# 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

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अखिलेश यादव मुख्यमंत्री उत्तर प्रदेश



दिनांक 11 जून, 2016

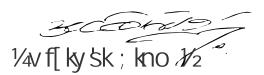
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मुझे यह जानकर अत्यन्त प्रसन्नता हुई कि 'जैवविविधता अधिनियम, 2002' के प्राविधानों के अनुपालन में जनपद कन्नौज में स्थानीय जैवविविधता का सर्वेक्षण व अभिलेखीकरण करके जन जैवविविधता रजिस्टर तैयार किया गया है।

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।



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**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।

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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।

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#### 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

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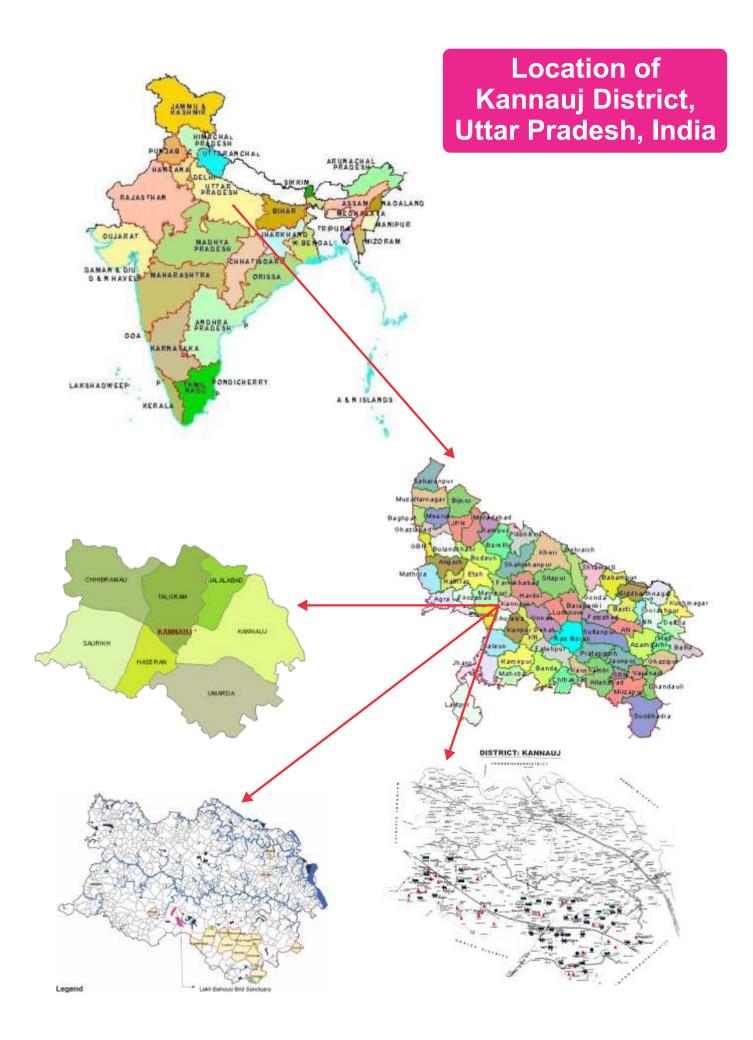
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#### Annexures

- 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 km<sup>2</sup> 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
<ul> <li>मछली पालन</li> </ul>	<ul> <li>असंगठित श्रमिक</li> </ul>
• पशु पालन	<ul> <li>संगठित श्रमिक</li> </ul>
• 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			
<b>xkstkrh;</b> Økl c <b>h</b> 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 M<del>d</del>

#### • 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 <sup>0</sup> 07 <sup>0</sup> उत्तर और 79 <sup>0</sup> 92 <sup>0</sup> 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

<b>Details of Biodiversity Management Committee</b>	(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 <b>g</b> ; kno एडीएसटी विकास भवन, कन्नौज	
2.	Contact Person : Address:	l <b>¢hr dç</b> kj श्रीकृष्ण बीज एवं कीटनाशक, कन्नौज	
3.	Contact Person : Address:	e <b>ψuk ; kno</b> 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 <b>µh vkclkákk fl ligk] QhYM vfl LV¥</b> 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:	<b>Jh vujkx dækj] QhYM vfl LV¥</b> रामपुर, मझिला, कन्नौज	
26.	Contact Person : Address:	Jh ekgj fl aj QhYM vfl LVa/ बहादुरपुर, मझिला, कन्नौज	
27.	Contact Person : Address:	Jh feyu d <b>ç</b> 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
<b>Other Details</b>		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.
<b>Community/Knowl</b>	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.
<b>Management mechanism</b>		Pesticides must be sprayed
Other Details		
<b>Community/Knowle</b>	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.
<b>Management mechanism</b>		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.
<b>Nutritional Value</b>		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
<b>Other Details</b>		
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
<b>Other Details</b>		
<b>Community/Knowle</b>	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

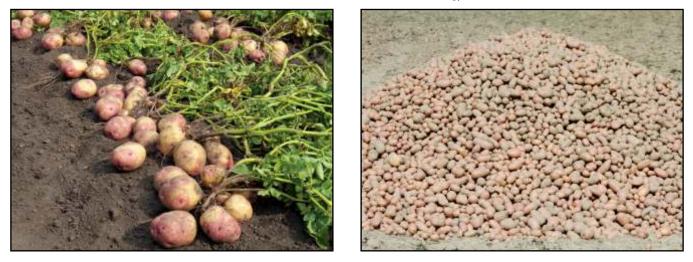
#### **Vegetables** Chaptisem (Lablab purpurcus) चपटीसेम



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
<b>Present –</b> In abundance
<b>Uses</b> 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
<b>Other Details</b> 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 <b>known)</b>	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.

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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
<b>Other Details</b>		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
<b>Other Details</b>		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	<b>r</b> 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

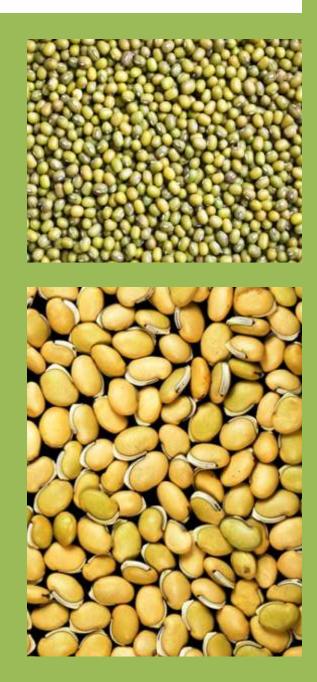


Castor/Arandi (Ricinus communis) अरंडी

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.
<b>Associated Traditional</b>	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

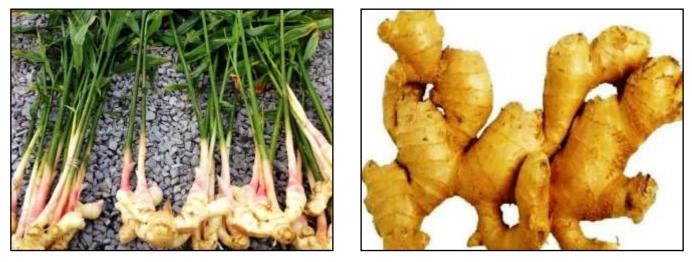
### **Spices** Dhania (Conandrum sativum) धनिया



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.
<b>Nutritional Value</b>		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	
<b>Unranked</b> Angiosperm	
<b>Family</b> 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.
<b>Local Status Past-</b> In abundance.	
<b>Present-</b> 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.
<b>Mythological Significa</b>	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.
<b>Nutritional Value</b>		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	<b>In abundance</b>
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 <b>f known)</b>	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.
<b>Nutritional Value</b>		
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

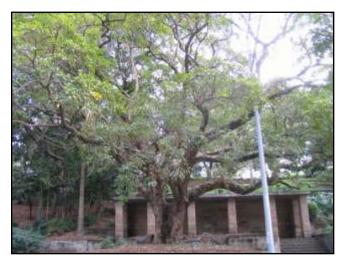
Bamboo / Indi (Bambusa bambos) बॉंस



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 <b>known)</b>	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.
<b>Nutritional Value</b>		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.
<b>Community</b> / 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	<b>dge</b> 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.
<b>Nutritional Value</b>		
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 <b>known)</b>	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.
<b>Other Details</b>		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.
<b>Community/Knowl</b>	edge Holder	Smt. Premlata

Menthol (Mentha piperita) i h j feð



Menthol (Mentha piperita) पीपरमिंट

Vinadam		Plantae
Kingdom		
Unranked		Angiosperm
Family		Lamiaceae
<b>Genus and Species</b>	(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
<b>Genus and Species</b>	(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
<b>Genus and Species</b>	(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.
<b>Nutritional Value</b>		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
<b>Genus and Species</b>	(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
<b>Genus and Species</b>	(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

<b>TZ:</b> 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.
<b>Nutritional Value</b>		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.
<b>Nutritional Value</b>		
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.
<b>Nutritional Value</b>		
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.
<b>Nutritional Value</b>		
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.
<b>Nutritional Value</b>		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

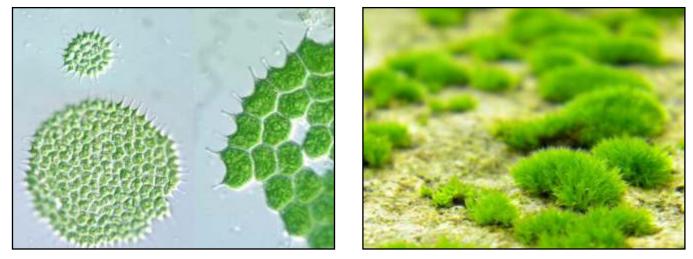


# FORMAT- V Aquatic Plants





## 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	
<b>Family</b> Nymphaceae	
Genus and Species (If known) Nymphea	
Local Name / Common Name Water Lily (नील कमल)	
Habit and HabitatAquatic; lakes, tals; ponds & water reservoirs.	
<b>Description</b> 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	
<b>Present-</b> In abundance	
<b>Uses</b> 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.	
<b>Other Details</b> The sacred lotus was once thought to be a water lily.	
Community / Knowledge Folder Mr. Sunil Yadav	

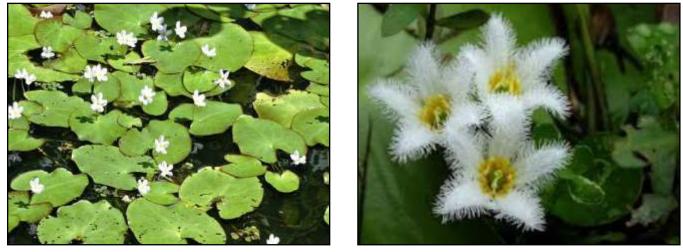
#### Aquatic Plants Kamalgatta (Nelumbo nucifera) कमलगट्टा



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	
<b>Management mechanism</b>	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

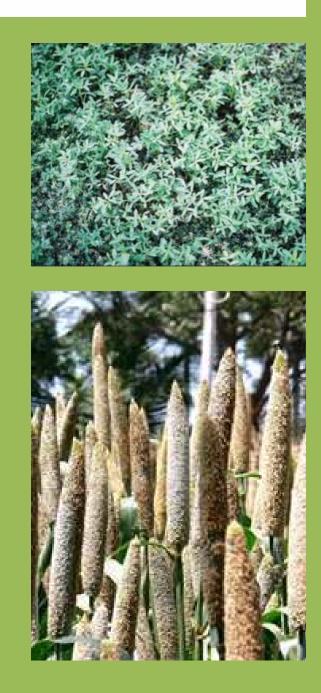


Kamli Shak (Ipomea aquatica) कमली शाक

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
<b>Genus and Species</b>	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	<b>ce</b> 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	<ul> <li>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.</li> </ul>
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
<b>Genus and Species</b>	(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.
<b>Nutritional Value</b>		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.
<b>Nutritional Value</b>		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	<b>gnificance</b> 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	<b>Aledge</b> 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
<b>Genus and Species</b>	(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**

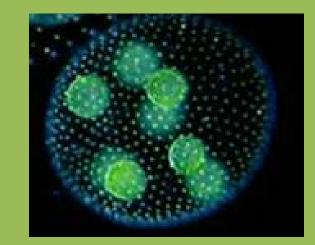
Cactus (Opuntia ficus indica) नागफनी



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

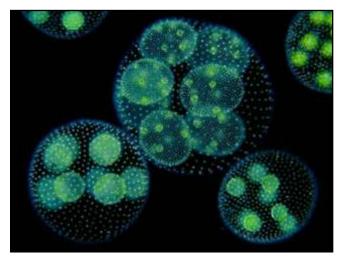
Mythological of Keligious	Significance	e
I.U.C.N. Status		
Source of seeds		Plantitself
Season when grown		It is found in throughout year.
Local Status: Past	t <b>-</b>	In abundance
Pres	sent –	In abundance
Uses		Used as fodder, commercial & medicinal.
Nutritional Value		Good source of water, Carbohydrates, 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

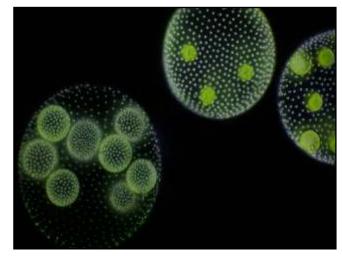


# FORMAT- X Microscopic Algae



# Microscopic Algae <sub>Volvox</sub> शैवाल



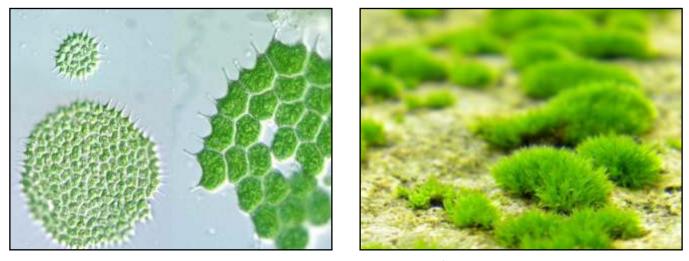


*Volvox* शैवाल

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

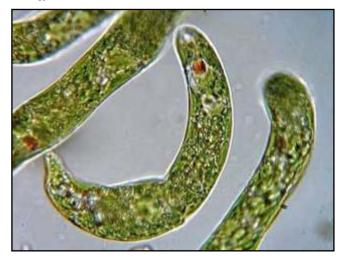




#### Fresh Water Protozoan

(Euglena viridis) यूग्लीना





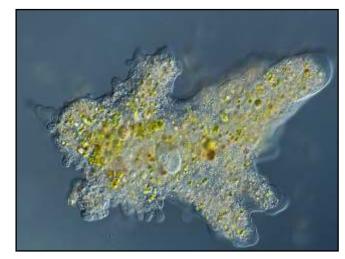
Euglena viridis (यूग्लीना)

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

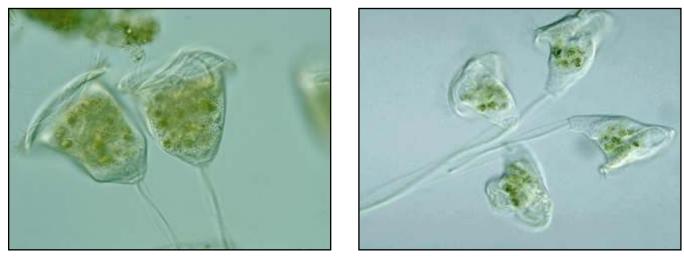




(Amoeba proteus) अमीबॉ

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

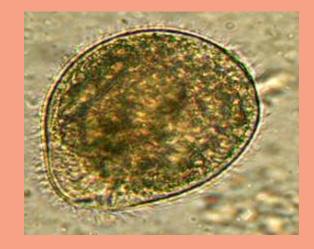
(Arcella vulgaris) आरसेला



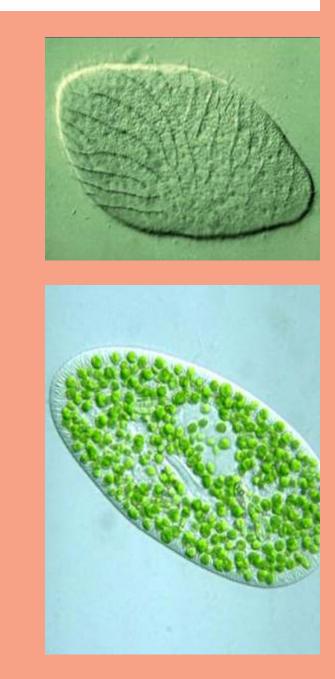


(Arcella vulgaris) आरसेला

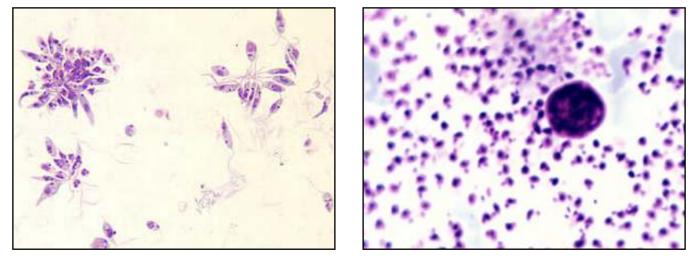
Phylum		Protozoa
Class		Rizopoda
Order		Lobosa
Genus and Species (If	f known)	Arcella vulgaris
Local Name / Commo	n Name	Arcella (आरसेला)
Habit and Habitat		Found in stagnant fresh water , moist forest soil .
Description		It contain light yellow to dark brown shell or test made up of silicious prisms. 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



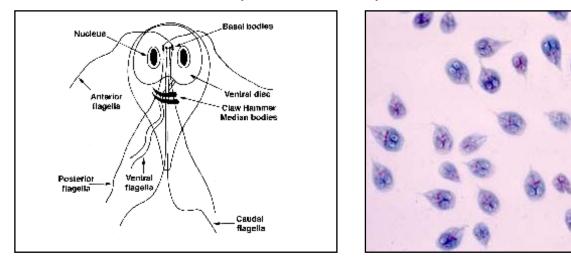
(Leishmania spp.) लीसमानिया



(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

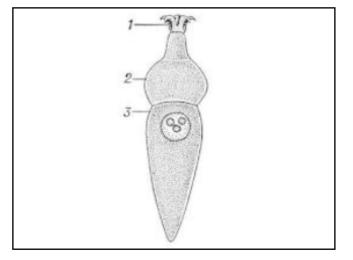
(Giardia intestinalis) जिआरडिया

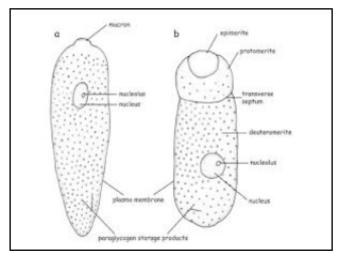


(Giardia intestinalis) जिआरडिया

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

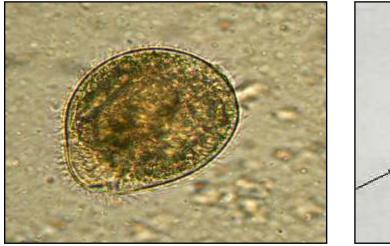




(Gregarina) ग्रीगरेना

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

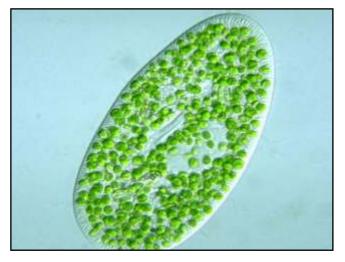


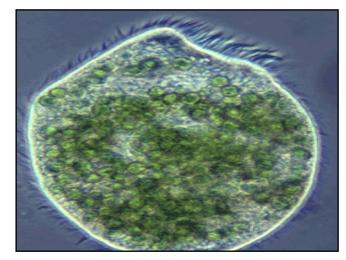


Balantidium (बेलेनटीडियम)

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

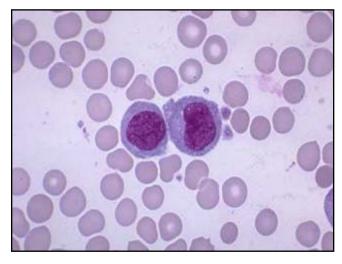
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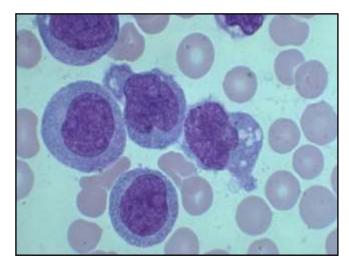




Nyctotherus (निक्टोथीरस)

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

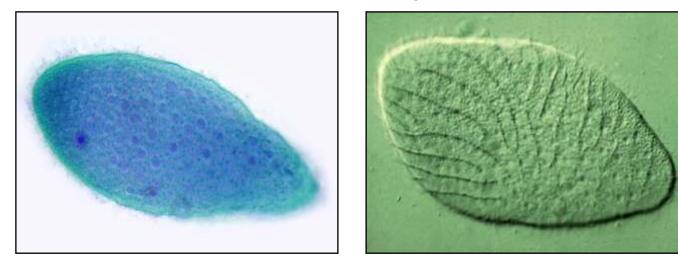




Monocystis (मोनोसिस्टिस)

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



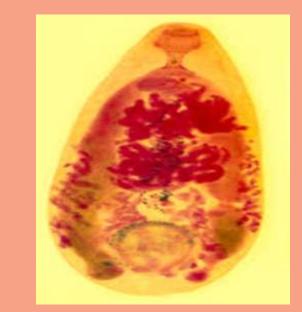
#### Coelentrata

(Hydra littoralis) हाइड्रा



(Hydra littoralis) हाइड्रा

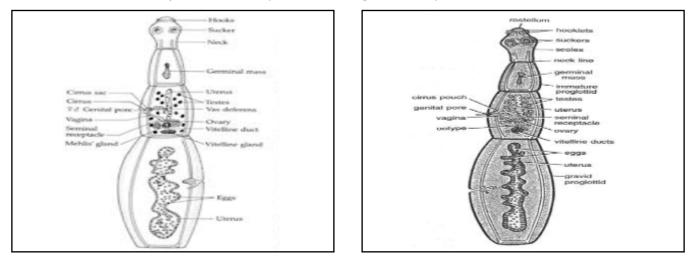
Phylum		Coelentrata
Class		Hydrozoa
Order		Hydeoidea
Genus and Species (If known)		Hydra littoralis
Local Name / Common Name		Hydra (हाइड्रा)
Habit and Habitat		Solitary, sedentary, attached to stones & weeds.
Description		Body tube like cylindrical, 1.3 cm in length. Hypostome covered by 6-10 filiform 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



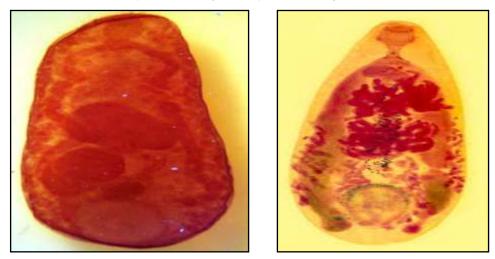
Hydatid worm (Echinococcus granulosus) हाईडेटिड वर्म



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

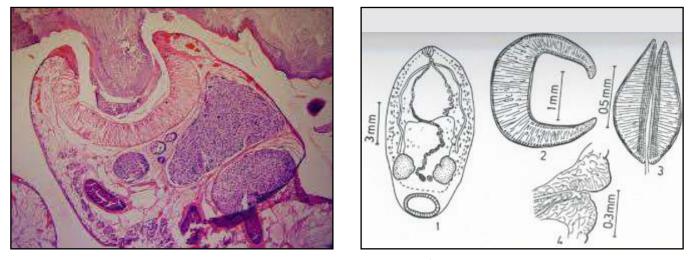
Amphistome (Paramphistomum) एम्फीस्टोम



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

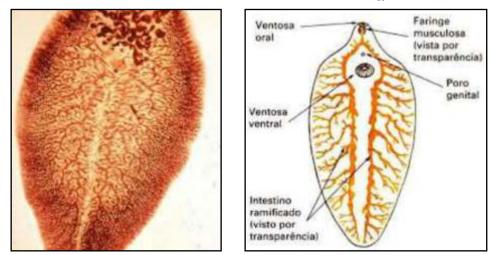
Amphistome (Gastrothylax) एम्फीस्टोम



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

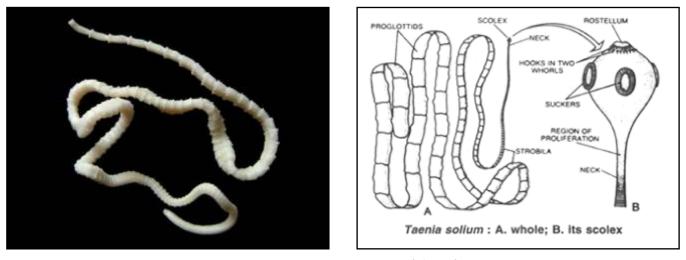
Liver fluke (Fasciola hepatica) लीवर फ्लूक



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

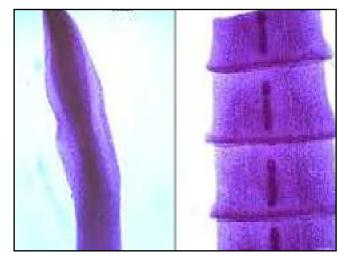


Pork tape warm (Taenea solium) पॉर्क टेप वर्म

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

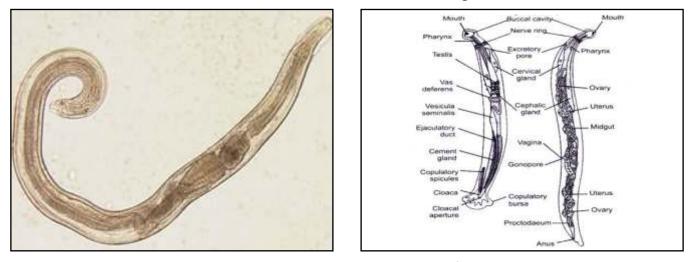




(Diphyllobothrium) डाईफिलोबोथरियम

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

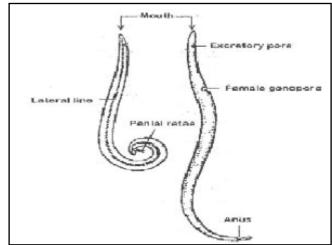


Hookworm (Ancylostoma duodenales) हुकवर्म

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

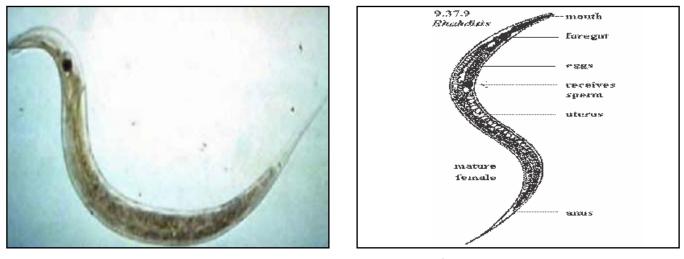
Planaria (Dugesia) प्लेनेरिया



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

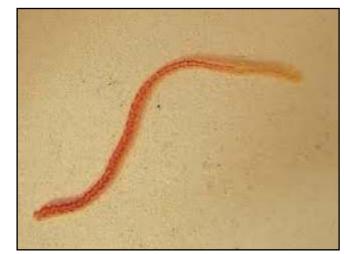


Leech (Hirudinaria granulosa) जोंक

Phylum		Annelida
Class		Hirudinea
Order		Gnathobdellida
<b>Genus and Species</b>	(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



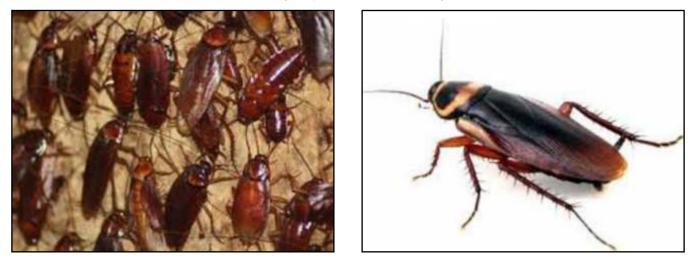
Ant (Solenos ispgeminate) चींटी



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 <sup>th</sup> 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.
<b>Other Details</b>		Used in research.
Community / Kno	wledge Holder	Mr. Zameel Ahmed

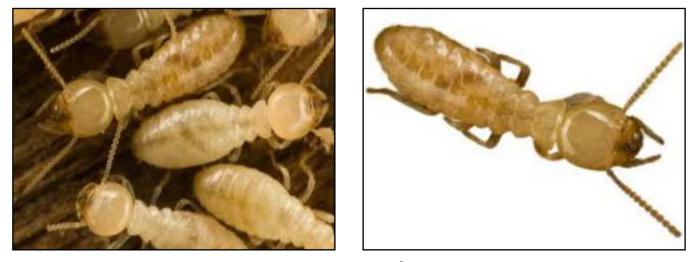
Housefly (Musca domestica) मक्खी



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

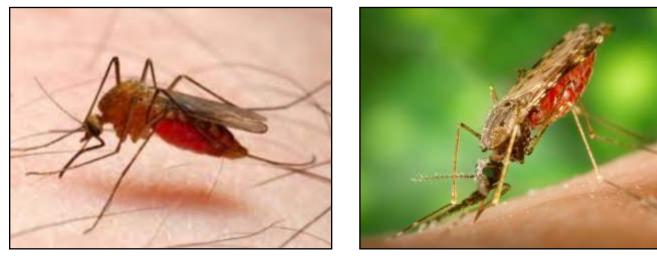
Gubraila (Scarabaeus sacer) गुबरैला



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

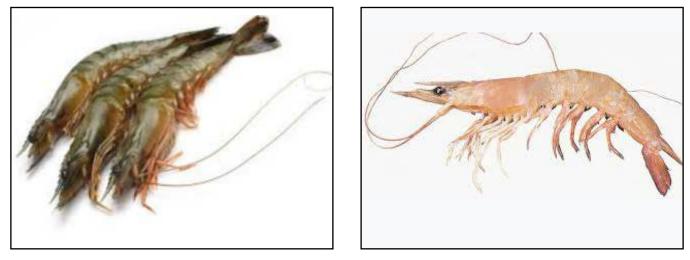
Mosquito (Anopheles) ePNj



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

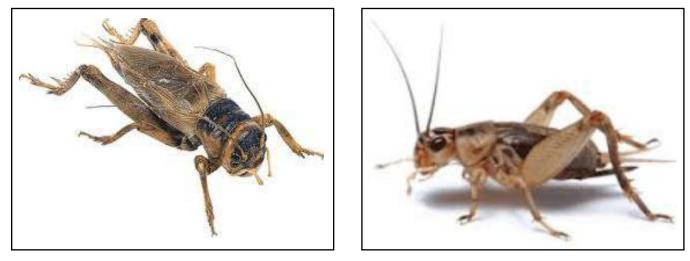
Prawn (Palaemon malcolmsonii) झींगा



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 <sup>st</sup> and 5 <sup>th</sup> 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.
<b>Other Details</b>		Mole cricket damages the cultivated crops.
Community/Know	vledge Holder	Ms. Meena Kumari

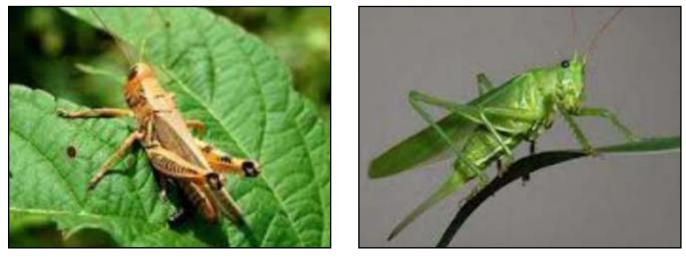
Bedbug (Cimex sp. lectularius) खटमल



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	
<b>Other Details</b>		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

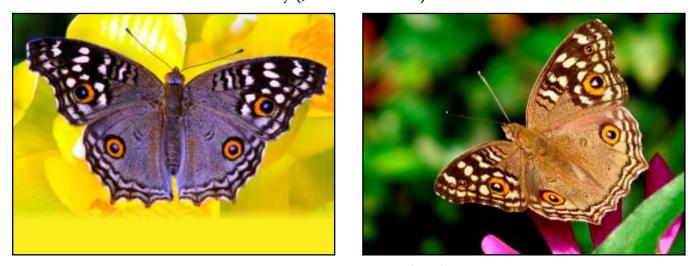
#### Arthropoda Asian Cabbage White (Pieris canidia) गोभी की तितली



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
<b>Genus and Species</b>	(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
<b>Genus and Species</b>	(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

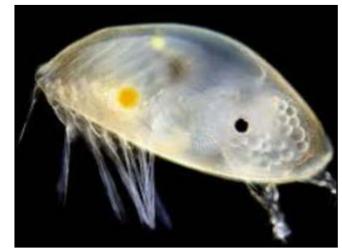


Water Flea (Daphnia) वॉटर फ्ली

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	<b>r</b> 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

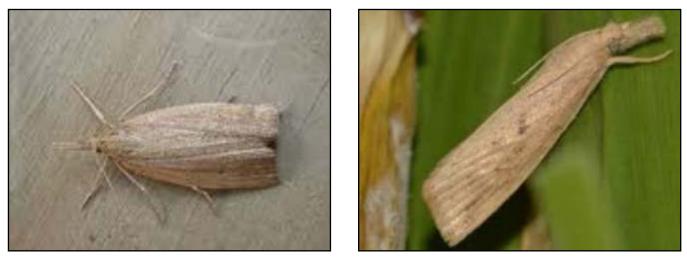
## **Arthropoda** Castor Semilooper (*Achaea janata*) कैस्टर सेमीलूपर



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

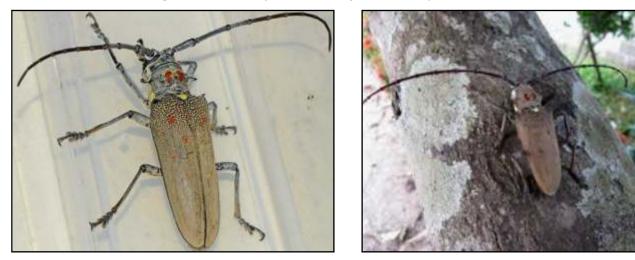
Mexican bean beetle (Epilachna varivestis) मैक्सीकन बीन कीट



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
<b>Genus and Species</b>	(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
<b>Genus and Species</b>	(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
<b>Genus and Species</b>	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
<b>Genus and Species</b>	(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

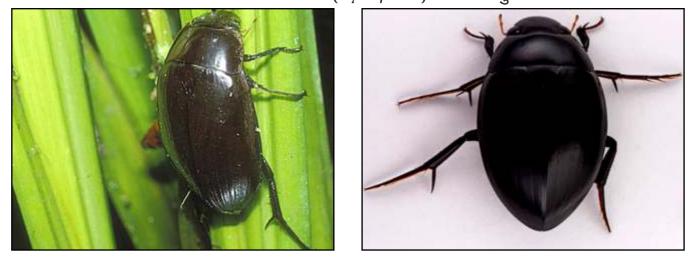
Water stick-insect (Ranatra spp.) जलकीट



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
<b>Genus and Species</b>	(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
<b>Genus and Species</b>	(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

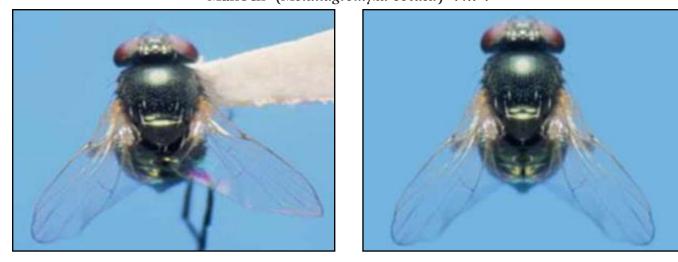
Chinese blister beetle (Mylabrus phalerata) चाइनीज ब्लिस्टर बीटल



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
<b>Genus and Species</b>	(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

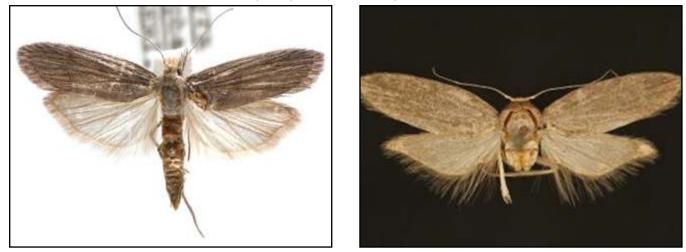
### Arthropoda Cotton leaf roller (Sylepta derogata) बन की सुरही



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
<b>Genus and Species</b>	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

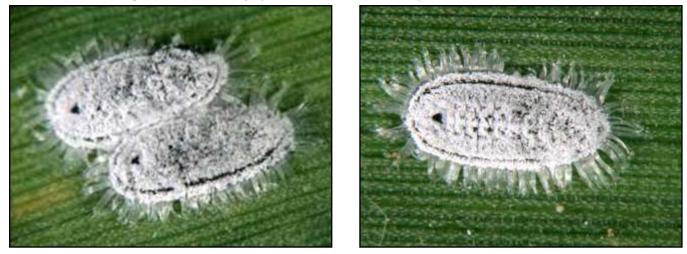
### **Arthropoda** Moth (*Antigastra catalaunalis*) शलभ



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

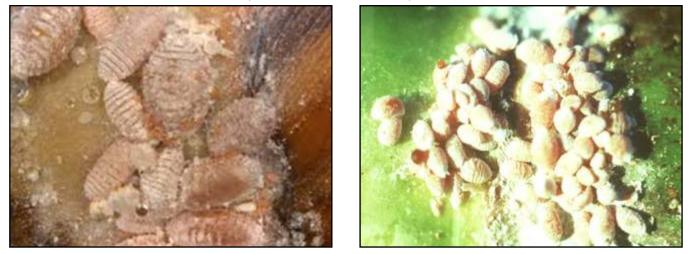
Sugarcane white fly (Aleurolobus barodensis) गन्ने की सफेद मक्खी



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

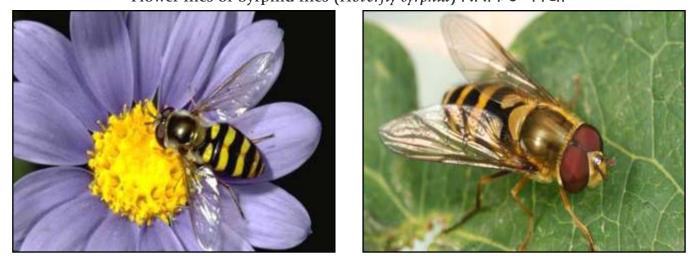




(Dasyneura lini) डेसीन्यूरा

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

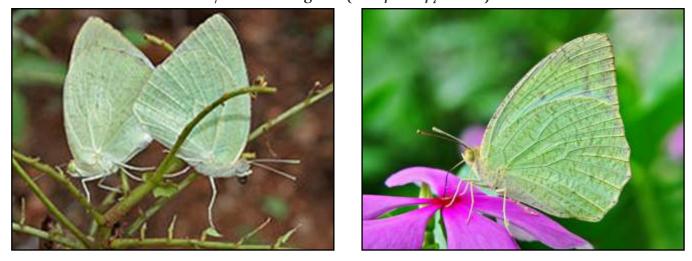
Southern green stink bug (Nezara viridula) हरा बग



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
<b>Genus and Species</b>	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
<b>Genus and Species</b>	(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



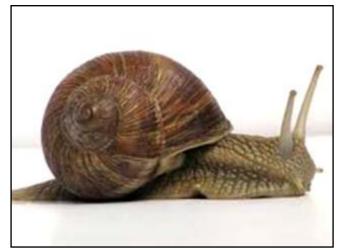
Slug (Acochlidium) स्लग

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		
<b>Genus and Species</b>	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

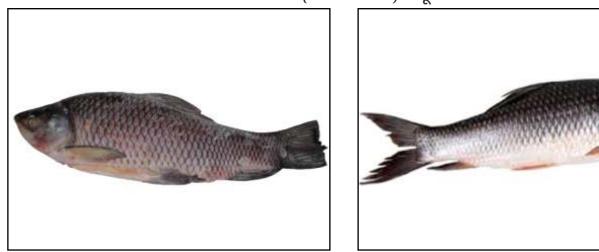
Phylum		Mollusca
Class		Gastropoda
Order		Hydrophila
<b>Genus and Species</b>	(If known)	Planorbis
Local Name/Comm	ion Name	Ram's Horn Snail (घोंघा)
Habit and Habitat		Freshwater, aquatic.
Description		Shells are flat coiled & sinistral. It is known from the Jurassic to the recent periods. The width 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

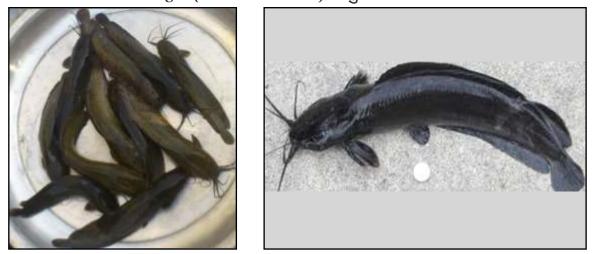




Singhi (Heteropneustes fossilis) सिंघी

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

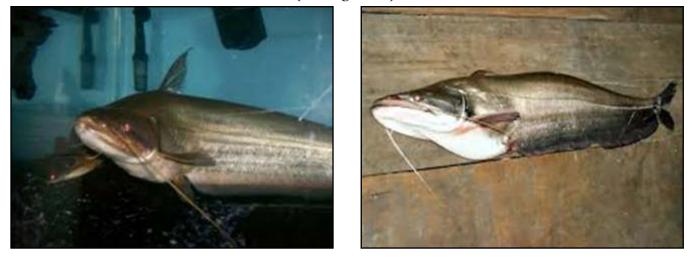
**Pisces** Mangur (Clarias batrachus) मांगुर



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

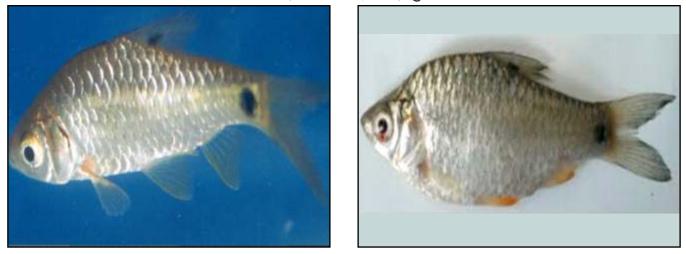
#### **Pisces** Lachi (*Wallago attu*) लच्छी



Lachi (Wallago attu) लच्छी

Phylum		Chordata
Class		Teleostomi
Order		Siluriformes
<b>Genus and Species</b>	(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

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# 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

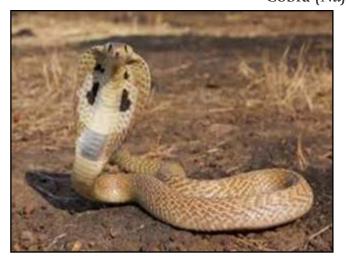
Viper / Daboia (Vipera russeli) वाइपर



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

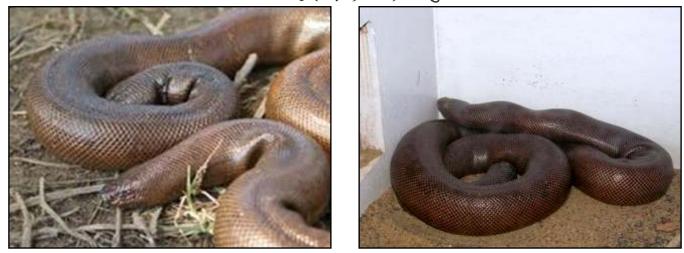
Turtle (Lissemys punctata) कछुआ



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
<b>Genus and Species</b>	(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
<b>Genus and Species</b>	(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		
<b>Community/Know</b>	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

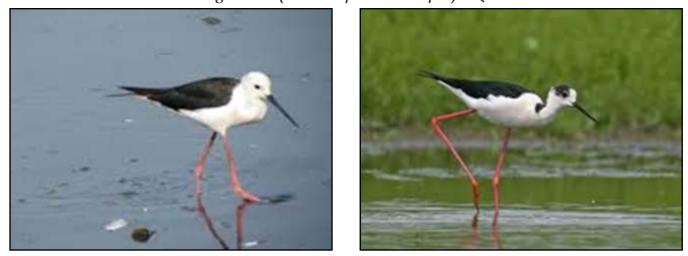
#### **Aquatic Birds** Yellow Wagtail *(Montacilla thunbergi)* पीला खंजन



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
<b>Genus and Species</b>	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
<b>Other Details</b>		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
<b>Genus and Species</b>	(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

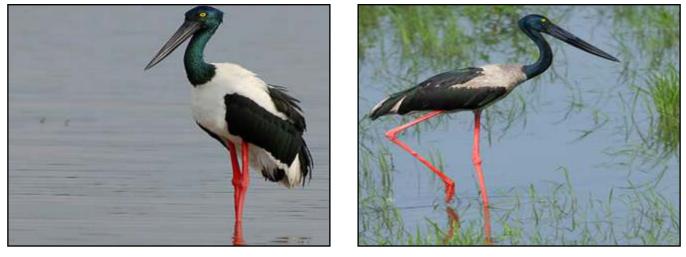




Sarus (Grus antigone) सारस

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

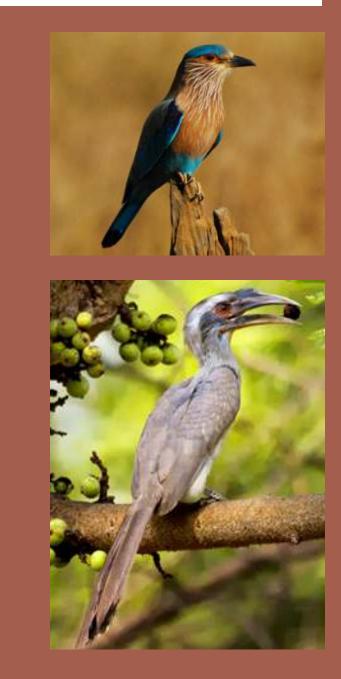


Black headed ibis (Threskiornis melanocephalus) काला बाज़ा

Phylum		Chordata
Class		Aves
Order		Pelecaniformes
<b>Genus and Species</b>	(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 (	<b>Cany)</b> 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
<b>Genus and Species</b>	(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
<b>Other Details</b>		
<b>Community/Know</b>	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 <sup>th</sup> 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.
<b>Management mechanism</b>	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	<b>ge</b> 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
<b>Associated Tradit</b>	ional Knowledge	
Management mec	hanism	Afforestation should be done
<b>Other Details</b>		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

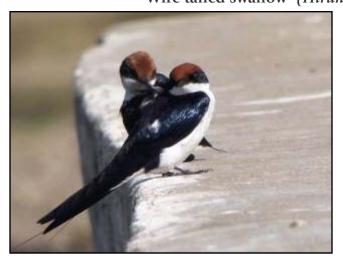
Shrike (Tephrodornis guleris) कजला लटोरा



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

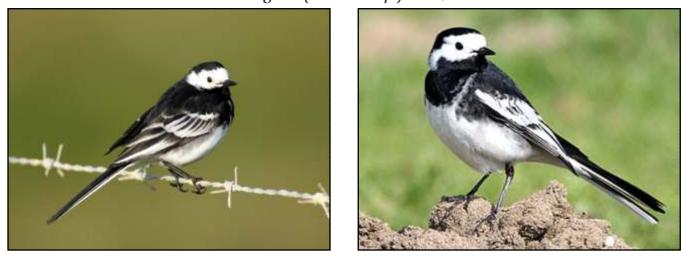
Green bee eater (Merops orientales) ग्रीन बी ईटर



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
<b>Genus and Species</b>	(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.
<b>Community/Know</b>	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
<b>Other Details</b>		In many areas it is regarded as an agricultural pest.
<b>Community/Know</b>	ledge Holder	Mr. Kuldeep Singh

Indian Silver Bill (Lonchura) तोता

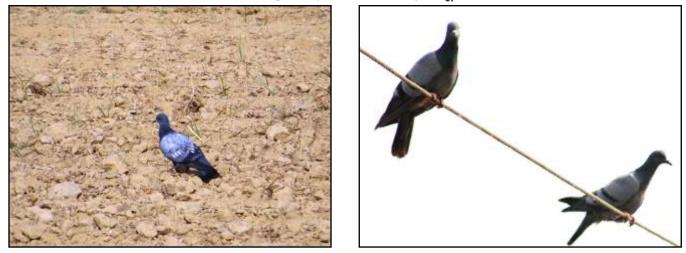




Indian Silver Bill (Lonchura) तोता

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
<b>Genus and Species</b>	(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	<b>(any)</b> 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
<b>Other Details</b>		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
<b>Genus and Species</b>	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
<b>Genus and Species</b>	(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.
<b>Management mechanism</b>	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
<b>Genus and Species</b>	(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

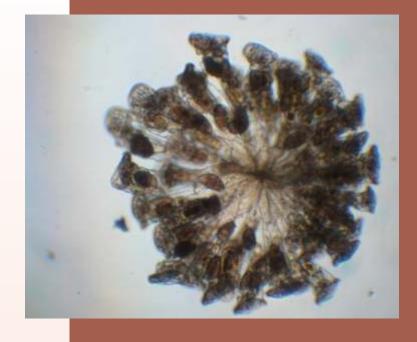
Bear (Ursus) भालू





Bear (Ursus) भालू

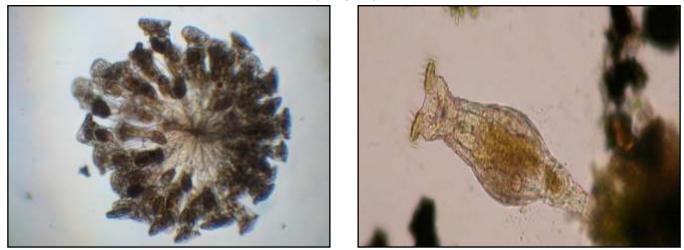
Phylum	Chordata
Class	Mammalia
Order	Carnivora
Genus and Species (If known)	Ursus
Local Name / Common Name	Bear/Bhalu/ Reech (भालू)
Habit and Habitat	Forest
Description	Elongated muscles and lower lip, long hairs and short hind legs. Most have a whitish V-shaped breast patch.
Mythological Significance (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

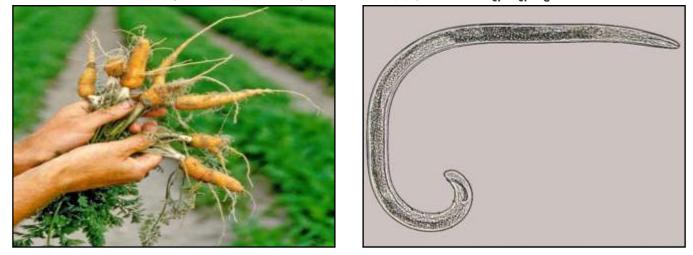
Dlaadaaaa		
Phylum		Rotifer
Class		Bdelloidea
Order		Bdelloidea
Genus and Species	(If known)	Rotifera
Local Name / Com	non Name	Wheel animal (व्हील एनीमल)
Habit and Habitat		Mostly aquatic & fresh water, rivers &bottoms of lakes.
Description		Bilateral symmetry & a variety of different shapes. Body divided 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



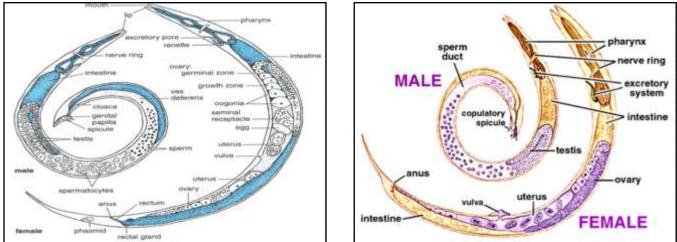
Stubby root nematode (Trichodorus spp.) अवरूद्ध मूलसूत्रकृमि



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

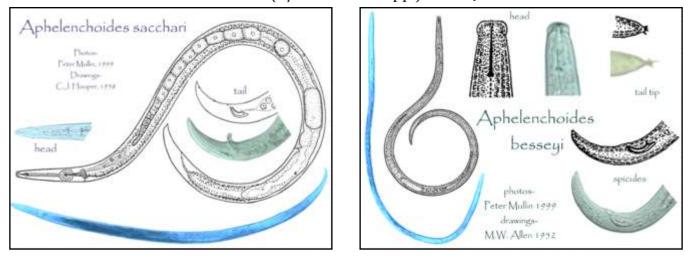
Lance nematodes (Hoplalaimus spp.) लेंसनिमाटोड



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

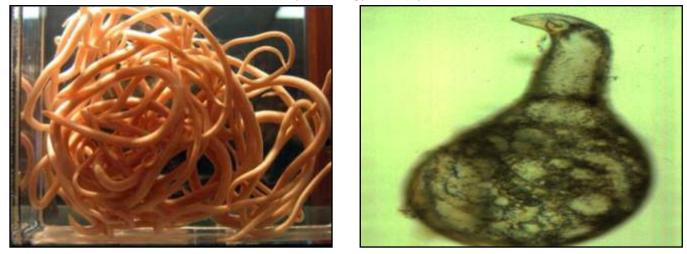
## Plant Nematodes Leaf & bud nematodes (Aphelenchoidus spp.) लीफ एण्ड बडनिमाटोड



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

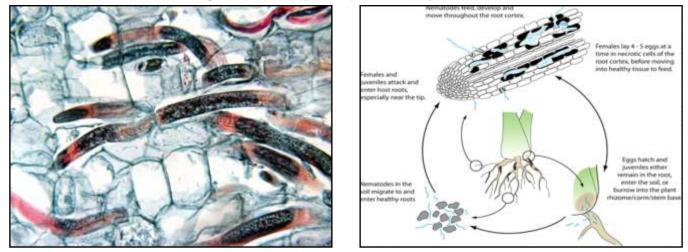
Root-Knot nematodes (Meloidogyne spp.) रूट-नॉट निमाटोड



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

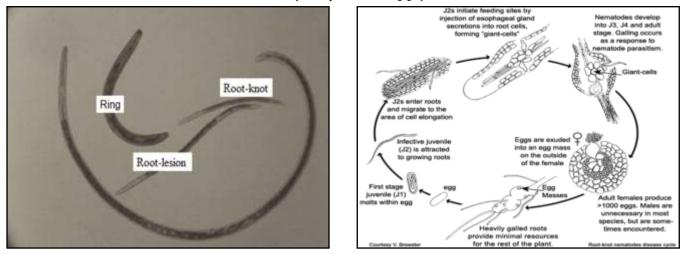
Burrowing nematodes (Rhadopholus spp.) बरोईंग निमाटोड



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 $5 \text{ m i n}$ ) befor e plantation.
Other Details	Damage the cortex of young roots of hosts plants.
Community / Knowledge Holder	Mr. Survesh Kumar

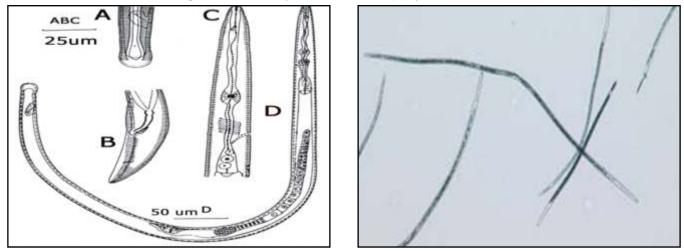
Root lesion nematodes (Pratylenchus spp.) रूट लेसननिमाटोड



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.
<b>Other Details</b>		Life span of female 5 years.
Community / Know	wledge Holder	Mr. Survesh Kumar

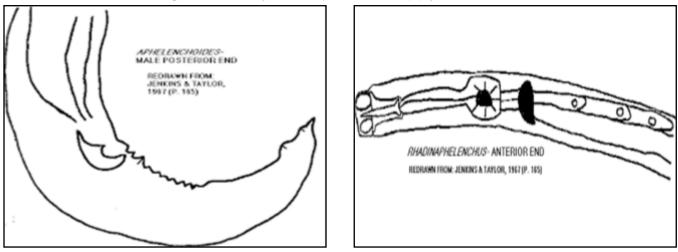
Sting nematodes (Belonolaimus spp.) स्टिंग निमाटोड



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

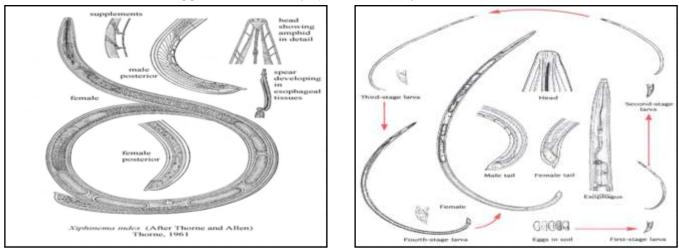
Red ring nematode (Rhadinaphelenchus spp.) रेड रिंग निमाटोड



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

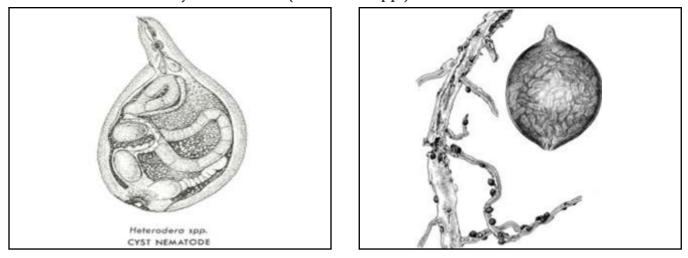
## **Plant Nematodes** Dagger nematodes (Xiphinema spp.) डेंगर निमाटोड



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

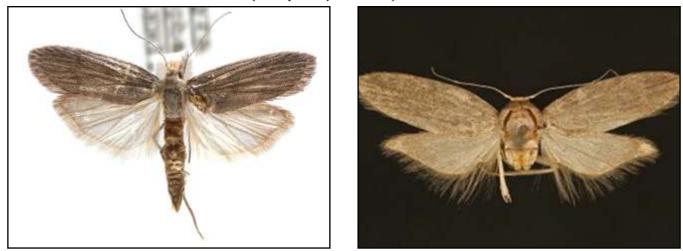
Phylum	Nematoda
Class	Secementea
Order	Tylenchida
Genus and Species (If known)	Heterodera spp.
Local Name / Common Name	Cyst nematodes (सिस्ट निमाटोड)
Habit and Habitat	Woody perennial plants.
Description	Female lay egg inside the cyst, female head attached to the root & body projecting outside life 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

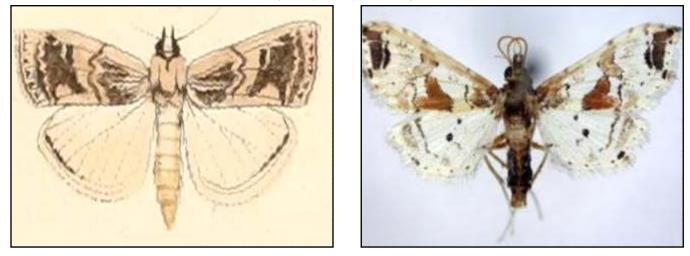


Rice moth (Corcyra cephalonica) चावल का कीडा

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

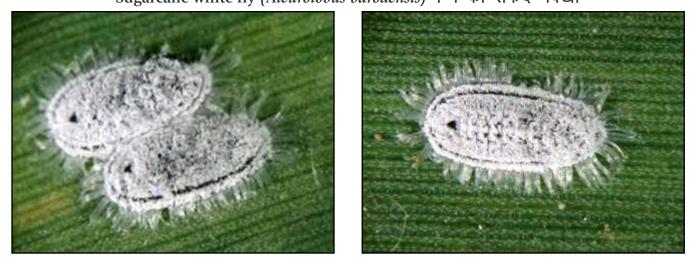
#### Insect as Pest Cowpea aphid (Aphis craccivora) कॉउपी एफिड



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

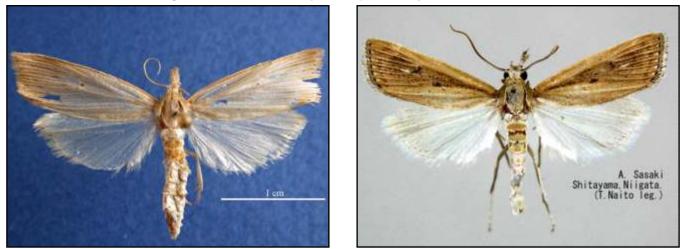
#### **Insect as Pest** Mexican bean beetle (*Epilachna varivestis*) मैक्सीकन बीन बीटल



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**

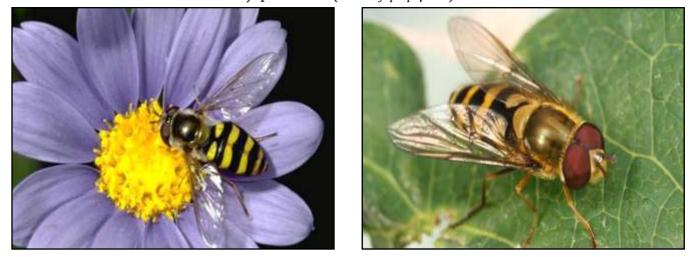
Scarce bordered straw moth (Helicoverpa armigera) स्कार्स बार्डर डस्ट्रा मॉथ



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
<b>Genus and Species</b>	(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.
<b>Community/Know</b>	ledge Holder	Mr. Zameel Ahmed

#### Insect as Pest Carpenter ant (Camponotus compressus) चींटा

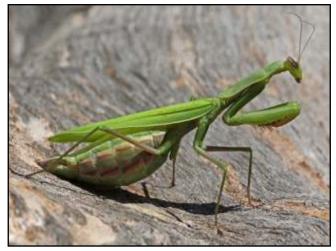


Carpenter ant (Camponotus compressus) चींटा

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

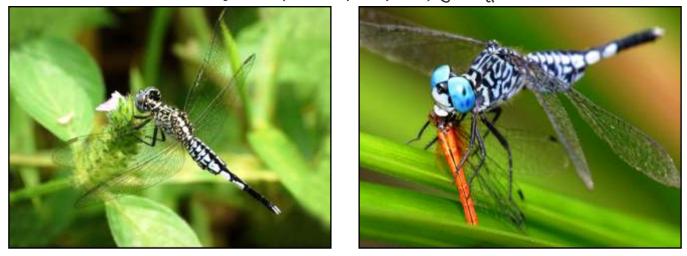




Praying Mantis (Mantis religiosa) प्रेईंग मैन्टिस

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
<b>Genus and Species</b>	(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

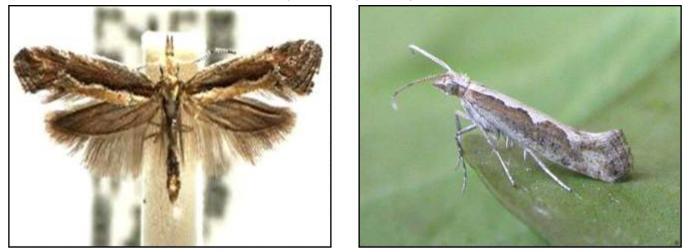
#### Insect as Pest Pink bollworm (Pectinophora gossypiella) कपास की लाल सुरही



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
<b>Genus and Species</b>	(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

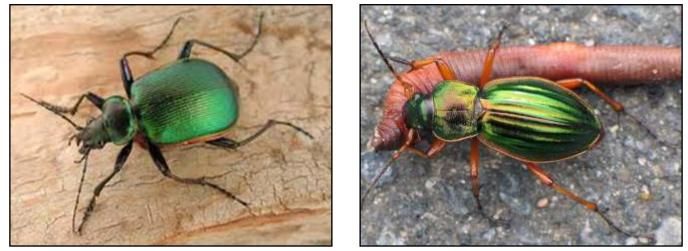
#### **Insect as Pest** Paper Wasp (Polistis stigma) ततैया



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

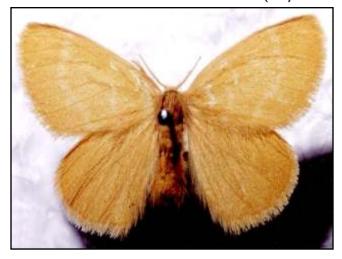
#### Insect as Pest Orange shoot borer (Inderbella tetaonis) संतरे का गिदार



Orange shoot borer (Inderbella tetaonis) संतरे का गिदार

<b>DI</b> 1		
Phylum		Arthropoda
Class		Insecta
Order		Lepidoptera
<b>Genus and Species</b>	(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

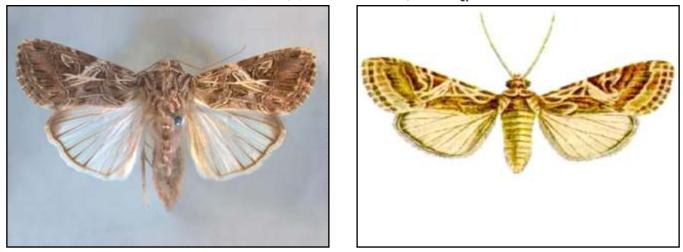




(Dasyneura lini) डैसिन्यूरा

Phylum		Arthropoda
Class		Insecta
Order		Diptera
<b>Genus and Species</b>	(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.
<b>Other Details</b>		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
<b>Genus and Species</b>	(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.
<b>Community/Know</b>	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
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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

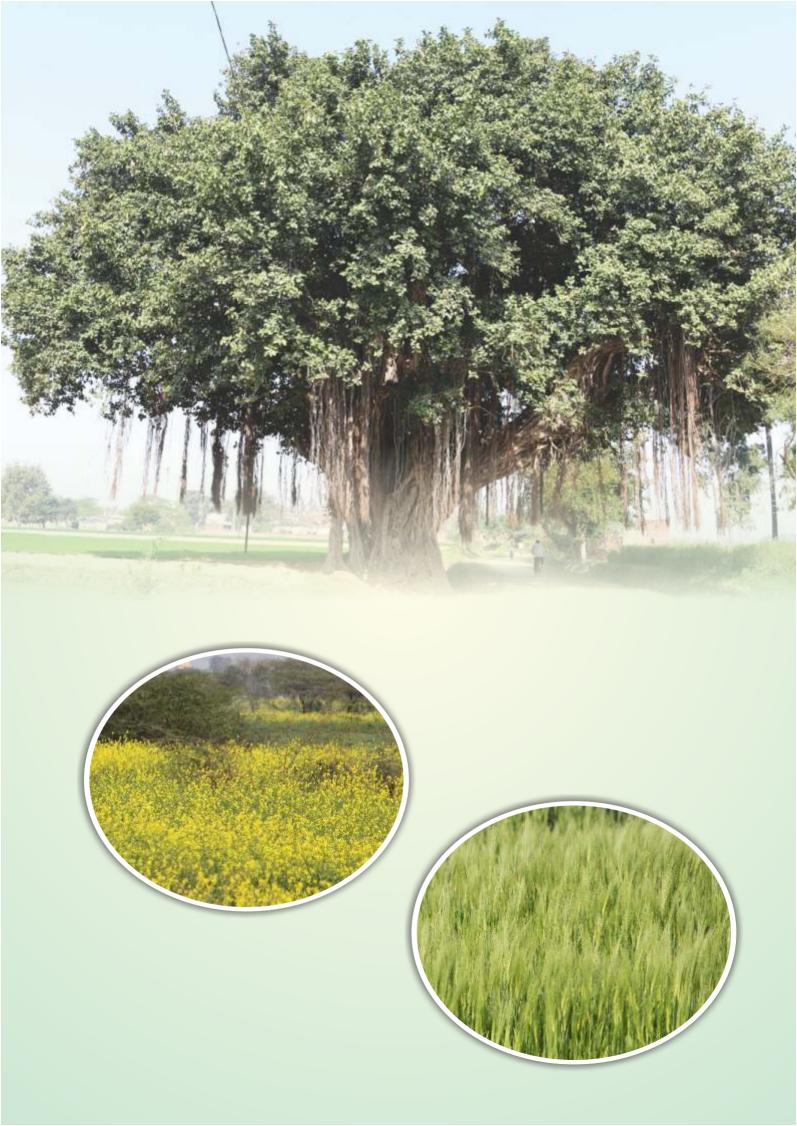
45.	Bos indicus	Ox	बैल	550, 608
46.	Bos taurus	Cow	गाय	535, 604
47.	Boselaphus tragocamelus	Neel Gai	नील गाय	548
48.	Brachydiplax chalybea	Rufous backed marsh hawk	बाज	344
49.	Branchythemis contaminata	Ditch Jewel	डैच ज्वैल	324
50.	Brumoids suturalis	Three- striped Lady beetle	थ्री स्ट्रिपड लेडी बीटल	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 <b>v</b>	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
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289.	Vespa orientalis	Oriental hornet	बरैय्या	1153
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291.	Vorticella	Bell-animalcule	वर्टीसेला	264
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