

E-Booklet

Floral Biodiversity Of Birla Institute of Technology, Mesra



Edited by

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Message of Vice- Chancellor

Ecological balance and biodiversity are an essential ingredient for a happy and healthy academic campus. Besides human components and civil infrastructure, green field, forest cover, water body, open space, blue sky, and a rich mix of biologically diverse species of flora and fauna greatly enrich and enliven the environment of a residential arena. Birla Institute of Technology Mesra covers nearly acres of land rich in biodiversity with a deluge of both common and rare varieties of flora and fauna. Recent survey shows that the campus can boast of diverse plants and animals representing a



myriad ecosystem, characteristic of this geographical and ecological region. Therefore, an initiative was undertaken at BIT Mesra to document the plants and animal species of the campus with their uses to create an authentic database of the biological wealth of the campus. I believe that this exercise will certainly inspire a greater number of stakeholders of this residential campus including the students and faculty members to value and conserve this diversity with passion and ownership. I am happy that this volume on Biodiversity has been prepared with meticulous documentation and objectivity. I strongly recommend that the campus inhabitants, alumni and all stakeholders should read this volume to know the unique life forms of our campus. As biological species evolve with time and application, our effort to document and preserve must also regularly upgrade with precision and scientific analysis. I earnestly appreciate the efforts taken by our faculty members and students for publishing this unique volume exhibiting the biological opulence of our campus under the leadership of the Dean (Infrastructure and Planning).

Message of Dean of Infrastructure and Planning

Awareness and action regarding the sphere of life surrounding us is absolutely necessary for the very existence of ours and our dear planet. On Earth, the system of life, which is unique in the universe, has manifested itself through a wonderful variety of life forms, including trees, birds, animals, apart from human beings. There is an inherent balance among the ecosphere, biosphere, and this biodiversity of life. It is the responsibility of Man, the superior being, to observe, understand, record, and protect this Biodiversity, which maintains the very balance of the entire life system on Earth. At our level, this task has been taken up by the Institute in the form of preparing one Biodiversity Register to document all forms of flora and fauna in the Institute campus. It is convinced as an open document to be continually upgraded and to be published and circulated for the awareness and action of all. This register has been compiled under a grant from the Institute and through the efforts of in-house and outside experts



The Diverse Flora of BIT, Mesra

A

Acacia auriculiformis (Acacia)
Acalypha indica
Acalypha wilkesiana.
Acorus calamus.
Acridotheres tristis
Adiantum lunulatum .
Adina cordifolia (Karma).
Aegle marmelos (Bael or wood apple).
Ageratum conyzoides .
Ageratum conyzoides
Albizia lebbek (Siris).
Alcedo atthis .
Allamanda cathartica.
Alstonia scholaris (chatim , Devil tree)
Alternanthera philoxeroides
Amaranthus spinosus .
Amaurornis phoenicurus
Amomum subulatum
Anas acuta
Anastomus oscitans
Andrographis paniculata .
Andropogon pertusus .
Anogeissus latifolia (Dhok
Anthocephalus cadamba (Kadam).
Araucaria bidwillii
Ardea alba
Ardea intermedia
Ardea purpurea
Ardeola grayii .
Argemone mexicana.
Argya striata .
Artocarpus heterophyllus.
Artocarpus lacucha.
Athene brama .
Azadirachta indica
Azaratum conyzoides .
Azolla pinnata

B

Bambusa balcooa
Bauhinia sp.
Bauhinia vahlii (Malu).
Bidens Pilosa
Bignonia aequinoctialis .
Bird Diversity .
Bixa orellana
Boerhavia diffusa

Boletus luridus
Bombax ceiba
Bougainvillea
Brassica campestris (field mustard).
Bryonopsis laciniosa .
Bryophyllum pinnatum
Bubulcus ibis.
Butea monosperma.

C

Caesalpinia pulcherrima (guletura
Calendula .
Callistemon citrinus (Bottle brush
Calotropis gigantea
Canscora diffusa (bhui neem
Carica papaya.
Carissa spinarum .
Cassia fistula (Amaltas
Cassia glauca
Cassia javanica.
Cassia podocarpa .
Cassia roxburghii
Cassia tora
Cassiasamea.
Casuarina equisetifolia (whistling pine tree).
Ceiba pentandra
Centella asiatica .
Centropus sinensis .
Ceratophyllum demersum
Ceryle rudis
Cheilocostus speciosus
Cheilocostus speciosus
Chrysanthemum sp
Clerodendron indicum .
Clerodendrum infortunatum .
Clitoria ternatea
Colchicum.
Commelina benghalensis
Crinum asiaticum
Crotalaria juncea .
Crotalaria juncea (railroad creeper
Croton bonplandianum.
Croton oblongifolius (Ghansura
Cuphea hyssopifolia
Curculigo orchoides
Curcuma angustifolia .
Cuscuta reflexa.
Cyanotis cristata .

Cyanthillium cinereum .
Cycas revoluta (Japanese sago palm)
Cymbopogon citratus .
Cymbopogon citratus (Lemon grass.
Cynodon dactylon
Cyperus rotundus

D

Dahlia .
Dalbergia sissoo (Indian Rosewood)
Delonix regia (gulmohar.
Dendrocalamus strictus
Dendrophthoe falcata.
Desmodium gangeticum.
Desmodium triflorum.
Desmodium triflorum.
Dicrurus adsimilis.
Dicrurus leucophaeus.
Dillenia indica (Elephant apple)
Dinopium banghalense .
Dioscorea bulbifera
Duranta erecta .

E

Eichhornia crassipes
Elephantopus scaber.
Elephantopus scaber
Emilia sonchifolia .
Eranthemum pulchellum .
Eryngium foetidum
Eucalyptus globulus
Eupatorium odoratum.
Euphorbia pulcherrima .
Euphorbia tithymaloides

F

Ficus benghalensis (Bargad).
Ficus benjamina.
Ficus elastica
Ficus glomerata (Dumur).
Ficus mollis
Ficus pumila
Ficus religiosa.
Ficus semicordata (Drooping fig)

G

Gallinula chloropus
Gracupica contra
Grewia tillifolia (Dhamani)

H

Heliconia rostrata.
Heliconia Rostrata .
Heliotropium indicum
Heteropogon Contortus .
Hibiscus cannabinus .
Hibiscus mutabilis
Hibiscus rosa-sinensis
Himantopus himantopus
Holarrhena antidysenterica (L. Wall. (Kurchi)
Holoptelea integrifolia
Hydrilla verticillata
Hygrophila spinosa
Hyptis suaveolens (Vilaiti Tulsi)

I

Ichnocarpus frutescens
Ipomoea cairica .

J

Jacaranda mimosifolia (blue Jacaranda)
Jasminum auriculatum (Juhi).
Jatropha curcas
Juniperus communis

K

Kigelia pinnata (Balam Kheera)
Kydia calycina (potari)

L

Lagerstroemia speciosa (Pride of India)
Lagerstromia flos-reginae
Lanius schach
Lantana camara
Launea sarmentosa.
Leonotis nepetifolia
Limnanthemum indicum
Lindenbergia indica
Litchi chinensis.
Litsea monopetala.
Ludwigia octovalvis .
Lygodium flexuosum

M

Madhuca indica (Mahua).
Mangifera indica
Manilkara zapota (Chikoo)
Mareca strepera .
Mazus pumilus .

Megalaima haemacephala
Mimosa pudica
Mimusops elengi Linn. (Bakul.)
Momordica charantia .
Morinda citrifolia
Moringa oleifera (drumstick.)
Motacilla maderaspatensis
Murraya koenigii .
Musa x paradisiaca L. (Banana)
Mussaenda luteola
Melia azedarach
Melia azedarach
Merops philippinus
Metopidius indicus
Michaelia champaka (Champa.)
Microcarbo niger .
Mimosa hispida Kunth

N

Netta rufina

O

Ocimum basilicum (basil.)
Olax scandens.
Oplismenus hirtellus .
Opuntia dillenii
Oriolus kundoo
Oriolus xanthornus
Orthosiphon rubicundus
Orthotomus sutorius.
Ougeinia oojeinense (Sandan.)
Oxalis corniculata
Oxalis latifolia

P

P. inornate
Paederia foetida
Parthenium hysterophorus
Peltoforum pterocarpum (Pila gulmohar.)
Peperomia pellucid .
Pergularia daemia .
Pergularia daemia
Pericrocotus cinnamomeus
Persicaria glabra .
Petrochelidon fluvicola .
Phoenix dactylifera
Phoenix dactylifera
Phoenix dactylifera .
Phoenix sylvestris (Khejur or Indian date)
Phyllanthus emblica (amla.)
Phyllanthus niruri.
Pinus roxburghii.

Pistia stratiotes
Pithecellobium dulce (jungle jalebi)
Plumeria alba (Frangipani.)
Polyalthia longifolia.
Polygonum glabrum
Pongamia pinnata.
Porphyrio poliocephalus.
Pseudibis papillosa
Psidium guajava
Psittacula kramera .
Psychotria nervosa.
Pterospermum acerifolium (Kanak champa)
Pycnonotus cafer
Pyrostegia venusta .

R

Rauwolfia tetraphylla .
Rauwolfia serpentina (serpentwood.)
Riccardia chamedryfolia .
Robinia pseudoacacia .
Roystonea regia (Royal Palm)
Rungia pectinata

S

Saccharum spontaneum .
Salvi coccinea .
Sansevieria roxburghiana
Santalum album (Indian sandalwood)
Schleichera oleosa (kusum.)
Scirpus acutus
Scoparia dulcis
Scoparia dulcis .
Selaginella bryopteris.
Sensitive Smithia .
Shorea robusta
Shrubs and Herbs Diversity
Sida cordifolia
Simarouba glauca (Lakshmi taru.)
Smithia purpurea .
Solanum nigrum.
Solanum Nigrum
Solanum torvum .
Solanum xanthocarpum .
Soymida febrifuga (Indian redwood.)
Spathodea campanulata (African Tulip tree)
Spilopelia chinensis .
Spondias pinnata (ambara)
Stereospermum chelonoides (Parul in Bengali)
Streptopelia decaocta
Swietenia macrophylla
Synedrella nodiflora.

Synedrella nodiflora
Syzygium cumini (Black Plum)

T

Tabernaemontana divaricata
Tabernaemontana divaricate .
Tadorna ferruginea
Tadorna tadorna
Tagetes erecta .
Tamarindus indica (Imli)
Taraxacum
Taraxacum officinale
Tectona grandis.
Terminalia arjuna.
Terminalia bellirica (baheda)
Terminalia chebula.
Thevetia peruviana.
Thuja standishii
Thunbergia coccinea
Tinospora cordifolia (giloy)
Toona ciliata (toon).
Treron Phoenicopterus
Trichilia connaroides .
Trigonella foenum-graecum

U

Urena lobata .
Urena Sinuate

V

Vallisneria spiralis
Vanda tessellata
Vanellus indicus .
Vanguiera Spinosa
Vernonia cinerea .
Vernonia cinereum

W

Wedelia chinensis

X

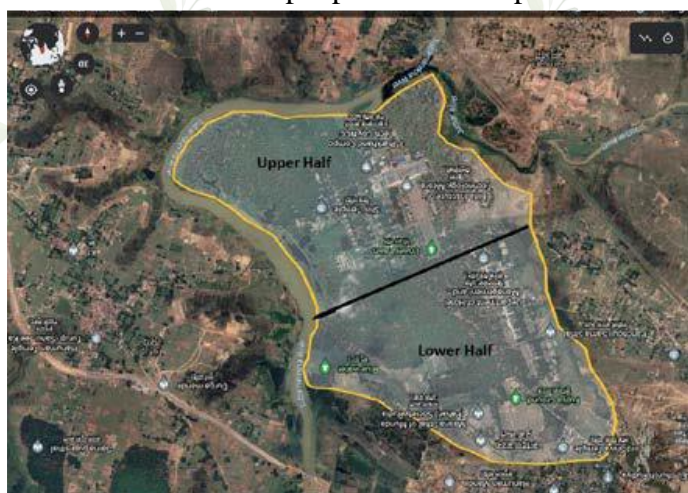
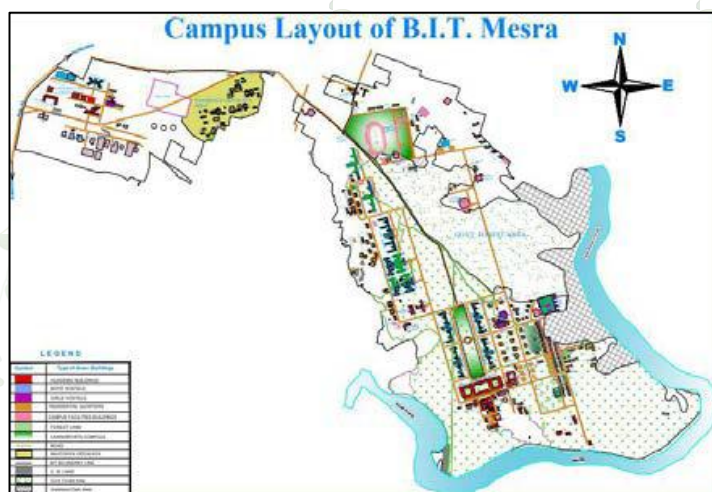
Xanthium strumarium .

Z

Ziziphus mauritiana (Indian jujube).
Ziziphus oenoplia (

Biodiversity of BIT, Mesra

A panoramic lush green campus of 780 acres intricately knitted with myriad hues of brilliant colors in different seasons throughout the year, the institution campus of BIT, Mesra presents a plethora of diversity both in terms of floral and faunal wealth. Floral species include herbs, shrubs, creepers and tree species in abundance. Similarly avifaunal diversity of the campus is also noteworthy with around 40 bird species found in different seasons round the year along with a considerable diversity of invertebrates and vertebrates. Not only visual beauty and aroma of the forest tantalizes the neurons of the population residing in the campus but supplies several non-timber products and fuelwood to the local people of the campus.



In 2021, an initiative was taken by the Dean (Infrastructure and Planning of BIT, Mesra with the generous support of our honorable Vice Chancellor, to carry out a biodiversity assessment of the campus. Though, time was hit by the COVID 19 pandemic situation, a team consisting of faculty member of BIT, Mesra and experts from Jharkhand Biodiversity Board conducted the inventorisation survey and documented the biological wealth

of the campus in this presented volume. A total number of 265 plant species belonging to 82 plant families along with 36 bird species were identified, photo captured and documented in this volume. The highest number of plant species belonged to the Fabaceae family. This plant family is indeed a large clan with 600 genera and 13,000 species worldwide.

Literature reviews on the species identified and documented in the campus revealed several utilities and important features associated with them. Some of the uses noted were using them as ornamental plants or gardening plants in landscaping and thematic landscaping.

Again, some plant species have been known to be used for environmental management and phytoremediation. Apart from these other uses noted for the different species were like use in cloth dye, cuisine, thatch, construction timber, edible plant and ayurvedic uses according to the Ayurvedic tradition of India. Several species were found which are used in soap making, leather tanning, perfumery, flavoring, fuel, and detergent, use in cosmetics etc. However, the dominant tree species which is found in the campus Id Sal (*Shorea robusta*, which is used for its quality timber.

Statistical analysis of the family for the documented species revealed 82 plant families

1. Acanthaceae
2. Amaranthaceae
3. Amaryllidaceae
4. Aneuraceae
5. Annonaceae
6. Apiaceae.
7. Apocynaceae
8. Araucariaceae
9. Aracaceae
10. Asparagaceae
11. Asteraceae
12. Bignoniaceae
13. Bixaceae
14. Boletaceae
15. Boraginaceae
16. Brassicaceae
17. Cactaceae
18. Caricaceae
19. Casuarinaceae
20. Ceratophyllaceae
21. Colchicaceae
22. Combretaceae
23. Commelinaceae
24. Convolvulaceae
25. Costaceae
26. Crassulaceae
27. Cupressaceae
28. Cycadaceae
29. Cyperaceae
30. Dilleniaceae
31. Dioscoreaceae
32. Dipterocarpaceae
33. Euphorbiaceae
34. Fabaceae
35. Gentianaceae
36. Heliconiaceae
37. Hpoxidaceae
38. Hydrocharitaceae
39. Lameaceae
40. Lauraceae,
41. Loranthaceae
42. Lygodiaceae
43. Lythraceae
44. Magnoliaceae
45. Malvaceae
46. Mazaceae
47. Meliaceae
48. Menyanthaceae
49. Moraceae
50. Moringaceae
51. Musaceae
52. Myrtaceae
53. Nyctaginaceae
54. Olacaceae
55. Onagraceae
56. Orchidaceae
57. Orobanchaceae
58. Oxalidaceae
59. Papaveraceae
60. Phyllanthaceae
61. Pinaceae
62. Plantaginaceae
63. Poaceae
64. Polygonaceae
65. Pontederiaceae
66. Pteridaceae
67. Rhamnaceae



Shorea robusta (Sal)



Tectona grandis



Bombax ceiba



Lagerstroemia speciosa



Alstonia scholaris



Toona ciliata (toon)



Dillenia indica



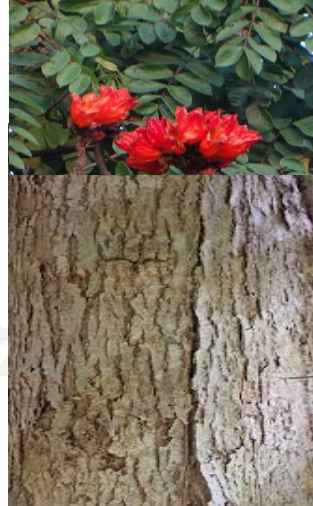
Lagerstromia flos-reginae



Thevetia peruviana



Dendrocalamus strictus



Spathodea campanulata



Swietenia macrophylla



Ziziphus mauritiana



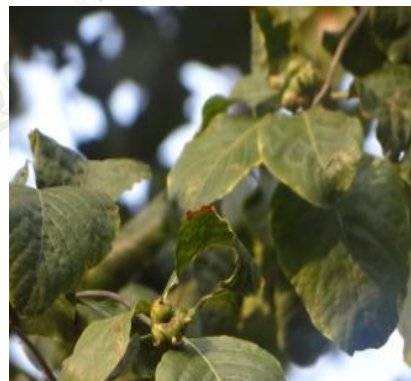
Pterospermum acerifolium



Ziziphus mauritiana



Stereospermum chelonoides



Morinda citrifolia



Santalum album



Aegle marmelos



Mangifera indica



Psidium guajava



Madhuca indica (Mahua)



Anthocephalus cadamba



Bambusa balcooa



Ziziphus mauritiana



Simarouba glauca



Cassia siamea



Bauhinia sp



Carica papaya



Artocarpus lacucha



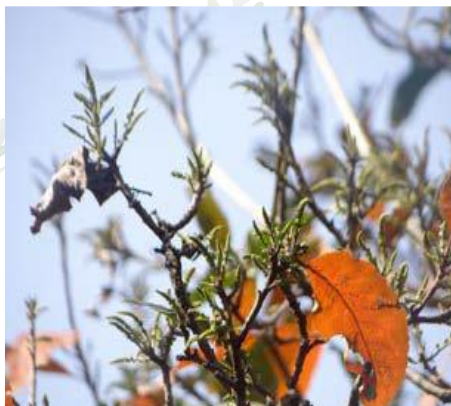
Terminalia chebula



Grewia tillifolia



Dendrophthoe falcata



Croton oblongifolius



Ficus elastica



Dalbergia sissoo



Dalbergia sissoo



Terminalia arjuna



Pinus roxburghii



Araucaria bidwillii



Plumeria alba



Azadirachta indica



Adina cordifolia



Casuarina equisetifolia



Cassia fistula



Thunbergia coccinea



Sida cordifolia



Ocimum basilicum



Euphorbia pulcherrima



Luffa cylindrica



Opuntia dillenii



Crinum asiaticum



Cuscuta reflexa



Cassia podocarpa



Cycas revoluta



Peltoforum pterocarpum



Callistemon citrinus



Anogeissus latifolia



Mimosa hispida Kunth



Peltoforum pterocarpum



Ficus semicordata



Delonix regia



Cassia roxburghii



Caesalpinia pulcherrima



Acacia auriculiformis



Ficus mollis



Ougeinia oojeinense



Soymidia febrifuga



Holoptelea integrifolia



Crotalaria juncea



Ipomoea cairica



Solanum torvum



Centella asiatica



Oxalis latifolia



*Alternanthera
philoxeroides*



Mimosa pudica



Canscora diffusa



Ficus pumila



Rungia pectinata



Lindenbergia indica



Synedrella nodiflora



Pergularia daemia



Sensitive Smithia



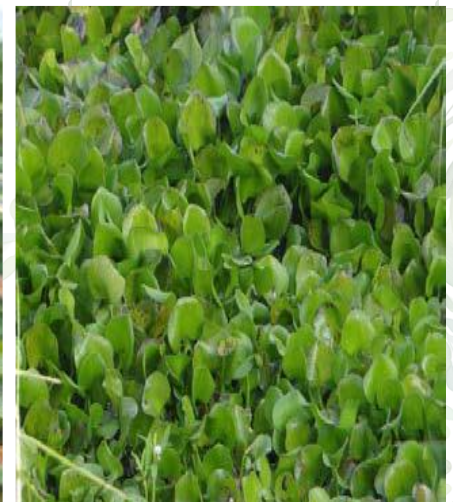
Bidens Pilosa



Dioscorea bulbifera



Trichilia connaroides



Eichhornia crassipes



Pistia stratiotes



Azolla pinnata



Launea sarmentosa



Hydrilla verticillata



Ceratophyllum demersum



Limnanthemum indicum



Solanum xanthocarpum



Hygrophila spinosa



Eupatorium odoratum



Vanda tessellata



Momordica charantia



Parthenium hysterophorus



Phyllanthus niruri



Phoenix dactylifera



Calotropis gigantea



Melia azedarach



Croton bonplandianum



Acalypha indica



Desmodium triflorum



Heliotropium indicum



Wedelia chinensis



Peperomia pellucida



Amaranthus spinosus



Boletus luridus



Saccharum spontaneum



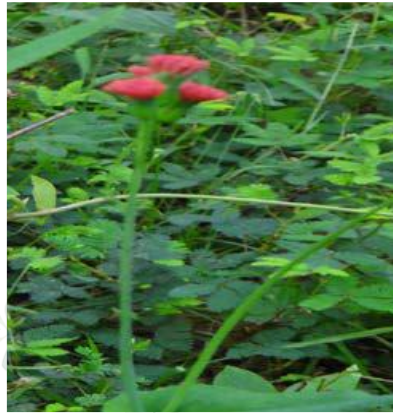
Rauwolfia tetraphylla



Rauwolfia serpentina



Pergularia daemia



Emilia sonchifolia



Vernonia cinerea



Curculigo orchiioides



Psychotria nervosa,



Lantana camara



Smithia purpurea



Urena Sinuate



Solanum Nigrum



Vanguiera spinosa



Phoenix dactylifera



Cyperus rotundus



Andropogon pertusus



Adiantum lunulatum



Cyanotis cristata



Cassia tora



Scoparia dulcis



Mazus pumilus



Cheilocostus speciosus



Hibiscus mutabilis



Allamanda cathartica



Curcuma angustifolia



Amomum subulatum



Colchicum



Clerodendron indicum



Heliconia Rostrata



Azaratum conyzoides

According to the PBR format, the identified species were summarized according to these classes.

Timber yielding plants:

	Plant Type	Local name	Scientific name	Other uses
1	Tree	Sal	<i>Shorea robusta</i>	Hardwood Timber
2	Tree	Sagwan	<i>Tectona grandis</i>	Hardwood Timber
3	Tree	Lakshmi Taru	<i>Simarouba glauca</i>	Furniture Toys
4	Tree	Kadam	<i>Anthocephaluscodamber</i>	Plywood, furniture, Boxes, crates
5	Tree	Mahogany	<i>Swietenia macrophylla</i>	Furniture
6	Tree	Parul	<i>Stereorpermum chelonoides</i>	Timber for Furniture
7	Tree	Meda	<i>Litsea monopetala</i>	Timber for furniture
8	Tree	Champa	<i>Michaelia champaka</i>	Fragrant products, hair and massage oil
9	Tree	Chinaberry	<i>Melia azedarach</i>	Natural insecticides
10	Tree	Indian elm	<i>Holoptelea integrifolia</i>	Medicinal against several diseases
11	Tree	Potari	<i>Kydiacalycina</i>	Cheap timber and fibre
12	Tree	Trichilia connaroides	<i>Heyneatrijuga</i>	Interior carpentry, for fuel
13	Tree	Karma	<i>Adina cordifolia</i>	Timber use
14	Tree	Mango	<i>Mangifera indica</i>	Timber use
15	Tree	Jackfruit	<i>Artocarpus heterophyllus</i>	Timber use
16	Tree	Eucalyptus	<i>Eucalyptus globulus</i>	Timber use

List of plant species categorized as Weed:

	Plant Type	Local name	Scientific name	Impact
1	Shrub	Kunth	<i>Mimosa hispidula</i>	Extremely weedy for many tropical crops
2	Sub shrub	Flannel weed	<i>Sida cordifolia</i>	Cough, Headache, Smoking cessation
3	Shrub	Little ironweed	<i>Cyanthilliumcinereun</i>	
4	Shrub	Goat weed	<i>Scoparia dulcis</i>	Kidney stone
5	Grass	Yellow wood sorrel	<i>Oxalis corniculata</i>	Diarrhoea, urinary tract infection
6	Herb	Beggar's tick	<i>Bidens pilosa</i>	Make the land infertile
7	Herb	Lettuce leaf	<i>Blumealacera L.</i>	Medicinal use for cough
8	Shrub	Siam weed	<i>Chromolaena odorata</i>	Skin infection
9	Herb	Hogweed	<i>Boerhavia</i>	Cures urinary system
10	Herb	Carrot grass	<i>Parthenium hysterophorus</i>	Biodiversity loss and choking
11	Herb	Pig weed	<i>Amaranthus</i>	Use as ornamental plant
12	Herb	Spring amaranth	<i>Amaranthus spinosus</i>	Serious weed for rice cultivation
13	Herb	Little ironweed	<i>Cyanthilliumcinereum</i>	Colic pain, cough, night blindness
14	Grass	Black spear grass	<i>Heteropogoncontortus</i>	Erosion control, revegetation
15	Herb	Goat weed	<i>Scoparia dulcis</i>	Anaemia, herpes, skin disorder
16	Herb	Billy goat weed	<i>Ageratum conyzoides</i>	Dysentery, diarrhea
17	Herb	Congress grass	<i>Parthenium</i>	Asthma

Ornamental Plants:

	Plant Type	Local name	Scientific name	Others Details
1	Tree	Pride of india	<i>Lagerostroemia</i>	Decorative purpose
2	Shrubs	Golden senna	<i>Cassiaglauca</i>	Used in landscaping
3	Tree	Kassod tree	<i>Cassia Siamea</i>	Wind breaks, shelter belts, intercropping system
4	Tree	Royal palm	<i>Roystonea regia</i>	Woods for construction, roots are used for diuretic
5	Tree	False Ashoka	<i>Polyalthialongifolia</i>	Matchboxes, packing,cracks, boxes
6	Bushes	Paper flower	<i>Bourgainuellea</i>	Indoor house plant
7	Shrubs	Japanese sago palm	<i>Cycas revoluta</i>	Edible starch
8	Tree	Pila gulmohar	<i>Peltoforumpterocarpum</i>	Cabinet making fodder crop
9	Tree	Butterfly palm	<i>Dypsislutescens</i>	Indoor homeplant
10	Tree	Gulmohar	<i>Delonix regia</i>	Fruit to some bird
11	Shrub	Guletura	<i>Caesalfiniapulcherrina</i>	
12	Tree	Acacia	<i>Acacia auriculiformis</i>	Fuelwood, paper, gum
13	Shrub	Lalpata	<i>Euphorbia pulcherrima</i>	Outdoor garden plant
14	Shrub	Podocarpa leaf	<i>Cassia podocarpa</i>	Landscaping
15	Climber	Juhi	<i>Jasminum auriculatum</i>	Religious purpose
16	Shrub	Hanging lobster's claw	<i>Heliconia Rostrata</i>	Landscape plant
17	Tree	White chedar	<i>Thuja sstandishi</i>	Used for hedges, ringworms
18	Herb	Water hyacinth	<i>Pontederia crassipes</i>	Basket, table mats, treat sewage waste
19	Aquatica herb	Water lettuce	<i>Pistiasteatiotes</i>	Water garden
20	Aquatic grass	Eel grass	<i>Vallisneria spirulis</i>	Aquarium plant
21	Aquatic	Coral pelliia	<i>Riccardiachamedryfolia</i>	Aquarium plant
22	Herb	Nabhali	<i>Cyanotis cristata</i>	Balcony, indoor flower plant
23	Herb	Blue mink	<i>Ageratum</i>	Garden plant, insecticide
24	Grass	Grass family	<i>Poaceue</i>	Lawn, turf, pasture,forage
25	Tree	Weeping fig	<i>Ficus benjamina</i>	Large and stately tree for parks

Fruit Plants:

	Plant Type	Local Name	Scientific Name	Season of fruit	Other Use
1	Tree	Elephant apple	<i>Dillenia speciosa</i>	Summer	Cuisine
2	Tree	Bael	<i>Aegle marmelos</i>	Summer	Medicinal use
3	Shrub	Indian jujube	<i>Ziziphus mauritiana</i>	Summer	Use in ulcer, cuts, rich in vitamin C
4	Tree	Papaya	<i>Carica papaya</i>	All	Medical use
5	Tree	Chikoo	<i>Manilkara zapota</i>	Winter	Antibacterial uses
6	Tree	Imli	<i>Tamarindus indica</i>	Summer	Traditional medicine
7	Tree	Khejur	<i>Phoenix sylvestris</i>	Rainy	jaggery
8	Tree	Banana	<i>Musa paradisiaca</i>	All	Cooking desert
9	Climber	Torai	<i>Luffa cylindrica</i>	Summer	Scrubbing sponge
10	Climber	Turkey berry	<i>Solanum torvum</i>	All	Improves digestion
11	Tree	Date palm	<i>Phoenix dactylifera</i>	Summer	Beneficial for Heart, liver, cold
12	Fungus	Lurid bolete	<i>Scuillellus</i>	Summer and autumn	As food supplements
13	Shrub	Wild coffee	<i>Psychotria nervosa</i>	Summer	Bird pollination
14	Tree	Meyna or Vanguiera	<i>Meyna spinosa</i>	winter	treatment of diphtheria.
15	Tree	Mango	<i>Mangifera indica</i>	Summer	Medicinal uses
16	Herb	Banana	<i>Musa x paradisiaca</i> L.	Throughout the year	Cooking and dessert
17	Tree	Jackfruit	<i>Artocarpus heterophyllus</i>	Summer	Staple food crop
18	Tree	Guava	<i>Psidium guajava</i>	monsoon	Timber use
19	Tree	Phalsa	<i>Grewia tillifolia</i>	monsoon	Medicinal and timber use
20	Tree	Ambara	<i>spondias pinnata</i>	Sumer and autumn	Medicinal use
21	Tree	Mahua	<i>Madhuca indica</i>	summer	Local Liquor preparation
22	herb	mustard	<i>Brassica campestris</i>	winter	Oil extraction
23	Tree	drumstick	<i>Moringa oleifera</i>	summer	Medicinal properties
24	Tree	amla	<i>Phyllanthus emblica</i>	summer	Medicinal properties

Medicinal Plant:

	Plant Type	Local Name	Scientific Name	Uses	Part use
1	Tree	Devil tree/ chatim	<i>Aistonia scholaris</i>	Homeopathy, ayurveda	Bark
2	Tree	African tulip tree	<i>Spathodea campanulata</i>	Antiseptic properties	Bark
3	Tree	Indian Sandalwood	<i>Santalum album</i>	Common cold, fever, soar throat	Flower
4	Tree	Kanak champa	<i>Petrospermum acerifolium</i>	Ulcer, blood problem	Flower
5	Tree	Indian mulberry	<i>Morinda citrifolia</i>	Cancer, hyper tension, cervical spondylosis	Fruit
6	Tree	Sausage tree	<i>Kigelia pinnata</i>	Antibacterial, skin care	Fruit
7	Tree	Jungle jalebi	<i>Pithecellobium dulce</i>	Toothache, eye inflammation	bark
8	Tree	Chebulic myrobalan	<i>Terminalia chebula</i>	Kidney liver dysfunction	Fruit
9	Tree	Dhamani	<i>Grewia tillifolia</i>	Skin disease, diarrhoea	Bark , roots
10	Tree	Var. coccinea, var. fulcata	Tree	Asthma, menstrual disorder	Flower
11	Tree	Ghansura	<i>Croton oblongifolius</i>	Snake poisoning, Heptaomegaly	Roots, bark
12	Shrub	Black plum	<i>Syzygium cumini</i>	Antioxidant activities, cardiac metabolic disorder	Fruit
13	Tree	Amla	<i>Phyllanthus emblica</i>	Shampoo, hair oil, skin care	Fruit
14	Tree	Drumstick	<i>Moringa oleifera</i>	Antifungal, antiviral, antidepressant	Fruit
15	Tree	Bakul	<i>Mimusops elengi</i>	Antifungal, antibacterial	Fruit
16	Tree	Amultas	<i>Cassia fistula</i>	ayurveda	Flower
17	Shrub	Common juniper	<i>Juniperus communis</i>	Female contraceptive	Berries
18	Tree	Bottle brush	<i>Callistemon citrinus</i>	Diarrhoea, ant bronchitis	Leaves
19	Tree	Parrot olax	<i>Olox scandens</i>	Mouth ulcer	Fruit
20	Shrub	Makora	<i>Ziziphus oenoplia</i>	Dysentery, inflammation of uterus	Stem, bark, roots
21	Tree	Pink cassia	<i>Cassia juvanica</i>	Anti-diabetic, constipation	Leaves, bark
22	Tree	Baheda	<i>Terminalia bellirica</i>	Infection of throat and chest	
23	Shrub	Kurchi	<i>Holarrhena antidysenterica</i>	Gut motility disorder	
24	Tree	Ambara	<i>Spondias pinnata</i>	Ulcer protective, anti cancerous	
25	Tree	Soft fig.	<i>Ficus mollis</i>	Treatment of cists and wound	Bark
26	Tree	Sandan	<i>Ougeinia oojeinense</i>	Eye problem, cut wound	Root, bark
27	Tree	Indian redwood	<i>Soymida febrifuga</i>	Diarrhoea, dysentery	Bark
28	Herb	Basil	<i>Ocimum basilicum</i>	Ayurveda, Chinese medicine	Leaves
29	Cactus	Prickly pear	<i>Opuntia dilleni</i>	Anti-oxidant, antitumour, neuroprotective	Steam

30	Shrub	Spider lily	<i>Crinum asiaticum</i>	Used in child birth, Postpartum haemorrhage	Root
31	Herb	Vilaititulasi	<i>Hyptis suaveolens</i>	Inflammation, gastric, ulcer infection	Leaves and seeds
32	Shrub	Giant dodder	<i>Cuscutareflexa</i>	Anti-emetic, bone fracture	Flower
33	Grass	Lemon grass	<i>Cymbopogon citratus</i>	Soup, aroma therapy	Steam
34	Climber	Giloy	<i>Tinospora cordifolia</i>	Skin infection, upset stomach	Leaves and stem
35	Shrubs	Bull's tongue	<i>Elephantopus scaber</i>	Bladder stone, cardio tonic	Leaves
36	Shrub	Pinwheel flower	<i>Tabernaemontana divaricata</i>	Anti-epileptic	Leaves
37	Shrub	Blood sage	<i>Salvia coccinea</i>	Brain tonic, traditional Chinese medicine	Flower
38	Climber	Railway creeper	<i>Jpomoe acairica</i>	Antibiotic properties	Roots
39	Climber	Garden night shade	<i>Solanum nigrum</i>	Teeth ache, stomach ache, fever	Fruit and leaves
40	Climber	Jal brahmi	<i>Centella asiatica</i>	Phytoremediation, skin treatment	All
41	Climber	Touch me not	<i>Mimosa pudica</i>	Anti-asthmatic, analgesic, tumour	Leaves
42	Climber	Bhui neem	<i>Canscora diffusa</i>	Analgesic, anticonvulsant, antitubercular	All
43	Herb	Comb rungia	<i>Rungia pectinata</i>	Small pox, pain relieve	Leaves
44	Herb	Pattharchatti	<i>Lindenbergia indica</i>	Skin eruption, chronic bronchitis	Leaves
45	Herb	Lajalukabla	<i>Sensitive smithia</i>	Stimulate flow of milk in mother	
46		Field mustard	<i>Brassica campetris</i>	Skin disease, snake bite, produces cooking oil	Seeds
47	Herb	Air potato	<i>Dioscorea bulbifera</i>	Piles, dysentery, ulcer, cough	Leaves
48	Aquatic	Tape grass	<i>Vallisneria spiralis</i>	Treatment of women appetite	Leaves
49	Aquatic	Dense flower, knot weed	<i>Persicaria glabra</i>	Respiratory disorder, antiseptic	Leaves, buds
50	Aquatic	Hdrilla	<i>Hydrilla verticillata</i>	Blood sugar control, neurological health	Leaves
51	Aquatic	Horlwort	<i>Ceratophyllum demersum</i>	Piles, burning sensation, fever	Leaves
52	Aquatic	Blue water leaf	<i>Beloanthera oppositifolia</i>	ulcer	Leaves
53	Herb	Gokanta	<i>Hygrothila auriculata</i>	Kidney infection, arthritis	flower
54	Herb	Creat	<i>Andrographis paniculata</i>	Skin disease, cancer, high BP	Flower, leaves
55	Tree	Checkedred vanda	<i>Vanda tessellata</i>	Dysentery, inflammation	Flower
56	Tree	Mahwa	<i>Madhuca longifolia</i>	Tonsillitis, heart disease	Leaves
57	Herb	Kadam	<i>Haldina cordifolia</i>	Indigestion, liver, skin	Leaves, flower
58	Climber	Stone breaker	<i>Phyllanthus</i>	Skin, ulcer, diabetes, frequent menstruation	Leaves

59	Shrub	Giant Indian milk weed	<i>Calotropis gigantea</i>	Snake bite, cancer, arthritis	Flower
60	Tree	China tree	<i>Melia azedrach</i>	Anti-diabetic, cathartic, emetic	Fruit
61	Herb	Bon tulshi	<i>Croton bonplanbianum</i>	Constipation, asthma	Leaves
62	Herb	Indian mercury	<i>Acalypha indica</i>	Anti-cancer, anti- diabetic	Leaves
63	Herb	Pepper elder	<i>Peperomia pellucida</i>	Fever, acne	Leaves, roots
64	Grass	Wild sugarcane	<i>Saccharum spontaneum</i>	Piles, sexual weakness	Roots
65	Climber	Bitter melon	<i>Momordica</i>	Chicken pox, measles, malaria	Roots, leaves
66	Shrub	Black nightshade	<i>Solanum</i>	Wing worms, pain, tumour, fever	Flower, leaves
67	Tree	The dropping fig	<i>Ficus semicordata</i>	Headache, ulcer, gastric problem	Fruits, leaves, roots
68	Tree	Devil pepper	<i>Rauwolfia tetraphylla</i>	Snake bite, mental disorder, fever	Fruit, leaves
69	Herb	Air yam	<i>Dioscorea bilbifera</i>	Cancer, asthma, piles	Leaves
70	Herb	Makora	<i>Ziziphus oenoplia</i>	Mouthwash, sore throat	Stem, bark
71	Shrub	White lippia	<i>Lippia</i>	Gastro intestinal, respiratory disorder	Leaves
72	Shrub	Trellis vine	<i>Pergulariadaemia</i>	Anti-venom, antiseptic	Leaves
73	Creeper	Maidenhair creeper	<i>Lygodiumflexuosum</i>	Jaundice, sprain, eczema	Fern
74	Creeper	Sensitive plant	<i>Mimosa pudica</i>	Small pox, haemorrhages, asthma	Root, leaves
75	Herb	Tassel flower	<i>Emilia sonchifolia</i>	Ophthalmia, gastropathy, wounds	Flower
76	Herb	Golden eye grass	<i>Curculigoorchioides</i>	Limp, limpness, knee joints, diarrhea	Flower
77	Herb	Parrot olax	<i>Olox scandens</i>	Anaemia, diabetes, fever	Bark
78	shrub	Putush	<i>Lantana camara</i>	Skin itches, asthma, measles	Flower
79	Herb	Mexican primrose willow	<i>Ludwigia octovalvis</i>	Edema, nephritis	Flower
80	Herb	Burr mallow	<i>U. sinuata</i>	Anti-rheumatic, anti-pyretic, emollient	Roots
81	Shrub	Black nightshade	<i>Solanum nigrum</i>	Aching teeth, fever, tumour, pain	Leaves
82	Grass	Coco grass	<i>Cyperus rotundus</i>	Stomach and bowel disorder, diabetes	Leaves
83	Herb	Sickle senna	<i>Senna tora</i>	Skin disease, snake bites	Leaves
84	Herb	Japanese mazus	<i>Mazus pumilus</i>	typhoid	Leaves
85	Shrub	Hamsapadi	<i>Adiantum philippense</i>	Elephantiasis, rabies	Leaves
86	Shrub	Bhat or hill glory bower	<i>Clerodendrum infortunatum</i>	Anti-convulsant, scabies, scorpion and snake bites	Leaves, root
87	Herb	Eastern purple coneflower	<i>Echinacea</i>	Cold, flu, cough, fever	Leaves
88	Grass	Dhoob	<i>Cynodon dactylon</i>	Heart tonic, brain tonic	Stem

Wild Diversity

	Plant type	Local name	Scientific name	Other details
1	Shrub	Yellow oleander	<i>Thevetia peruviana</i>	Religious purpose
2	Tree	Cotton tree	<i>Bombax ceiba</i>	Fibre producing
3	Grass	Female bamboo	<i>Bambusa balcooa</i>	Building material, baskets, mats
4	Grass	Male bamboo	<i>Dendrocalamus strictus</i>	Building material, baskets, mats, paper
5	Tree	Bargad	<i>Ficus benghulensis</i>	Soil conservation
6	Tree	Blue jacaranda	<i>Jacaranda mimosifolia</i>	
7	Tree	Malu	<i>Bauhinia vahlii</i>	Cooked as pulse, stems are used for mats and baskets
8	Tree	Dumur	<i>Ficus glomerata</i>	Edible fruits and vegetables, curing mosquito bites
9	Tree	Chir pine	<i>Pinus roxburghii</i>	Adhesive, paper, rubber,
10	Tree	Bunya pine	<i>Araucaria bidwilli</i>	Edible kernel
11	Tree	Dhok	<i>Anageissus latifolia</i>	Source of ghatti gum, tanning of firewood
12	Tree	False acacia	<i>Robinia pseudoacacia</i>	Laxative, diurepic
13	Tree	Kusum	<i>Schleiehera oleosa</i>	Edible leaves and shoots, oil used in hair dressing, powdered seed applied in wound
14	Shrub	Devils backbone	<i>Euphorbia tithymaloides</i>	Planted in landfills and toxic waste sites
15	Climber	Railroad creeper	<i>Crotalaria juncea</i>	Fibre for ropes, strings, floor mat
16	Climber	Creeping fig	<i>Ficus pumila</i>	causes skin inflammation
17	Climber	Trellis vine	<i>Pergularia daemia</i>	Fishing and hunting poison
18	Aquatic	Mosquito fern	<i>Azolla pinnata</i>	Biofertilizers
19	Herb	Air yam	<i>Dioscorea</i>	Makes air poison
20	Herb	Dandelion	<i>Taraxacum officinale</i>	increase urine production, decrease pain and swelling
21	Climber	Mouth day flower	<i>Commelina erecta</i>	Good moisture content
22	Grass	Blue stem	<i>Andropogon</i>	Hay, forage for horse
23	Grass	Bristle basket grass	<i>oplismenus</i>	horticulture



Biodiversity is the greatest treasure we have... Its diminishment is to be prevented at all cost.

Thomas Eisner