Description | | Body elongated, broad & stout, measuring more than a metre in length. Colour blackish grey above & silvery on the sides. Scales are pink or coppery in centre on dorsal side & whitish below. Air bladder is present which is usually large & divided into anterior & posterior part. |
| Mythological Significance (if any) | | Symbol of good luck |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Important as a food fish and medicines |
| Associated Traditional Knowledge | | Medicinal importance |
| Management mechanism | | Induced breeding programme should be promoted. |
| Other Details | | Largest Indian carp. Mouth very wide with rounded lips. |
| Community / Knowledge Holder | | Mr. Adarsh Dubey |

Pisces Common Carp (*Cyprinus carpio*) कॉमन कार्प



Common Carp (Cyprinus carpio) कॉमन कार्प

| Phylum | | Chordata |
|----------------------|-------------------|---|
| Class | | Actinopterygii |
| Order | | Cypriniformes |
| Genus and Species | s (If known) | Cyprinus carpio |
| Local Name / Com | mon Name | CommonCarp (कॉमन कार्प) |
| Habit and Habitat | | Widespread freshwater in lakes & lane rivers. |
| Description | | Torpedo shaped, golden yellow in colour. Average size is 40-80 cm. 2 pairs of barbells & a mesh like scale pattern. It is omnivorous fish. It is considered as very destructive invasive species. |
| Mythological Sign | ificance (if any) | Symbol of good luck |
| I.U.C.N. Status | | Vulnerable species. |
| Season when seen | | Although spawn in the spring but can spawn multiple times in a season. |
| Local Status: | Past- | Not present in past. |
| | Present- | Have been introduced in present. |
| Uses | | Used as food. Now considered as pest due to their ability to out-complete native fish stocks. |
| Associated Traditi | onal Knowledge | Traditional importance as thick soup on Christmas Eve in foreign countries. |
| Management mechanism | | In commercial operation spawning can be stimulated using a process of hypophysation where lyophilized pituitary exract is injected into the fish. |
| Other Details | | Very destructive Invasive species. Being included in the list of world's 100 worst invasive fish. |
| Community / Know | wledge Holder | Mr. Adarsh Dubey |

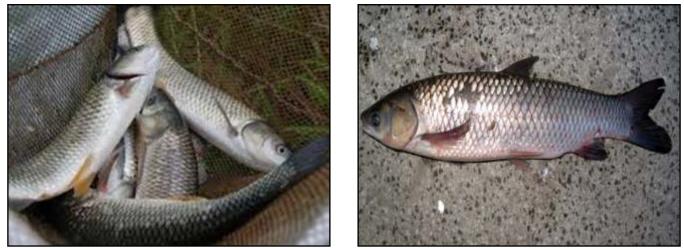
Pisces Silver Carp (Hypopthalmichthys molitrix) सिल्वर कार्प



Silver Carp (Hypopthalmichthys molitrix) सिल्वर कार्प

| Phylum | Chordata |
|------------------------------------|---|
| Class | Actinopterygiri |
| Order | Cypriniformes |
| Genus and Species (If known) | Hypopthalmichthys molitrix |
| Local Name / Common Name | Silver Carp (सिल्वर कार्प) |
| Habit and Habitat | It is a freshwater cyprinid fish. |
| Description | It is a deep bodied laterally compressed fish, size is around 60-100 cm in length. It is a filter feeder. It is also called the flying carp due to its tendency to leap from water. |
| Mythological Significance (if any) | Symbol of good luck |
| I.U.C.N. Status | Near threatened |
| Season when seen | Occurs during spring. |
| Local Status: Past- | Less abundant |
| Present- | More abundant |
| Uses | Successfully used in controlling water quality, especially in control of noxious blue green algae. Used in Aquaculture. |
| Associated Traditional Knowledge | Medicinal value |
| Management mechanism | Fish breeding programmes should be encouraged. |
| Other Details | Silver carp, like all Hypophthalmicthys sps. have no stomachs. These carp have natural defenses to their toxins. Sometimes can contain enough algal toxins in their system to become hazardous to eat. |
| Community / Knowledge Holder | Mr. Adarsh Dubey |

Pisces Grass carp (Ctenopharyngodon idella) ग्रास कार्प



Grass carp (Ctenopharyngodon idella) ग्रास कार्प

| Phylum | Chordata |
|------------------------------------|--|
| Class | Actinopterygiri |
| Order | Cypriniformes |
| Genus and Species (If known) | Ctenopharyngodon idella |
| Local Name / Common Name | Grass carp (ग्रास कार्प) |
| Habit and Habitat | Hebivorous, freshwater fish. |
| Description | Have elongated, chubby, torpedo shaped body forms. Mouth is slightly oblique with non-fleshy lips, and no barbels. |
| Mythological Significance (if any) | Symbol of good luck |
| I.U.C.N. Status | |
| Season when seen | Spring season. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Edible fish. |
| Associated Traditional Knowledge | Medicinal value |
| Management mechanism | Fish breeding programmes should be encouraged. |
| Other Details | Used as weed control. The fish are popular among bowfishers where bowfishing for them is legal. |
| Community / Knowledge Holder | Mr. Adarsh Dubey |



FORMAT- XIX Amphibia



Amphibia

Common Toad (Bufo melanostictus) टोड



Common Toad (Bufo melanostictus) टोड

| Phylum | | Chordata |
|------------------------------------|---------|--|
| Class | | Amphibia |
| Order | | Amura or scillentla |
| Genus and Species (If | known) | Bufo melanostictus |
| Local Name / Common | Name | Common Tode / True Tode (टोड) |
| Habit and Habitat | | Bufo is terrestrial, nocturnal, hiding under logs & stanes or in burrows in day. It enters water only to breed & spawn. |
| Description | | It differs from frog in having rough dry & mostly spin with more poison glands than mucous glands. Body divided into head & trunk, head contains large eyes, nostrils & tympanum. Behind eyes there is a pair of large parotid glands. Hind-limbs are short; toes provided with horny tips & poorly developed webs. |
| Mythological Significance (if any) | | The toad has long been considered to be an animal of illomen or a connection to a spirit world. |
| I.U.C.N. Status | | Species of least concern. |
| Season when seen | | Rainy season |
| Local Status: | Past | Less in number |
| I | Present | More in number |
| Uses | | As pest control. |
| Associated Traditional Knowledge | | The main toxic substances found in the parotid gland & skin of common toad is called bufotoxim. It has clinical effect including severe irritation & pain to eyes, mouth, nose & throat. |
| Management mechanism | | |
| Other Details | | It secretes toxicsubstances. |
| Community/Knowledge Holder | | Mr. S. P. Singh |

414 Uttar Pradesh State Biodiversity Board

Amphibia

Frog (Rana tigrina) मेंढ़क



Frog (Rana tigrina) मेंढ़क

| Phylum | | Chordata |
|------------------------------------|------------|--|
| Class | | Amphibia |
| Order | | Anura |
| Genus and Species | (If known) | Rana tigrina |
| Local Name / Comm | ion Name | Frog (Indian bull-frog) (मेंढ़क) |
| Habit and Habitat | | Swamp , ponds & nearstreams. |
| Description | | Body is green with black patches along with a yellow midrib on the dorsal surface & pale yellow on the ventral surface. Head is flat & more or less triangular, external nostrils are on the dorsal surface of the snout. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Rainy season |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | In practicals in science laboratory. |
| Associated Traditional Knowledge | | Help in weather forecast. |
| Management mechanism | | Killing for dissection purpose should be banned. |
| Other Details | | |
| Community/Knowledge Holder | | Mr. S. P. Singh |

Amphibia

Indian bull frog (Haplobatrachus tigerinus) मेंढ़क



Indian bull frog (Haplobatrachus tigerinus) मेंढ़क

| Phylum | | Chordata |
|----------------------|-------------------|--|
| Class | | Amphibia |
| | | - |
| Order | | Anura |
| Genus and Specie | s (If known) | Haplobatrachus tigerinus |
| Local Name / Com | mon Name | Indian bull frog (मेंढ़क) |
| Habit and Habitat | | Land & water under stones. |
| Description | | Squat bodies, smooth skin, strong hind legs for leaping & webbed feet. Body is bilaterally symmetrical. It measures about 12 to 18 cm in length. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | They become inactive both in winter & in summer seasons. They remain active in spring & rainy season. |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Study purpose |
| Associated Traditi | ional Knowledge | Help in weather forecast. |
| Management mechanism | | |
| Other Details | | There is no parental care. They are cold-blooded. It's size & voice is loud. |
| Community/Know | vledge Holder | Mr. S. P. Singh |

Amphibia Midwife Toad *(Alytes)* टोड



Midwife Toad (Alytes) टोड

| Phylum | | Chordata |
|------------------------------------|----------------|--|
| , | | |
| Class | | Amphibia |
| Order | | Anura |
| Genus and Species | s (If known) | Alytes |
| Local Name / Com | mon Name | Midwife toad (टोड) |
| Habit and Habitat | | Found under stones logs or in underground tunnels.Hides in dry sandy soil. |
| Description | | It is shy, nocturnal animals. They give away their presence by their ringing call. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Rainy season |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Study purpose, to control insects. |
| Associated Traditi | onal Knowledge | |
| Management mec | hanism | |
| Other Details | | Characteristic of these toad-like frogs is their parental care: the males carry a string of fertilised eggs on their back, hence the name "midwife". |
| Community/Know | vledge Holder | Mr. S. P. Singh |



FORMAT- XX Reptiles



Reptiles Common House Lizard (*Hemidactylus*) छिपकली





Common House Lizard (Hemidactylus) छिपकली

| Dhylum | | Chordata |
|------------------------------------|-----------|---|
| Phylum | | |
| Class | | Reptilia |
| Order | | Squamata |
| Genus and Species (If known) | | Hemidactylus |
| Local Name / Common Name | | Common House Lizard (छिपकली) |
| Habit & Habitat | | Nocturnal in habit. During winter they hibernate under wood, logs & crevices of the walls. They are adapted to walk on walls. They feed on insect & small Chordates. |
| Description | | Body measuring 25cm in length in slender, covered with minute small scales & divided into head, trunk & tail. They are ugly looking. Some member contain black 7 dark grey dorsal surface. Abdomen is yellowish white. Head is triangular containing eyes, nostrils & external ear opening. |
| Mythological Significance (if any) | | It is believed that if lizard falls on the Head it symbolizes that the individual should be prepared for a rebellion caused by someone who has disturbed the peace of mind. |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past – | In abundance |
| | Present - | In abundance |
| Uses | | It can be used in science laboratories. |
| Associated Traditional Knowledge | | When falls on different region of body, it depicts different indications. Example - good luck, bad luck |
| Management mechanism | | |
| Other Details | | Shows caudal autotomy. |
| Community / Knowledge Holder | | Mr. Virendra Singh |

Reptiles Garden lizard / Girgitan (Calotes calotes) गिरगिट



Garden lizard / Girgitan (Calotes calotes) गिरगिट

| Phylum | Chordata |
|------------------------------------|---|
| | |
| Class | Reptilia |
| Order | Squamata |
| Genus and Species (If known) | Calotes calotes |
| Local Name / Common Name | Garden lizard / Girgitan (गिरगिट) |
| Habit & Habitat | Calotes is adapted for arboreal life & slight disturbance or any noise causes the lizard to run away swiftly. |
| Description | Calotes is commonly known as blood sucker because of the red colour of neck. Body is elongated, slender, 30 cm in length, covered with tough scales & divided into head, short neck, trunk & tail. |
| Mythological Significance (if any) | According to Hinduism, lizard chirping is considered holy & auspicious. |
| I.U.C.N. Status | |
| Season when seen | Throughout year. |
| Local Status: Past – | In abundance |
| Present - | In abundance |
| Uses | Pest control. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Famous for colour change. |
| Community / Knowledge Holder | Mr. Virendra Singh |

Reptiles Monitor Lizard (Varanus) गोह



Monitor Lizard (Varanus) गोह

| Phylum | | Chordata |
|------------------------------------|----------|--|
| Class | | Reptilia |
| Order | | Squamata |
| Genus and Species (If known) | | Varanus |
| Local Name / Common Name | | Monitor Lizard (गोह) |
| Habit & Habitat | | Mabuia is adapted for burrowing life & Consequently herd contains small eyes. |
| Description | | Animal measuring 60-90 cm in length divided into head, neck, trunk & tail. Body is covered with smooth, small scales heaving large brownish, black 7 orange patches, which acts like warning colours. Head is triangular & contains fixed eyes & nostrils. |
| Mythological Significance (if any) | | |
| Season when seen | | Throughout year |
| Local Status: P | ast – | Less in number |
| P | resent - | Less in number |
| Uses | | Medicinal & commercial use. |
| Associated Traditional Knowledge | | Hideous creature |
| Management mechanism | | |
| Other Details | | Endangered. |
| Community / Knowledge Holder | | Mr. Virendra Singh |

Reptiles Blind snake (Typhlops) अंधा साँप



Blind snake (Typhlops) अंधा सॉंप

| Phylum | | Chordata |
|------------------------------------|------------|---|
| Class | | Reptilia |
| Order | | Squamata |
| Genus and Species | (If known) | Typhlops |
| Local Name / Com | non Name | Blind snake (अंधा सॉंप) |
| Habit & Habitat | | It is a burrowing snake feeding on small insect, earthworms & soft larval insects.Usually occur in urban and agricultural areas. |
| Description | | It is about 170-180 mm in length & brown with a shining chocolate hue above & lighter below in colour. The body is cylindrical & covered with uniform imbricate scales all over. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout year |
| Local Status: | Past – | More in number |
| | Present - | Less in number |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | The distribution and survival of this group of snakes directly reflects soil humidity and temperature. This is also the only snake reported from Lakshadweep Islands. |
| Community / Knowledge Holder | | Mr. Virendra Singh |

Reptiles Water Snake (Natrix piscator) पनियासॉंप



Water Snake (Natrixpiscator) पनियासॉंप

| Phylum | | Chordata |
|------------------------------------|-----------|---|
| Class | | Reptilia |
| Order | | Squamata |
| Genus and Species (If known) | | Natrix piscator |
| Local Name / Common Name | | Water Snake (पनिया सॉंप) |
| Habit & Habitat | | It is found in fresh water, hidden under water, vegetation or grasses. It is diurnal, oviparous & feeds on fishes & frogs. |
| Description | | Body is covered with epidermal scales &chessboard like black spots. Head is distinct & comprises bulging eyes, slit- like, mouth & bifid tongue. Head scales are larger, called as shields, belly scales plate like while side scales are smaller. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | In rainy season |
| Local Status: | Past – | More in number |
| | Present - | Less in number |
| Uses | | Important role in nature's food chain |
| Associated Traditional Knowledge | | Also found in grasses |
| Management mechanism | | |
| Other Details | | Non-poisonous |
| Community / Knowledge Holder | | Mr. Virendra Singh |

Reptiles

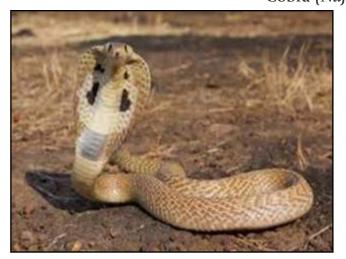
Viper / Daboia (Vipera russeli) वाइपर



Viper / Daboia (Vipera russeli) वाइपर

| Phylum | Chordata |
|------------------------------------|---|
| Class | Reptilia |
| Order | Squamata |
| Genus and Species (If known) | Vipera russeli |
| Local Name / Common Name | Viper / Daboia (वाइपर) |
| Habit & Habitat | It is found in rocky & bushy region. It feeds on mice, rats, lizards & birds. |
| Description | Body is elongated & measures upto one 7 half metre in length. The general colour is pale brown above with three longitudinal series form about 30 rows on the body. Head is triangular & covered with very small imbricate scales on the upper surface. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past – | More in number |
| Present - | Less in number |
| Uses | Used in Antivenom preparation |
| Associated Traditional Knowledge | Very dangerous |
| Management mechanism | Net & stick method |
| Other Details | Its native name is Sus_Karna symbolizingits powerful hissing. |
| Community / Knowledge Holder | Mr. Virendra Singh |

Reptiles Cobra (Naja naja) नाग





Cobra (Naja naja) नाग

| Phylum | Chordata. |
|------------------------------------|---|
| Class | Reptilia |
| Order | Squamata |
| Genus and Species (If known) | Najanaja |
| Local Name / Common Name | Cobra /Nag (नाग) |
| Habit & Habitat | Cobra is diurnal, shy, living in holes, under stones, mud walls & in thick vegetation. It is oviparous, carnivorous & feeds on frogs, rats, lizards &other snakes. It hibernates in winters. |
| Description | Body measures 2.3 metres in length & is wheatish (gehuwa) in colour hood contains spectacle mark on dorsal surface. Some persons call it figure of ten. There is a white band around mark. |
| Mythological Significance (if any) | In Indian mythology it refers to Sheshnaag, Nag Devta and worshipped on Nag Panchami. |
| I.U.C.N. Status | |
| Season when seen | Insummer |
| Local Status: Past – | More in number |
| Present - | Less in number |
| Uses | Used for making antivenom& to control the pest (mainly rats). |
| Associated Traditional Knowledge | Very poisonous& dangerous. |
| Management mechanism | Net & stick, bags and domesticated by Snake Charmers |
| Other Details | Used by snake charmers. |
| Community / Knowledge Holder | Mr. Virendra Singh |

Reptiles

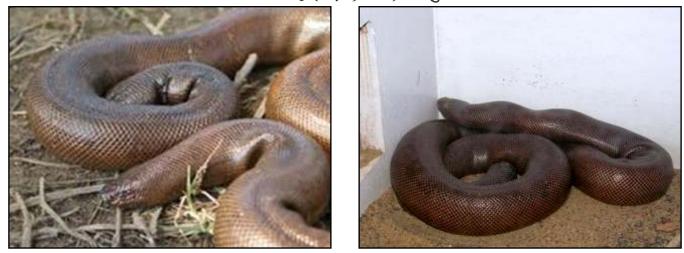
Turtle (Lissemys punctata) कछुआ



Turtle (Lissemys punctata) कछुआ

| Phylum | Chordata |
|------------------------------------|---|
| Class | Reptilia |
| Order | Testudines |
| Genus and Species (If known) | Lissemys punctata |
| Local Name / Common Name | Kachua/ Turtle (कछुआ) |
| Habit & Habitat | Aquatic |
| Description | Broad carapace in adult.Snout in present. Tail is veryshort. |
| Mythological Significance (if any) | In an Indian mythology it is one of the Dashavatars called as "Kacchap" avatar and symbol of good luck. |
| I.U.C.N. Status | |
| Season when seen | In rainy season |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Medicinal for skin treatment. |
| Associated Traditional Knowledge | In India, the shell is used to make remedy. Believed to be a medicine for tuberculosis. |
| Management mechanism | Breeding centres are there |
| Other Details | Their eggs are commonly used as a source of food and protein. As a result, these turtles are often exploited as a source of profit and medicinal value. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

Reptiles Do muhasaanp (Eryx johnii) दो मुहाँ साँप



Do muhasaanp (Eryx johnii) दो मुहाँ साँप

| Phylum | | Chordata |
|----------------------------------|-------------------|--|
| Class | | Reptilia |
| Order | | Squamata |
| Genus and Species | s (If known) | Eryx johnii |
| Local Name / Com | mon Name | Indian or John sand-boa or domukhi (दो मुहाँ साँप) |
| Habit & Habitat | | Eryx is found in sandy regions. It remains hidden in sand & feeds on lizard, frogs & mine. |
| Description | | It is elongated measuring one meter in length, pinkish grey dorsal surface has irregular brown patches while ventral surface is yellowish. Entire body is covered with 40-45 rows of small scales; sometimes keeled in tail region. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Insummer |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | By Snake charmers and important role in nature's food chain |
| Associated Traditional Knowledge | | Non-poisonous |
| Management mechanism | | |
| Other Details | | These snakes are rather timid and shy, and bites have never been reported till date. |
| Community / Know | wledge Holder | Mr. Zameel Ahmed |

Reptiles Dhaman (Ptyas mucosus) धामिन



Dhaman (Ptyas mucosus) धामिन

| Phylum | | Chordata |
|-----------------------|----------------|---|
| Class | | Reptilia |
| Order | | Squamata |
| Genus and Species (I | f known) | Ptyas mucosus |
| Local Name / Commo | on Name | Dhaman (धामिन) |
| Habit & Habitat | | It feeds on frogs, toads, mammals, even snakes & lizards. It can climb on trees & is oviparous. |
| Description | | Body is elongated with dirty, yellow colour measuring about 3 metres in length & covered with 16-17 rows of slightly keeled scales. It is non-poisonous & active snake. |
| Mythological Signific | cance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Mostly in summer |
| Local Status: | Past – | More in number |
| | Present - | Less in number |
| Uses | | Dhamans and are aggressively hunted by humans in some areas of their range for skins and meat. |
| Associated Tradition | al Knowledge | |
| Management mechar | nism | |
| Other Details | | Emit a growling sound and inflate their necks when threatened. |
| Community / Knowle | edge Holder | Mr. Zameel Ahmed |

Reptiles

Indian Saw-Scaled Viper (Echis corinatus) वाइपर



Indian Saw-Scaled Viper (Echis corinatus) वाइपर

| Phylum | | Chordata |
|----------------------------------|-------------------|--|
| Class | | Reptilia |
| Order | | Squamata |
| Genus and Species | (If known) | Echis corinatus |
| Local Name / Com | mon Name | Indian Saw-Scaled Viper (वाइपर) |
| Habit & Habitat | | It feeds on rodents, lizards, frogs & a variety of arthropods & found on a range of different substrates including sand, rock, soft soil land in scrublands. |
| Description | | Size ranges below 15-31.5 inches in total length. Head distinct from neck, snout very short & rounded. The nostril bear three shields,& head covered with small keeled scales. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Mostly in summer |
| Local Status: | Past – | In abundance |
| | Present - | Less in number |
| Uses | | To control pests, Important role in food chain |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | It is the smallest member of the Big Four snakes which are responsible for causing the most snakebite cases and deaths. |
| Community / Knowledge Holder | | Mr. Zameel Ahmed |

Reptiles

Tortoise / Soft river terrapin (Trionyx gangeticus) कछुआ



Tortoise / Soft river terrapin (Trionyx gangeticus) कछुआ

| Phylum | Chordata |
|------------------------------------|--|
| | |
| Class | Reptilia |
| Order | Squamata |
| Genus and Species (If known) | Trionyx gangeticum |
| Local Name / Common Name | Tortoise / Soft river terrapin (कछुआ) |
| Habit & Habitat | It is a common freshwater & pond terrapin. |
| Description | Body is flat, oval & encased in bony shell. Skin is smooth & leathery. Head is pointed with greenish or brackish longitudinal streak, lips are fleshy. Horny peak is absent. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Critically endangered |
| Season when seen | Rainy season |
| Local Status: Past – | More in number |
| Present - | Less in number |
| Uses | For ornamental purpose in aquarium. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | It is one of the most critically endangered turtle species according to a 2000 assessment by the IUCN. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

Reptiles Spiny-tailed lizard/Saara (Uromastix hard wickii) सारा



Spiny-tailed lizard/Saara (Uromastix hard wickii) सारा

| Phylum | Chordata |
|------------------------------------|--|
| Class | Reptilia |
| Order | Squamata |
| Genus and Species (If known) | Uromastix hard wickii |
| Local Name / Common Name | Spiny-tailed lizard/Saara (सारा) |
| , | |
| Habit & Habitat | Uromastix is gentle, timid & non-aggressive lizard & burrowing lizard. It inhabits dry sandy regions such as deserts with scanty vegetation. |
| Description | The body of Uromastix is elongated, massive& depressed. The length varies from 20 to 30 cm. The upper surface of the body is yellow brown with dark spots, where as the lower surface is lighten & pale. The dorsal surface of tail is covered with whorls of large spinose scale. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | April-October |
| Local Status: Past – | More in number |
| Present - | Less in number |
| Uses | Uromastrix is generally used in the laboratory in North India for dissection. |
| Associated Traditional Knowledge | They are also hunted by local peoples in the belief that the fat extracted from it is an aphrodisiac. |
| Management mechanism | |
| Other Details | These lizards are mainly herbivorous. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |



FORMAT- XXI Aves (A) Aquatic Birds



Cattle Egret (Bubulcus ibis) बगुला





Cattle Egret (Bubulcus ibis) बगुला

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known)) | Bubulcus ibis |
| Local Name / Common Name | Bagula/Cattle Egret (बगुला) |
| Habit & Habitat | Found in wet places and ponds. |
| Descriptions | It is white and brown in colour. 88-96 cm in size. Scale is marginally larger & is slightly longer in male. Breeding plumes found in male than the female. Breeding season is April to October. Orange- buff plumes on the back. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout year. |
| Local Status: Past – | Earlier In abundance. |
| Present – | Now Less in number. |
| Uses | Scenicbeauty, aspollinator& pest controller |
| Associated Traditional Knowledge | Used as proverbs from ancient time |
| Management mechanism | Conservation of wetlands |
| Other Details | They spread some animal infection suchas heart water, infectionbursal diseases & possibly Newcastle diseases. |
| Community/Knowledge Holder | Mr. Jai Singh |

Aquatic Birds Grey Heron (Ardea cinerea) सिलेटी अंजन





Grey Heron (Ardea cinerea) सिलेटी अंजन

| Phylum | | Chordata |
|----------------------------------|-------------|---|
| Class | | Aves |
| 01400 | | |
| Order | | Pelecaniformes |
| Genus and Species (If kn | own) | Ardea cinerea |
| Local Name / Common N | ame | Grey Heron (सिलेटी अंजन) |
| Habit and Habitat | | Inhabits all types of inlands & coastal wetland. Normally singly or in scattered group but roosts &preens colonially high in trees. Feeds mainly standing hunched. |
| Description | | Large, grey & black Heron with powerfully, yellow bill. Grey above with black flight feathers. Below white, usually with greyish wash. Black crown sides, nape plumes &fore neck. In flight shows white leading edges. Sexes alike. Crown grey. Flight with neck retracted & feet extended. |
| Mythological Significance | ce (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Commonly seen in winter |
| Local Status: Pas | st- | In abundance |
| Pre | esent- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Knowledge Holder | | Mr. Jai Singh |

Pheasant tailed Jacana (Hydrophasianus chirurgus) पिहो



Pheasant tailed Jacana (Hydrophasianus chirurgus) पिहो

Common coot (Fulica atra) कॉमन कूट



Common coot (Fulica atra) कॉमन कूट

| Phylum | | Chordata |
|----------------------|-------------------|---|
| Class | | Aves |
| Order | | Gruiformes |
| Genus and Species | (If known) | Fulica atra |
| Local Name / Com | mon Name | Common coot (कॉमन कूट) |
| Habit and Habitat | | Large swimming flocks on open water of jewels& rivers, often mixing with duck. Feeds on vegetable matter. Flocks may panic & splatter clumsily across the water. |
| Description | | Large, blackish aquatic, crake with prominent white bill & frontal shield. Sooty black head & neck with greyer black body & whitish trailing edge to wings. Sexes alike. Juvenile has whitish throat &fore neck, grey bill, greenish feet. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Commonly in winter |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Tradition | onal Knowledge | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Know | ledge Holder | Mr. Jai Singh |

Aquatic Birds Purple Heron (Ardea purpurea) नरी अंजन



Purple Heron (Ardea purpurea) नरी अंजन

| Phylum | | Chordata |
|------------------------------------|--------------|---|
| Class | | Aves |
| | | |
| Order | | Pelecaniformes |
| Genus and Species | s (If known) | Ardea purpurea |
| Local Name / Com | mon Name | Purple Heron (नरी अंजन) |
| Habit and Habitat | | Inhabits well- vegetated wetlands of all types, including mangroves. Eats fish & other aquatic animals. |
| Description | | Large, slender- necked, and grey heron. Upper parts, purplish- grey with Rufous shoulders & forewings. Serpentine head & neck is Rufous with black lines & black- plumed crown. Under parts largely Rufous, can look very dark. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Almost all the year |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Knowledge Holder | | Mr. Jai Singh |

Little Grebe (Tachybaptus ruficollis) पनडुब्बी



Little Grebe (Tachybaptus ruficollis) पनडुब्बी

| Phylum | | Chordata |
|------------------------------------|------------|---|
| Class | | Aves |
| Order | | Podicipediformes |
| Genus and Species | (If known) | Tachybaptus ruficollis |
| Local Name / Com | non Name | Little Grebe / Dabchick (पनडुब्बी) |
| Habit and Habitat | | Inhabits well vegetated wetlands including village ponds. Usually shy, diving when disturbed & hiding in emergent vegetation. Feeds on small fish. |
| Description | | Small, very dumpy, water bird with distinctly fluffy rear & short yellow-based bill. In breeding plumage, dark brown above, including breast with chestnut cheeks & fore-neck, buff flanks & whitish rear. Young have stripy neck. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Commonly in winter |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Knowledge Holder | | Mr. Jai Singh |

Aquatic Birds Ruddy-Breasted Crake (Porzana fusca) जामुनी जलमुर्गी



Ruddy-Breasted Crake (Porzana fusca) जामुनी जलमुर्गी

| Phylum | | Chordata |
|------------------------------------|---------------|--|
| Class | | Aves |
| Order | | Gruiformes |
| Genus and Species | s (If known) | Porzana fusca |
| Local Name / Com | mon Name | Ruddy- Breasted Crake / Purple Moorhen (जामुनी जलमुर्गी) |
| Habit and Habitat | | Inhabits well- vegetated marshes, jheels & river banks. Also paddy field & quite dry low scrub. Feeds on invertebrates. |
| Description | | A small, reddish- brown crack with bright pink begs. Adult alike with brown upper parts, pale throat, dark red under parts& white- barred black under tail coverts. Juveniles browner with faint barring below. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | All the year |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Know | vledge Holder | Mr. Jai Singh |

Aquatic Birds Spot billed Duck (Anas poecilorhyncha) स्पॉट बिल्ड बत्तख



Spot billed Duck (Anas poecilorhyncha) स्पॉट बिल्ड बत्तख

| Phylum | | Chordata |
|------------------------------------|--------------|--|
| | | Aves |
| Order | | Anseriformes |
| Genus and Species | s (If known) | Anas poecilorhyncha |
| Local Name / Com | | , Spot-Billed Duck / Spot bill (स्पॉट बिल्ड बत्तख) |
| Habit and Habitat | | The commonest breeding duck, inhabiting any sort of sizable vegetated freshwater, including park or garden ponds. Feeds on aquatic plants & animals. Nests on the ground in waterside vegetation. |
| Description | | A large duck with sexes alike. Basically brown with whitish feather edgings on body, striking black & white- bordered green specula & white tertials. Breast spotted, Black crown &eye stripe create a masked appearance. Reddish spots in front of eyes & black bill boldly tipped yellow. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Almost through the year |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Knowledge Holder | | Mr. Om Prakash |

Comb duck (Sarkidiornis melanotos) नकटा



Comb duck (Sarkidiornis melanotos) नकटा

| Phylum | | Chordata |
|------------------------------------|------------|---|
| Class | | Aves |
| Order | | Anseriformes |
| Genus and Species | (If known) | Sarkidiornis melanotos |
| Local Name / Comm | non Name | Comb Duck / Nukta or Naktu, Knob-billed Goose (नकटा) |
| Habit and Habitat | | Inhabits well vegetated jheels & marshes with old timber. Feeds on aquatic animals & vegetation. |
| Description | | Large, heavily built duck, male significantly larger & brighter. Glossy purple black above with greyish. Flanks, black bordered white breast &speckled black head. Bill & feet blackish. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Commonly seen in winters |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Knowledge Holder | | Mr. Om Prakash |

Aquatic Birds Great Egret (Casmerodius albus) मलंग बगुला



Great Egret (Casmerodius albus) मलंग बगुला

| Phylum | | Chordata |
|------------------------------------|--------------|---|
| Class | | Aves |
| Order | | Pelecaniformes |
| Genus and Species | (If known) | Casmerodius albus |
| Local Name / Comr | non Name | Great Egret (मलंग बगुला) |
| Habit and Habitat | | Inhabits larger wetlands & coast. Feeds short vegetation, waiting for fish or aquatic animal prey to approach. |
| Description | | Large, snow white Heron with long, thin neck & very long legs. In non- breeding plumage, bill all yellow with dusky tip & legs all black. In breeding plumage, bill gradually becomes black, lures blue & tibia red. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | All the year |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Know | ledge Holder | Mr. Om Prakash |

Intermediate Egret (Mesophoyx intermedia) पटोखा बगुला



Intermediate Egret (Mesophoyx intermedia) पटोखा बगुला

| Phylum | | Chordata |
|------------------------------------|------------|--|
| Class | | Aves |
| Order | | Pelecaniformes |
| Genus and Species | (If known) | Mesophoyx intermedia |
| Local Name / Com | mon Name | Intermediate Egret (पटोखा बगुला) |
| Habit and Habitat | | Inhabits wetlands & the coast which is often mixed in feeding grounds, often in quite large parties. |
| Description | | Large, snow white heron with thick neck & short, thick bill. Separated from great by shape & gape-line halting below eye. In non- breeding plumage, bill all yellow, often with black tip, yellow lures& brownish legs with greenish tibia. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Almost all the year |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Knowledge Holder | | Mr. Om Prakash |

Aquatic Birds Northern Pintail (Anas acuta) नार्थन पिनटेल



Northern Pintail (Anas acuta) नार्थन पिनटेल

| Phylum | | Chordata |
|------------------------------------|--------------|---|
| Class | | Aves |
| Order | | Anseriformes |
| Genus and Species | s (If known) | Anas acuta |
| Local Name / Com | mon Name | Common Pintail / Northern Pintail (नार्थन पिनटेल) |
| Habit and Habitat | | Inhabits well vegetated large rivers, jheels, coastal lagoons& marshes. Feeds on aquatic plants & animals from surface also grazes watersides. |
| Description | | Large, slender, small- headed, duck with pointed tail. Adult male has dark brown head & upper neck with white side stripes extending to white breast. Flanks vermiculated grey. Central tail pin feathers elongated by 10cm. Specula brownish green with striking white rear borders. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | L | Commonly in winter |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Knowledge Holder | | Mr. Om Prakash |

Painted Stork (Mycteria leucocephala) जांघिल



Painted Stork (Mycteria leucocephala) जांघिल

| Phylum | | Chordata |
|------------------------------------|--------------|--|
| Class | | Aves |
| Order | | Ciconiiformes |
| Genus and Species | (If known) | Mycteria leucocephala |
| Local Name / Com | mon Name | Painted Stork (जांघिल) |
| Habit and Habitat | | Inhabits larger wetlands, mudflats, salt pans & estuaries. Feeds on fish & other aquatic animals in shallow water. |
| Description | | A huge, erect water bird with white & black plumage. Largely white with black barring on wings & breast & black flight feathers. Pinkish wash on lower buck. Long, slightly decurved, yellow bill, bare radish face & pink legs. Sexes alike. Immature dusky grey. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Mostly winter & monsoon. |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Know | ledge Holder | Mr. Om Prakash |

Aquatic Birds Wood Sandpiper (Tringa glareola) वुड सैंडपाइपर



Wood Sandpiper (Tringa glareola) वुड सैंडपाइपर

| Phylum | | Chordata |
|------------------------------------|--------------|--|
| Class | | Aves |
| Order | | Charadriiformes |
| Genus and Species | s (If known) | Tringa glareola |
| Local Name / Com | mon Name | Spotted Sandpiper / Wood Sandpiper (वुड सैंडपाइपर) |
| Habit and Habitat | | Inhabits marshes, jheels, riversides, wet paddy & muddy coasts. Often in large flocks. Feeds in shallow water or muddy margins on aquatic invertebrates. |
| Description | | Medium-sized, rather slender wader with square white rump, no wing bars & whitish under wings. Above brown, strongly spotted white. Some head & neck streaking & white super cilia. Tail barred, so Less in number contrast with white rump than green darker with more spots in breeding plumage. Legs yellowish |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | l | Mostly in winter |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | Sexes alike |
| Community/Knowledge Holder | | Mr. Jai Singh |

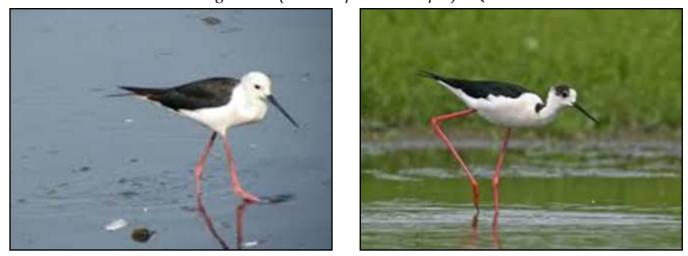
Aquatic Birds Yellow Wagtail *(Montacilla thunbergi)* पीला खंजन



Yellow Wagtail (Montacilla thunbergi) पीला खंजन

| Phylum | | Chordata |
|------------------------------------|--------------|--|
| Class | | Aves |
| Order | | Passeriformes |
| Genus and Species | s (If known) | Montacilla thunbergi |
| Local Name / Com | mon Name | Yellow Wagtail / Blue- headed Wagtail (पीला खंजन) |
| Habit and Habitat | | Inhabits wet grassland, marshes & edges of freshwater bodies. Feed actively in loose flocks on insects on ground or in air. |
| Description | | Green & yellow wagtail. At least seven races occur, separated by the head colour & pattern on breeding male. It have yellow under parts; green backs & white wing & tail edgings. Females & juveniles duller &Less in number yellow. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | L | Commonly in winter |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | |
| Community/Knowledge Holder | | Mr. Anurag Kumar |

Aquatic Birds Black Winged Stilt *(Himantopus himantopus)* पाइड स्टील्ट



Black Winged Stilt (Himantopus himantopus) पाइड स्टील्ट

| Phylum | | Chordata |
|------------------------------------|---------|--|
| Class | | Aves |
| Order | | Charadriiformes |
| | ` | |
| Genus and Species (If kno | wn) | Himantopus himantopus |
| Local Name / Common Na | me | Pied Stilt (पाइड स्टील्ट) |
| Habit and Habitat | | Found in shallow, freshwater & wetland with sand & mud. |
| Description | | Adults are 33-36 cm long. They have long pink legs, a long thin black bill & are blackish above & white below, with head & neck with a varying amount of black. Males have a black, often with greenish gloss. Female's backs have a brown hue, contrasting with the black remiges. Breeding habitat of these birds is marshes shallow lakes & ponds. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | They are migratory birds. They are mostly seen in breeding season. |
| Local Status: Pas | t- | In abundance |
| Pre | sent- | Less in number |
| Uses | | Pest Control and scenic beauty |
| Associated Traditional Kn | owledge | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | They feed mainly on aquatic insects but will also take molluscs & crustaceans. They are very famous for their jet black wings. |
| Community/Knowledge H | lolder | Mr. Anurag Kumar |

Mallard / White Duck (Anas platyrhynchos) नीलसर बत्तख



Mallard / White Duck (Anas platyrhynchos) नीलसर बत्तख

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Anseriformes |
| Genus and Species (If known) | Anas platyrhynchos |
| Local Name / Common Name | Mallard / White Duck (नीलसर बत्तख) |
| Habit and Habitat | Mallards live in wetlands, eat water plants & small animals. |
| Description | Wild duck is a dabbling duck. The duck belongs to the subfamily Anatinae of the water fowl family Anatidue. Male bird have a glossy green head & are grey on wings & belly while the females have mainly brown- speckled plumage. 50-65 cm long in size & weight is 0.72-1.58 kg. Breeding season is near spring. |
| Mythological Significance (if any) | They are very friendly so they are very important in Hindu religion. |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | Less in number |
| Uses | Scenic beauty, as pollinator& pest controller |
| Associated Traditional Knowledge | Mallard are used as a children's book story. They also used as logo. |
| Management mechanism | Conservation of wetlands |
| Other Details | They are most familiar ducks. Since 1933, the Peabody Hotel in Tennessee has maintained a tradition of keeping one mallard drakes four mallard hins, as a guests of honor. |
| Community/Knowledge Holder | Mr. Anurag Kumar |

Aquatic Birds Lesser Whistling Duck (Dendrocygna javanica) छोटी सिलही



Lesser Whistling Duck (Dendrocygna javanica) छोटी सिलही

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Anseriformes |
| Genus and Species (If known) | Dendrocygna javanica |
| Local Name / Common Name | Lesser Whistling Duck (छोटी सिलही) |
| Habit and Habitat | They found in flocks around lakes & wet paddy fields. They can perch on trees & build nest in the hollow of a tree. |
| Description | This chestnut brown duck confusable only with the fulvos whistling duck. Size 35 to 45 cm in length & weighing 450 to 600 grams. The male or drake is the more distinctively colored of the mallards. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Through out the year. |
| Local Status: Past- | In abundance |
| Present- | Less in number |
| Uses | Scenic beauty, as pollinator& pest controller |
| Associated Traditional Knowledge | |
| Management mechanism | Conservation of wetlands |
| Other Details | They are not threatened by hunting as they are not considered good to eat. |
| Community/Knowledge Holder | Mr. Anurag Kumar |

Aquatic Birds Little Ringed Plover (Pharadrius dubius) लिटिल रिंग्ड प्लोवर



Little Ringed Plover (Pharadrius dubius) लिटिल रिंग्ड प्लोवर

| Phylum | | Chordata |
|--------------------------|-------------------|--|
| Class | | Aves |
| Order | | Charadriiformes |
| Genus and Species | s (If known) | Pharadrius dubius |
| Local Name / Com | mon Name | Little Ringed Plover(लिटिल रिंग्ड प्लोवर) |
| Habit and Habitat | | Found in freshwater including gravel oats, river. They are migratory. |
| Description | | Adults have a grey-brown back & wings, a white belly, and a white breast with one black neckband. They have a brown cap a white forehead. The head pattern and the presence of a clear yellow eye-ring. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Insummers |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Scenic beauty, as pollinator& pest controller |
| Associated Traditi | onal Knowledge | |
| Management mecl | hanism | Conservation of wetlands |
| Other Details | | They are migratory. |
| Community/Know | vledge Holder | Mr. Anurag Kumar |

Aquatic Birds Asian Openbills (Anastomus oscitans) घोंघिल



Asian Openbills (Anastomus oscitans) घोंघिल

| Phylum | Chordata |
|------------------------------------|---|
| | |
| Class | Aves |
| Order | Ciconiiformes |
| Genus and Species (If known) | Anastomus oscitans |
| Local Name / Common Name | Asian Openbills (घोंघिल) |
| Habit and Habitat | Wetland & are only rarely seen along river banks & tidal flats. |
| Description | They are grayish white with glossy black wings & tail that have a green or purple sheen. The name is derived from the distinctive gap formed between the recurred lower & arched upper mandible of the beak in adult birds. Like all storks, it flies with its neck out stretched. Weight is 1.3 to 8.9 kg Breeding season is between June & December. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | All season |
| Local Status: Past- | In abundance |
| Present- | Less in number |
| Uses | Scenic beauty, as pollinator& pest controller |
| Associated Traditional Knowledge | Asian Openbills serves as effective indicators of the ecological health of wetland. |
| Management mechanism | Conservation of wetlands |
| Other Details | The longest life span of Asian Openbills is captivity is 18 years. They are carry& transmit H5N1, a form of avian fluenza. |
| Community/Knowledge Holder | Mr. Anurag Kumar |

Black headed ibis (Threskiornis melanoaphalus) सफेद आइबीस





Black headed ibis (Threskiornis melanoaphalus) सफेद आइबीस

| DL-L | Chandata |
|------------------------------------|---|
| Phylum | Chordata |
| Class | Aves |
| Order | Pelecaniformes |
| Genus and Species (If known) | Threskiornis melanoaphalus |
| Local Name / Common Name | Black headed ibis (सफेद आइबीस) |
| Habit and Habitat | Wetland area, ponds lakes, paddy fields. |
| Description | Adults are typically 75 cm long white plumaged with some greyer areas on the wings. The bold head the neck & legs are black. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Currently considered near threatened. |
| Season when seen | Throughout year |
| Local Status: Past- | Inabundance |
| Present- | Less in number |
| Uses | Scenic beauty, as pollinator& pest controller |
| Associated Traditional Knowledge | |
| Management mechanism | Conservation of wetlands |
| Other Details | The species is suspected to be in moderately rapid decline owing to hunting, egg collecting. The thick down curved bill is dusky yellow. Sexes are similar, but juveniles have winter necks & a black bill. Breeding season is June to October. |
| Community/Knowledge Holder | Mr. Anurag Kumar |

Bronze winged Jacana (Metopidius indicus) जलपीपी



Bronze winged Jacana (Metopidius indicus) जलपीपी

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Charadriiformes |
| Genus and Species (If known) | Metopidius indicus |
| Local Name / Common Name | Jalpipi (जलपीपी) |
| Habit and Habitat | Wetland, pond, floting & energent vegetation, e.g. – lotus, lily. |
| Description | 28-31 cm, male 147-202 g, female 226-354 g Glossy black plumage with back, scapulars & upperwing covert greenish, tail & vent rufous. Breeding season during monsoons. Eg – late June to early september. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Not globally threatened, dependent on existence of wetlands. |
| Season when seen | In monsoon, summers |
| Local Status: Past- | In abundance |
| Present- | Less in number |
| Uses | Scenic beauty, as pollinator& pest controller |
| Associated Traditional Knowledge | |
| Management mechanism | Conservation of wetlands |
| Other Details | They make floating nest when forced they sometimes choose to hide but submerging themselves. |
| Community/Knowledge Holder | Mr. Milan Kumar |

Common moorhen (Galinula chloropus) सामान्य जलमुर्गी





Common moorhen (Galinula chloropus) सामान्य जलमुर्गी

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Gruiformes |
| Genus and Species (If known) | Galinula chloropus |
| Local Name / Common Name | Common moorhen (सामान्य जलमुर्गी) |
| Habit and Habitat | Pond, lakes |
| Description | The moorhen is a distinctive species with dark plumage apart from the white under tail, yellow legs & a red frontal shield. Breeding season is spring between mid- moren & mid May. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Spring |
| Local Status: Past- | In abundance |
| Present- | Less in number |
| Uses | Scenic beauty, as pollinator& pest controller |
| Associated Traditional Knowledge | The birds are territorial during breeding season. |
| Management mechanism | Conservation of wetlands |
| Other Details | The nest is barket build on the ground in dense vegetation. |
| Community/Knowledge Holder | Mr. Milan Kumar |

Aquatic Birds Snake Bird/Darter (Anhinga melanogaster) पनवा





Snake Bird/Darter (Anhinga melanogaster) पनवा

| Phylum | | Chordata |
|--------------------------|-------------------|--|
| Class | | Aves |
| Order | | Suliformes |
| Genus and Species | (If known) | Anhinga melangaster |
| Local Name / Com | mon Name | Darter/Pan Dubi (पनवा) |
| Habit and Habitat | | Inhabit fresh water lakes, rivers, marshes, swamps. |
| Description | | They measure about 80 to 100 cm in length, weight 1,050 to 1,350 grams. Males have black & brown plumage, a short erectilecrest on the nape & a larger bill than the female. Female Anhinga is similar to the male except that it has apale gray buff or light brown head. Breeding season is March – April. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Scenic beauty, as pollinator& pest controller |
| Associated Tradition | onal Knowledge | |
| Management mech | nanism | Conservation of wetlands |
| Other Details | | There are four living species of darter recognized. The term 'snakebird' is usually used without any additions to signify which ever of the completely allopatric species occurs in any one region. |
| Community/Know | ledge Holder | Mr. Milan Kumar |

Black bittern (Ixobrychus flavicollis) काला बिटर्न



Black bittern (Ixobrychus flavicollis) काला बिटर्न

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Pelecaniformes |
| Genus and Species (If known) | Ixobrychus flavicollis |
| Local Name / Common Name | Black bittern/Kala Bagula (काला बिटर्न) |
| Habit and Habitat | Inhabits both terrestrial & estuarine wetland. |
| Description | This is a fairly large species at 58 cm in length, being by some margin the largest biter. The female is paler than the male, with a more yellow wash on the underparts. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Listed as threatened. |
| Season when seen | Throughout year |
| Local Status: Past- | In abundance |
| Present- | Less in number |
| Uses | Scenic beauty, as pollinator& pest controller |
| Associated Traditional Knowledge | Black bittern feed on a wide range of small animals but mainly fish. |
| Management mechanism | Conservation of wetlands |
| Other Details | Their nest on platforms of reeds in shrubs or sometimes in trees. |
| Community/Knowledge Holder | Mr. Milan Kumar |

Aquatic Birds Red wattled lapwing (Vannelus indicus) टिटहरी



Red wattled lapwing (Vannelus indicus) टिटहरी

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Charadriiformes |
| Genus and Species (If known) | Vannelus indicus |
| Local Name / Common Name | Titehri (टिटहरी) |
| Habit & Habitat | Found in Rainy area, wet land |
| Descriptions | 35 cm long in size. The wings & back are light brown will a purple sheen but head, chest & front part of neck are black. Male have a 5% longer wing & tend to have a longer carpal spur. Female are smaller then male. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout year. |
| Local Status: Past – | In abundance. |
| Present – | Less in number. |
| Uses | Used as a pest control, Pollinaters and Scenic beauty |
| Associated Traditional Knowledge | Local belief is that the bird sleeps on its back with the legs upwards & an associated Hindi metaphor "Tithiri se asmanthamajayega" it used when referring to person undertaking beyond their ability or strength. |
| Management mechanism | Conservation of wetlands |
| Other Details | The eggs are known to be collected by practitioners of Folk medicine. |
| Community/Knowledge Holder | Mr. Milan Kumar |

Aquatic Birds Pied Kingfisher (*Ceryle rudis*) पाइड किंगफिशर





Pied Kingfisher (Ceryle rudis) पाइड किंगफिशर

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Coraciiformes |
| Genus and Species (If known) | Ceryle rudis |
| Local Name / Common Name | Pied Kingfisher (पाइड किंगफिशर) |
| Habit and Habitat | Close to water, near large rivers in estuaries, near small & large lakes. |
| Description | This Kingfisher is about 17 cm long & is white with a black mask, a white supercillium & black breast bands. The crest is neat &the upper part are barred in black. Breeding season in winter. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | They are not threatened. Pied Kingfisher is one of the Kingfisher the most widespread in the world. |
| Season when seen | Mostly in winters |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Pest control, as pollinator & scenic beauty |
| Associated Traditional Knowledge | They kept as pets & because tame after one week. |
| Management mechanism | Conservation of wetlands |
| Other Details | Pied Kingfisher are major predator of fish. There is some evidence for a mutualistic relationship with clawless in number other. |
| Community/Knowledge Holder | Mr. Milan Kumar |

White Breasted Kingfisher (Halcyon capensis) व्हाईटब्रेस्टेड किंगफिशर



White Breasted Kingfisher (Halcyon capensis) व्हाईटब्रेस्टेड किंगफिशर

| Phylum | Chordata |
|----------------------------------|--|
| Class | Aves |
| Order | Coraciiformes |
| Genus | Pelargopsis |
| Local Name / Common Name | White Breasted Kingfisher (व्हाईट ब्रेस्टेड किंगफिशर) |
| Habit and Habitat | Found in Territorial areas, Lives near water bodies. |
| Description | This is very large kingfisher measuring 35 to 36 cm in length. The adult has a green back, blue wings & tail and grey head. Breeding season is January to September. |
| Mythological Significance | |
| I.U.C.N. Status | Not globally Threatened |
| Season when seen | All season |
| Local Status Past- | In abundance |
| Present- | Less in number |
| Uses | As a Pest, control pollinator & Scenic beauty. |
| Associated Traditional Knowledge | |
| Management mechanism | Conservation of wetlands |
| Other Details | Stark - billed kingfisher digs its nest in a river bank. |
| Community/Knowledge Holder | Mr. Milan Kumar |
| | |

Aquatic Birds Common kingfisher (Alcedo attnis) किंगफिशर



Common kingfisher (Alcedo attnis) किंगफिशर

| Phylum | Chordata |
|----------------------------------|---|
| Class | Aves |
| Order | Coraciiformes |
| Genus | Alcedo |
| Local Name / Common Name | Common kingfisher (किंगफिशर) |
| Habit and Habitat | Found near streams , rivers and lakes with well vegetated banks. |
| Description | This species has the typical short – tailed dumpy-bodied large headed and long billed kingfisher shape. It is about 16 cm (6.3 in) long with a wingspan of 25 cm (9.8 in) and weights 34-46 grams. Females are identical in appearance to the male except that her lower mandible is orange real with a black tip. |
| Mythological Significance | Kingfisher were thought to be the Halcyon bird with power to control the wind& waves |
| I.U.C.N. Status | Least concern |
| Season when seen | All season |
| Local Status Past- | In abundance |
| Present- | Less in number |
| Uses | As a pest control, pollinator & scenic beauty. |
| Associated Traditional Knowledge | 2 |
| Management mechanism | Conservation of wetlands |
| Other Details | They are important members of ecosystem and good indicater of fresh water community health |
| Community/Knowledge Holder | Mr. Milan Kumar |

Water hen (Amaurornis phoenicurus) जलमुर्गी



Water hen (Amaurornis phoenicurus) जलमुर्गी

| Phylum | | Chordata |
|----------------------------------|-------------------|---|
| Class | | Aves |
| Order | | Passeriformes |
| Genus and Species | (If known) | Amaurornis phoenicurus |
| Local Name / Com | mon Name | Water hen / Lotus bird (जल मुर्गी) |
| Habit and Habitat | | Mostly in pond |
| Description | | Size 39-58 cm in length Breeding adult are mainly back other than white wings head and fore neck The side of neck is golden . Breeding season – March-July , it breeds in the monsoon season |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Mostly in monsoon |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Pest Control , as a pollinator, scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | They are like to stay on lotus flower most of the time. |
| Community/Know | ledge Holder | Mr. Milan Kumar |

Aquatic Birds Jal Kauwa (*Phalacro corax*) जल कौआ





Jal Kauwa (Phalacro corax) जल कौआ

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Suliformes |
| Genus and Species (If known) | Phalacro corax |
| Local Name / Common Name | Jal Kauwa/Cormorant (जल कौआ) |
| | |
| Habit and Habitat | Found in lakes |
| Description | Size are 70-79 cm in length. Weight are 0.35-5 kg. Adults are brown-black with a small patch of yellow- orange skin on the face. All species are fish eaters. They are excellent divers. Primitive appearance with its long neck making it appear almost reptilian. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout year mostly in summer. |
| Local Status: Past- | In abundance |
| Present- | Less in number |
| Uses | Pest Control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | They are trained by fishermen & used as fishing. They caught big fishes. |
| Management mechanism | Conservation of wetlands |
| Other Details | Cormorants seem to be a very ancient group, with similar ancestors reading all the way back to the time of the dinosaurs. |
| Community/Knowledge Holder | Mr. Jai Singh |

Sarus (Grus antigone) सारस

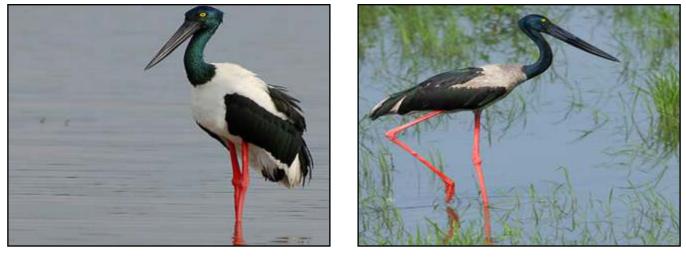




Sarus (Grus antigone) सारस

| Phylum | Chordata |
|------------------------------------|--|
| | |
| Class | Aves |
| Order | Gruiformes |
| Genus and Species (If known) | Grus antigone |
| Local Name / Common Name | Sarus / Sarus crane (सारस) |
| Habit and Habitat | Open wetlands |
| Description | It is a large non-migratory bird. It is the tallest of all flying birds standing at a height of 1.8m. They are of grey color & contrasting red head & upper neck. They form long lasting pair bonds & maintain territories. |
| Mythological Significance (if any) | Story of Siddhartha & Devdatt. |
| I.U.C.N. Status | Vulnerable |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Scenic beauty, as a pest controller. |
| Associated Traditional Knowledge | Their presence is indicator of water bodies of hygienic & healthy ecosystem. |
| Management mechanism | Protection of wetlands. |
| Other Details | The bare red skin of adults head & neck is brighter during breeding season. |
| Community/Knowledge Holder | Mr. Jai Singh |

Black necked stork (Ephippionhynchus asiaticus) लोहा सारंग



Black necked stork (Ephippionhynchus asiaticus) लोहा सारंग

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Ciconiiformes |
| Genus and Species (If known) | Ephippionhynchus asiaticus |
| Local Name / Common Name | Black necked stork (लोहा सारंग) |
| Habit and Habitat | Wetlands habitats, freshwater, marshes. |
| Description | The black necked stork is a large bird. It has a heavy beak dark to pale pink legs. |
| Mythological Significance (if any) | The Mir Shikars, traditional bird hunters of Bihar, India had a ritual practice that required a young man to capture a black- necked stork "LohaSarang" alive before he could marrif. |
| I.U.C.N. Status | Near threatened |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In less abundance |
| Uses | Scenic beauty, as pollinator& pest controller |
| Associated Traditional Knowledge | |
| Management mechanism | Conservation of wetlands |
| Other Details | They are largely non- social & are usually seen as single bird. |
| Community/Knowledge Holder | Mr. Jai Singh |

Northern Shoveler (Anas clypeata) गिराह



Northern Shoveler (Anas clypeata) गिराह

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Anseriformes |
| Genus and Species (If known) | Anas clypeata |
| Local Name / Common Name | Northern Shoveler (गिराह) |
| Habit and Habitat | Inhabits well- vegetated large rivers, jheels, coastal lagoons and marshes. |
| Description | Medium- sized recognized by unique spatulate bill. Male has bottle green head white breast. Upper part black and white. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In less abundance |
| Uses | Scenic beauty, as pollinator& pest controller |
| Associated Traditional Knowledge | |
| Management mechanism | Conservation of wetlands |
| Other Details | It is a fairly quiet species. The male has a clunking call, whereas the female has a mallard like quack. |
| Community/Knowledge Holder | Mr. Jai Singh |

Aquatic Birds Ruddy shelduck (Tadorna ferruginea) सुरखाब





Ruddy shelduck (Tadorna ferruginea) सुरखाब

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Anseriformes |
| Genus and Species (If known) | Tadorna ferruginea |
| Local Name / Common Name | Surkhab / Ruddy shelduck (सुरखाब) |
| Habit and Habitat | In tropical & sub- tropical regions. |
| Description | It is a distinctive species. 58-70 cm long with a 110-135 cm. wingspan. It has orange- brown body plumage & paler head. The wings are white with black white feathers. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | During winter season. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Scenic beauty, as pollinator & pest controller |
| Associated Traditional Knowledge | It is feathers are considered precious. |
| Management mechanism | Conservation of wetlands |
| Other Details | It breeds on cliffs, burrows, tree holes or crevices distant from water. |
| Community/Knowledge Holder | Mr. Jai Singh |

Aquatic Birds Gadwall (Anas strepera) बेखुर





Gadwall (Anas strepera) बेखुर

| Phylum | | Chordata |
|----------------------------------|-------------------|---|
| Class | | Aves |
| Order | | Anseriformes |
| Genus and Species | (If known) | Anas strepera |
| Local Name / Com | non Name | Gadwall (बेखुर) |
| Habit and Habitat | | In open wetlands |
| Description | | It is 46-56 cm long with a 78-90 cm wingspan. The male is slightly larger than the female, weighing on average 990 gm. The breeding male is patterned grey with a black rear eng, light chestnut wings & a brilliant white speculum. The female is light brown in colour. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Scenic beauty, as pollinator & pest controller |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | It is a quieter duck, except during its courtship display. |
| Community/Knowledge Holder | | Mr. Jai Singh |

Aquatic Birds Lesser Adjutant (Leptoptilos javanicus) हरगिल



Lesser Adjutant (Leptoptilos javanicus) हरगिल

| Dhylum | Chordata |
|------------------------------------|--|
| Phylum | |
| Class | Aves |
| Order | Ciconiiformes |
| Genus and Species (If known) | Leptoptilos javanicus |
| Local Name / Common Name | Lesser Adjutant (हरगिल) |
| Habit and Habitat | In open wetlands |
| Description | It is a large stork with an upright stance, a bare head & neck without a pendant pouch, it has a length of 87-93 cm & stands about 110-12 cm tall. The skull cap is pale & the upper plumage is uniformly dark, appearing almost black. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Vulnerable |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Scenic beauty, as pollinator & pest controller |
| Associated Traditional Knowledge | |
| Management mechanism | Conservation of wetlands |
| Other Details | Males & females appear similar in plumage but males tend to be larger & heavier billed. |
| Community/Knowledge Holder | Mr. Jai Singh |

Common snipe (Gallinago gallinago) स्नायिप



Common snipe (Gallinago gallinago) रनायिप

| Phylum | | Chordata |
|-------------------------|--------------|---|
| Class | | Aves |
| Order | | Charadriiformes |
| Genus and Species (If k | nown) | Gallinago gallinago |
| Local Name / Common | Name | Common Snipe (स्नायिप) |
| Habit and Habitat | | In open wetlands. |
| Description | | Adults are 25-27 cm in length with a 44-47 cm wingspan & a weight of 80-140 gm. They have short greenish- grey legs & a very long straight dark bill. They have a dark stripe through the eye with light stripes above & below it. The wings are pointed. |
| Mythological Significa | nce (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | During winter season |
| Local Status: Pa | ast- | In abundance |
| P | resent- | In abundance |
| Uses | | Scenic beauty, as pollinator&pest controller |
| Associated Traditional | Knowledge | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | It is a well camouflaged bird, it is usually shy & conceals itself close to ground vegetation & flushes only when approached closely. |
| Community/Knowledg | e Holder | Mr. Jai Singh |

Black headed ibis (Threskiornis melanocephalus) काला बाज़ा

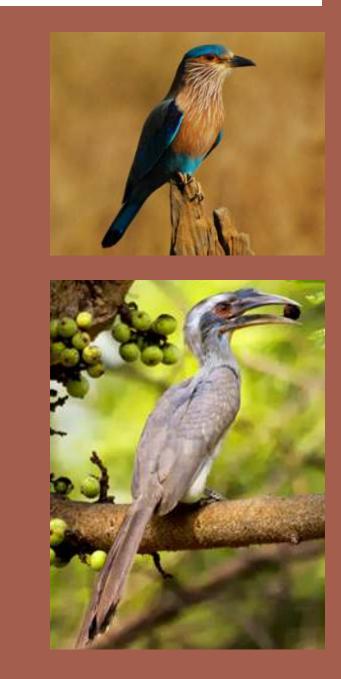


Black headed ibis (Threskiornis melanocephalus) काला बाज़ा

| Phylum | | Chordata |
|----------------------------------|-------------------|---|
| Class | | Aves |
| Order | | Pelecaniformes |
| Genus and Species | (If known) | Threskiornis melanocephalus |
| Local Name / Com | mon Name | Black headed ibis / Oriental white ibis (काला बाज़ा) |
| Habit and Habitat | | In marshy wetlands |
| Description | | Adults are typically 75 cm long & white plumaged with some greyer areas on the wings. The bald head, the neck & legs are black. The thick down curved bill is dusky yellow. Sexes are similar. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Near threatened |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In less abundance |
| | Present- | In less abundance |
| Uses | | Scenic beauty, as pollinator & pest controller |
| Associated Traditional Knowledge | | |
| Management mechanism | | Conservation of wetlands |
| Other Details | | Juveniles have whiter necks & a black bill. It builds a stick nest in a tree & lays 2-4 eggs. |



FORMAT- XXI Aves (B) Terrestrial Birds



Oriental Magpie Robin (Copsychus saularis) रॉबिन



Oriental Magpie Robin (Copsychus saularis) रॉबिन

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Copsychus saularis |
| Local Name / Common Name | Robin (रॉबिन) |
| Habit & Habitat | Woodland & cultivated area |
| Descriptions | 19 cm long including the long tail that is usually held cocked upright. Male has black upper parts, head 7 throat apart from a white shoulder patch. Female are greyish black above & greyish-white. Breeding season March to July. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | This species is considered as one of the 'little concern' globally but in some areas the species is on the decline. |
| Season when seen | In summer and winters. |
| Local Status: Past – | In abundance |
| Present – | In abundance |
| Uses- | Used as a pest control, Pollinations and Scenic beauty |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done. |
| Other Details | Magpie robins were widely kept as cage birds for their singing abilities. Magpie Robin is the National bird of Bangladesh. |
| Community/Knowledge Holder | Mr. Dhirendra Kumar |

Crow (Corvus splendens) कौआ



Crow (Corvus splendens) कौआ

| Phylum | Chordata |
|-----------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If know |) Corvus splendens |
| Local Name / Common Nam | Crow/Kawa (कौआ) |
| Habit & Habitat | Perhaps the most familiar bird of Indian town & villages. Lives in close association with man. |
| Descriptions | 42 cm in size. Black in colour but neck are grey colour. Both sexes shares in cubation & nest feedings. Nesting season between April to June. |
| Mythological Significance (| Cany) Used in black magic. Crow is the vehicle of lord Shani. Symbol of ancestors (Shraad) |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout year. |
| Local Status: Past – | Earlier in more in number. |
| Prese | t – Now in Less in number. |
| Uses | Used as a pest control, pollinators |
| Associated Traditional Kno | ledge Eat the eggs of other birds. |
| Management mechanism | Afforestation should be done |
| Other Details | They are good decomposers and useful scavengers. |
| Community/Knowledge Ho | der Mr. Dhirendra Kumar |

Peacock / Mor (Pavo cristatus) मोर



Peacock / Mor (Pavo cristatus) मोर

| Phylum | | Chordata |
|--------------------|-------------------|---|
| Class | | Aves |
| Order | | Galliformes |
| Genus and Species | s (If known) | Pavo cristatus |
| Local Name / Com | mon Name | Peacock/Mor (मोर) |
| Habit & Habitat | | Open forest & woodland,usually near a riveror streams, Farmlandand villages. |
| Descriptions | | 1.8-2.3m length in size. 2.75-6 kg in weight. The male's head, neck & breast are a glossy, iridescent blue with white patches above & below the eyes. Along with a crest of upright, blue-tipped feathers on the crown of the head. Female are peahens. Breeding season is rainy. |
| Mythological Sign | ificance (if any) | Numerous iconic representation is frequently depicted in temple art, mythology, poetry, Folk music and traditions. |
| I.U.C.N. Status | | Least concern |
| Season when seen | | All season, breed mostly in monsoon. |
| Local Status: | Past – | In abundance |
| | Present – | In abundance |
| Uses | | Used as a pest control, pollinators and scenic beauty |
| Associated Traditi | onal Knowledge | People have believe that when peacock dances rain comes. |
| Management mecl | nanism | |
| Other Details | | Peacock is the national bird of India. |
| Community/Know | vledge Holder | Mr. Dhirendra Kumar |

Plum headed Parakeet (Psittacula cyanocephala) तोता



Plum headed Parakeet (Psittacula cyanocephala) तोता

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| | |
| Order | Psittacopasserae |
| Genus and Species (If known) | Psittacula cyanocephala |
| Local Name / Common Name | Plum headed Parakeet/Tota (तोता) |
| Habit & Habitat | They have successfully adapted to living in disturbed habitats. |
| Description | 40 cm length in size.Green with long bluish tail & red bill. Adult male sports a real or black neck-ring. The males develop a black ring between 18 months & by three years the ring is highlighted with pink & blue. Females do not have the ring,breeding season is in warm weather (July- September) |
| Mythological Significance (if any) | In Hindu mythology Parrot is the vehicle of Kamadeva God. |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout Year |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Used as a pest control, pollinators and has scenic beauty. |
| Associated Traditional Knowledge | Parrots have featured in human writings, story, art, humour, religion & music for thousand of years. |
| Management mechanism | Afforestation should be done |
| Other Details | Parrots are the most intelligent birds & the ability of some species to imitate human voice enhances their popularity as pets. |
| Community/Knowledge Holder | Mr. Dhirendra Kumar |

House Sparrow (Passer domesticus) गौरेया



House Sparrow (Passer domesticus) गौरेया

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Passer domesticus |
| Local Name / Common Name | Gauriya/House Sparrow (गौरेया) |
| Habit & Habitat | A confirmed hanger on of man ,in hills and plains alike, whether in a busting noisy city or out skirting forest. |
| Descriptions | Brown and grey sparrow withstout bill. Male has black patch near chine. Buffer with dark streaking above, pale supercilia, unstreaked buff below. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern or in danger |
| Season when seen | All season |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest control, pollinator, scenic beauty. |
| Associated Traditional Knowledge | They are most familiar birds . |
| Management mechanism | Afforestation should be done |
| Other Details | Birds usually described later as sparrow are reffered to in many works of ancient literature & religious texts in Europes and western area. Sparrow is the state bird of Delhi. |
| Community/Knowledge Holder | Mr. Dhirendra Kumar |

Baboona (Zosterops palpebrosus) बबुना





Baboona (Zosterops palpebrosus) बबुना

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Zosterops palpebrosus |
| Local Name / Common Name | Baboona / Oriental white eye. (बबुना) |
| Habit & Habitat | Inhabits wooded areas including forests, parks and gardens. |
| Descriptions | 10 cm in size. Greenish-yellow in colour. Yellow on throat & upper breast & rump. Breeding season is Febuary to April. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | All season |
| Local Status: Past- | Less in number |
| Present- | More in number |
| Uses | Pest control, pollinator, scenic beauty. |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | The oriental white-eye is a smell passerine bird in the white-eye family. |
| Community/Knowledge Holder | Mr. Dhirendra Kumar |

Terrestrial Birds Kali Phutki (*Prinia socialis*) काली फुतकी



Kali Phutki (Prinia socialis) काली फुतकी

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Prinia socialis |
| Local Name / Common Name | Kali Phutki / Ashy Prinia (काली फुतकी) |
| Habit & Habitat | Frequents shrubbery in gardens. |
| Descriptions | Size is 13 cm. Colour is deep orange belly head & mantle dark. Similar sexes in male & female. Breeding season is after monsoon. In breeding plumages are grey. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern. |
| Season when seen | All season |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest control, pollinator, scenic beauty. |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | Its is most easily distinguished by the loudsharp. |
| Community/Knowledge Holder | Mr. Dhirendra Kumar |
| | |

Indian Robin (Saxicoloides fulicata) कलचुरी





Indian Robin (Saxicoloides fulicata) कलचुरी

| Phylum | | Chordata |
|--------------------------|------------------|--|
| Class | | Aves |
| | | |
| Order | | Passeriformes |
| Genus and Species | (If known) | Saxicoloides fulicata |
| Local Name / Comm | non Name | Kalchuri/ Indian Robin (कलचुरी) |
| Habit & Habitat | | Inhabits dry, often rock, wooden areas shrub, cultivation and garden. |
| Descriptions | | Size is 6-8 cm in male. Mainly black, brownish in colour. Male are mainly black with a white shoulder patch or stripe whose visible extent can vary with posture. Female are brownish above with the vent a paler shade of chestnut than the males. Breeding season is December to September but varies accordingly to the first rains. |
| Mythological Signi | ficance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | All season |
| Local Status: | Past- | More in number |
| | Present- | Less in number |
| Uses | | Pest control, as pollinator, scenic beauty. |
| Associated Traditio | onal Knowledge | |
| Management mechanism | | Afforestation should be done |
| Other Details | | |
| Community/Know | ledge Holder | Mr. Dhirendra Kumar |

Mahoka (Centropus sinenis) महोका



Mahoka (Centropus sinenis) महोका

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Cuculiformes |
| Genus and Species (If known) | Centropus sinenis |
| Local Name / Common Name | Mahoka/Coucal (महोका) |
| Habit & Habitat | Mainly habitat is terrestrial stalks along the ground or clambers. |
| Descriptions | Black and chest nut cuckoo with long, broad black tail. Sexes are similar in plumage females are slighty large. They are similar but larger. Juvenile barred white often looks shaggy headed. Breeding season is after the monsoon other part are June to September. |
| Mythological Significance (if any) | The deep calls are associated with spirits & omens. |
| I.U.C.N. Status | |
| Season when seen | All season |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest control, pollinator, scenic beauty. |
| Associated Traditional Knowledge | The flesh was once eaten as a cure to Tuberculosis & pulmonary ailments. |
| Management mechanism | Afforestation should be done |
| Other Details | Haemosporidia closely related to those that cause malaria & pulmonary ailments. |
| Community/Knowledge Holder | Mr. Dhirendra Kumar |

Red vented Bulbul (Pycnonotus cafer) बुलबुल





Red vented Bulbul (Pycnonotus cafer) बुलबुल

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeri formes |
| Genus and Species (If known) | Pycnonotus cafer |
| Local Name / Common Name | Bulbul (बुलबुल) |
| Habit & Habitat | Prefers better wooded localities than the red vented species & commonly found in hills upto 2500 m. |
| Descriptions | Size is 20 cm. Colour is black crest. Dark brown above with white. 2 tail tips & underparts. Brown side breast patches. Sexes are similar. Male & female are alike. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | All season |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest control, pollinator, scenic beauty. |
| Associated Traditional Knowledge | An general bulbuls areresistant to human pressures on the environment & are tolerant of disturbed habitat. |
| Management mechanism | Afforestation should be done |
| Other Details | In19 th century India, these birds were frequently kept as cage pets & for fighting especially in the carnatic region. |
| Community/Knowledge Holder | Mr. Dhirendra Kumar |

Terrestrial Birds Jungle-Babbler (Turdoides striatus) जंगल बैबलर



Jungle-Babbler (Turdoides striatus) जंगल बेबलर

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Turdoides |
| Local Name / Common Name | Jungle-Babbler/Satbhai (जंगल बैबलर) |
| Habit & Habitat | In gardens within large cities as well as in forested areas and cultivation areas. |
| Descriptions | Size is 25 cm. They are grey brown upperparts, grey throat & breast with some moulting. Breeding season is March- April & July-September. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | All season |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest control, pollinator, scenic beauty. |
| Associated Traditional Knowledge | This species which commonly known in India as the "Seven Sisters" or "Seven Brothers" or by the Hindustani equivalent of "Sat bhai". |
| Management mechanism | Afforestation should be done |
| Other Details | In Sri Lanka this birds known as demalichcha. |
| Community/Knowledge Holder | Mr. Dhirendra Kumar |

Black Kite (Milvus migrans govinda) चील





Black Kite (Milvus migrans govinda) चील

| Phylum | | Chordata |
|----------------------------------|-------------------|---|
| Class | | Aves |
| Order | | Accipitriformes |
| Genus and Species | (If known) | Milvus govinda |
| Local Name / Com | mon Name | Cheel/Black Kite (चील) |
| Habit & Habitat | | In area of high human population. Here the birds avoid heavily forested regions. |
| Descriptions | | Size is 46-54 cm. Black, brown, legs are yellow& the claws are black sexes are alike. The patch behind the eye appears darker. Breeding season is winter. |
| Mythological Sign | ificance (if any) | It is said in ancient Egyptian mythology to have taken the form of a kite in various situation in order to resurrect the deed. |
| I.U.C.N. Status | | Least concern |
| Season when seen | | July to after the monsoon. |
| Local Status: | Past- | More in number |
| | Present- | Less in number |
| Uses | | Pest, control, pollinator, scenic beauty. |
| Associated Traditional Knowledge | | Used like messenger in ancient time. |
| Management mechanism | | Afforestation should be done |
| Other Details | | They are opportunist hunters & have been known to take birds, bats & rhodents. Black-eared kites were formed to accumulate nearly 70% of mercury accumulated from polluted food in the feathers. |
| Community/Know | ledge Holder | Mr. Dhirendra Kumar |

Indian Roller (Coracias benghalensis) नीलकंठ



Indian Roller (Coracias benghalensis) नीलकंठ

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Coraciiformes |
| Genus and Species (If known) | Coracias benghalensis |
| Local Name / Common Name | Indian Roller (नीलकंठ) |
| Habit & Habitat | The main habitat is cultivation land, thin forest & grassland. |
| Descriptions | Size 26-27 cm long & weighing are 90g. The breast is brownish & not blue as in the European Roller.The crowns vent are blue. Throat is blue in colour. |
| Mythological Significance (if any) | It is said to be sacred to Vishnu & used to be caught & released during festival such as Dussehra & Durga puja. A local hindi name is Neelkanth, meaning "blue throat" a name associated with the deity Shiva (who drink poison resulting in the blue throat) |
| I.U.C.N. Status | Least concern |
| Season when seen | All season. Mostly in October&Nov. |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | As a pest control, pollinator & scenic beauty. |
| Associated Traditional Knowledge | Adding its chopped feathers to grass cows was believed increase their milk yield. |
| Management mechanism | Afforestation should be done |
| Other Details | The Indian roller has been chosen as the State bird by the Indian states of Bihar, Andhra Pradesh, Telangana, Karnataka & Odisha. |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |

Asian Paradise Fly Catcher (Terpsiphone paradisi) दूधराज



Asian Paradise Fly Catcher (Terpsiphone paradisi) दूधराज

| Phylum | Chordata |
|----------------------------------|--|
| Class | Aves |
| Order | Passeriforms |
| Genus and Species (If known) | Terpsiphone paradisi |
| Local Name / Common Name | Asian Paradise Fly Catcher (दूधराज) |
| Habit and Habitat | Thick forests & well-wooded habitats. |
| Description | Size are 18 to 21 cm. The inside of the mouths of paradise flycatcher are brighty coloured. Females are short tailed with rufous wings & a black head. Males haves elongated central tail feathers & in some populations a black & rufous plumage while others have white plumage. They are monogamous May to July. |
| Mythological Significance (if an | y) |
| I.U.C.N. Status | Least concern |
| Season when seen | All season |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest Control, pollinator & Scenic beauty. |
| Associated Traditional Knowled | ge The paradise flycatcher make a range of vocalizations, These range from whistling songs to harsher calls. |
| Management mechanism | Afforestation should be done |
| Other Details | |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |

Black Drongo (Dicrurus adisimilis) ब्लैक झौंगो





Black Drongo (Dicrurus adisimilis) ब्लैक झौंगो

| Phylum | | Chordata |
|----------------------------------|-------------------|--|
| Class | | Aves |
| Order | | Passeriformes |
| Genus and Species | s (If known) | Dicrurus adisimilis |
| Local Name / Com | mon Name | King crow/Bujanga (ब्लैक झ्रौंगो) |
| Habit and Habitat | | Open agricultural areas & light forest throughout range. |
| Description | | Size-28 cm. Feeding on insect. These birds are glossy black with a wide fork. The sexes cannot be told apart in the field. They are aggressive & fearless in number birds. Breeding season is February to March. Males & females sing in the morning during breeding season. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Winter season. |
| Local Status: | Past- | More in number |
| | Present- | Less in number |
| Uses | | As a pollinator |
| Associated Traditional Knowledge | | It is believed that it brought water to 'Husayn ibn Ali revered by Shia muslims |
| Management mecl | hanism | Afforestation should be done |
| Other Details | | Black drongo's were introduced just before the second world war. |
| Community/Know | vledge Holder | Mr. Sarvesh Kumar |

Laughing Dove (Streptopelia senega lensis) छोटा फाख्ता



Laughing Dove (Streptopelia senega lensis) छोटा फाख्ता

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Columbiformes |
| Genus and Species (If known) | Streptopelia senega lensis |
| Local Name / Common Name | Laughing Dove (छोटा फाख्ता) |
| Habit and Habitat | It is common & wide spread species in scrub, dry farmland. |
| Description | The laughing dove is a long tailed, slim pigeon, typically 25 cm (9.8 inch) in length. It is pinkish brown on the underside with tinged head & neck. Breeding periods in spring autumn. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | Less abundance |
| Uses | Pest, control pollinator & scenic beauty. |
| Associated Traditional Knowledge | They make laughing sound. |
| Management mechanism | Afforestation should be done |
| Other Details | Other names include palm dove & Senegal dove while in India the name of the little brown dove is often used. |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |

Terrestrial Birds Bank Myna *(Acridotheres ginginianus)* मैना



Bank Myna (Acridotheres ginginianus) मेना

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Acridotheres ginginianus |
| Local Name / Common Name | Bank Myna (मैना) |
| Habit and Habitat | Habitat is cultivated farmland, cities in markets & railway station. |
| Description | 22cm in length. The head is black on the crownsides. The upper plumage is salty grey while the under side is lighter grey with pale pink plumage towards the centre of the abdomen. Breeding season is May to August. |
| Mythological Significance (if any) | The common myna widely appears under the name saarika in Indian culture from vedic times. |
| I.U.C.N. Status | Least concern |
| Season when seen | All season |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest control, as pollinator & scenic beauty. |
| Associated Traditional Knowledge | The common myna is an important motif in Indian culture & appears both in Sanskrit& Parakrit literature. |
| Management mechanism | Afforestation should be done |
| Other Details | Ithas been recorded as the fourth ranking avian pest in the fruit industry. |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |

Egyptian Vulture (Neophron percnopterus) इजिप्शीयन वल्चर



Egyptian Vulture (Neophron percnopterus) इजिप्शीयन वल्चर

| Phylum | | Chordata |
|------------------------------------|--------------|--|
| Class | | Aves |
| Order | | Accipitriformes |
| Genus and Species | (If known) | Neophron percnopterus |
| Local Name / Com | non Name | White scavenger vulture/Gidh (इजिप्शीयन वल्चर) |
| Habit and Habitat | | Generally inhabits open, arid areas & can be found in rocky sites for nesting. |
| Description | | The adult's plumage is white, with black flight feathers in the wings. Size 47-65 cm. Males are 47-52 cm long. Females are 52-55.5 cm long. 1600-220 gram in weight. Breeding season is spring. |
| Mythological Significance (if any) | | In India temple at Thirukalukundran near chengalpattu was formed for a pair of birds that reputedly visited the temple for centuries. |
| I.U.C.N. Status | | Least concern |
| Season when seen | | All season |
| Local Status: | Past- | More in number |
| | Present- | Less in number |
| Uses | | Pest control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | | This species play a role in ancient Egyptian Culture. |
| Management mechanism | | Afforestation should be done |
| Other Details | | The longest recorded lifespan in captivity for an Egyptian Vulture is 37 years. |
| Community/Know | ledge Holder | Mr. Sarvesh Kumar |

Black-Red stark (Phoenicurus phoenicurus) ब्लैक रेड स्टॉट



Black-Red stark (Phoenicurus phoenicurus) ब्लैक रेड स्टीट

| DI 1 | | |
|--------------------------|--------------------|---|
| Phylum | | Chordata |
| Class | | Aves |
| Order | | Passeriformes |
| Genus and Specie | s (If known) | Phoenicurus phoenicurus |
| Local Name / Com | mon Name | Red start (ब्लैक रेड स्टीट) |
| Habit and Habitat | t | Wood land with a high horizontal visibility and low amounts of shrubs where the trees are old enough to have holes suitable for its nest |
| Description | | Size length is 13-14.5 cm long. The tail is orange red, weight 11-13 g male is smaller and has slate grey upper parts except the rump and tail. Female is brown with paler underpart and throat is whitish. Breeding season is between April to July. |
| Mythological Sigr | nificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | ı | Insummers |
| Local Status: | Past- | More in number |
| | Present- | Less in number |
| Uses | | Pest control, as pollinator, scenic beauty |
| Associated Tradit | ional Knowledge | |
| Management mec | hanism | Afforestation should be done |
| Other Details | | They are migratory species . |
| Community/Know | wledge Holder | Mr. Sarvesh Kumar |

Pied bush chat (Saxicola caprata) काला पिड्डा



Pied bush chat (Saxicola caprata) काला पिड्डा

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Saxicola caprata |
| Local Name / Common Name | Kalea pidda (काला पिड्डा) |
| Habit and Habitat | Open terrain with low termed hide vegetarian. |
| Description | Size is 13 -14 cm weight is 14-20 g colour black. Male is black except for white rump wing patch and lower belly. female is brown and slightly streaked. Breeding season is February to May. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year but some population is partly migratory, mostly in winters |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | They are insectivorous , and like other chats, hunts from a prominent low perch. |
| Management mechanism | Afforestation should be done |
| Other Details | They nest in cavities in stone walls or in holes of embankment, lining the nest with grass and animal hair. |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |

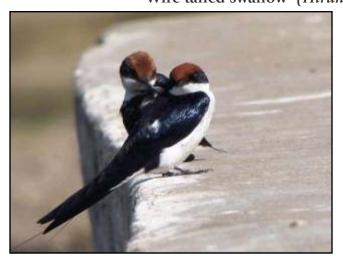
Shrike (Tephrodornis guleris) कजला लटोरा



Shrike (Tephrodornis guleris) कजला लटोरा

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Tephrodornis guleris |
| Local Name / Common Name | Wood shrike (कजला लटोरा) |
| Habit and Habitat | Found in forest dwellers they are migratory. |
| Description | Shrikes are medium sized birds up to 50 cm (20 inch) in length with grey brown or black and white plumage Their beaks are hooked, like that of a bird of prey, reflecting their predatory nature. Breeding season in summer |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Mainly in summers |
| Local Status: Past- | In abundance |
| Present- | Less abundant |
| Uses | Pest control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | Shrikes are known for their habit of catching insect and smaller vertebrates. |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |

Terrestrial Birds Wire tailed swallow *(Hirundo smithii)* वायर टेल्ड स्वालो





Wire tailed swallow (Hirundo smithii) वायर टेल्ड स्वालो

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Hirundo smithii |
| Local Name / Common Name | Wire tailed swallow (वायर टेल्ड स्वालो) |
| Habit and Habitat | The bird is found near water and human habitation |
| Description | Size 18 cm (7 inch) in length bit has bright blue upperpart, bright white under part and chestnut cap. Immature bird lack tail wires and have dull brown caps. Breeding season is January to March and July to August. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | This species gets its name from the very long filamentous outermost tail feathers which tail behind two wires. |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |

Martin (Progne subis) मार्टिन



Martin (Progne subis) मार्टिन

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Progne subis |
| Local Name / Common Name | Martin (मार्टिन) |
| Habit and Habitat | They are migrated in Kannauj city. They are colonial with dozen of martins nesting in the same spot. They feed in open areas near water. |
| Description | The average length from bill to tail is 20 cm (7.9 inch). Males are entirely black with glossy steel blue sheen. Females are dark on top with some steel blue sheen. & lighter under parts. Breeding season is spring. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Spring season |
| Local Status: Past- | In abundance |
| Present- | Less abundant |
| Uses | Pest control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | The population of purple martin is dependent on artificial martin houses of wood or aluminum. |
| Management mechanism | Afforestation should be done |
| Other Details | They are fairly noisy. Purple martins are aerial insectivores, meaning that they catch insects from the air. |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |

Terrestrial Birds Warbler (Cettia brunnifrons) वॉरबलर



Warbler (Cettia brunnifrons) वॉरबलर

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Cettia brunnifrons |
| Local Name / Common Name | Warbler (वॉरबलर) |
| Habit and Habitat | Shrubberies at edges of evergreen. |
| Description | Size are 10-11 cm. Males are 8-9 grams in weight & females are 6-9 grams in weight. Small slender looking bush- warbler with small bill, long pale supercilium well defined in front of eye. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | April-August |
| Local Status: Past- | In abundance |
| Present- | Less abundant |
| Uses | Pest control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | |
| Community/Knowledge Holder | Mr. Sarvesh Kumar |

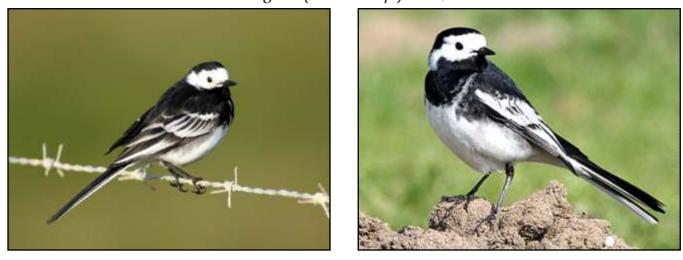
Green bee eater (Merops orientales) ग्रीन बी ईटर



Green bee eater (Merops orientales) ग्रीन बी ईटर

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Coraciiformes |
| Genus and Species (If known) | Merops orientales |
| Local Name / Common Name | Green bee eater (ग्रीन बी ईटर) |
| Habit and Habitat | Woodland with scattered trees & bare soil or sand. |
| Description | The Green bee eater is small sized bird around 18cm in length. The green bee eater is an easily distinguishable bird due to its bright green plumage & attractive long tail feathers. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | March-June |
| Local Status: Past- | In abundance |
| Present- | Less abundant |
| Uses | Pest control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | A study suggested that green bee eaters may be capable of interpreting the behavior of human observers. |
| Management mechanism | Afforestation should be done |
| Other Details | They take sand bathing, They are near passerine bird in the bee eater family. |
| Community/Knowledge Holder | Smt. Premlata |

Terrestrial Birds White Wag tail *(Motacilla sp.)* सफेद खंजन



White Wag tail (Motacilla sp.) सफेद खंजन

| Phylum | | Chordata |
|----------------------------------|-----------------|---|
| Class | | Aves |
| Order | | Passeriformes |
| Genus and Species (| lf known) | Motacilla sp. |
| Local Name / Comm | on Name | White Wag tail (सफेद खंजन) |
| Habit and Habitat | | Found in grassland areas |
| Description | | The white wag tail is a slender bird. 5-19 cm in length. Maximum life span in the wild is 12 years. Weight is 25 grams. Male uses a series of contact calls to attract the females. Breeding season is from April to August. |
| Mythological Signif | icance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: | Past- | More in number |
| | Present- | Less in number |
| Uses | | Used for Pest control, as a pollinator and for scenic beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Afforestation should be done |
| Other Details | | They are insectivorous birds of open countries. The wag tail is the national bird of Latvia. |
| Community/Knowl | edge Holder | Abrar Khan |

Rock-chat (Cercomela fusca) रॉक चैट



Rock-chat (Cercomela fusca) रॉक चैट

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Cercomela fusca |
| Local Name / Common Name | Rock chat (रॉक चैट) |
| Habit and Habitat | Found an old building & rocky areas. |
| Description | They are look like Indian Robin &is about 17 cm long. It is uniformly rufous, brown with the wings & tail of a slightly darker shade. Brown on the under sides with dark grey- brown vent. Breeding season is spring to summer. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | It is a common house bird. |
| Management mechanism | Afforestation should be done |
| Other Details | In India, the local name is Shama. It feeds on insects, captured mainly on the ground. |
| Community/Knowledge Holder | Abrar Khan |

Terrestrial Birds Golden oriole (Oriolus oriolus) गोल्डन ओरिओल



Golden oriole (Oriolus oriolus) गोल्डन ओरिओल

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Oriolus oriolus |
| Local Name / Common Name | Golden oriole (गोल्डन ओरिओल) |
| Habit and Habitat | Riverine forest, large gardens, woodland. |
| Description | Males are striking in the typical oriole black & yellow plumage, but the female is a drabber green bird. Orioles are shy, and even the males is remarkably difficult to see in the dappled yellow & green leaves of the canopy. Breeding season in summer. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Winters |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Pest control, as pollinator, scenic beauty |
| Associated Traditional Knowledge | They are very shy bird |
| Management mechanism | Afforestation should be done |
| Other Details | They feed on insects& fruits. They build neat nests in tree forks & lay 3-6 eggs. They are migratory. |
| Community/Knowledge Holder | Abrar Khan |

Fly Catcher (Muscicapa latirostris) फ्लाई कैचर



Fly Catcher (Muscicapa latirostris) फ्लाई कैचर

| Phylum | | Chordata |
|----------------------------------|-------------------|--|
| Class | | Aves |
| Order | | Passeriformes |
| Genus and Species | s (If known) | Muscicapa latirostris |
| Local Name / Com | mon Name | Fly catcher (फ्लाई कैचर) |
| Habit and Habitat | | Open woodland & cultivated areas. |
| Description | | They are 13 cm long, including the cocked tail. It is similar in shape to larger spotted fly catcher. The dark bill is relatively large & broad based. The adult has grey- brown upperparts, which became greyer as the plumage& whitish underparts with brown- tinged flanks. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | All season |
| Local Status: | Past- | More in number |
| | Present- | Less in number |
| Uses | | It is used as pest control, as pollinator, scenic and for beauty |
| Associated Traditional Knowledge | | |
| Management mechanism | | Afforestation should be done |
| Other Details | | The male Asian brown fly catcher sings a simple melodic- song during courtship. |
| Community/Know | vledge Holder | Abrar Khan |

Rufous Tree pie (Dendrocitta vagabunda) ट्री पाई



Rufous Tree pie (Dendrocitta vagabunda) ट्री पाई

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| | |
| Order | Passeriformes |
| Genus and Species (If known) | Dendrocitta vagabunda |
| Local Name / Common Name | Rufous Tree pie/Kotri (ट्री पाई) |
| Habit and Habitat | Open shrub, agricultural areas, forests as well as gardens. |
| Description | The sexes are alike & the main colour of the body is cinnamon with a black head & the long graduated tail is bluish grey& is tipped in black. The bill, legs & feet are black. Breeding season is from April to June. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Summer |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | It is used as pest control, as a pollinator, and for scenic beauty |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | The rufous treepie is an arboreal feeding almost completely in tree on fruits seeds. |
| Community/Knowledge Holder | Abrar Khan |

Indian Grey Hornbill (Tockus birostris) धनेश



Indian Grey Hornbill (Tockus birostris) धनेश

| Phylum | | Chordata |
|----------------------|-----------------|--|
| Class | | Aves |
| Order | | Bucerotiformes |
| Genus and Species (| If known) | Tockus birostris |
| Local Name / Comm | on Name | Indian Grey Hornbill (धनेश) |
| Habit and Habitat | | Found in cities, urban areas, old avenue trees. |
| Description | | Medium sized Hornbill, measuring around 61cm (24 inch). The upperparts are grayish brown. Male has a large casque on a dark bill, and the culmen & lower mandible are yellowish. Female has yellowish bill with black on the basal half & on the casque. |
| Mythological Signifi | icance (if any) | Symbol of Good luck |
| I.U.C.N. Status | | Least concern |
| Season when seen | | All season |
| Local Status: | Past- | More in number |
| | Present- | Less in number |
| Uses | | Pest control, as pollinator, scenic beauty |
| Associated Tradition | nal Knowledge | Bill-grapping & aerial jousting. |
| Management mechanism | | Afforestation should be done |
| Other Details | | They indulge in various social activities. |
| Community/Knowle | edge Holder | Abrar Khan |

Green barbet (Megalaima sp.) टुकटुकिया



Green barbet (Megalaima sp.) टुकटुकिया

| Phylum | Chordata |
|------------------------------|---|
| Class | Aves |
| Order | Piciformes |
| Genus and Species (If know | <i>Megalaima</i> sp. |
| Local Name / Common Name | Tuktukia (टुकटुकिया) |
| Habit and Habitat | Found in woodland areas. |
| Description | 31-33 cm in length & weight is 192-295 g. It is plump bird, with a short neck large head & short tail. Head is brownish. They are quite aggressive. The adult has a blue head, large yellow bill. Breeding season is summer (December-July). |
| Mythological Significance (i | uny) |
| I.U.C.N. Status | Least concern |
| Season when seen | Winter to summer |
| Local Status: Past- | In abundance |
| Presen | Less abundant |
| Uses | Play important role in forests as seed dispersal agents. They also visit the flower of Bombax for nector & may be involved in pollination. |
| Associated Traditional Know | edge |
| Management mechanism | Afforestation should be done |
| Other Details | They feed on the fruits. Their fruit eating makes than a minor nuisance in fruit orchards although they are noted, a having a beneficial effect in coffee plantations. |
| Community/Knowledge Hol | er Abrar Khan |

Baya weaver (Ploceus philippinus) बया



Baya weaver (Ploceus philippinus) बया

| Dhylum | | Chordata |
|----------------------------------|-------------------|---|
| Phylum | | |
| Class | | Aves |
| Order | | Passeriformes |
| Genus and Species | (If known) | Ploceus philippinus |
| Local Name / Com | mon Name | Baya weaver (बया) |
| Habit and Habitat | | These birds are found in grasslands, cultivated areas & scrublands. |
| Description | | These are sparrow sized (15 cm) & in their non- breeding plumage, both males & females resembles female house sparrows. They have a stout conical but and a short square tail. Breeding males have a bright yellow crown, dark brown mask, blackish brown bill. They look like sparrow. Breeding season is during the monsoon. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | All season (summers) |
| Local Status: | Past- | In abundance |
| | Present- | Less abundant |
| Uses | | As a pollinator |
| Associated Traditional Knowledge | | In earlier times the Baya Weaver was trained by street performers in India for entertainment. They could pickup object at the command of their trainers. They were trained to fire toy cannons string beads, pick up coins & other objects. |
| Management mechanism | | Afforestation should be done |
| Other Details | | The male weaves nests that come with heat shield mecha- nisms & security check to stay out of reach of predators. |
| Community/Know | ledge Holder | Abrar Khan |

Jungle Owlet (Glaucidium radiatum) उल्लू



Jungle Owlet (Glaucidium radiatum) उल्लू

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Strigiformes |
| Genus and Species (If known) | Glaucidium radiatum |
| Local Name / Common Name | Ullu/Jungle Owlet (उल्लू) |
| Habit and Habitat | Scrubbed forest to deciduous forest. |
| Description | It is small owlet & has a rounded head. There is no clear facial disk & the wings are brownish with narrow white tail. The iris is yellow, the bill & tarsi are greenish with black claws. |
| Mythological Significance (if any) | It is symbolized as the carrier of "Goddess Laxmi". |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | More in number |
| Present- | More in number |
| Uses | Pest control |
| Associated Traditional Knowledge | Used in black magic. |
| Management mechanism | Afforestation should be done |
| Other Details | This owlet is mainly active at dawn and dusk, but is known to call & fly during the day time as well. |
| Community/Knowledge Holder | Abrar Khan |

Fowl (Gallus gallus domesticus) मुर्गा





Fowl (Gallus gallus domesticus) मुर्गा

| Phylum | Chordata |
|------------------------------------|---|
| Class | |
| | Aves |
| Order | Galliformes |
| Genus and Species (If known) | Gallus gallus domesticus |
| Local Name / Common Name | Murga / Fowl (मुर्गा) |
| Habit and Habitat | Inhabits well watered forest. |
| Description | Male has golden brown hackles covering neck & back. Thick long covered black tail. Red comb and wattles. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Used in farming (chicken farms). Very productive food source of both meat & eggs. |
| Associated Traditional Knowledge | It is more prone to Ranikhet disease. In ancient times, fowls were used to fight |
| Management mechanism | Domestication |
| Other Details | The red jungle fowl was first domesticated at least five thousands year ago in Asia. |
| Community/Knowledge Holder | Abrar Khan |

House Swift (Apus nipalnsis) अबाबील





House Swift (Apus nipalnsis) अबाबील

| Dhalaan | Chardete |
|------------------------------------|--|
| Phylum | Chordata |
| Class | Aves |
| Order | Apodiformes |
| Genus and Species (If known) | Apus nipalnsis |
| Local Name / Common Name | House Swift / Little Swift (अबाबील) |
| Habit and Habitat | It favors urban areas & ancient building. |
| Description | Small, broad winged, blackish swift with almost square tall. Wing is pointed. Tail is short. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Mainly seen from February to September |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Used as a pollinator |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | The most aerial bird in India is common swift (Apus apus). |
| Community/Knowledge Holder | Mr. Kuldeep Singh |
| | |

Rose Ringed Parakeet (Psittacula krameri) तोता



Rose Ringed Parakeet (Psittacula krameri) तोता

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Psittaciformes |
| Genus and Species (If known) | Psittacula krameri |
| Local Name / Common Name | Tota / Rose- ringed Parakeet (तोता) |
| Habit and Habitat | Often bands itself into large flocks. Nestsin a natural hollow tree trunk. |
| Description | Grass green with long bluish tail & red bill. Male has black & pink malas stripes & collar after third year. Female lack these. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In less abundance |
| Uses | Used as a pet & in circus. In seed dispersal. |
| Associated Traditional Knowledge | It mimics the sounds. |
| Management mechanism | It destroys the crop & it is managed by setting up scarecrow. |
| Other Details | It's a beautiful green bird. |
| Community/Knowledge Holder | Mr. Kuldeep Singh |

Scaly breasted munia (Lonchura punctulata) सीनबाज



Scaly breasted munia (Lonchura punctulata) सीनबाज

| Diala | | Chardete |
|-----------------------|-------------------|---|
| Phylum | | Chordata |
| Class | | Aves |
| Order | | Passeriformes |
| Genus and Species | (If known) | Lonchura punctulata |
| Local Name / Com | mon Name | Scaly breasted munia (सीनबाज) |
| Habit and Habitat | | Usually close to water & grassland. They are found mainly on plains. |
| Description | | The scaly breasted munia is 11-12 cm long. The under parts are white dark scale marking. Large conical bills, brown scaled feathers in white breast and flanks. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | Less abundant |
| Uses | | As a pollinator |
| Associated Tradition | onal Knowledge | |
| Management mech | anism | Afforestation should be done |
| Other Details | | In many areas it is regarded as an agricultural pest. |
| Community/Know | ledge Holder | Mr. Kuldeep Singh |

Indian Silver Bill (Lonchura) तोता

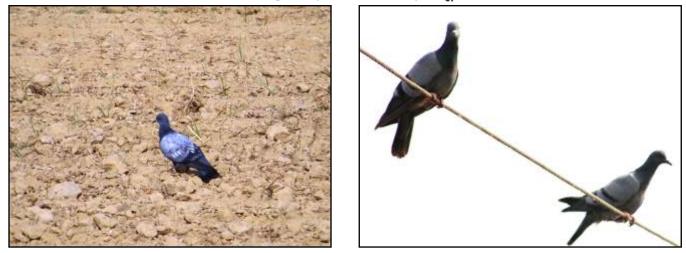




Indian Silver Bill (Lonchura) तोता

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Lonchura malabarica |
| Local Name / Common Name | Indian Silver Bill or White Throated Munia (पिद्दा) |
| Habit and Habitat | It is found frequently in dry open scrub, fallow land & agricultural land. |
| Description | It is 11-11.5 cm long & has conical silver grey bill. The tail is black & wings are dark contrasting with a white rump. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout year |
| Local Status: Past- | In abundance |
| Present- | Less abundant |
| Uses | As a pollinator |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | |
| Community/Knowledge Holder | Mr. Kuldeep Singh |
| | |

Rock Pigeon (Columba livia) कबूतर



Rock Pigeon (Columba livia) कबूतर

| Phylum | | Chordata |
|--------------------------|-------------------|---|
| Class | | Aves |
| Order | | Columbiformes |
| Genus and Species | (If known) | Columba livia |
| Local Name / Comr | non Name | Kabootar / Rock Pigeon (कबूतर) |
| Habit and Habitat | | In remote rocky places. |
| Description | | It is medium sized blue grey pigeon with darker head & neck. Wings darker and tail black. Small head & stocky body. |
| Mythological Signi | ificance (if any) | Has religious importance in Amarnath & Pashupatinath. |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Its meat is used in paralysis. |
| Associated Tradition | onal Knowledge | Used to send messages in old times. |
| Management mech | anism | For its survival we should spread grain at house's verandas. |
| Other Details | | Its voice is the symbol of ill omen. Pigeons can suck up water when they drink. |
| Community/Know | ledge Holder | Mr. Kuldeep Singh |

Spotted dove (Spilopelia chinesis) चित्रोखा फाख्ता



Spotted dove (Spilopelia chinesis) चित्रोखा फाख्ता

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Columbiformes |
| Genus and Species (If known) | Spilopelia chinesis |
| Local Name / Common Name | Spotted dove (चित्रोखा फाख्ता) |
| Habit and Habitat | In moist region, mostly found on the ground where they forage for seed and grain. |
| Description | This dove is long tailed buff brown with a white spotted black collar patch on the back & sides of the neck. The back has brown feathers with rufous spots. |
| Mythological Significance (if any) | ···· |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | It adapts well to cultivated areas. They are affected by the use of pesticides and herbicides. |
| Community/Knowledge Holder | Mr. Kuldeep Singh |

Kalasis Myna (Sturnus pagodarum) ब्राह्मणी मैना



Kalasis Myna (Sturnus pagodarum) ब्राह्मणी मैना

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Sturnus pagodarum |
| Local Name / Common Name | Kalasis Myna/Brahmini Myna (ब्राह्मणी मैना) |
| Habit and Habitat | Inhabits open woodland, dry scrubs, grooves, parks & garden. |
| Description | Small, stocky grey and orange sterling with glossy black crested crown. Upper part grey with broad. |
| Mythological Significance (if any) | Symbol of good luck |
| I.U.C.N. Status | Vulnerable |
| Season when seen | Throughout the year |
| Local Status: Past- | In less abundance |
| Present- | In less abundance |
| Uses | As a pollinator & seed dispersal. |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | Both sexes take part in nest building. |
| Community/Knowledge Holder | Mr. Kuldeep Singh |

Coppersmith barbet (Megalaima haemacephala) छोटा बसन्ता



Coppersmith barbet (Megalaima haemacephala) छोटा बसन्ता

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Piciformes |
| Genus and Species (If known) | Megalaima haemacephala |
| Local Name / Common Name | Coppersmith barbet or Crimson breasted barbet (छोटा बसन्ता) |
| Habit and Habitat | They are found in gardens, grooves & sparse woodland. |
| Description | The red forehead, yellow eye ring and throat patch with streaked underside and green upperparts. |
| Mythological Significance (if any) | ····- |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | As a pollinator & also used for pest control |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | They are silent and do not call in winter |
| Community/Knowledge Holder | Mr. Kuldeep Singh |
| | |

Asian Koel (Eudynamys scolopuceus) कोयल



Asian Koel (Eudynamys scolopuceus) कोयल

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Cuculiformes |
| Genus and Species (If known) | Eudynamys scolopuceus |
| Local Name / Common Name | Koel / Asian Koel (कोयल) |
| Habit and Habitat | Arboreal, Brood parasites, Frequently come in gardens, grooves and open country abounding in large leafy trees. |
| Description | Large striped or glossy black long tailed cuckoo with white bill and ruby red eyes. Male all black, female &juveniles dark grey- brown. Above barred and spotted whitish. |
| Mythological Significance (if any) | Mentioned in Manusmriti, protecting them from harm |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | Less abundant |
| Uses | As a pollinator and seed dispersal. |
| Associated Traditional Knowledge | Its voice is a symbol of good luck |
| Management mechanism | Afforestation should be done |
| Other Details | It has been chosen as the state bird by the Indian Union Territory of Puducherry |
| Community/Knowledge Holder | Mr. Kuldeep Singh |

Common Mynah (Acridotheres tristis) देसी मैना



Common Mynah (Acridotheres tristis) देसी मैना

| Phylum | Chordata |
|-------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known | Acridotheres tristis |
| Local Name / Common Name | Common Mynah / Desi Myna (देसी मैना) |
| Habit and Habitat | It is a social bird live in closed proximity with human dwellings |
| Description | A stocky, purplish- brown starling with large, white wing patches. Yellow bill & yellow patches behind eyes. Black head. |
| Mythological Significance (if | (any) It widely appears under the name saarika in Indian culture from Vedic times. |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present | - In abundance |
| Uses | As a pollinator |
| Associated Traditional Know | ledge |
| Management mechanism | Afforestation should be done |
| Other Details | The common myna are popular as cage birds for their singing speaking abilities. |
| Community/Knowledge Hold | ler Mr. Kuldeep Singh |

Red whiskered bulbul (Pycnonotus jocosus) बुलबुल



Red whiskered bulbul (Pycnonotus jocosus) बुलबुल

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Pycnonotus jocosus |
| Local Name / Common Name | Bulbul / Red whiskered bulbul (बुलबुल) |
| Habit and Habitat | Prefers better wooded localities. |
| Description | A slim, jaunty bulbul with prominent black crest. Dark brown above with white tail lips and underparts. White cheeks and red patches behind eyes. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | As a pollinator |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | These birds are in great request among the natives, being of a fearless disposition, and easily reclaimed. They are taught to sit on the hand, and numbers may thus be seen in any Indian baazar. |
| Community/Knowledge Holder | Mr. Kuldeep Singh |

Spotted owlet (Athene brama) चुगद





Spotted owlet (Athene brama) चुगद

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Strigiformes |
| Genus and Species (If known) | Athene brama |
| Local Name / Common Name | Spotted owlet (चुगद) |
| Habit and Habitat | Inhabits open wood cultivation and near habitation. |
| Description | Small, grayish brown owl and yellow issues. Wings and tail narrowly barred. White cegebrows and rounded brown. Broken white collar. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In less abundance |
| Uses | As a pest controller |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | |
| Community/Knowledge Holder | Mr. Ishwari Prasad |

Common Hoopoe (Upupa epops) हुदहुद





Common Hoopoe (Upupa epops) हुदहुद

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Coraciiformes |
| Genus and Species (If known) | Upupa epops |
| Local Name / Common Name | Common Hoopoe / Hudhud (हुदहुद) |
| Habit and Habitat | Found in lawns, gardens & grooves in and around villages & towns. |
| Description | Striking, fan- crested pinkish- orange, black & white bird with long decurved bill. Orange or rufous pink with white- barred black tail & white bars on broad, black wings. |
| Mythological Significance (if any) | It is considered sacred in Ancient Egypt and were "depicted on the walls of tombs and temples" |
| I.U.C.N. Status | Least concern |
| Season when seen | February to May generally. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | As a pollinator |
| Associated Traditional Knowledge | Named after its vocalization, the Eurasian hoopoe emits a low "hoop, hoop, hoop" |
| Management mechanism | Afforestation should be done |
| Other Details | The hoopoe was chosen as the national bird of Israel in My 2008. |
| Community/Knowledge Holder | Mr. Ishwari Prasad |

Alexandrine parakeet (Psittacula eupatria) हीरामन तोता



Alexandrine parakeet (Psittacula eupatria) हीरामन तोता

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Psittaciformes |
| Genus and Species (If known) | Psittacula eupatria |
| Local Name / Common Name | Alexandrine parakeet (हीरामन तोता) |
| Habit and Habitat | Inhabits wooded areas and plantations. |
| Description | A large grass green parakeet with red shoulder patches. Male has black maler stripes merging into pink collar. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Potent pollinator |
| Associated Traditional Knowledge | Parrots have featured in human writings, religion & music |
| Management mechanism | Afforestation should be done |
| Other Details | Kept as cage birds for entertainment |
| Community/Knowledge Holder | Mr. Ishwari Prasad |

Terrestrial Birds Collared Dove (Streptopelia decaocto) लाली पोहू





Collared Dove (Streptopelia decaocto) लाली पोहू

| Phylum | | Chordata |
|----------------------|-------------------|--|
| Class | | Aves |
| Order | | Columbiformes |
| Genus and Species | s (If known) | Streptopelia decaocto |
| Local Name / Com | mon Name | Collared Dove (लाली पोहू) |
| Habit and Habitat | | Terrestrial habitat |
| Description | | It is a medium sized dove with an average length of 32 cm & wingspan of 47.55 cm. It is grey- buff to pinkish- grey, overall a little darker above than below with a blue-grey under wing patch. It has a black- collar edged with white on its nape from which it gets its name. Legs are short & red bill is black. Sexes separate. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As a pollinator |
| Associated Traditi | onal Knowledge | |
| Management mecl | nanism | Afforestation should be done |
| Other Details | | It is not migratory & generally found in pairs. |
| Community/Know | vledge Holder | Mr. Ishwari Prasad |

Common Raven (Corvus corax) कौंआ



Common Raven (Corvus corax) कौंआ

| Phylum | | Chordata |
|--------------------|--------------------|--|
| Class | | Aves |
| Order | | Passeriformes |
| Genus and Species | s (If known) | Corvus corax |
| Local Name / Com | mon Name | Common Raven (कोंआ) |
| Habit and Habitat | | Almost in all type of habitats except arctic regions. |
| Description | | It ranges between 54 & 67 cm in length with a wingspan of 115 to 130 cm. The bill is large & slightly curved. It has a longish, strongly graduated tail & mostly black plumage & dark brown iris. |
| Mythological Sign | iificance (if any) | They have been often considered to be birds of ill omen & death. |
| I.U.C.N. Status | | Least concern |
| Season when seen | L | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditi | ional Knowledge | Its call is symbol of coming guests in home |
| Management mec | hanism | Afforestation should be done |
| Other Details | | It is a national bird of Bhutan. |
| Community/Know | vledge Holder | Mr. Ishwari Prasad |

Shikra (Accipiter badius) चिपका





Shikra (Accipiter badius) चिपका

| Phylum | | Chordata |
|--------------------------|-------------------|--|
| Class | | Aves |
| Order | | Accipitriformes |
| Genus and Species | s (If known) | Accipiter badius |
| Local Name / Com | mon Name | Shikra (चिपका) |
| Habit and Habitat | | Plains & lower hills. |
| Description | | It is a small raptor & like most other hawks, this species has short rounded wings & a narrow & somewhat long tail. Adults are whitish on the underside. Males have a red iris while the female have a less red iris. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | As a pollinator |
| Associated Traditi | onal Knowledge | |
| Management mech | nanism | Afforestation should be done |
| Other Details | | Its call is mimicked by drongos & this behavior is thought to aid in stealing food by alarming other birds. |
| Community/Know | ledge Holder | Mr. Ishwari Prasad |

Black Hooded oriole (Oriolus xanthornus) ओरियोल



Black Hooded oriole (Oriolus xanthornus) ओरियोल

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Oriolus xanthornus |
| Local Name / Common Name | Black Hooded Oriole (ओरियोल) |
| Habit and Habitat | In tropical regions |
| Description | The male is a striking, with the typical oriole black & yellow colouration. The plumage is predominantly yellow with a solid black hood & black also in the wings & tail centre. The female has greenish under parts. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | Less abundant |
| Uses | As a pollinator, for pest control |
| Associated Traditional Knowledge | There is a Bengals story about its origin. |
| Management mechanism | Afforestation should be done |
| Other Details | Its flight is somewhat like a thrush, strong & direct with some shallow dips over longer distances. |
| Community/Knowledge Holder | Mr. Ishwari Prasad |

Terrestrial Birds Paddyfield Pipit (Anthus rufulus) चरचरी





Paddyfield Pipit (Anthus rufulus) चरचरी

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Anthus rufulus |
| Local Name / Common Name | Paddyfield Pipits (चरचरी) |
| Habit and Habitat | In open scrubs & grasslands. |
| Description | This is a large pipit at 15 cm, mainly streaked grey- brown above & pale below with breast streaking. It is along legged & a long dark bill. Sexes are similar. Young birds are more richly coloured below than adults. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | As pest controller, as a pollinator |
| Associated Traditional Knowledge | |
| Management mechanism | More and more plants should be planted |
| Other Details | It runs rapidly on grounds & feeds principally on small insects but consumes larger beetles, tiny snails, worms etc. |
| Community/Knowledge Holder | Mr. Ishwari Prasad |

Terrestrial Birds Indian bush lark *(Mirafra erythroptera)* अगैया



Indian bush lark (Mirafra erythroptera) अगैया

| Phylum | Chordata |
|-----------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Mirafra erythroptera |
| Local Name / Common Name | Indian bush lark (अगैया) |
| Habit and Habitat | In arid areas |
| Description | It has a cheek patch completely bounded by a white supercilium & post- auricular border. The crown & upperparts are heavily streaked. The pale underparts have large spots on the breast. Most of its wings coverts, tertials & central tail feathers have pale centres. |
| Mythological Significance (if any | y) |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowled | ge |
| Management mechanism | Bird census and afforestation should be done |
| Other Details | It sings from bush tops but does not usually perch on trees & wires. |
| Community/Knowledge Holder | Mr. Ishwari Prasad |

Terrestrial Birds Crested Eagle (Morphnus guianensis) डोगरा चील





Crested Eagle (Morphnus guianensis) डोगरा चील

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| | |
| Order | Accipitriformes |
| Genus and Species (If known) | Morphnus guianensis |
| Local Name / Common Name | Crested Eagle (डोगरा चील) |
| Habit and Habitat | In humid lowland forests, mostly tropical rainforest. |
| Description | It measures 71-89 cm long & has a wingspan of 138-176 cm. It has a large head, bare legs. The tail is fairly long. The wings are short & rounded. The head, back & chest of most adults are light brownish grey with white throat & a dark spot on the crest & small dark mask across the eyes. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Near threatened |
| Season when seen | Throughout the year |
| Local Status: Past- | In less abundance |
| Present- | Less abundant |
| Uses | As a pollinator, main role in food chain of nature |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | It is almost always observed singly or in pairs. The nest is huge but has a shallow cup. |
| Community/Knowledge Holder | Mr. Ishwari Prasad |

Common tailor bird (Orthotomus sutorius) दर्जी



Common tailor bird (Orthotomus sutorius) दर्जी

| Phylum | Chordata |
|------------------------------------|--|
| Class | Aves |
| Order | Passeriformes |
| Genus and Species (If known) | Orthotomus sutorius |
| Local Name / Common Name | Common tailor bird (दर्जी) |
| Habit and Habitat | In tropical & sub- tropical regions. |
| Description | It is a small bird with long tail often held upright. Adult male has bright olive green upperparts. Underparts are paler, creamy buff. Thighs are rufous. Wings are short & rounded. Bill is long & down curved. Eyes are pale brown. Legs & feet are pinkish. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | As a pest controller |
| Associated Traditional Knowledge | "Rikki- Tikki- Tari" one of Jungle Book stories includes a tailor bird couple. |
| Management mechanism | |
| Other Details | The processes used by the tailor bird in nest as sewing, rivelting, lacing & matting. The stich is male by piercing two leaves & drawing fibre through them. |
| Community/Knowledge Holder | Mr. Ishwari Prasad |

Common hawk cuckoo (Hierococcyx varius) पपीहा



Common hawk cuckoo (Hierococcyx varius) पपीहा

| Phylum | Chordata |
|------------------------------------|---|
| Class | Aves |
| Order | Cuculiformes |
| Genus and Species (If known) | Hierococcyx varius |
| Local Name / Common Name | Common hawk cuckoo / Brain fever bird (पपीहा) |
| Habit and Habitat | In deciduous & semi- evergreen forests. |
| Description | It is a medium to large sized bird. The plumage is ashy grey above, whitish brown, cross- barred with brown. The tail is broadly barred. The sexes are alike. They have distinctive yellow eye ring. Males are larger. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Afforestation should be done |
| Other Details | It is a brood parasite preferring babblers. A single egg is laid in each nest. |
| Community/Knowledge Holder | Mr. Ishwari Prasad |



FORMAT- XXII Mammais



Mammals Squirrel (Funambulus pennanti) गिलहरी



Squirrel (Funambulus pennanti) गिलहरी

| Phylum | | Chordata |
|------------------------------------|------------|--|
| Class | | Mammalia |
| Order | | Rodentia |
| Genus and Species | (If known) | Funambulus pennanti |
| Local Name / Com | non Name | Gilhari /Squirrel (गिलहरी) |
| Habit & Habitat | | It lives on trees, ground & is fast runner. It feeds on fruits & seeds. It builds nest of twigs & leaves. It is diurnal. |
| Description | | Body contains three white & grey stripes on dorsal side, absent on neck, body divisible into head, neck, trunk & tail. Ventral side & limbs covered by small grey hairs, snout contains several moustaches, & eyes are large, pinnae well developed. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: | Past – | More in number |
| | Present – | Less in number |
| Uses | | Used for Research & Biological Studies |
| Associated Traditional Knowledge | | They hide the seed and forget, and these seeds germinate. Hence help in pollination |
| Management mechanism | | |
| Other Details | | Used in experiments. |
| Community/Knowledge Holder | | Mr. Narendra Kumar |

Cow (Bos taurus) गाय





Cow (Bos taurus) गाय

| Phylum | | Chordata |
|---|--------------|--|
| Class | | Mammalia |
| Order | | Artiodactyla |
| Genus and Species | s (If known) | Bost taurus |
| - | | Cow (गाय) |
| Local Name / Common Name Habit and Habitat | | Inhabiting field, grassland & around the human dwelling. Cows are domesticated & one of most common pet that live with human. |
| Description | | More breeds have horns, which can be as large as the texas to longhorn. They are large in size & their colour different from black, white & contain dots on the skin. They contain long tail & gestation period in 9 month. |
| Mythological Significance (if any) | | Sacred in Hindu religion, accordingly to Vedic scriptures they are to be treated with the same respect as ones mother. |
| I.U.C.N. Status | | Least concern |
| Season when seen | | All the year. |
| Local Status: | Past – | More in number |
| | Present – | Less in number |
| Uses | | Milk production ∈ agriculture. |
| Associated Traditional Knowledge | | Their urine is used in curing different diseases. |
| Management mechanism | | It is domesticated |
| Other Details | | They are also used as draft animals & in curing different diseases. |
| Community/Knowledge Holder | | Mr. Narendra Kumar |

Buffalo (Bubalus bubalis) भैंस



Buffalo (Bubalus bubalis) भैंस

| Phylum | Chordata |
|------------------------------------|--|
| Class | Mammalia |
| Order | Artiodactyla |
| Genus and Species (If known) | Bubalus bubalis |
| Local Name / Common Name | Bhains/ Buffalo (भेंस) |
| Habit and Habitat | They are domesticated & most of the time they wants to live in water & mud. |
| Description | The skin of river buffalo is black. They are in large size & contain a long tail, they have rounded horns. |
| Mythological Significance (if any) | They are scarified to praise God. |
| I.U.C.N. Status | Least concern |
| Season when seen | All the season |
| Local Status: Past – | More in number |
| Present – | More in number |
| Uses | Milk, meat & skin |
| Associated Traditional Knowledge | There are many proverbs. |
| Management mechanism | It is domesticated |
| Other Details | Participate in racing festival. |
| Community/Knowledge Holder | Mr. Narendra Kumar |

Dog/Kutta (Canis familiaris) कुत्ता



Dog/Kutta (Canis familiaris) कुत्ता

| Phylum | Chordata |
|------------------------------------|---|
| Class | Mammalia |
| Order | Carnivora |
| Genus and Species (If known) | Canis familiaris |
| Local Name / Common Name | Dog/Kutta (कुत्ता) |
| Habit and Habitat | Mostly found around human dwellings. These days domesticated dogs are common. |
| Description | Body divided into head, trunk & tail. |
| Mythological Significance (if any) | Significance of dog is mentioned in Hindu Holi book 'Mahabharat'. |
| I.U.C.N. Status | Least concern |
| Season when seen | Almost all year. |
| Local Status: Past – | Less in number |
| Present – | More in number |
| Uses | In guarding of houses & fields. |
| Associated Traditional Knowledge | Very faithful |
| Management mechanism | It is domesticated |
| Other Details | Tracing criminals. |
| Community/Knowledge Holder | Mr. Narendra Kumar |

Mammals Bakra, Bakri (Capra hircus) ৰক্ষা





Bakra, Bakri (Capra hircus) बकरा

| Phylum | Chordata |
|------------------------------------|---|
| Class | Mammalia |
| Order | Artiodactyla |
| Genus and Species (If known) | Capra hircus |
| Local Name / Common Name | Bakra, Bakri (बकरा) |
| Habit and Habitat | Found in grazing grassland & open plains. It's feed on cereals & plant leaves. |
| Description | Most goats have two horns of various shape& sizes depending on the breeds. Horizontal pupil, goats are ruminants. |
| Mythological Significance (if any) | They are sacrificed in Bakra Eid in Muslim religion. |
| I.U.C.N. Status | Least concern |
| Season when seen | All the season. |
| Local Status: Past – | More in number |
| Present – | Less in number |
| Uses | For milk& flesh. |
| Associated Traditional Knowledge | Fighting of goat as a sport. |
| Management mechanism | It is domesticated |
| Other Details | Their skin used in leather formation. |
| Community/Knowledge Holder | Mr. Narendra Kumar |

Cat (Felis catus / domesticus) बिल्ली



Cat (Felis catus / domesticus) बिल्ली

| Phylum | | Chordata |
|------------------------------------|--------------|---|
| Class | | Mammalia |
| Order | | Carnivora |
| Genus and Species | s (If known) | Felis catus / domesticus |
| Local Name / Com | mon Name | Billi (बिल्ली) |
| Habit & Habitat | | Solitary, nocturnal, preferring darkness. |
| Description | | Body divided into head, neck, trunk & tail. Head more or less rounded with prominent eyes &cat have excellent sight. Legs short & have sharp claws retractable into protective sheath. |
| Mythological Significance (if any) | | Crying of cat is considered sad in Hindu religion. |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Allyear |
| Local Status: | Past – | More in number |
| | Present – | Less in number |
| Uses | | Kills rats, act as biological control. |
| Associated Traditional Knowledge | | To make children afraid by stories. |
| Management mechanism | | It is domesticated |
| Other Details | | Cats have gained importance for advanced research. |
| Community/Knowledge Holder | | Mr. Narendra Kumar |

Mammals Rabbit (Oryctolagus cunculus) खरगोश



Rabbit (Oryctolagus cunculus) खरगोश

| Phylum | Chordata |
|------------------------------------|--|
| Class | Mammalia |
| Order | Lagomorpha |
| Genus and Species (If known) | Oryctolagus cunculus |
| Local Name / Common Name | Khargosh (खरगोश) |
| Habit & Habitat | Inhabiting fields, grasslands & wood lands. Gregarious, coming out of burrows for feeding in twilight. |
| Description | Body cat- like & divisible into head, neck, trunk & tail. Head contains long tactile vibrissae or whiskers, external nares, usually shorter, eyes white, black, brown as spotted. Fast runner (30-40 km/hour) |
| Mythological Significance (if any) | |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout year |
| Local Status: Past – | More in number |
| Present – | Less in number |
| Uses | Fur of rabbit is used to make purses, gloves& caps. Some varieties are eaten. |
| Associated Traditional Knowledge | Story on Rabbit & Tortoise in Punchtantra story book. |
| Management mechanism | It is domesticated |
| Other Details | Experimental animal of research. |
| Community/Knowledge Holder | Mr. Narendra Kumar |

Rat (Rattus rattus) चूहा





Rat (Rattus rattus) चूहा

| Phylum | Chordata |
|------------------------------------|---|
| Class | Mammalia |
| Order | Rodentia |
| Genus and Species (If known) | Rattus rattus |
| Local Name / Common Name | Chuha (चूहा) |
| Habit & Habitat | Garden , fields & houses. |
| Description | Body covered with black hairs, pinnae well developed, eye sharp & tail is elongated & scaly. |
| Mythological Significance (if any) | Vehicle of Lord Ganesha in Hindu mythology. |
| I.U.C.N. Status | Least concern |
| Season when seen | All season |
| Local Status: Past – | More in number |
| Present – | More in number |
| Uses | Rat has great experimental value. |
| Associated Traditional Knowledge | There are many proverb in Hindi scripts on rat. |
| Management mechanism | Rat kills and trapes |
| Other Details | It is considered as a parasite of man. |
| Community/Knowledge Holder | Mr. Narendra Kumar |

Monkey (Rhesus macaque) बंदर



Monkey (Rhesus macaque) बंदर

| Phylum | Chordata |
|------------------------------------|--|
| Class | Mammalia |
| Order | Primates |
| Genus and Species (If known) | Rhesus macaque |
| Local Name / Common Name | Bandar (बंदर) |
| Habit & Habitat | Live in wide variety of habitat including cities, villages, forms, forests, semi deserts & mangrove swamps. |
| Description | Body covered with brownish or golden hair, nostrils parallel & direct downwards. Internal cheek pouched for the food & external ear reduced. |
| Mythological Significance (if any) | It is worshiped as Lord Hanuman. |
| I.U.C.N. Status | Least concern |
| Season when seen | All the year |
| Local Status: Past – | More in number |
| Present – | More in number |
| Uses | Used in circus. |
| Associated Traditional Knowledge | Famous story on monkey & crocodile. |
| Management mechanism | When found in excess they are transformed from one place to other. |
| Other Details | Rh factor first time discovered in (<i>Rhesues Macaque</i>) monkey. |
| Community/Knowledge Holder | Mr. Narendra Kumar |

Horses (Equus caballus) घोड़ा



Horses (Equus caballus) घोड़ा

| Phylum | Chordata |
|------------------------------------|---|
| Class | Mammalia |
| Order | Perissodactyla |
| Genus and Species (If known) | Equus caballus |
| Local Name / Common Name | Horses (घोड़ा) |
| Habit & Habitat | Horses live in herds in open plains & grasslands. Horses are domesticated & one of the fastest running animals. |
| Description | Body of horse is massively built & divided into head, neck, trunk & tail. Neck is long & mobile. Mane longer & pendant & their trunk is large. Tail is bushy completely covered with long hairs. |
| Mythological Significance (if any) | It is known as 'Seven Horses' the vehicle of "Surya Dev". |
| I.U.C.N. Status | Least concern |
| Season when seen | All season |
| Local Status: Past – | More in number |
| Present – | Less in number |
| Uses | Riding & transport |
| Associated Traditional Knowledge | Were used in wars & horse shoe nails used in various purpose. |
| Management mechanism | Kept in stables |
| Other Details | Horse racing for entertainment purposes |
| Community/Knowledge Holder | Mr. Narendra Kumar |

Pig (Susscrofa domesticus) सुअर





Pig (Susscrofa domesticus) सुअर

| Phylum | Chordata |
|------------------------------------|--|
| Class | Mammalia |
| Order | Artiodactyla |
| Genus and Species (If known) | Susscrofa domesticus |
| Local Name / Common Name | Suar (सुअर) |
| Habit & Habitat | Plains, wetlands etc. |
| Description | Body covered with short stiff hair, long, mobilesnout and cannies of both jaws curved. |
| Mythological Significance (if any) | Some people used its symbol as money bank for good luck. |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year. |
| Local Status: Past – | Less in number |
| Present – | More in number |
| Uses | Give high protein food & hairs for brushes. |
| Associated Traditional Knowledge | Scavengers , eat human faeces. |
| Other Details | It is responsible for many communicable diseases as 'Swine Flu'. |
| Community/Knowledge Holder | Smt. Premlata |

Donkey (Equus heminous) गधा



Donkey (Equus heminous) गधा

| Dhydrom | Chordata |
|------------------------------------|---|
| Phylum | Chordata |
| Class | Mammalia |
| Order | Perissodactyla |
| Genus and Species (If known) | Equus heminous |
| Local Name / Common Name | Gadha/Donkey (गधा) |
| Habit & Habitat | Grasslands & open plains. |
| Description | One functional toe with a large hoof on each foot. Only lower part of tail covered with hair. |
| Mythological Significance (if any) | Donkey is the vehicle of one of the nine Avtar of "Durga Mata". |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year. |
| Local Status: Past – | More in number |
| Present – | Less in number |
| Uses | For carrying loads |
| Associated Traditional Knowledge | For carrying loads. |
| Other Details | Their molars are specially well developed for grinding plant food. |
| Community/Knowledge Holder | Smt. Premlata |

Sheep (Ovis aries) भेंड़





Sheep (Ovis aries) भेंड़

| Phylum | | Chordata |
|------------------------------------|-----------|--|
| Class | | Mammalia |
| Order | | Artiodactyla |
| Genus and Species (If known) | | Ovis aries |
| Local Name / Common | Name | Bhed (भेंड़) |
| Habit & Habitat | | Grasslands & open plains. |
| Description | | Two horns are coiled .body covered by long fury hairs. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Through out the year. |
| Local Status: | Past – | More in number |
| 1 | Present – | Less in number |
| Uses | | Economic value (high) |
| Associated Traditional Knowledge | | Wool & milk is useful. |
| Management mechanism | | It is domesticated |
| Other Details | | Their meat are also eaten. |
| Community/Knowledge Holder | | Smt. Premlata |

Mangoose (Herpestes edwarsdsii) नेवला



Mangoose (Herpestes edwarsdsii) नेवला

| Phylum | | Chordata |
|------------------------------------|--------------|---|
| Class | | Mammalia |
| Order | | Carnivora |
| Genus and Species | s (If known) | Herpestes edwarsdsii |
| Local Name / Com | mon Name | Neola/Mangoose (नेवला) |
| Habit & Habitat | | Burrows in land , nocturnal. |
| Description | | They are small upto 60 cm. They are burrowing and nocturnal carnivores with slender low bodies. Legs are short with long bushy tail and pointed snouts. |
| Mythological Significance (if any) | | When they cross the way, then people feel happy. |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout year |
| Local Status: | Past – | More in number |
| | Present – | Less in number |
| Uses | | Kept in zoo. |
| Associated Traditional Knowledge | | Story of fight with snake. |
| Management mechanism | | |
| Other Details | | Body has a coat of yellowish grey fur and front feet has 5 claws. |
| Community/Knowledge Holder | | Smt. Premlata |

Neel Gai (Boselaphus tragocamelus) नीलगाय



Neel Gai (Boselaphus tragocamelus) नीलगाय

| Phylum | | Chordata |
|------------------------------------|---------|---|
| Class | | Mammalia |
| Order | | Artiodactyla |
| Genus and Species (If kn | own) | Boselaphus tragocamelus |
| Local Name / Common N | ame | Neel Gai (नील गाय) |
| Habit & Habitat | | Grasslands & open plains |
| Description | | It is a largest asian antelope with thin legs and a robust body with sexual dimorphism. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year |
| Local Status: Pas | st – | Less in number |
| Pre | esent – | More in number |
| Uses | | None |
| Associated Traditional Knowledge | | Harm the crop fields. |
| Management mechanism | | |
| Other Details | | They are found in groups. |
| Community/Knowledge | Holder | Smt. Premlata |
| | | |

Mammals Jackal (Canis aureus) सियार





Jackal (Canis aureus) सियार

| Phylum | Chordata |
|-----------------------------------|--|
| Class | Mammalia |
| Order | Carnivora |
| Genus and Species (If known) | Canis aureus |
| Local Name / Common Name | Siyar/Jackal (सियार) |
| Habit & Habitat | Forests & fields |
| Description | They have a slender limbs and generally good runners. They prey on small mammals. |
| Mythological Significance (if any | ·) |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past – | Less in number |
| Present – | More in number |
| Uses | None |
| Associated Traditional Knowledg | ge Hunt young cattles. |
| Management mechanism | |
| Other Details | Have a different type of voice. |
| Community/Knowledge Holder | Mr. Zameel Ahmed |
| | |

Ox (Bos indicus) बैल





Ox (Bos indicus) बैल

| Phylum | Chordata |
|------------------------------------|---|
| Class | Mammalia |
| Order | Artiodactyla |
| Genus and Species (If known) | Bos indicus |
| Local Name / Common Name | Ox (baail) (बैल) |
| Habit & Habitat | Grasslands & open plains. |
| Description | Also known as bull, commonly castrated adult male cattle. The even-toed hoofed, having an even number of toes. |
| Mythological Significance (if any) | Ox is a vehicle of God "Shiva". |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past – | More in number |
| Present – | Less in number |
| Uses | Transport & farming |
| Associated Traditional Knowledge | For farming. |
| Management mechanism | In thatch |
| Other Details | |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

Deer (Maschus maschiferus) हिरन



Deer (Maschus maschiferus) हिरन

| Phylum | | Chordata |
|------------------------------------|------------|---|
| Class | | Mammalia |
| Order | | Artiodactyla |
| Genus and Species | (If known) | Maschus maschiferus |
| Local Name / Com | non Name | Deer/Chital/Hiran (हिरन) |
| Habit and Habitat | | Mainly found in the forest and eat the green grass. |
| Description | | It is hornless and no face gland, tail is peculiar. Wears a coat of thick and bristly hairs, almost pithy in structure, general colour dark brown speckled with grey. |
| Mythological Significance (if any) | | In Ramayana, Ravana makes Maricha, his demonminister, transform himself into a golden deer that is killed by Rama. |
| I.U.C.N. Status | | Vulnerable |
| Season when seen | | Throughout the year |
| Local Status: | Past- | More in number |
| | Present- | Less in number |
| Uses | | Ecological balance and in zoo for entertainment. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Zoos an National parks should be established. |
| Other Details | | Help in mutual recognition. |
| Community/Knowledge Holder | | Mr. Zameel Ahmed |
| | | |

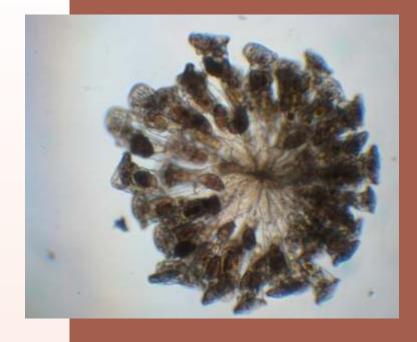
Bear (Ursus) भालू





Bear (Ursus) भालू

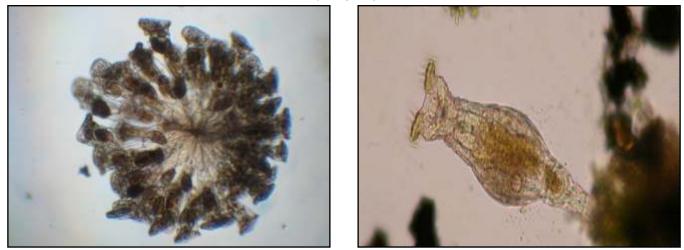
| Phylum | Chordata |
|------------------------------------|---|
| Class | Mammalia |
| Order | Carnivora |
| Genus and Species (If known) | Ursus |
| Local Name / Common Name | Bear/Bhalu/ Reech (भालू) |
| Habit and Habitat | Forest |
| Description | Elongated muscles and lower lip, long hairs and short hind legs. Most have a whitish V-shaped breast patch. |
| Mythological Significance (if any) | Jamvant the bear appears in the "Ramayana", who was the oldest member of Shree Rama"s army. |
| I.U.C.N. Status | Vulnerable |
| Season when seen | Throughout the year |
| Local Status: Past- | More in number |
| Present- | Less in number |
| Uses | Ecological balance and use for human entertainment. |
| Associated Traditional Knowledge | |
| Management mechanism | Zoos an National parks should be established. |
| Other Details | |
| Community/Knowledge Holder | Mr. Zameel Ahmed |
| | |



FORMAT- XXIII Minor Phyla



Minor Phyla Wheel animal (*Rotifera*) व्हील एनीमल



Wheel animal (Rotifera) व्हील एनीमल

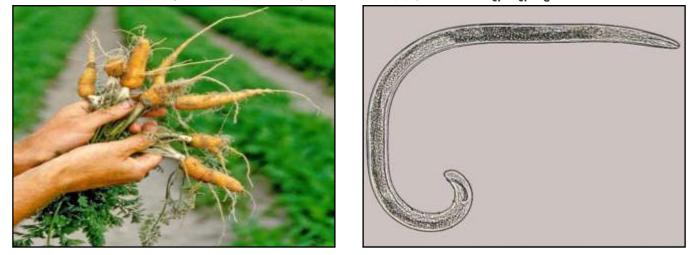
| Dlaadaaaa | | |
|----------------------------------|------------------|---|
| Phylum | | Rotifer |
| Class | | Bdelloidea |
| Order | | Bdelloidea |
| Genus and Species | (If known) | Rotifera |
| Local Name / Com | non Name | Wheel animal (व्हील एनीमल) |
| Habit and Habitat | | Mostly aquatic & fresh water, rivers &bottoms of lakes. |
| Description | | Bilateral symmetry & a variety of different shapes. Body divided into a head, trunk & foot. Rigid cuticles are oft e n composed of multiple plates. The coronal cilia pull the animal. |
| Mythological Signi | ficance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Found throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | They are used extensively in aquaculture & a q u a r i u m s because of very high reproductive rates. |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Rotifers eat particular organic dentritus, dead bacteria, algae & Parasites. |
| Community/Know | ledge Holder | Mr. S.P. Singh |
| | | |



FORMAT- XXIV Plant Nematodes



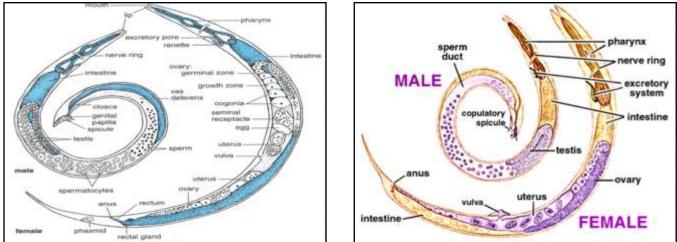
Stubby root nematode (Trichodorus spp.) अवरूद्ध मूलसूत्रकृमि



Stubby root nematode (Trichodorus spp.) अवरूद्ध मूलसूत्रकृमि

| Phylum | | Nematoda |
|------------------------------------|---------------|--|
| Class | | Secementea |
| Order | | Tylenchida |
| Genus and Species | s (If known) | Trichodorus spp. |
| Local Name / Com | mon Name | Stubby root nematodes (अवरूद्ध मूलसूत्रकृमि) |
| Habit and Habitat | | Ectoparasite on vegetables, grains, fruits crops, fodders. |
| Description | | Saliva secreted by this nematode check the activity of cambium, life cycle is 16 days which is longer at lower temperatures. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Nematicides is used for control. |
| Other Details | | The larva & adult can be destroyed by fumigation. |
| Community / Kno | wledge Holder | Mr. Survesh Kumar |
| | | |

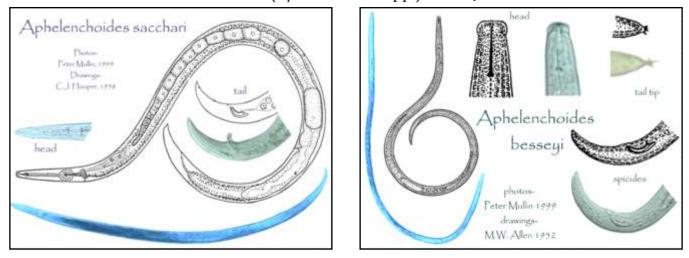
Lance nematodes (Hoplalaimus spp.) लेंसनिमाटोड



Lance nematodes (Hoplalaimus spp.) लेंसनिमाटोड

| Phylum | Nematoda |
|------------------------------------|---|
| Class | Secementea |
| Order | Tylenchida |
| Genus and Species (If known) | Hoplalaimus spp. |
| Local Name / Common Name | Lance nematodes (लेंस निमाटोड) |
| Habit and Habitat | Agricultural crop, forest, cotton, maize sugarcane etc. |
| Description | It is the spiral nematodes causes stunting growth & slow development of root system. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Selected nematicides is quite helpful to control it. |
| Other Details | It has a very wide host range due to migratory nature of nematode, largenecrotic lesions form in the plant root system. |
| Community / Knowledge Holder | Mr. Survesh Kumar |

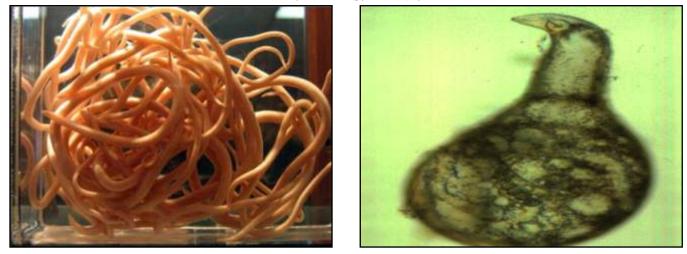
Plant Nematodes Leaf & bud nematodes (Aphelenchoidus spp.) लीफ एण्ड बडनिमाटोड



Leaf & bud nematodes (Aphelenchoidus spp.) लीफ एण्ड बडनिमाटोड

| Phylum | | Nematoda |
|------------------------------------|---------------|---|
| Class | | Secementea |
| Order | | Tylenchida |
| Genus and Species | s (If known) | Aphelenchoidus spp. |
| Local Name / Com | mon Name | Leaf & bud nematode (लीफ एण्ड बडनिमाटोड) |
| Habit and Habitat | | Strawberries, rice, vandaarchids. |
| Description | | Ecto&endo both parasite, attack from the base of plants & reach upwards towards flower. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Found throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | 40% of 3-p-clorophenyl. 5-methyl rodamine is helpful to check it. |
| Other Details | | Cause 'summer crimp' in strawberries. |
| Community / Kno | wledge Holder | Mr. Survesh Kumar |
| | | |

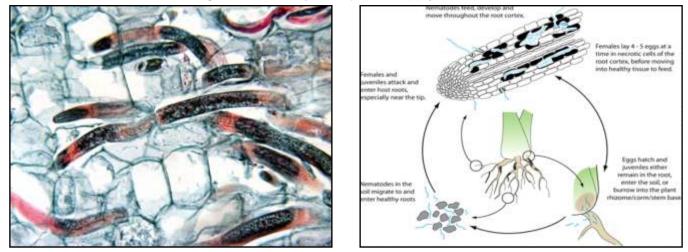
Root-Knot nematodes (Meloidogyne spp.) रूट-नॉट निमाटोड



Root-Knot nematodes (Meloidogyne spp.) रूट-नॉट निमाटोड

| Phylum | Nematoda |
|------------------------------------|---|
| Class | Secementea |
| Order | Tylenchida |
| Genus and Species (If known) | Meloidogyne spp. |
| Local Name / Common Name | Root-Knot nematodes (रूट—नॉट निमाटोड) |
| Habit and Habitat | Found on sandy soils in warmer regions. |
| Description | Egg hatch into larvae, larvae attack on new host, moults 3 times & develop into females. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Flodding of infected area recommended. |
| Other Details | For copulation male leaves the hosts & enter the sac like matrices of the female. |
| Community / Knowledge Holder | Mr. Survesh Kumar |

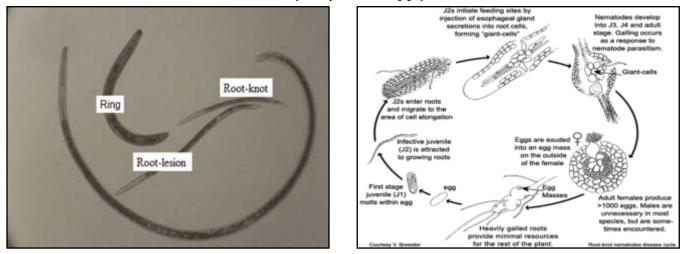
Burrowing nematodes (Rhadopholus spp.) बरोईंग निमाटोड



Burrowing nematodes (Rhadopholus spp.) बरोईंग निमाटोड

| Phylum | Nematoda |
|------------------------------------|---|
| Class | Secementea |
| Order | Tylenchida |
| Genus and Species (If known) | Rhadopholus spp. |
| Local Name / Common Name | Burrowing nematodes (बरोईंग निमाटोड) |
| Habit and Habitat | Tropic & subtropical region, banana, sugarcane, coffee plant. |
| Description | Development takes 2-3 days at 24 degree temperature. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Treated with hot water (55 degree for 5 m i n) befor e plantation. |
| Other Details | Damage the cortex of young roots of hosts plants. |
| Community / Knowledge Holder | Mr. Survesh Kumar |

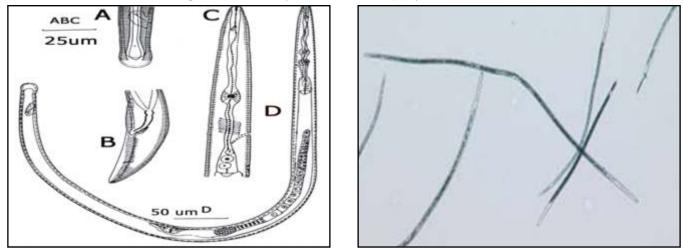
Root lesion nematodes (Pratylenchus spp.) रूट लेसननिमाटोड



Root lesion nematodes (Pratylenchus spp.) रूट लेसननिमाटोड

| Phylum | | Nematoda |
|------------------------------|-------------------|--|
| Class | | Adenophorea |
| Order | | Tylenchida |
| Genus and Species (If known) | | Pratylenchus spp. |
| Local Name / Com | mon Name | Root lesion nematodes (रूटलेसन निमाटोड) |
| Habit and Habitat | | Cotton. Wheat, pineapples, grape strawberry plants. |
| Description | | Endoparasite, life-cycle 30-70 days depending on environment conditions, development take 2-3 years. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Traditi | onal Knowledge | |
| Management mech | nanism | Fumigation of soil& suitable nematicidesd e s t r o y t h i s nematodes. |
| Other Details | | Life span of female 5 years. |
| Community / Know | wledge Holder | Mr. Survesh Kumar |

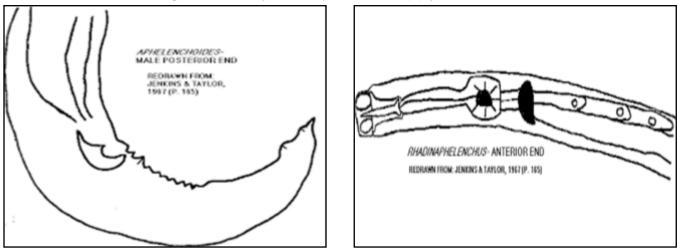
Sting nematodes (Belonolaimus spp.) स्टिंग निमाटोड



Sting nematodes (Belonolaimus spp.) स्टिंग निमाटोड

| Phylum | Nematoda |
|------------------------------------|--|
| Class | Chromadoria |
| Order | Rhabditia |
| Genus and Species (If known) | Belonolaimus spp. |
| Local Name / Common Name | Sting nematodes (स्टिंग निमाटोड) |
| Habit and Habitat | Root strips of ground nut, cotton, s o y a b e a n , m a i z e , cowpea. |
| Description | Migratory parasite in nature. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Summer |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Crop rotation by non-host plant.eg. – tobacco, water melon. |
| Other Details | Sunken dark lesions appear on the affected root & root tips. |
| Community/KnowledgeHolder | Mrs. Kiran Kanaujia |

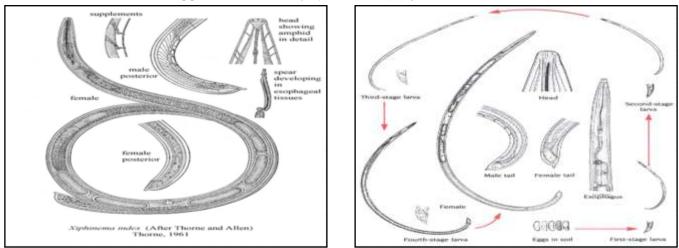
Red ring nematode (Rhadinaphelenchus spp.) रेड रिंग निमाटोड



Red ring nematode (Rhadinaphelenchus spp.) रेड रिंग निमाटोड

| Phylum | | Nematoda |
|------------------------------|--------------------|---|
| Class | | Secementea |
| Order | | Aphelenchida |
| Genus and Species (If known) | | Rhadinaphelenchus spp. |
| Local Name / Common Name | | Red ring nematode (रेड रिंग निमाटोड) |
| Habit and Habitat | t | Coconut & oil palm. |
| Description | | Life cycle in 7 days, short period of life cycle cause growth of population of this nematode. |
| Mythological Sigr | nificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | ı | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | |
| Associated Tradit | ional Knowledge | |
| Management mec | hanism | Destroy by spraying insecticides. |
| Other Details | | Some beetles are responsible for spreading the nematodes. |
| Community / Knowledge Holder | | Mrs. Kiran Kanaujia |
| | | |

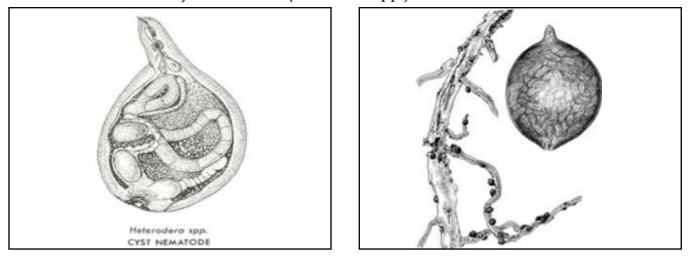
Plant Nematodes Dagger nematodes (Xiphinema spp.) डेंगर निमाटोड



Dagger nematodes (Xiphinema spp.) डैगर निमाटोड

| Phylum | Nematoda |
|------------------------------------|--|
| Class | Adenophorea |
| Order | Dorylaimida |
| Genus and Species (If known) | Xiphinema spp. |
| Local Name / Common Name | Dagger nematode (डैगर निमाटोड) |
| Habit and Habitat | Sugar beet, turnip, spinach seedling cucumber, potato. |
| Description | Ectoparasite, development from egg to adult takes 2-3 years, life span of female is 5 years. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Destroy by fumigation. |
| Other Details | Formation of root lesions &stunting of shoots in strawberry attacked by Xiphinema. |
| Community / Knowledge Holder | Mrs. Kiran Kanaujia |

Plant Nematodes Cyst nematodes (Heterodera spp.) सिस्ट निमाटोड



Cyst nematodes (Heterodera spp.) सिस्ट निमाटोड

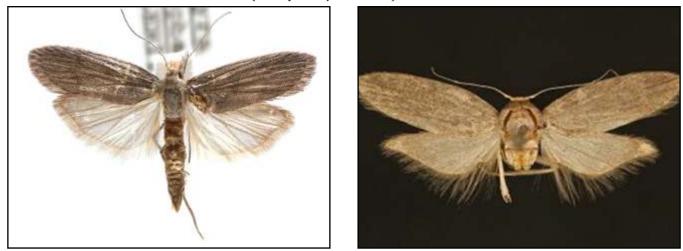
| Phylum | Nematoda |
|------------------------------------|--|
| Class | Secementea |
| Order | Tylenchida |
| Genus and Species (If known) | Heterodera spp. |
| Local Name / Common Name | Cyst nematodes (सिस्ट निमाटोड) |
| Habit and Habitat | Woody perennial plants. |
| Description | Female lay egg inside the cyst, female head attached to the root & body projecting outside life cycle 1-2 month. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Crop rotation in the cheapest & best method. |
| Other Details | Formation of cyst. The larvae invade the tips of the root & establish a feeding site. |
| Community / Knowledge Holder | Mrs. KiranKanaujia |



FORMAT- XXV Insect as Pests



Insect as Pest Rice moth (Corcyra cephalonica) चावल का कीडा

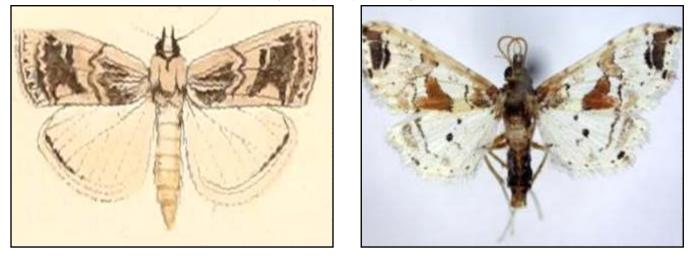


Rice moth (Corcyra cephalonica) चावल का कीडा

| Phylum | Arthropoda |
|-----------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Corcyra cephalonica |
| Local Name / Common Name | Rice moth (चावल का कीड़ा) |
| Habit and Habitat | In cereals (rice). |
| Description | Rice moth is a pyraloid moth. The only living species of the genus carcyra. Its caterpillars feed on dry plant stuffs such as seeds, cereals, food are flour & dried fruits. |
| Mythological Significance (if any | y) |
| I.U.C.N. Status | |
| Season when seen | July-August |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowled | ge |
| Management mechanism | Insecticides are used. |
| Other Details | Rice moth is a significant pest. |
| Community/Knowledge Holder | Mr. Sakir Khan |
| | |

Insect as Pest

Snout moth (Euzophora perticella) स्नाउट मॉथ



Snout moth (Euzophora perticella) रनाउट मॉथ

| Phylum | Arthropoda |
|-------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Euzophora perticella |
| Local Name / Common Name | Snout moth (स्नाउट मॉथ) |
| Habit and Habitat | Pest on solanummelongena (Solanaceae) |
| Description | Euzopher a pericella is a species of snout moths in the genus euzophera. Their larvae are a pest on Solanumme-longena (Solanaceae). |
| Mythological Significance (if | any) |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance. |
| Present | - In abundance. |
| Uses | |
| Associated Traditional Knowl | edge |
| Management mechanism | |
| Other Details | This species is known from India & Sri Lanka. |
| Community/Knowledge Hold | er Mr. Sakir Khan |
| | |

Insect as Pest Moth (Antigastra catalaunalis) शलभ





Moth (Antigastra catalaunalis) शलभ

| Phylum | Arthropoda |
|---------------------------------|---|
| | - |
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Antigastra catalaunalis |
| Local Name / Common Name | Moth (शलभ) |
| Habit and Habitat | |
| Description | It is endemic to tropical & subtropical areas but is also found in other areas due to its migratory nature. The wingspan is 19-22 mm. |
| Mythological Significance (if a | ny) |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowle | dge |
| Management mechanism | Insecticides are used for control. |
| Other Details | The larvae feed on Antirrhinum, linaria, vulgaris sesame & scrophulariaceae & pedaliaceae species. |
| Community/Knowledge Holde | r Mr. Sakir Khan |

Insect as Pest Scarab beetle (Heliocorpris spp.) स्कार्ब बीटल



Scarab beetle (Heliocorpris) स्कार्ब बीटल

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Coleoptera |
| Genus and Species (If known) | Heliocorpris spp. |
| Local Name / Common Name | Scarab beetle (स्कार्ब बीटल) |
| Habit and Habitat | |
| Description | Heliocorpris is a genus of scarabaeidaeor scarab beetles in the superfamily scarabaeoidea. They are found in Africa. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Field monitoring. |
| Other Details | |
| Community/Knowledge Holder | Mr. Sakir Khan |
| | |

Insect as Pest Mango leaf hopper (Amritodus atkinsoni) आम की चनंपा



Mango leaf hopper (Amritodus atkinsoni) आम की चनंपा

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Amritodus atkinsoni |
| Local Name / Common Name | Mango leaf hopper (आम की चनंपा) |
| Habit and Habitat | Found on ficuscarica, mango, uriman. |
| Description | Nymphs & adults suck the phloem sap from inflorescence & leaves of host plants. This affects photosynthesis. Egg lay on leaves & flower stems. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Several fungal pathogens may prove useful for biological control. |
| Other Details | Flower losses of 20-100 % have been recorded. |
| Community/Knowledge Holder | Mr. Sakir Khan |

Insect as Pest Onion thrips *(Thrips tabaci)* अनियन थ्रिप्स



Onion thrips (Thrips tabaci) अनियन थ्रिप्स

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Class | IIIsecta |
| Order | Thysanoptera |
| Genus and Species (If known) | Thrips tabaci |
| Local Name / Common Name | Onion thrips (अनियन थ्रिप्स) |
| Habit and Habitat | Feed on pollen, can be major agricultural. Pest with several being vectors of tobacco viruses. |
| Description | Thrips are most frequently intercepted at parts of entry into the united states. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year. |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Field monitoring. |
| Other Details | Most of which occur on each of the continents. Only one species described from Antarctica. |
| Community/Knowledge Holder | Mr. Sakir Khan |

Insect as Pest

Southern green stink bug (Nezara viridula) हरा कीट



Southern green stink bug (Nezara viridula) हरा कीट

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Hemiptera |
| Genus and Species (If known) | Nezara viridula |
| Local Name / Common Name | Southern green stink bug / green vegetable bug (हरा कीट) |
| Habit and Habitat | Legumes, beans, soyabeans. |
| Description | Body length of male 12.1 mm (0.48 in) while female are bigger 13.1 mm (0.52 in). body is bright green & shield shaped & eyes are usually raddish, but they may also be black. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Winter |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | It is an economically important pest on such crops. |
| Associated Traditional Knowledge | |
| Management mechanism | Crop rotation. |
| Other Details | Several distinct marphs can be distinguished by the pattern of their exoskeleton colouration. |
| Community/Knowledge Holder | Mr. Sakir Khan |

Insect as Pest Kaltenbach (*Lipaphis erysimi*) माहुम





Kaltenbach (Lipaphis erysimi) माहुम

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Lipaphis erysimi |
| Local Name / Common Name | Kaltenbach (माहुम) |
| Habit and Habitat | This aphid attacks on broccoli, cabbage, daikon, redish, tomato, zucchini. |
| Description | Wingless, female, aphids (called apterae) are yellowish green, gray or olive green with a white waxy bloom. Male is smaller than female & measures approximately 3/50 inch (1.20-1.35 mm) in length. Eggs are lain on the veins of leaves. Four nymphal stages. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Summer |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Chemical treatment with mesh a midophas & quinalphas assured the best protection against host. |
| Other Details | Temperature is crucial factor for the longevity of the turnip aphid. |
| Community/Knowledge Holder | Mr. Sakir Khan |

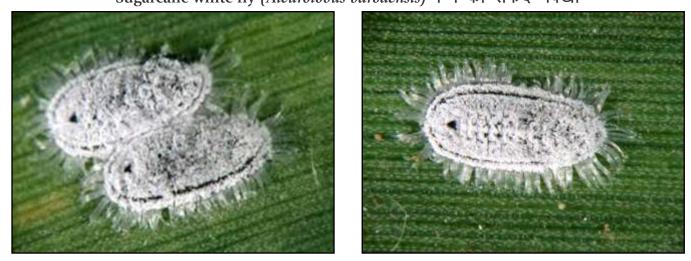
Insect as Pest Cowpea aphid (Aphis craccivora) कॉउपी एफिड



Cowpea aphid (Aphis craccivora) कॉउपी एफिड

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Hemiptera |
| Genus and Species (If known) | Aphis craccivora |
| Local Name / Common Name | Cowpea aphid (कॉउपी एफिड) |
| Habit and Habitat | Acting as hosts on bean family (cucurbits, butroat, groundnut, cotton, cowpeas). |
| Description | It is a small species of aphid. Female has a glossy black or dark brown body with prominent cauda (tail like protrusion). Antennae have six segments, cauda is pale colour. Adult do not have wax on their dorsal surface. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Warmer climates (summer), spring also. |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Field rotation & sampling also. |
| Other Details | Unsigned females are up to 2.2 mm (0.1 in) long have cross-barring on the abdomen. |
| Community/Knowledge Holder | Mr. Sakir Khan |

Insect as Pest Sugarcane white fly (Aleurolobus barodensis) गन्ने की सफेद मक्खी



Sugarcane white fly (Aleurolobus barodensis) गन्ने की सफेद मक्खी

| Phylum | Arthropoda |
|----------------------------------|---|
| Class | Insecta |
| Order | Hemiptera |
| Genus and Species (If known) | Aleurolobus barodensis |
| Local Name / Common Name | Sugarcane white fly (गन्ने की सफेद मक्खी) |
| Habit and Habitat | Sugarcane but feeds also on wheat barley. |
| Description | Adult are very minute fragile insect. 0.32 cm long with pale yellow body. Blackish eyes & two pair of whitish wings. Life-cycle completed about 25 days. Number of egg laid 3 to 51. |
| Mythological Significance (if an | y) |
| I.U.C.N. Status | |
| Season when seen | November to March |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowled | ge |
| Management mechanism | Harvesting of the invested crop, Ratoon crops should be given proper manuring. |
| Other Details | The female is larger & more robust than male & sluggish in her movement. |
| Community/Knowledge Holder | Mr. Sakir Khan |

Insect as Pest Cotton leaf roller (Sylepta derogata) बन की सुरही



Cotton leaf roller (Sylepta derogata) बन की सुरही

| Phylum | | Arthropoda |
|----------------------|------------------|---|
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | (If known) | Sylepta derogata |
| Local Name / Comr | | Ban kiSurhi/Cotton leaf roller (बन की सुरही) |
| | non rume | |
| Habit and Habitat | | Cotton, Lady- finger, hollyhock. |
| Description | | The moth is of a whitish colour, with a faint yellow tinge. The wings with many fine dark lines, an irregular pattern. It is less than 2 cm in length & 3 cm across when the wings are open. |
| Mythological Signi | ficance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | October to November |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Tradition | onal Knowledge | |
| Management mech | anism | Regular hand picking of rolled cotton leaves. Catterpillers should be killed in kerosinised water. |
| Other Details | | The catterpillars becomes full grown in about two weeks. The pest is active from March to November after which it hibernates. |
| Community/Know | ledge Holder | Mr. Sakir Khan |

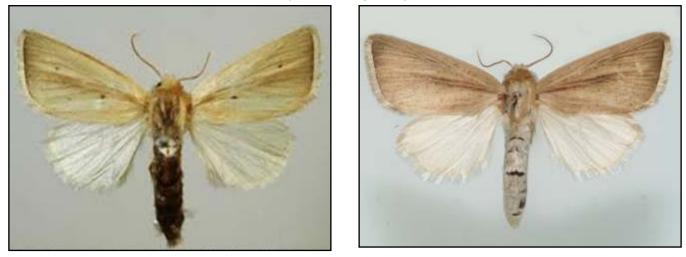
Insect as Pest Termite (Odontotermes obesus) दीमक



Termite (Odontotermes obesus) दीमक

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Isoptera |
| Genus and Species (If known) | Odontotermes obesus |
| Local Name / Common Name | Termite (दीमक) |
| Habit and Habitat | Living & dead vegetation wheats, barley, oats, ground- nut, vegetables. |
| Description | The termites are social & polymorphic insect live in colony. Queen is very big, creamy white, wingless. It laid 40,000 to 80,000 egg per day. Eggs are small kidney shaped. Complimentary forms are brachypterous&apterous. The colonized forms are brownish in colour with two pairs of slender, long narrowed wings. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Wood ground should be treated with 5% DDt emulsion spray. |
| Other Details | Workers are about 1/4 inch long. Soldiers slightly bigger than the workers. |
| Community/Knowledge Holder | Mr. Sakir Khan |

Insect as Pest Pink stem borer (Sesamia inferens) पिंक स्टम बोरर



Pink stem borer (Sesamia inferens) पिंक स्टम बोरर

| Dhylum | Arthropodo |
|----------------------------------|--|
| Phylum | Arthropoda |
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Sesamia inferens |
| Local Name / Common Name | Pink stem borer (पिंक स्टम बोरर) |
| Habit and Habitat | Cereal crops like wheat other crops like sugarcane, maize, jowar etc. |
| Description | Moths are moderately robust with pale yellow-brown body. The head & thorax bears tufts brown hairs. The forewings are brown to light brown in colour. The h i n d wings are white with light yellow scales. |
| Mythological Significance (if an | y) |
| I.U.C.N. Status | |
| Season when seen | Dry pre-monsoon period. |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowled | ge |
| Management mechanism | Chemical treatment is necessary. |
| Other Details | The eggs are bead like. Females lays as many as 300 egg in five masses. |
| Community/Knowledge Holder | Mr. Sakir Khan |

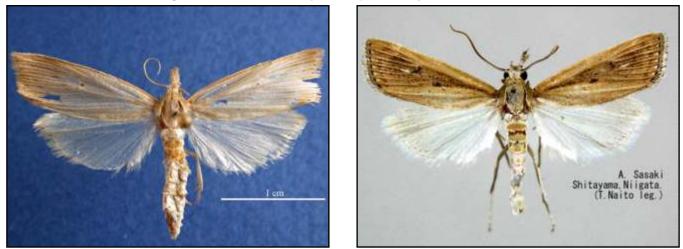
Insect as Pest Mexican bean beetle (*Epilachna varivestis*) मैक्सीकन बीन बीटल



Mexican bean beetle (Epilachna varivestis) मैक्सीकन बीन बीटल

| Phylum | Arthropoda |
|---------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Epilachna varivestis |
| Local Name / Common Name | Mexican bean beetle (मैक्सीकन बीन बीटल) |
| Habit and Habitat | Great variety of bean plants. |
| Description | Oval shaped, 8 black spots on eachelytron. 6-7 mm long. Eggs are glued in clusters |
| Mythological Significance (if a | ny) |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | In areas of high economic impact. |
| Associated Traditional Knowle | dge |
| Management mechanism | Insecticides are still routinely in areas of high economic impact. |
| Other Details | Larvae are usually yellow spiny & pill shaped. |
| Community/Knowledge Holde | r Mr. Sakir Khan |

Insect as Pest Sorghum Shoot Borer (Chillo partellus) बाजरे का कीड़ा



Sorghum Shoot Borer (Chillo partellus) बाजरे का कीड़ा

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Chillo partellus |
| Local Name / Common Name | Sorghum Shoot Borer (बाजरे का कीड़ा) |
| Habit and Habitat | Shoot tip of plants |
| Description | Dark brown moths, female 1.5 times larger than male. Lays about 500 flat fish scale like egg in groups under sides of leaves. Light yellow coloured larvae with spots. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | April-October |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Resistant varieties- CSH-1, ASH-1 & PSH-1. |
| Other Details | Resistant of larvae into shoot tip results in dead heart which does not come out easily on pulling out. |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

Insect as Pest Castor Semilooper (Achaea janata) कैस्टर सेमीलूपर



Castor Semilooper (Achaea janata) कैस्टर सेमीलूपर

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Achaea janata |
| Local Name / Common Name | Castor Semilooper (कैस्टर सेमीलूपर) |
| Habit and Habitat | Castor |
| Description | Dark brown colored with white & black patterns on hind wings. Egg laid singly or in batches. Brown larvae with black lateral lines or black larvae with white spots. Pupats in loosely woven silken cocoon in soil among fallen leaves. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | February - October |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Putting bird perches @ 10 per acre to attract birds to controlling larvae stages. |
| Other Details | Severe defoliation in caster leaving veins. |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

Insect as Pest

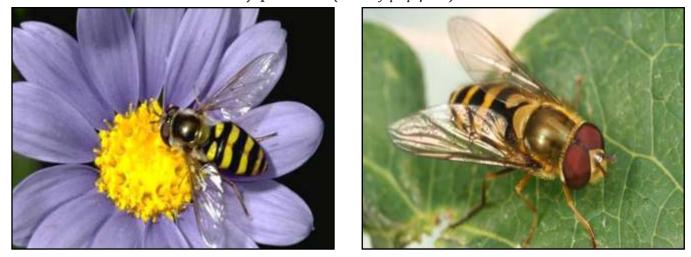
Scarce bordered straw moth (Helicoverpa armigera) स्कार्स बार्डर डस्ट्रा मॉथ



Scarce bordered straw moth (Helicoverpa armigera) स्कार्स बार्डर डस्ट्रा मॉथ

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Helicoverpa armigera |
| Local Name / Common Name | Scarce bordered straw moth (स्कार्स बार्डर डस्ट्रा मॉथ) |
| Habit and Habitat | Tropical & subtropical pest of vegetable crops such as artichoke, bean, cucumber & tomato. |
| Description | 30-40 mm wingspan. Forewings mainly achreous, greenish- grey to reddish brown with darker markings. Hind wings creamish-white with brackish border. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | April to october |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Important contaminants in crops sent for processing. |
| Associated Traditional Knowledge | |
| Management mechanism | Spray the insecticides. |
| Other Details | The larvae known as old World bollwarms are capable of causing considerable defoliation also on tomato. |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

Insect as Pest Flower flies or Syrphid flies (Hoverfly syrphid) सिरफीड मक्खी



Flower flies or Syrphid flies (Hoverfly syrphid) सिरफीड मक्खी

| Phylum | | Arthropoda |
|----------------------------------|------------------|--|
| Class | | Insecta |
| Order | | Diptera |
| Genus and Species | (If known) | Hoverfly syrphid |
| Local Name / Comn | non Name | Flower flies (सिरफीड मक्खी) |
| Habit and Habitat | | Found in stagnant water. Found in bumble bee nests found in ant or termite nests & decomposing vegetation. |
| Description | | They are small, elongate & slender, single functional pair of wings. Brightly coloured with spots, stripes & bands of yellow or brown covering their bodies. |
| Mythological Signi | ficance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Insecticides used |
| Other Details | | They exhibits Batesionmimicry. |
| Community/Know | ledge Holder | Mr. Zameel Ahmed |

Insect as Pest Carpenter ant (Camponotus compressus) चींटा

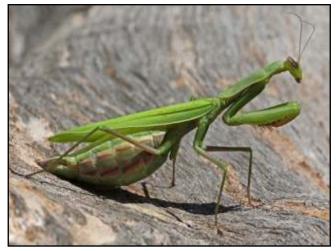


Carpenter ant (Camponotus compressus) चींटा

| Phylum | | Arthropoda |
|------------------------------------|--------------|---|
| Class | | Insecta |
| Order | | Hymenoptera |
| Genus and Species | s (If known) | Camponotus compressus |
| Local Name / Com | mon Name | Carpenter ant (चींटा) |
| Habit and Habitat | | Forest, damp wood. |
| Description | | It is a species of ant found in India & Southern Asia. It is a frequent visitor to toilets as it consumes urea. These ants stroke their antenna on the hind parts of these insects simulating them to excrete a sugar rich liquid, called honeydew which the ant consume. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year. |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | They are known to protect the insects from predators like ladybugs, obtain honeydew. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Treated chemically |
| Other Details | | It is one of the many species which tends plant sap sucking insect like aphids &tree hoppers. |
| Community/Knowledge Holder | | Mr. Zameel Ahmed |

Insect as Pest Praying Mantis (Mantis religiosa) प्रेईंग मैन्टिस

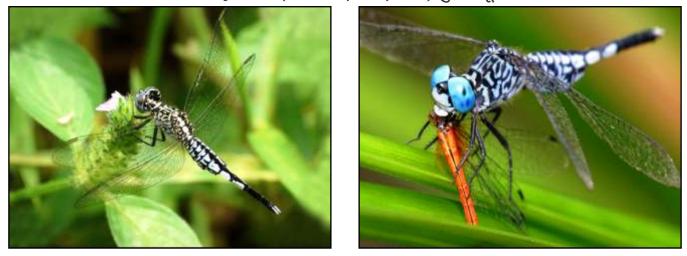




Praying Mantis (Mantis religiosa) प्रेईंग मैन्टिस

| Phylum | | Arthropoda |
|------------------------------------|------------|--|
| | | * |
| Class | | Insecta |
| Order | | Mantoptera |
| Genus and Species | (If known) | Mantis religiosa |
| Local Name / Com | mon Name | Praying Mantis (प्रेईंग मैन्टिस) |
| Habit and Habitat | | Found in shrubbery, highly predaceous & cannibalistic species. |
| Description | | Predominantly green, rarely brown. Female is highly cannibalistic. Males are preyed up on at the time of mating. |
| Mythological Significance (if any) | | In south Africa mythology refers to the mantis as a god in khoi. |
| I.U.C.N. Status | | |
| Season when seen | | |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Spray the insecticides. |
| Other Details | | Excellent bicontrol agents. |
| Community/Knowledge Holder | | Mr. Zameel Ahmed |

Insect as Pest Trumpet Tail (Acisoma panarpoides) तुरही पूँछ



Trumpet Tail (Acisoma panarpoides) तुरही पूँछ

| Phylum | | Arthropoda |
|----------------------------------|------------------|--|
| Class | | Insecta |
| Order | | Odoptera |
| Genus and Species | (If known) | Acisoma panarpoides |
| Local Name / Comm | non Name | Trumpet Tail (तुरही पूँछ) |
| Habit and Habitat | | Found near water bodies like ponds & tanks. |
| Description | | 15-20 mm, transparent wings. Eyes blue & black on the posterior side. Thorax blue dusted with black markings. Abdomen small, trumpet shaped with broad segments 1-5 which becomes slim towards segment 6-10. |
| Mythological Signi | ficance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | |
| Other Details | | Blue abdomen with black markings. |
| Community/Knowledge Holder | | Mr. Zameel Ahmed |
| | | |

Insect as Pest Pink bollworm (Pectinophora gossypiella) कपास की लाल सुरही



Pink bollworm (Pectinophora gossypiella) कपास की लाल सुरही

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Pectinophora gossypiella |
| Local Name / Common Name | Pinkbollworm (कपास की लाल सुरही) |
| Habit and Habitat | Flowers, seeds & cottons. |
| Description | Dark brown coloured moth with black patches. They fly swiftly. Adults lay 100 cream coloured eggs. Pupates inside cotton boll or soil. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | May-November |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Spray the insecticides. |
| Other Details | Feeds on opened flowers of plants, damages bhendi fruits. |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

Insect as Pest Diamond back moth (Plutella xylostella) ভাযमण्ड बैक शलभ



Diamond back moth (Plutella xylostella) डायमण्ड बैक शलभ

| Phylum | | Arthropoda |
|----------------------------------|-------------------|---|
| Class | | Insecta |
| Order | | Lepidoptera |
| | (If Irm orum) | A A |
| Genus and Species | | Plutella xylostella |
| Local Name / Com | mon Name | Cabbage moth (डायमण्ड बैक शलभ) |
| Habit and Habitat | | European moth believed to originate in Mediterranean region, cruciferous crops, cabbage, mustard, radish turnip. |
| Description | | Wingspan of adult about 15 mm & body length of 6 mm. Forewings are narrow, brownish-gray & lighter along anterior margin, with the dark speckles. Eggs are oval & flattened (0.44 mm long & 0.26 mm wide) which is yellow or pale green. Larvae have a few short black hairs. Pupae are about 8 mm long & are wrapped in a loose silk cocoon. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Summer |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | Using winter cress as a buffer plant around agricultural fields. |
| Associated Traditional Knowledge | | |
| Management mechanism | | Use of chemical insecticides. |
| Other Details | | Moths are active at night but they also fly in the afternoon during mass outbreaks. |
| Community/Know | vledge Holder | Mr. Zameel Ahmed |

Insect as Pest Al/Ghora (Pyrilla perpusilla) घोरा



Al/Ghora (Pyrilla perpusilla) घोरा

| Phylum | | Arthropoda |
|--------------------------|------------------|--|
| Class | | Insecta |
| Order | | Hemiptera |
| Genus and Species | (If known) | Pyrilla perpusilla |
| Local Name / Comr | non Name | Al or Ghora (घोरा) |
| Habit and Habitat | | Sugarcane but wheat, oat, barley, maize, bajra etc. |
| Description | | The female lays pale greenish yellow eggs in clusters. The eggs are covered with white cottony wax filaments from the anal tuff of the female. |
| Mythological Signi | ficance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Found all throughout the year, serious damage is caused from May. |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Tradition | onal Knowledge | |
| Management mechanism | | Destruction of egg- masses. Rooting should be avoided in badly infested areas. |
| Other Details | | A complete life-cycle from egg laying to adult stage takes about 40-60 days during the rainy season. |
| Community / Know | vledge Holder | Mr. Zameel Ahmed |

Insect as Pest Green Lacewing (Chrysopa spp.) ग्रीन लेसविंग



Green Lacewing (Chrysopa spp.) ग्रीन लेसविंग

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Neuroptera |
| Genus and Species (If known) | Chrysopa spp. |
| Local Name / Common Name | Green Lacewing (ग्रीन लेसविंग) |
| Habit and Habitat | |
| Description | Adult green lacewing have delicate, light green bodies. Large clear wings & bright golden or copper coloured eyes. They are ½ to ¾ inch long. The larvae are small, grayish brown & narrow. Egg laid on plant stems & foliage. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | Lacewing larvae & adults feed upon aphiods & small insects, insect egg & spider mites. Also eat leaf hopper numps, small caterpillars. |
| Associated Traditional Knowledge | |
| Management mechanism | |
| Other Details | Use in biological pest control. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

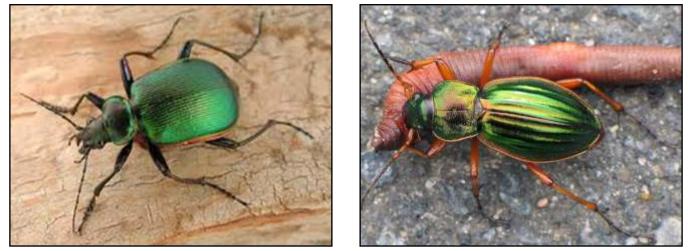
Insect as Pest Paper Wasp (Polistis stigma) ततैया



Paper Wasp (Polistis stigma) ततैया

| Phylum | Arthropoda |
|-----------------------------------|--|
| Class | Insecta |
| Order | Hymenoptera |
| Genus and Species (If known) | Polistis stigma |
| Local Name / Common Name | Paper Wasp (तत्तैया) |
| Habit and Habitat | Nest- building sites, commonly build nests on human habitation. |
| Description | This species is very commonly mistakenfor a yellow jacket as it is back strongly marked yellow red colour. Their long legs, dangle below their bodies which are also more slender than a yellow jacket. |
| Mythological Significance (if any | y) |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | Beneficial far mankind. |
| Associated Traditional Knowled | ge |
| Management mechanism | |
| Other Details | All species are predatory, and they may consume large number of catterpillars. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

Insect as Pest Carabid Beetle (Carabus olympiae) केराबिड बीटल



Carabid Beetle (Carabus olympiae) कैराबिड बीटल

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Coleoptera |
| Genus and Species (If known) | Carabus olympiae |
| Local Name / Common Name | Carabid Beetle (कैराबिड बीटल) |
| Habit and Habitat | Believed to have originally been a forest dweller ranging from beech forest to open shrubland. |
| Description | A large colourful beetle, it is unusual is being endemic to just one small area of Italian Alps. The body is rather long & flattened, with clearly differentiated head, thorax, abdomen. Long, slender legs & quite prominent mandibles & palps. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | It generate electrical potential, it help to supply energy far digging. |
| Associated Traditional Knowledge | |
| Management mechanism | Spray the insecticides. |
| Other Details | Carabusolympiae is still an attractive insect, with a dark purplish blue head & pronotum. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

Insect as Pest Mustard sawfly (Athalia lugens proxima) सरसों की इल्ली



Mustard sawfly (Athalia lugens proxima) सरसों की इल्ली

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Hymenoptera |
| Genus and Species (If known) | Athalia lugens proxima |
| Local Name / Common Name | Mustard sawfly (सरसों की इल्ली) |
| Habit and Habitat | Mustard, cabbage, cauliflower, tori & other cruciferous plants. |
| Description | They have 2 pairs of dark coloured wings with black veins. Adults are active female is found to be saw- like. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | October to March in cold weather. |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Grubs should be hand-picked &destroyed. |
| Other Details | The whole life- cycle is completed in 31-74 days. In day time the grubs are found hidden in leaves. |
| Community / Knowledge Holder | Mr. Zameel Ahmed |

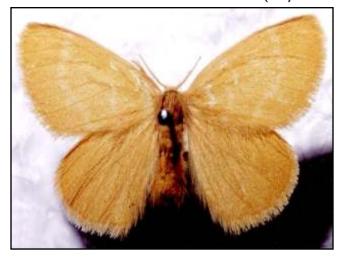
Insect as Pest Orange shoot borer (Inderbella tetaonis) संतरे का गिदार



Orange shoot borer (Inderbella tetaonis) संतरे का गिदार

| DI 1 | | |
|----------------------------------|-------------------|---|
| Phylum | | Arthropoda |
| Class | | Insecta |
| Order | | Lepidoptera |
| Genus and Species | (If known) | Inderbella tetaonis |
| Local Name / Com | mon Name | Orange shoot borer (संतरे का गिदार) |
| Habit and Habitat | | It can be seen at the junction of two branches hanging on bark of Infestedtrees. |
| Description | | Adult of insect are pale brown with head & thorax dark brown, forewing pale with numerous dark brown band. Caterpillar are about 50-60 mm long. Purpae are 16-2 0 mm long stout, reddish-brown with two rows of spines on each abdominal segment. |
| Mythological Sign | ificance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | April- December |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Avoid over crowding of trees &branches. |
| Other Details | | Female lay about 20000 egg in cluster only 1 generation in a year. |
| Community / Know | wledge Holder | Mr. Vinay Mishra |

Insect as Pest (Euproctis lunata) शलभ





(Euproctis lunata) शलभ

| Phylum | Arthropoda |
|------------------------------------|--|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Euproctis lunata |
| Local Name / Common Name | Moth (शलभ) |
| Habit and Habitat | The larvae were found on acacia trees in social forestry plantations. |
| Description | The larvae swarms persisted for 10-15 days in different vegetation. Complete defoliation was observed. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year (February - March) |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Flame cultivators, insecticidal dusting &catch were adapted to control of pest. |
| Other Details | Skin irritation due to urticaria. |
| Community / Knowledge Holder | Mr. Vinay Mishra |

Insect as Pest Sugarcane mealybug (Saccharicoccus sacchari) कॉकरेल



Sugarcane mealybug (Saccharicoccus sacchari) कॉकरेल

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Hemiptera |
| Genus and Species (If known) | Saccharicoccus sacchari |
| Local Name / Common Name | Sugarcane mealybug (कॉकरेल) |
| Habit and Habitat | Severalgraminae, especially sorghum & phhragmites, Saccnarumafficinarum. |
| Description | Body of female is 4-5 mm long, pink the antennae with seven segments. There are two ostiales & the circulus is large medially considered (dumbbell shaped). |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance. |
| Present- | In abundance. |
| Uses | It transmit bug virus. |
| Associated Traditional Knowledge | |
| Management mechanism | The encyrtid endoparasitoid anagyries kills 14-21 % of pest in autumn. |
| Other Details | Cerarrii are present on posterior segment. |
| Community / Knowledge Holder | Mr. Vinay Mishra |

Insect as Pest (Dasyneura lini) डैसिन्यूरा

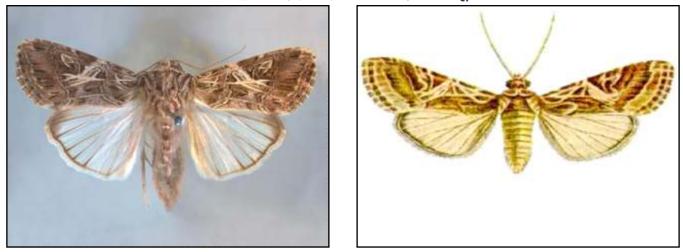




(Dasyneura lini) डैसिन्यूरा

| Phylum | | Arthropoda |
|----------------------------------|------------------|---|
| Class | | Insecta |
| Order | | Diptera |
| Genus and Species | (If known) | Dasyneura lini |
| Local Name / Com | non Name | Dasyneura (डैसिन्यूरा) |
| Habit and Habitat | | Carthamus tinctorius (safflower, Linum usitatissimum flax) |
| Description | | Female ovipositor retractable with using terminal cercifused into a single median lobe. Female antennae formula 2+9- 2+18 with short neck. Female antennae formula 2+11-2+18 with long neck & simple circumfila. |
| Mythological Signi | ficance (if any) | |
| I.U.C.N. Status | | |
| Season when seen | | Throughout the year |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Integration of potential methods by resistant verities. Mechanical & chemical method in the form of IPM modules which may ecofriendly & co-effective to control pest. |
| Other Details | | Female with elongate- cylindrical with short neck. |
| Community / Knowledge Holder | | Mr. Vinay Mishra |

Insect as Pest Tobacco caterpiller (Spodoptera litura) तम्बाकू का गिदार



Tobacco caterpiller (Spodoptera litura) तम्बाकू का गिदार

| Phylum | Arthropoda |
|------------------------------------|---|
| Class | Insecta |
| Order | Lepidoptera |
| Genus and Species (If known) | Spodoptera litura |
| Local Name / Common Name | Tobacco caterpillar (तम्बाकू का गिदार) |
| Habit and Habitat | Hide in soil day & feeds in night, cotton, castor, groundnut. |
| Description | Dark brown coloured moths with patterned wings. Egg laid in groups (300-500) covered with body scalar. Larvae are green & later instars dark coloured with green black patterns. |
| Mythological Significance (if any) | |
| I.U.C.N. Status | |
| Season when seen | Summer |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | |
| Associated Traditional Knowledge | |
| Management mechanism | Showing trap crop caster on field, border crop & barriers crop-maize sorghum around fields. |
| Other Details | Feeds on leaves scraping gregariously result in died up leaves. |
| Community / Knowledge Holder | Mr. Vinay Mishra |

Insect as Pest

Red Pumkin Beetles/ToraiKaKira (Raphidopalpa foveicollis) तोरई का कीड़ा



Red Pumkin Beetles/ToraiKaKira (Raphidopalpa foveicollis) तोरई का कीड़ा

| Phylum | | Arthropoda |
|------------------------------------|------------|--|
| Class | | Insecta |
| Order | | Coleoptera |
| | (761) | * |
| Genus and Species | (If known) | Raphidopalpa foveicollis |
| Local Name / Com | non Name | Torai Ka Kira & Pumkin Beetles (तोरई का कीड़ा) |
| Habit and Habitat | | Cucurbitaceous plants e.g. cucumber, melon, torai, tinda, louki. |
| Description | | The adult beetles measures 6.5 to 7 mm. Upper surface of the body i9s brilliant orange, but abdomen is entirely black. Each female can lay about 300 eggs. The eggs hatch in about 7-15 days. |
| Mythological Significance (if any) | | |
| I.U.C.N. Status | | |
| Season when seen | | During April to end of September or middle of October. |
| Local Status: | Past- | In abundance. |
| | Present- | In abundance. |
| Uses | | |
| Associated Traditional Knowledge | | |
| Management mechanism | | Collection of the beetles by means of hand, nets & destroying them in kerosinised water. |
| Other Details | | The total life- cycle occupies 30-35 days & there are 5 generations during the year. |
| Community / Knowledge Holder | | Mr. Vinay Mishra |



FORMAT- XXVI Sacred Animals





Sacred Animals

Cow (Bos taurus) गाय





Cow (Bos taurus) गाय

| Phylum | | Chordata |
|------------------------------------|--------------|---|
| Class | | Mammalia |
| Order | | Artiodactyla |
| Genus and Species | (If known) | Bos taurus |
| Local Name / Com | mon Name | Cow (गाय) |
| Habit and Habitat | | Inhabits in field, grassland & around the human dwelling. Cows are domesticated & one of most common pet that live with human. |
| Description | | More breeds have horns, which can be as large as the texas to longhorn or small like a scure. They are large in size & their colour different from black, white & contain dots on the skin. They contain long tail & gestation period is 9 month. |
| Mythological Significance (if any) | | Sacred in Hindu religion, according to Vedic scriptures they are to be treated with the same respect as ones mother. |
| I.U.C.N. Status | | Least concern |
| Season when seen | | All the year. |
| Local Status: | Past – | More in number |
| | Present – | Less in number |
| Uses | | Milk production & in agriculture. |
| Associated Traditional Knowledge | | Their urine is used in curing different diseases. |
| Management mechanism | | |
| Other Details | | They are also used as draft animals & in curing different diseases. |
| Community/Know | ledge Holder | Smt. Premlata |

Buffalo (Bubalus bubalis) भैंस



Buffalo (Bubalus bubalis) भैंस

| Phylum | Chordata |
|------------------------------------|--|
| Class | Mammalia |
| Order | Artiodactyla |
| Genus and Species (If known) | Bubalus bubalis |
| Local Name / Common Name | Bhains/ Buffalo (भैंस) |
| Habit and Habitat | They are domesticated & most of the time they wants to live in water & mud. |
| Description | The skin of river buffalo is black. They are in large size & contain a long tail, they have rounded horns. |
| Mythological Significance (if any) | They are sacrificed to praise God. |
| I.U.C.N. Status | Least concern |
| Season when seen | All the season |
| Local Status: Past – | More in number |
| Present – | More in number |
| Uses | Milk, meat & skin |
| Associated Traditional Knowledge | There are many proverbs like "Akal badiya Bhains" |
| Management mechanism | |
| Other Details | Participate in racing festival. |
| Community/Knowledge Holder | Smt. Premlata |

Dog/Kutta (Canis familiaris) कुत्ता



Dog/Kutta (Canis familiaris) कुत्ता

| Phylum | Chordata |
|------------------------------------|---|
| Class | Mammalia |
| Order | Carnivora |
| Genus and Species (If known) | Canis familiaris |
| Local Name / Common Name | Dog/Kutta (कुत्ता) |
| Habit and Habitat | Mostly found around human dwellings. These days domesticated dogs are common. |
| Description | Body divided into head, trunk & tail. |
| Mythological Significance (if any) | Significance of dog is mentioned in Hindu Holy book 'Mahabharat'. |
| I.U.C.N. Status | Least concern |
| Season when seen | Almost all year. |
| Local Status: Past – | Less in number |
| Present – | More in number |
| Uses | In guarding of houses & fields. |
| Associated Traditional Knowledge | Very faithful black bod is considered and as vehicle of Lord Bhairo. |
| Management mechanism | |
| Other Details | Tracing criminals. |
| Community/Knowledge Holder | Smt. Premlata |

Gadha/Donkey (Equus heminous) गधा



Gadha/Donkey (Equus heminous) गधा

| Phylum | Chordata |
|------------------------------------|---|
| Class | Mammalia |
| Order | Perissodactyla |
| Genus and Species (If known) | Equus heminous |
| Local Name / Common Name | Gadha/Donkey (गधा) |
| Habit & Habitat | Grasslands and open plains. |
| Description | One functional toe with a large hoof on each foot. Only lower part of tail covered with hair. |
| Mythological Significance (if any) | Donkey is the vehicle of one of the nine Avtar of " Durga Mata". |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year. |
| Local Status: Past – | More in number |
| Present – | Less in number |
| Uses | For carrying load |
| Associated Traditional Knowledge | For carrying load. |
| Other Details | Their molars are specially well developed for grinding plant food. |
| Community/Knowledge Holder | Smt. Premlata |

Ox (Bos indicus) बैल





Ox (Bos indicus) बैल

| Phylum | Chordata |
|------------------------------------|---|
| Class | Mammalia |
| Order | Artiodactyla |
| Genus and Species (If known) | Bos indicus |
| Local Name / Common Name | Ox (बैल) |
| Habit & Habitat | Grasslands & open plains. |
| Description | Also known as bull, commonly castrated adult male cattle. The even-toed hoofed, having an even number of foes. |
| Mythological Significance (if any) | Ox is a vehicle of God "Shiva". |
| I.U.C.N. Status | Least concern |
| Season when seen | Throughout the year |
| Local Status: Past – | More in number |
| Present – | Less in number |
| Uses | Transport & farming |
| Associated Traditional Knowledge | For farming. |
| Management mechanism | Kept in thatch |
| Other Details | |
| Community/Knowledge Holder | Mr. Zameel Ahmed |

Rat (Rattus rattus) चूहा





Rat (Rattus rattus) चूहा

| Phylum | Chordata |
|------------------------------------|---|
| Class | Mammalia |
| Order | Rodentia |
| Genus and Species (If known) | Rattus rattus |
| Local Name / Common Name | Rat/Chuha (चूहा) |
| Habit & Habitat | Garden , fields & houses. |
| Description | Body covered with black hairs, pinnae well developed, eye sharp & tail is elongated & scaly. |
| Mythological Significance (if any) | Vehicle of Lord Ganesha in Hindu mythology. |
| I.U.C.N. Status | Least concern |
| Season when seen | All season |
| Local Status: Past – | More in number |
| Present – | More in number |
| Uses | Rat has a great experimental value. |
| Associated Traditional Knowledge | There are many proverb in Hindi scripts on rat. |
| Management mechanism | Rat kills and traps are used |
| Other Details | It is considered asa pest |
| Community/Knowledge Holder | Smt. Premlata |

Monkey (Rhesus macaque) बन्दर



Monkey (Rhesus macaque) बन्दर

| Phylum | | Chordata |
|----------------------------------|-------------------|---|
| Class | | Mammalia |
| Order | | Primates |
| Genus and Species | s (If known) | Rhesus macaque |
| Local Name / Com | mon Name | Bandar/ Monkey (बन्दर) |
| Habit & Habitat | | Live in wide variety of habitat including cities, villages, forms, forests, semi deserts & mangrove swamps. |
| Description | | Body covered with brownish or goldenhair, nostrils parallel & direct downwards. Internal cheek pouched for the food & external ear reduced. |
| Mythological Sign | ificance (if any) | It worshiped as Lord Hanuman. |
| I.U.C.N. Status | | Least concern |
| Season when seen | L | Throughout the year |
| Local Status: | Past – | More in number |
| | Present – | More in number |
| Uses | | Used in circus. |
| Associated Traditional Knowledge | | Famous story on monkey & crocodile. |
| Management mechanism | | |
| Other Details | | Rh factor first time discovered |
| inRhesus monkey. | | |
| Community/Know | vledge Holder | Smt. Premlata |

Peacock / Mor (Pavo cristatus) मोर



Peacock / Mor (Pavo cristatus) मोर

| Phylum | | Chordata |
|----------------------------------|-------------------|---|
| Class | | Aves |
| Order | | Galliformes |
| Genus and Species | (If known) | Pavo cristatus |
| Local Name / Com | non Name | Peacock/Mor (मोर) |
| Habit & Habitat | | Open forest & woodland, usually near a river or streams. Farmland, villages. |
| Descriptions | | 1.8-2.3 m length in size. 2.75-6 kg in weight. The male's head , neck & breast are a glossy, irridescent blue with white patches above & below the eyes. Along with a crest of upright, blue-tipped feathers on the crown of the head. Female are peahens Breeding season is rainy. |
| Mythological Signi | ificance (if any) | Numerous iconic representation is frequently depicted in temple art, mythology, poetry, Folk music and traditions. |
| I.U.C.N. Status | | Least concern |
| Season when seen | | Throughout the year and breeding mostly in monsoons |
| Local Status: | Past – | In abundance |
| | Present – | Less abundant |
| Uses | | Used as a pest control, Pollinators and Scenic beauty |
| Associated Traditional Knowledge | | People have believe that when peacock dances it indicates rains may come |
| Management mech | anism | |
| Other Details | | Peacock is the National bird of India. |
| Community/Knowledge Holder | | Mr. Jai Singh |

Indian Roller (Coracias benghalensis) नीलकण्ठ



Indian Roller (Coracias benghalensis) नीलकण्ठ

| Phylum | | Chordata |
|------------------------------------|---------------|---|
| Class | | Aves |
| Order | | Coraciiformes |
| Genus and Specie | es (If known) | Coracias benghalensis |
| Local Name / Con | nmon Name | Indian Roller (नीलकण्ठ) |
| Habit & Habitat | | The main habitat is agricultural fields thin forests & grassland. |
| Descriptions | | Size are 26-27 cm long & weight are 90g. the breast is brownish & not blue as in the European Roller. The crowns vent are blue. Throat is blue in colour. |
| Mythological Significance (if any) | | It is said to be sacred to Vishnu & used to be caught & released during festival such as Dussehra & Durga Puja. A local hindi name is Neelkanth, meaning "blue throat" a name associated with the deity Shiva (who drank poison resulting in the blue throat) |
| I.U.C.N. Status | | Least concern |
| Season when see | n | All season. Mostly in October& November |
| Local Status: | Past- | Abundant |
| | Present- | Very less |
| Uses | | As a pest control, pollinator & scenic beauty. |
| Associated Traditional Knowledge | | Adding its chopped feathers to fodder grass of cows was believed to increase their milk yield. |
| Management mee | chanism | |
| Other Details | | The Indian roller has been chosen as the State bird by the Indian states of Bihar, Andhra Pradesh, Telangana, Karnataka & Odisha. |
| Community/Know | vledge Holder | Mr. Jai Singh |
| | | |

Sarus (Grus antigone) सारस





Sarus (Grus antigone) सारस

| Phylum | Chordata |
|------------------------------------|--|
| | |
| Class | Aves |
| Order | Gruiformes |
| Genus and Species (If known) | Grus antigone |
| Local Name / Common Name | Sarus / Sarus crane (सारस) |
| Habit and Habitat | Open wetlands |
| Description | It is a large non-migratory bird. It is the tallest of all flying birds standing at a height of 1.8m. They are of grey color & contrasting red head & upper neck. They form long lasting pair bonds & maintain territories. |
| Mythological Significance (if any) | Story of Siddhartha & Devdatt. |
| I.U.C.N. Status | Vulnerable |
| Season when seen | Throughout the year |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Scenic beauty, as a pest controller. |
| Associated Traditional Knowledge | Their presence is indicator of water bodies of hygienic & healthy ecosystem. |
| Management mechanism | Protection of wetlands. |
| Other Details | The bare red skin of adult head & neck is brighter during breeding season. |
| Community/Knowledge Holder | Mr. Jai Singh |

Ant (Solenos ispgeminate) चींटी



Ant (Solenos ispgeminate) चींटी

| Phylum | | Arthropoda |
|------------------------------------|-----------------|---|
| Class | | Insecta |
| Order | | Hymenoptera |
| Genus and species | s (If known) | Solenos ispgeminate) |
| Local Name / Com | mon Name | Ant / Chiti (चींटी) |
| Habit & Habitat | | On land and in moist places. |
| Description | | Size (0.5 to 25mm), Red or black in colour, body is divided into head, thorax & abdomen. They are polymorphic. Queen ant mated once in her lifetime. |
| Mythological Significance (if any) | | The ants working together for the common good is to be taken as a lesson to men, who should work in unity. |
| I.U.C.N Status | | |
| Season when seen | l | Throughout year |
| Local Status: | Past - | In abundance |
| | Present - | In abundance |
| Uses | | As a harvester. Serve as a food for several animals & humans. |
| Associated Tradit | ional Knowledge | As a pest and weather forecast |
| Management mechanism | | Spraying pesticide & malathion. |
| Other Details | | Sugar & sugary materials are usually destroyed by most of the species. Ant bites have curative properties. Used in biological experiment for sex determination. |
| Community / Knowledge Holder | | Mr. Jai Singh |

Turtle (Lissemys punctata) कछुआ



Turtle (Lissemys punctata) कछुआ

| Phylum | Chordata |
|------------------------------------|--|
| Class | Reptilia |
| Order | Testudines |
| Genus and Species (If known) | Lissemys punctata |
| Local Name / Common Name | Kachua/Turtle (कछुआ) |
| Habit & Habitat | Aquatic |
| Description | Broad carapace in adult while more circular in young ones. Snout is present. Tail is very short. |
| Mythological Significance (if any) | In Indian mythology it is one of the Dasha Avatar's called as Kacchap & Symbol of good luck |
| I.U.C.N. Status | Endangered |
| Season when seen | In rainy season |
| Local Status: Past- | In abundance |
| Present- | In abundance |
| Uses | Medicinal for skin treatment. |
| Associated Traditional Knowledge | In India, the shell is used to make a remedy believed to be a medicine for tuberculosis. |
| Management mechanism | Breeding centres are there |
| Other Details | Their eggs are commonly used as a source of food and protein. As a result, these turtles are often exploited as a source of profit. Lot of medicinal value |
| Community / Knowledge Holder | Mr. Jai Singh |

Cobra (Naja naja) नाग





Cobra (Naja naja) नाग

| Phylum | | Chordata. |
|------------------------------------|----------------|--|
| Class | | Reptilia |
| Order | | Squamata |
| Genus and Species | (If known) | Naja naja |
| Local Name / Com | non Name | Cobra (नाग) |
| Habit & Habitat | | Cobra is diurnal, shy, living in holes, under stones, mud walls & in thick vegetation. It is oviparous, carnivorous & feeds on frogs, rats, lizards & other snakes. It hibernates in winters. |
| Description | | Body measures 2.3 metres in length & is wheatish (gehuwa) in colour. Hood contains spectacle mark on dorsal surface. Some persons call it figure of ten. There is a white band around mark. |
| Mythological Significance (if any) | | In Indian mythology it refers to Shashnag and Nagdevta. Worshipped on Nagpanchami |
| I.U.C.N. Status | | |
| Season when seen | | Insummer |
| Local Status: | Past – | More in number |
| | Present - | Less in number |
| Uses | | Used for making antivenom & to control the pest (mainly rats). |
| Associated Tradition | onal Knowledge | Very poisonous & dangerous. |
| Management mechanism | | |
| Other Details | | Domesticated by snake charmers. |
| Community / Knowledge Holder | | Mr. Jai Singh |

Jungle Owlet (Glaucidium radiatum) उल्लू



Jungle Owlet (Glaucidium radiatum) उल्लू

| Phylum | | Chordata |
|--------------------|-------------------|--|
| Class | | Aves |
| Order | | Strigiformes |
| Genus and Species | s (If known) | Glaucidium radiatum |
| Local Name / Com | mon Name | Ullu / Jungle Owlet (उल्लू) |
| Habit and Habitat | | Scrub forest to deciduous forest. |
| Description | | It is small owlet & has a rounded head . There is no clear facial disk & the wings are brownish with narrow white tail. The iris is yellow, the bill & tarsi are greenish with black claws. |
| Mythological Sign | ificance (if any) | It is symbolized as the carrier of "Goddess Laxmi". |
| I.U.C.N. Status | | Least concern |
| Season when seen | L | Throughout the year |
| Local Status: | Past- | In abundance |
| | Present- | In abundance |
| Uses | | Pest control |
| Associated Traditi | onal Knowledge | Used in black magic. |
| Management mec | hanism | |
| Other Details | | This owlet is mainly active at dawn and dusk, but is known to call & fly during the day time as well. |
| Community/Know | vledge Holder | Mr. Jai Singh |

Plum headed parakeet (Psittacula cyanocephala) तोता



Plum headed parakeet (Psittacula cyanocephala) तोता

| DI 1 | | |
|-------------------|-------------------|--|
| Phylum | | Chordata |
| Class | | Aves |
| Order | | Psittacopasserae |
| Genus and Specie | s (If known) | Psittacula cyanocephala |
| Local Name / Com | mon Name | Plum headed parakeet/Tota (तोता) |
| Habit & Habitat | | They have successfully adapted to living in disturbed habitats. |
| Description | | 40 cm length in size. Green with long bluish tail & red bill. Adult male sports a real or black neck-ring. The males develop a black ring between 18 months & by three years the ring is highlighted with pink & blue. Females do not have the ring. It breeding season in warm weather (July- September) |
| Mythological Sign | ificance (if any) | In Hindu mythology Parrot is the vehicle of Kamadeva God. |
| I.U.C.N. Status | | |
| Season when seen | l | Throughout Year |
| Local Status: | Past- | In abundance |
| | Present- | Less in number |
| Uses | | Used as a pest control, Pollinators and Scenic beauty. |
| Associated Tradit | ional Knowledge | Parrots have featured in human writngs, story, art, humor, religion & music for thousand of years. |
| Management mec | hanism | |
| Other Details | | Parrots are the most intelligent birds & the ability of some species to imitate human voice enhances their popularity as pets. |
| Community/Know | vledge Holder | Mr. Jai Singh |

List of Flora described in District Kannauj

| S. No | Scientific Name | Local Name | Name in Hindi | Page No. |
|-------|--------------------------|---------------|---------------|-------------------|
| 1. | Abelmoschus esculentus | Ladyfinger | भिन्डी | 03 |
| 2. | Murraya paniculata | Manokamini | मनोकामनी | 299 |
| 3. | Agares spp. | Agave | एगेन | 235 |
| 4. | Agaricus benesil | Mushroom | मशरूम | 65 |
| 5. | Ageratum conzyoides | Kakrona | ककरोना | 375, 447 |
| 6. | Allium cepa | Onion | प्याज | 31 |
| 7. | Allium sativum | Garlic | लहसुन | 05, 357 |
| 8. | Amaranthus tricolor | Bari Chaulai | चौलाई | 57, 445 |
| 9. | Amranthus | Raam dana | रामदाना | 145 |
| 10. | Annona squamosa | Custard Apple | शरीफा | 81 |
| 11. | Anthocephalus chinesis | Kadam | कदम्ब | 79 |
| 12. | Arachis hypogea | Groundnut | मूँगफली | 151, 209 |
| 13. | Artocarpus heterophtllus | Jackfruit | कटहल | 55 |
| 14. | Avena sativa | Oat | जई | 137, 439 |
| 15. | Averrhoa carambola | Amrakh | अमरख | 133 |
| 16. | Azadirachta indica | Neem | नीम | 277, 319, 475 |
| 17. | Bambusa bambos | Bamboo | बाँस | 241, 477 |
| 18. | Benincasa hispida | White Gourd | सफेद कद्दू | 119 |
| 19. | Beta vulgaris | Sugarbeet | चुकन्दर | 33 |
| 20. | Aegle marmelos | Bael | बेल | 75, 347, 467 |
| 21. | Brassica aleracea | Cabbage | बन्दगोभी | 13 |
| 22. | Brassica hirta | Mustard | पीली सरसो | 189 |
| 23. | Brassica nigra | Mustard | काली सरसो | 29, 187, 213, 223 |
| 24. | Brassica oleracea | Cauliflower | फूल गोभी | 7 |
| 25. | Brassica rapa | Turnip | शलजम | 45 |
| 26. | Cajanus cajan | Pigeon Pea | अरहर | 157 |
| 27. | Callistemon lanceolatus | Bottle Brush | चील | 295 |
| 28. | Calotropis procera | Madaar | मदार | 395, 463 |

| 29. Canavalia gladiata | Bari Sem | बड़ी सेम | 53 |
|----------------------------------|-------------------|--------------|---------------|
| 30. Cannabis sativa | Hemp | भांग | 337, 471 |
| 31. Capsicum annum | Chilli | मिर्ची | 17, 181 |
| 32. Carica papaya | Рарауа | पपीता | 97 |
| 33. Carissa carandas | Karaunda | करौंदा | 111 |
| 34. Cassia fistula | Amaltaas | अमलतास | 287 |
| 35. Chenopodium album | Bathua | बथुआ | 11 |
| 36. Chrysopogon zizanioides | Khus | खस | 265 |
| 37. Cinnamomum tamala | Tejpatta | तेजपत्ता | 327 |
| 38. Citrus limon | Lemon | नींबू | 35, 115 |
| 39. Citrus maxima | Chakotra | चकोतरा | 117 |
| 40. Coccinia indica | Kundru | कुंदरू | 47 |
| 41. Coccinia grandis | Jungli Kundru | जंगली कुंदरू | 399 |
| 42. Colocasia spp. | Arbi | घुंईया | 63 |
| 43. Conandrum sativum | Coriander | धनिया | 181 |
| 44. Corchorus olitorius | Nalta jute | नालता जूट | 229 |
| 45. Croton californicus | Coroton | करेटन | 279 |
| 46. Cucumis melo | Musk Melon | खरबुजा | 105 |
| 47. Cucumis melo var. fllexuosus | Armenian cucumber | ककड़ी | 107 |
| 48. Cucumis sativus | Cucumber | खीरा | 101 |
| 49. Cucurbita maxima | Pumpkin | कद्दू | 23 |
| 50. Cuminum cyminum | Cumin seed | जीरा | 195 |
| 51. Curcuma longa | Turmeric | हल्दी | 179, 341, 467 |
| 52. Cynodon dactylon | Doob grass | दूबघास | 353, 389, 451 |
| 53. Cyperus rotundus | Motha patera | मोथा | 427 |
| 54. Dalbergia sissoo | Sheesham | शीशम | 239 |
| 55. Datura alba | Dhatura | धतूरा | 339, 393, 461 |
| 56. Daucus carota | Carrot | गाजर | 43 |
| 57. Delonix vegia | Gulmohar | गुलमोहर | 291 |
| 58. Dolichos lablab | Lablab | ्र सेम | 171 |
| 59. Eclipta prostrata | Bhringraj | भृंगराज | 325 |
| 60. Eichhornia crassipes | Jalkumbhi | जलकुम्भी | 381, 405 |

| 61. | Eleocharis dulcis | Chinese Water Chestnut | सिंघाडा प्रजाति | 425 |
|-----|-------------------------|------------------------|-----------------|----------|
| 62. | Eleusine coracana | Ragi | रागी | 131 |
| 63. | Epipremnum aureum | Money plant | मनी प्लान्ट | 281 |
| 64. | Eryngium foetidum | Culantro | कुलैन्ट्रो | 383 |
| 65. | Eucalyptus globulus | Eucalyptus | यूकेलिपट्स | 207, 331 |
| 66. | Euphorbia hirta | Doodhi | दूधी | 391 |
| 67. | Fagopyrum esculentum | Kuttu | कुट्टू | 141 |
| 68. | Ferula asafoetida | Hing | हींग | 199 |
| 69. | Ficus benghalensis | Banyan | बरगद | 457 |
| 70. | Ficus virens | Pakad | पाकड | 243 |
| 71. | Ficus religiosa | Peepal | पीपल | 455 |
| 72. | Foeniculum vulgare | Saunf | सौंफ | 193 |
| 73. | Glycine max | Soybean | सोयाबीन | 165 |
| 74. | Gossypium arborium | Cotton | रूई (कपास) | 227 |
| 75. | Helianthus annus | Sunflower | सूरजमुखी | 217, 301 |
| 76. | Hibiscus canmabinus | Kenaf | केनफ | 231 |
| 77. | Hibiscus rosa sinensis | China rose | गुड़हल | 289, 369 |
| 78. | Hibiscus sabdariffa | Roselle | रोजेल | 233 |
| 79. | Holoptelea integrifolia | Chilbil | चिलबिल | 109 |
| 80. | Hordeum vulgare | Barley | जौं | 135, 435 |
| 81. | Hydrilla verticillata | Hydrilla | हाइड्रिला | 421 |
| 82. | Ipomea aquatica | Kamli Shak | कमलीशाक | 429 |
| 83. | Ipomoea batatas | Sweet potato | शकरकन्द | 103 |
| 84. | Jasminum auriculatum | Bela | बेला | 257, 309 |
| 85. | Jasminum sambac | Mogra | मोगरा | 269, 313 |
| 86. | Jasminum unifoliolatam | Chameli | चमेली | 261, 293 |
| 87. | Jussiaeaa repens | Van laung | वन लौंग | 917 |
| 88. | Lablab purpurcus | Chapti sem | चपटी सेम | 37, 171 |
| 89. | Laevsonia inermis | Mehndi | मेंहदी | 283, 361 |
| 90. | Langenceia siceraria | Bottle gourd | लौकी | 21 |
| 91. | Lens culinaris | Masoor | मसूर | 159 |
| 92. | Limonia accidissima | Kaitha | कैथा | 95 |

| 93. Luffa acutangula | Taroi | तरोई | 59 |
|-----------------------------|----------------|----------------|---------------|
| 94. Lycopersicum esculentum | Tomato | टमाटर | 27 |
| 95. Mangifera indica | Mango | आम | 8, 245, 465 |
| 96. Manilkara hexandra | Khirni | खिरनी | 121 |
| 97. Mentha arvensis | Pudina | पुदीना | 19 |
| 98. Mentha piperita | Peppemint | पिपरमिन्ट | 211, 321 |
| 99. Mimusops elengi | Molshree | मॉलश्री | 203, 271, 335 |
| 100Momordiea charantia | Bittergourd | करेला | 61 |
| 101Moringa oleifera | Drumstick | सहजन | 67 |
| 102Morus alba | Shehtoot | शहतूत | 91 |
| 103Musa sp. | Banana | केला | 87 |
| 104Nelumbo nucifera | Kamalgatta | कमलगट्टा | 409 |
| 105Nelumbo nucifera | Lotus | कमल | 481 |
| 106Neptunic oleraeca | Lajalu | लजालू | 413 |
| 107Nerium olender | Kaner | कनेर | 315 |
| 108Nymphea | Water Lily | नीलकमल | 407 |
| 109Nymphoides indica | Jalrani | जलरानी | 411 |
| 110Ocimum tenuiflorum | Basil | तुलसी | 323, 469 |
| 111Opuntia ficus indica | Cactus | नागफनी प्रजाति | 493 |
| 112 <i>Opuntia strictia</i> | Nagfani | नागफनी | 275 |
| 113Oryza rufipogo | Fasai Grass | फसाई घास | 419 |
| 114Oryza sativa | Rice | धान | 125, 485 |
| 115Parthenium hysterophurus | Congress grass | गाजर घास | 387, 449 |
| 116Pediastrum boryanum | Green Algae | हरित शैवाल | 403, 499 |
| 117 Pennisptum glancum | Bajra | बाजरा | 139, 441 |
| 118Phaseolus lunatus | Lima bean | बीन | 169 |
| 119Phyllanthus emblier | Amla | आँवला | 73, 219, 363 |
| 120Pisum sativum | Pea | मटर | 49, 175 |
| 121Plumeria | Champa | चम्पा | 267, 305 |
| 122Poenix dectulifera | Date | खजूर | 99 |
| 123Polygonum limbatum | Sment Weed | खर पतवार | 423 |
| 124Prosopis cinereria | Shami | सनी | 459 |

| 125Prosopis Julififlona | Masqcut | मैस्कट | 491 |
|-----------------------------------|-----------------|------------------|---------------|
| 126Psidium guava | Guava | अमरूद | 89 |
| 127 Punica granatum | Pomegranate | अनार | 83, 349 |
| 128Ranunculus scrleratus | Jaldhania | जलधनिया | 397 |
| 129Raphanus sativus | Radish | मूली | 15 |
| 130Ricinus communis | Arandi | अरण्य | 152, 205, 353 |
| 131Rosa indica | Rose | गुलाब | 259, 303, 367 |
| 132Rumex nepalensis | Jangli Palak | जंगली पालक | 377 |
| 133Saccharum officinarum | Sugarcane | गन्ना | 253, 483 |
| 134Santalum paniculatum | Sandalwood | चंदन | 479 |
| 135Saraca asoca/indica | Sita Ashoka | सीता अशोक | 473 |
| 136Saraca longifolia | Ashok | अशोक | 273 |
| 137 Sesamum indicum | Sesame | सफेद तिल | 149, 215 |
| 138Sesamun indicum nigru | m Sesame | काला तिल | 147, 221 |
| 139Shorea robusta | Sal | साल | 249 |
| 140Solanum melongena | Brinjal | बैंगन | 51 |
| 141Solanum nigrum | Makoi | मकोई | 359, 379 |
| 142Solanum tuberosum | Potato | आलू | 39 |
| 143Sorghum bicolor | Jwar | ज्वार | 133, 433 |
| 144Spinacia oleracea | Spinach | पालक | 9 |
| 145Spirodela polyrhiza | Big Duck Weed | बड़ी काई / पतवार | 915 |
| 146Syzygium aromaticum | Clove | लौंग | 197, 345 |
| 147Syzygium cumini | Jamun | जामुन | 93, 351 |
| 148Tabernaemontana diva | ricata Chandini | चाँदनी | 307 |
| 149Tagetes erecta | Marigold | गेंदा | 297 |
| 150Tectona grandis | Shagaon | सागौर | 247 |
| 151 Terminalia chebula | Harrad | हरद | 329 |
| 152Trapa bispinosa | Water chestnut | सिंघाड़ा | 143 |
| 153 <i>Tribulus terrestris</i> | Gokharu | गोखरू | 385 |
| 154 <i>Trifolium alexandrinum</i> | n Barseem | बरशीम | 437 |
| 155Trigonella foenum grae | ecum Methi | मेंथी | 191 |
| 156Triticum aestivum | Wheat | गेहूँ | 127 |

| 157. | Tylophora indica | Tamarind | इमली | 77 |
|------|---------------------|-----------|---------|----------|
| 158. | Vicia faba | Bankla | बांकला | 41 |
| 159. | Vigna aconitifola | Moth bean | बीन | 67 |
| 160. | Vigna mungo | Urad | उड़द | 163 |
| 161. | Vigna radiata | Moong | मूँग | 161 |
| 162. | Vigna sinensis | Cowpea | लोबिया | 173 |
| 163. | Vigna ungiculat | Lobia | लोबिया | 251 |
| 164. | Vinea rosea | Sadabahar | सदाबहार | 311, 371 |
| 165. | Volvox | Volvox | शैवाल | 497 |
| 166. | Zeamays (Zea mays) | Maize | मक्का | 129 |
| 167. | Zingiber officinale | Ginger | अदरक | 185, 343 |
| 168. | Ziziphus mauritiana | Ber | बेर | 71 |

Annexure-2

List of Fauna described in District Kannauj

| S. No | Scientific Name | Local Name | Name in Hindi | Page No. |
|------------|----------------------------|----------------------|---------------------|---------------|
| 1. | Accipiter badius | Shikrav | शीकरा | 525 |
| 2. | Aceria cajani | Rust mite | रस्ट माईट | 358 |
| 3. | Achaea janata | Castor Semilooper | नींबू का पतंगा | 335, 583 |
| 4. | Achatina fulica | Giant African Snail | घोंघा | 396 |
| 5. | Acisoma panarpoides | Trumpet Tail | तुरही पूँछ | 588, 325 |
| 6. | Acochlidium | Slug | घोंघा | 394 |
| 7. | Acridotheres ginginianus | Bank Myna | मैना | 490 |
| 8. | Acredotheres tristis | Common Myna | देषी मैना | 518 |
| 9. | Adonia variegata | Ladybird | मोगरी | 367 |
| 10. | Alcedo attnis | Common Kingfisher | छोटा किलकिला | 462 |
| 11. | Aleurolobus barodensis | Sugarcane white fly | गन्ने की मक्खी | 378, 577 |
| 12. | Alytes Midwife | Toad | टोड | 417 |
| 13. | Amaurornis phoenicurus | Water Hen | जल मुर्गी | 463 |
| 14. | Amoeba proteus | Amoeba | | 263 |
| 15. | Amritodus atkinsoni | Mango leaf hopper | आम की चनंपा | 380, 572 |
| 16. | Anas acuta | Northern Pintail | सींखपर बत्तख | 445 |
| 17. | Anas clypeata | Northern Shoveller | तिदारी बत्तख | 467 |
| 18. | Anas platyrhynchos | Mallard | नीलसर बत्तख | 450 |
| 19. | Anas poecilorhyncha | Spot billed Duck | गुगराल बत्तख | 441 |
| 20. | Anas strepera | Gadwall | बेखुर बत्तख | 469 |
| 21. | Anastomus oscitans | Asian Openbills | घोंघिल | 453 |
| 22. | Ancylostoma duodenales | Hookworm | हुकवार्म | 288 |
| 23. | Anhinga melanogaster | Darter | पनवा | 457 |
| 24. | Anopheles | Mosquito | मच्छर | 304 |
| 25. | Anthus rufulus | Paddyfield Pipit | चरचरी | 527 |
| 26. | Antigastra catalaunalis | Moth | शलभ | 377, 570 |
| 27. | Aphelenchoidus spp. | Leaf & bud nematodes | लीफ एण्ड बड निमेटोड | 558 |
| 28. | Aphis craccivora | Cowpea aphid | कॉउपि एफिड | 330, 348, 576 |
| 29. | Apis cerena indica | Indian bee | मधुमक्खी | 389 |
| <u>30.</u> | Apis florea | Dwarf honey bee | मधुमक्खी | 355 |
| 31. | Apus nepalensis | House Swift | अबाबील | 509 |
| 32. | Arcella vulgaris | Arcella | आरसेला | 266 |
| 33. | Ardea cinerea | Grey Heron | सिलेटी अंजन | 435 |
| 34. | Ardea purpurea | Purple Heron | नरी अंजन | 438 |
| 35. | Ariadne merione | Common Castor | कॉकन कैषटर | 340 |
| 36. | Ascaris lumbricoides | Round worm | राउण्ड वर्म | 289 |
| 37. | Athalia lugens proxima | Mustard sawfly | मस्टर्ड शाफलाई | 595 |
| 38. | Athalia proxima | Mustard Sawfly | सरसों की लिली | 347 |
| <u>39.</u> | Athene brama | Spotted Owlet | उल्लू | 520 |
| 40. | Atrophaneura aristolochiae | Common Rose | कॉमन रोज | 310 |
| 41. | Bactocera rufamaculata | Mangostem borer | आम का तना भेदक | 339 |
| 42. | Balantidium coli | Balantidium | बैलंटीडियम | 271 |
| 43. | Belonolaimus spp. | Sting nematodes | स्टिंग निमेटोड | 562 |
| 44. | Bubulcus ibis | Cattle Egret | गाय बगुला | 434 |

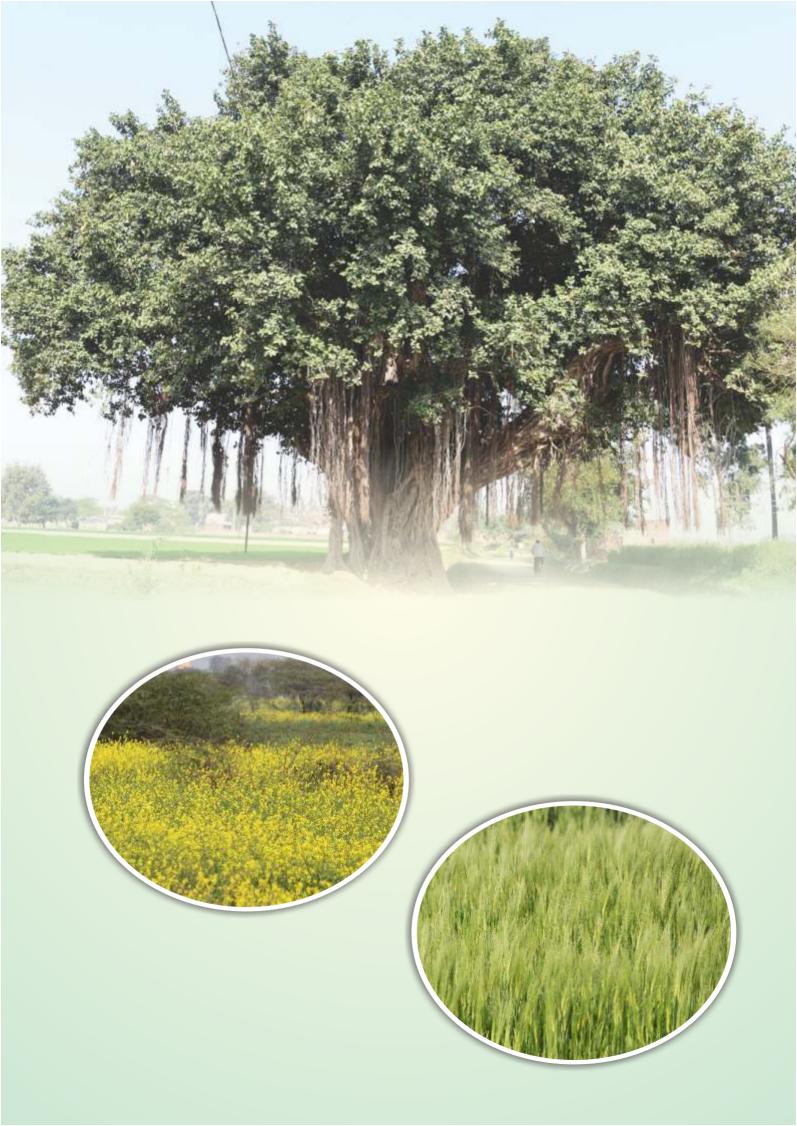
| 45. | Bos indicus | Ox | बैल | 550, 608 |
|-----|---------------------------|----------------------------|-------------------------|----------|
| 46. | Bos taurus | Cow | गाय | 535, 604 |
| 47. | Boselaphus tragocamelus | Neel Gai | नील गाय | 548 |
| 48. | Brachydiplax chalybea | Rufous backed marsh hawk | बाज | 344 |
| 49. | Branchythemis contaminata | Ditch Jewel | डैच ज्वैल | 324 |
| 50. | Brumoids suturalis | Three- striped Lady beetle | थ्री स्ट्रिपड लेडी बीटल | 713 |
| 51. | Bubalus bubalis | Buffalo | भैंस | 536, 605 |
| 52. | Bufo melanostictus | Common Toad | टोड | 414 |
| 53. | Calotes calotes | Calotes | गिरगिट | 421 |
| 54. | Camponotus compressus | Carpenter ant | चींटी | 354, 586 |
| 55. | Canis aureus | Jackal | सियार | 549 |
| 56. | Canis familiaris | Dog | कुत्ता | 537, 606 |
| 57. | Capra hircus | Goat | बकरी | 538 |
| 58. | Carabus olympiae | Carabid Beetle | काराबीड बीटल | 363, 594 |
| 59. | Casmerodius albus | Great Egret | मलंग बगला | 443 |
| 60. | Catla catla | Catla | कतला | 409 |
| 61. | Catopsilia pomona | Common Emigrant | कॉमन इमीग्रेन्ट | 365 |
| 62. | Catopsilla pyranthe | Moth | पतंगा | 385 |
| 63. | Centropus sinenis | Mahoka | महोका | 482 |
| 64. | Cepora nerissa | Common gull | कॉमन गुल | 311 |
| 65. | Cercomela fusca | Rock-chat v | शमा–दौमा | 500 |
| 66. | Ceriagron coromandelianum | Coromandel Marsh Dart | कोरोमण्डल मार्स डार्ट | 343 |
| 67. | Ceryle rudius | Pied Kingfisher | कौरिल्ला किलकिला | 460 |
| 68. | Cettia brunnifrons | Warbler | बाजरा का कीड़ा | 497 |
| 69. | Chilo partellus | Sorghum Shoot Borer | सौरगम तना भेदक | 336, 582 |
| 70. | Chrysopa spp. | Green Lacewing | हरित जालपंख | 592 |
| 71. | Cicada | Cicada | सिकाडा | 331 |
| 72. | Cimex lectularius | Bedbug | खटमल | 307 |
| 73. | Clarias batrachus | Mangur | मांगुर | 404 |
| 74. | Columba livia | Pigeon | कबूतर | 513 |
| 75. | Componotus compressus | Ant | ਚੀਂਟੀ | 685 |
| 76. | Copsychus saularis | Robin | कलचुरी | 474 |
| 77. | Coracias benghalensis | Indian Roller | नीलकण्ठ | 486, 612 |
| 78. | Corcyra cephalonica | Rice moth | चावल का कीड़ा | 374, 568 |
| 79. | Corvus splendens | Crow | कौआ | 475 |
| 80. | Corvus corax | Crow | कौआ | 524 |
| 81. | Ctenopharyngodon idella | Grass carp | ग्रॉस कार्प | 412 |
| 82. | Cyprinus carpio | Common Carp | कॉमन कार्प | 410 |
| 83. | Cypris | Seed Shrimp | शीड श्रिम | 327 |
| 84. | Dacus cucurbitae | Melon fly | सोन मक्खी | 371 |
| 85. | Danaus genutia | Striped Tiger | धारीदार तितली | 323 |
| 86. | Daphnia | Water Flea | वॉटर फ्ली | 326 |
| 87. | Dasyneura lini | Dasyneura | डेसीन्यूरा | 382, 599 |
| 88. | Delias eucharis | Common Jezebel | तितली | 316 |
| 89. | Dendrocitta vagabunda | Tree pie | मेहताब | 503 |
| 90. | Dendrocygna javanica | Lesser Whistling Duck | छोटी सलेही | 451 |
| 91. | Dicrurus adisimilis | Black Drango | भुजंगा | 488 |
| 92. | Diphyllobothrium | Diphyllobothrium | डाईफिलोबोथरीयम | 287 |
| 93. | Drosophila melanogastor | Fruit fly | ड्रासोफेला | 1137 |
| 94. | Dugesia | Planaria | प्लेनेरिया | 290 |

| 95. | Echinococcus qranulosus | Hydatid worm | हाईटेड वर्म | 282 |
|------|--|---------------------------------------|--------------------------|----------|
| 96. | Echis corinatus | Indian Saw-Scaled Viper | फरसा | 430 |
| 97. | Enterobius vermicularis | Pinworm | पिनवर्म | 291 |
| 98. | Ephippionhynchus asiaticus | Black necked Stork | लोहा सारस | 466 |
| 99. | Epilachna varivestis | Mexican bean beetle | ईपीलैचना कीट | 338, 581 |
| 100. | Equus caballus | Horse | घोड़ा | 543 |
| 101. | Equus heminous | Donkey | गधा | 545, 607 |
| 102. | Eryx johnii | Do muha saanp | दो मुँहा साँप | 428 |
| 103. | Etiella zinckenella | Pea pod borer | मटर का कीड़ा | 366 |
| 104. | Eudynamys scolopucea | Asian Koel | कोयल | 517 |
| 105. | Euglena viridis | Euglena | यूग्लीना | 262 |
| 106. | Euploea core | Common Crow | कॉमन क्रो | 322 |
| 107. | Euproctis lunata | Moth <i>v</i> | शलभ | 597 |
| 108. | Eurema blanda | Three spot Grass yellow | थ्री स्पॉट ग्रासयलो | 341 |
| 109. | Euspongia | Bath sponge | स्पंज | 276 |
| 110. | Euzophora perticella | Snout moth | स्नाउट मॉथ | 375, 569 |
| 111. | Exelastis atomosa | Moth | शलभ | 386 |
| 112. | Fasciola hepatica | Liver fluke | लीवर फ्लूक | 285 |
| 113. | Felis catus / domesticus | Cat | बिल्ली | 539 |
| 114. | Forficula | Earwig | इयरविग | 329 |
| 115. | Fulica atra | Common coot | कॉमन कूट | 437 |
| 116. | Funambulus pennanti | Squirrel | गिलहरी | 534 |
| 117. | Galinula chloropus | Common moorhen | सामान्य जलमुर्गी | 456 |
| 118. | Gallinago gallinago | Common Snipe | चाहा | 471 |
| 119. | Gallus gallus domesticus | Domestic Fowl | मुर्गा | 508 |
| 120. | Gastrothylax | Amphistome | एम्फीस्टोम | 284 |
| 120. | Giardia intestinalis | Giardia | जियार्डिया | 269 |
| 122. | Glaucidium radiatum | Jungle Owlet | जंगली उल्लू | 507, 617 |
| 123. | Graphium doson | Common Jay | कॉमन जे | 315 |
| 123. | Gregarina | Gregarina | ग्रीगेराईना | 270 |
| 125. | Grus antigone | Sarus | सारस | 465, 613 |
| 125. | Gryllotalpa | Mole cricket | झींगुर | 306 |
| 120. | Halcyon capensis | White breasted Kingfisher | सफेदछाती किलकिला | 461 |
| 127. | Helicoverpa armigera | Scarce bordered straw moth | स्केष बोर्डर स्ट्रामॉथ | 332, 584 |
| 120. | Heliocorpris | Scarab beetle | स्कार्ब बिटल | 381, 571 |
| 130. | Helix | Snail | घोंघा | 395 |
| 130. | Hemidactylus | Common House Lizard | छिपकली | 420 |
| 131. | Herpestes edwarsdsii | Mongoose | नेवला | 547 |
| 132. | Heterodera spp. | Cyst nematodes | | 565 |
| 133. | Heteropneustes fossilis | Singhi | सिंघी | 403 |
| 134. | Hierococcyx varius | Common hawk cuckoo | कोयल | 531 |
| 135. | Himantopus himantopus | Pied Stilt | फायल पाईड स्टीलट | 449 |
| 130. | Himaniopus nimaniopus Hirudinaria granulosa | Leech | पाइड स्टालट जोंक | 295 |
| 137. | Hiruainaria granulosa Hirundo smithii | Wire tailed swallow | जाक अबाबील | 495 |
| 138. | Hirunao smithi Holotrichia serrata | | अवावाल सफेद ग्रब | 362 |
| 139. | | White grubs Lance nematodes | सफद ग्रब लेंस निमेटोड | 557 |
| 140. | Hoplalaimus spp. | | लस ानमटाड मेंढक | 416 |
| | Haplobatrachus tigerinus | Indian bull frog Flower flies | | |
| 142. | Hoverfly syrphid | | फूल मक्खी | 383, 585 |
| 143. | Hydra littoralis | Hydra | हाइड्रा | 280 |

| 144. | Hydrophasianus chirurgus | Pheasant tailed Jacana | पिहो | 436, |
|---------------------|--|--------------------------|-----------------------|----------|
| 145. | Hydrophilus | Giant Black Water Beetle | पानी का गुबरैला | 351 |
| 146. | Hypopthalmichthys molitrix | Silver Carp | सिल्वर मछली | 411 |
| 147. | Inderbella tetaonis | Orange shoot borer | संतरे का गिदार | 376, 596 |
| 148. | Ixias marianne | White Orange Tip | सफेद नारंगी | 320 |
| 149. | Junonia hierta | Yellow pansy | पीली तितली | 319 |
| 150. | Junonia iphita | Chocolate Pansy | चॉकलेटी तितली | 313 |
| 151. | Junonia lemonias | Lemon Pansy | नींबू की तितली | 318 |
| 152. | Junonia orithiya | Blue Pansy | नीलीं तितली | 321 |
| 153. | Kallima spp. | Orange Oakleaf | कालिमा | 387 |
| 154. | Labeo rohita | Rohu | रोहू | 402 |
| 155. | Laevicaulis | Garden slug | घोंघा | 393 |
| 156. | Leishmania donovani | Leishmania | लेस्मानिया | 268 |
| 157. | Lepisma | Silver Fish | सिल्वर फिष | 328 |
| 158. | Lipaphis erysimi | Green mustard fly | माहुम | 346, 575 |
| 159. | Lissemys punctata | Turtle | कछुआ | 427, 615 |
| 160. | Leptoptilos javanicus | Lesser Adjutant | चंदियारी | 470 |
| 161. | Lonchura punctulata | Scaly breasted Munia | सीनबाज | 511 |
| 162. | Lonchura malabarica | Indian Silver bill | पिद्दा | 512 |
| 163. | Ixobrychus flavicollis | Black bittern | काला बीर्टन | 887 |
| 164. | Lymnaea stagnails | Great Pond Snail | घोंघा | 398 |
| 165. | Macrochlamys indica | Snail | घोंघा | 397 |
| 166. | Mantis religosa | Praying Mantis | प्रेयिंग मैन्टिस | 356, 587 |
| 167. | Maschus maschiferus | Deer | हिरन | 551 |
| 168. | Megalaima spp. | Green barbet | हरा टुकटुकिया | 505 |
| 169. | Megalaima haemacephala | Coppersmith Barbet | टुकटुकिया | 516 |
| 170. | Melanagromyza obtusa | Malloch | | 370 |
| 171. | Melanopus or poecilocenus | Grasshopper | टिड्डा | 308 |
| 172. | Meloidogyne spp. | Root-Knot nematodes | रूट नॉट निमेटोड | 559 |
| 173. | Merops orientales | Green bee eater | ग्रीन बी ईटर | 498 |
| 174. | Mesophoyx intermedia | Intermediate Egret | पटोखा बगला | 444 |
| 175. | Mesophoyx intermedia Metopidius indicus | Bronze winged Jacana | जलपीपी | 455 |
| 176. | Milvus migrans govinda | Black kite | चील | 485 |
| 177. | Mirafra erythroptera | Indian bush lark | अगैया | 528 |
| 178. | Monocystis | Monocystis | मोनोसिस्टिस | 273 |
| 179. | Montacilla thunbergi | Yellow Wagtail | पीला खंजन | 448 |
| 180. | Morphnus guianensis | Crested Eagle | डोगरा चील | 529 |
| 181. | Motacilla spp. | Wag tail | सफेद खंजन | 499 |
| 182. | Musca domestica | Housefly | घरेलू मक्खी | 300 |
| $\frac{182.}{183.}$ | Muscicapa latirostris | Fly Catcher | पलाई कैचर | 502 |
| 185. | Muscicapa infostris Mycteria leucocephala | Painted Stork | जांधिल | 446 |
| 185. | Mylabrus phalerata | Chinese blister beetle | चायनीज बीटल | 369 |
| 185. | Mystus seenghala | Mystus | यायनाज बाटल मिस्टस | 408 |
| 180. | Mystus seenghata Mythimna separata | Rice ear- culting | माइथिमा | 364 |
| $\frac{187}{188}$ | Naja naja | Cobra | माइायमा नाग | 426, 616 |
| | | Water Snake | नाग पनीहा साँप | 426, 616 |
| 189. | Natrix piscator | | | |
| 190. | Neophron percnopterus | Egyptian Vulture | गोबर गिद्द | 491 |
| 191. | Nepa cinerea | Water scorpion | वाटर स्कॉरपियन | 349 |
| 192. | Nezara viridula | Southern green stink bug | हरा बग | 384, 574 |
| 193. | Nototpterus chitala | Chital | चीतल | 407 |

| 194. | Nyctotherus cardiformis | Nyctotherus | निक्टोथिरस | 272 |
|--------------|--------------------------|-----------------------|-------------------|---------------|
| 195. | Octopus | Aphid | माहू | 637 |
| 196. | Odontotermes obesus | Termite | दीमक | 301, 579 |
| 197. | Opalina ranurum | Opalina | ओपैलाईना | 274 |
| 198. | Oriolus oriolus | Golden oriole | पीलक | 501 |
| 199. | Oriolus xanthornus | Black Hooded Oriole | ओरियाल | 526 |
| 200. | Orthotomus sutorius | Common tailor bird | दर्जी | 530 |
| 201. | Oryctolagus cunculus | Rabbit | खरगोष | 540 |
| 202. | Ovis aries | Sheep | ਮੈਂਤ | 546 |
| 203. | Palaemon malcolmsonii | Prawn | झींगा | 305 |
| 204. | Pandinus spp. | Common scorpion | बिच्छू | 357 |
| 205. | Pantala flavercens | Wandering Glider | वाण्डरिंग ग्लाइडर | 345 |
| 206. | Papilio demoleus | Lemon butterfly | नींबू तितली | 725 |
| 207. | Papilio polytes | Common Mormon | कॉमन मॉरमोन | 312 |
| 208. | Paramecium | Slipper animalcule | पैरामीषियम | 265 |
| 209. | Paramphistomum | Amphistome | एम्फीस्टोम | 283 |
| 210. | Passer domesticus | House Sparrow | गौरैया | 478 |
| 211. | Pavo cristatus | Peacock | मोर | 476, 611 |
| 212. | Pectinophora gossypiella | Pink bollworm | कपास की लाल सुरही | 314, 334, 539 |
| 213. | Periplaneta americana | Cockroache | तिलचट्टा | 299 |
| 214. | Phalacrocorax carbo | Great Cormorant | बड़ा पनकौआ | 464 |
| 215. | Phalacrocorax niger | Little Cormorant | छोटा पनकौआ | 899 |
| 216. | Pharadrius dubius | Little Ringed Plover | लिटिल रिंग प्लोवर | 452 |
| 217. | Pheretima posthuma | Earthworm | केंचुआ | 294 |
| 218. | Phoenicurus phoenicurus | Black-Red start | थिरथिरा | 492 |
| 219. | Pieris brasstcae | Cabbage Butterfly | कैबेज तितली | 317 |
| 220. | Pieris canidia | Indian Cabbage White | गोभी की तितली | 337 |
| 221. | Pila globosa | Pila | घोंघा | 292 |
| 222. | Planorbis | Ram's Horn Snail | घोंघा | 399 |
| 223. | Ploceus philippinus | Baya weaver | बया | 506 |
| 224. | Plutella xylostella | Diamond back moth | शलभ | 372, 590 |
| 225. | Polistis stigma | Paper Wasp | ततैया | 593 |
| 226. | Porzana fusca | Purple Moorhen | जामुनी जलमुर्गी | 440 |
| 227. | Pratylenchus spp. | Root lesion nematodes | रूट लेषन निमेटोड | 561 |
| 228. | Prinia socialis | Ashy Prinia | काली फुतकी | 480 |
| 229. | Progne subis | Martin | मार्टिन | 496 |
| 230. | Psittacula cyanocephala | Plum Headed Parakeet | तोता | 477, 618 |
| 231. | Psittacula eupatria | Alexandrine Parakeet | तोता | 522 |
| 232. | Psittacula krameri | Rose ring Parakeet | तोता | 510 |
| 233. | Psittacula krameri | Rose ring Parakeet | तोता | 510 |
| 234. | Ptyas mucosus | Dhaman | धामन | 429 |
| 235. | Puntius sophore | Puntius | पुन्टियस | 406 |
| 236. | Pycnonotus cafer | Red vented Bulbul | बुलबुल | 483 |
| 237. | Pycnonotus jocosus | Red whiskered Bulbul | बुलबुल | 519 |
| 238. | Pyrilla perpusilla | Ghora | घोरा | 591 |
| 239. | Rana tigrina | Frog | मेंढक | 415 |
| 240. | Ranatra spp. | Water stick-insect | जलकीट | 350 |
| | Raphidopalpa foveicollis | Torai Ka Kira | तरोई का कीड़ा | 388, 601 |
| 241. | | | | |
| 241. 242. | Ratifera | Wheel animal | रोटीफर | 554 |

| 244. | Rhadinaphelenchus spp. | Red ring Nematode | रेड रिंग निमेटोड | 563 |
|------|----------------------------|----------------------------|-------------------------|----------|
| 245. | Rhadopholus spp. | Burrowing nematode | बरोईंग निमेटोड | 560 |
| 246. | Macaca mulatta | Monkey | बन्दर | 542, 610 |
| 247. | Saccharicoccus sacchari | Sugarcane mealybug | गन्ने का कीड़ा | 379, 598 |
| 248. | Sarkidiornis melanotos | Comb duck | नकटा | 443 |
| 249. | Saxicola caprata | Pied bush chat | काला पिद्दा | 493 |
| 250. | Saxicoloides fulicata | Indian Robin | कलचुरी | 481 |
| 251. | Scarabaeus sacer | Gubraila | गुबरैला | 303 |
| 252. | Scirtothrips dorsalis | Chilli thrips | चिली थ्रीप्स | 352 |
| 253. | Scutigera coleoprata | Centipede | कनखजूरा | 302 |
| 254. | Scutigrella immaculata | Garden centipede | कनखजूरा | 360 |
| 255. | Sesamia inferens | Pink stem borer | पिंकस्टेम | 580 |
| 256. | Solenos isogeminate | Ant | ਚੀਂਟੀ | 298, 614 |
| 257. | Spilopelia chinensis | Spotted Dove | चितरोखा फाख्ता | 514 |
| 258. | Spodoptera litura | Tobacco caterpiller | तम्बाकू की गिदार | 333, 600 |
| 259. | Spongilla | Fresh water sponge | स्पंज | 277 |
| 260. | Streptopelia decaocto | Collared Dove | लाली पोहू | 523 |
| 261. | Streptopelia senega lensis | Laughing Dove | छोटा फाख्ता | 489 |
| 262. | Sturnus pagodarum | Brahminy Myna | ब्रह्मणी मैना | 515 |
| 263. | Sus Scrofa domesticus | Pig | सुअर | 544 |
| 264. | Syllepta derogata | Cotton leaf roller | बन की सुरही | 373, 578 |
| 265. | Tachybaptus ruficollis | Little Grebe | दुबदुबी | 439 |
| 265. | Tadorna ferruginea | Ruddy Shelduck | <u>पुषपुष</u> सुरखाब | 468 |
| 267. | Taenea solium | Pork tape warm | पाँकं टेप वर्म | 286 |
| 267. | Telonomus remus | Telonomus | ्पाक टप वम टीलोनॉमस | 361 |
| 268. | | Shrike | वजला लटोरा | 494 |
| | Tephrodornis guleris | | | |
| 270. | Terpsiphone paradisi | Asian Paradise Fly Catcher | दूधराज | 487 |
| 271. | Tetranchus spp. | Spider mite | लाल मकड़ी दीमक | 359 |
| 272. | Threskiornis melanoaphalus | Oriental white ibis | आइबिस | 472, 454 |
| 273. | Thrips tabaci | Onion thrips | अनियन थ्रिप्स | 513 |
| 274. | Tirumala limniace | Blue Tiger | ब्लू टाइगर | 309 |
| 275. | Tockus birostris | Indian Grey Hornbill | घनेष | 504 |
| 276. | Trichodorus spp. | Stubby root nematode | अवरूद्ध मूल सूत्र कृमि | 556 |
| 277. | Trichogramma | Trichogramma | ट्राइकोग्रामा | 353 |
| 278. | Tringa glareola | Wood Sandpiper | तितवारी | 447 |
| 279. | Trionyx gangeticus | Tortoise | कछुआ | 431 |
| 280. | Trithemis aurora | Crimson Marsh Glider | मार्स ग्लाइडर | 342 |
| 281. | Tubifex | Tubifex | ट्यूबीफैक्स | 296 |
| 282. | Turdoides striatus | Jungle-Babbler | सतभाई | 484 |
| 283. | Typhlops | Blind snake | अंधा साँप | 423 |
| 284. | Upupa epops | Common Hoopoe | हुदहुद | 521 |
| 285. | Uromastix hardwickii | Spiny-tailed lizard | स्पाइनी छिपकली | 432 |
| 286. | Ursus | Bear | भालू | 552 |
| 287. | Vannelus indicus | Red wattled Lapwing | टिटहरी | 459 |
| 288. | Varanus | Monitor Lizard | गोह | 422 |
| 289. | Vespa orientalis | Oriental hornet | बरैय्या | 1153 |
| 290. | Vipera russeli | Viper | वाइपर | 425 |
| 291. | Vorticella | Bell-animalcule | वर्टीसेला | 264 |
| 292. | Wallago attu | Lachi | लाची | 405 |
| 293. | Xiphinema spp. | Dagger nematode | डैगर निमेटोड | 564 |
| 294. | Zosterops palpebrosus | Baboona | बबूना | 479 |



U.P. STATE BIODIVERSITY BOARD