

FLORA OF INDIA
Series 4



FLORA OF TAROBA NATIONAL PARK

S.K. MALHOTRA
&
S. MOORTHY



BOTANICAL SURVEY OF INDIA

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Series 4

A FLORISTIC ACCOUNT OF
TAROBA NATIONAL PARK AND ITS ENVIRONS,
CHANDRAPUR DISTRICT, MAHARASHTRA STATE

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&
S MOORTHY



BOTANICAL SURVEY OF INDIA

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Date of Publication : December 31, 1992

Price :

*Cover Photos : Top : Careya arborea in full bloom.
Bottom : A flowering twig of Calycopteris floribunda.*

Published by the Director, Botanical Survey of India,
P-8, Brabourne Road, Calcutta-700 001 and Printed at
Deep Printers, 3/26, Ramesh Nagar, New Delhi-110 015.

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FOREWORD

The Botanical Survey of India has been entrusted with the major task of undertaking detailed floristic surveys and inventorisation of the rich plant-wealth of our country. During the course of the years since its reorganisation in 1954, the Survey has done commendable work in the fields of floristics, plant taxonomy, ecology, endemism and conservation of rare and threatened plants of the vegetation of India. The results are being published under the categories : Flora of India (Series 1), State Floras (Series 2), District Floras (Series 3) and Special Publications, Monographs pertaining to ecology, conservation, etc. (Series 4).

With the setting up of several biologically rich areas as National Parks, Biosphere Reserves, and Wildlife Sanctuaries of utmost Conservation concern by the Government of India, the Botanical Survey thought it prudent to diversify its research into the realms of conservation and bring out special publications on such areas documenting the floral wealth which forms the basic requirement for scientific management and conservation.

The present publication on the Flora of Taroba National Park is one such endeavour by the scientists of the Survey, based on detailed field work in the area. This provides details on the location, approach, historical and environmental aspects of the area followed by a graphic account on the vegetation. The flora enumerates 667 species under 393 genera belonging to 110 families of flowering plants and ferns, easily identifiable by means of taxonomic keys to the families, genera and species. For each species, upto-date nomenclature, short description with flowering and fruiting periods and habitat notes are provided. At the end an index to scientific names is given for easy reference.

It is hoped that this synoptic flora of the Park area would be useful for biologists, teachers, students of botany, nature lovers and Park management authorities in getting to know of the plants of the area and in undertaking researches on plant-animal co-existence and better management of the Park.

I congratulate the authors for completing the assigned work and the Publication Section for processing its publication.

Botanical Survey of India
Calcutta
November, 9, 1992.

B. D. SHARMA
Director



PLATE 1 .: Photograph of Taroba National Park forest area with thick forest cover of vegetation representing tall trees like *Tectona grandis*, *Terminalia* spp. ; *Lagerstroemia* spp. etc. In the foreground *Costus speciosus* is present.



PLATE 2 : Thick ground vegetation dominated by *Costus speciosus*, along with other herbs, climbers, grasses and sedges like *Triumfetta rhomboidea*, *Sida* spp., *Ampelocissus latifolia*, *Paspalidium flavidum*, *Scleria* spp. etc.



PLATE 3 : General vegetation of dense forest with common tall trees like *Anogeissus latifolia*, *Terminalia crenulata*, *T. chebula*, *Tectona grandis*, *Dalbergia latifolia*, etc. In the foreground are *Costus speciosus*, *Triumfetta rhomboidea*, *Paspalidium flavidum*, etc.

INTRODUCTION

Taroba National Park situated at a distance of about 45 km from Chandrapur City is the most attractive spot in the heart of the reserve forests of West Chandrapur forest division. There is a motorable road, leading from Chandrapur City to the Taroba National Park. After covering about 12 km from Chandrapur, the road plunges into the forests making a zig-zag path. The protected boundary of the National Park begins after 10 km from Khatoda village. From Khatoda the forests of Taroba begin and at some places they are very dense. After crossing the 'Kumbhi nala' the road climbs up a hillock unfolding a beautiful view of a big lake with forested hills providing an excellent background. The lake is called the 'Taroba lake' and a few forest rest houses have been recently constructed by the forest department on the hillocks nearby, formed by a bunding up a stream and joining three hillocks which surround it. There is also a shrine of Taroba where on every Sunday of the Pausa (December-January) month a festival is held and many Adivasis visit the temple. There is also a shrine of Maruti. People still believe in the sanctity of the lake water and take it to sprinkle their crops with the belief that it would keep the crop pests away.

In 1905 the area surrounding the Taroba lake was restricted for entry and later in 1935 it was made a sanctuary. In 1955, it was declared a National Park and 116.5 sq. km belt with an additional buffer zone of 57 sq km was created around the park where shooting is also prohibited. Visitors are not allowed to carry fire-arms inside and a mobile squad is posted to check any pilferage. Due to the various protective measures adopted by the forest department, the wildlife of both the animals and plants has increased much. Herds of cheetal, bison etc. are a common sight in the early mornings and evenings around the lake.

The lake itself contains a few crocodiles and a variety of fishes. In order to enlighten the tourists about the animals and plants of the area a net work of 88 km of fair weather roads have been constructed recently in the park leading to different points, of these the most important is the circular road around the lake at whose vantage points 'machans' or towers have been erected from where tourists can observe the animals approaching the lake, drinking water and relaxing.

Materials and methods

The area was frequently visited to record in detail seasonal variations to collect plants in their different developmental stages. Special attention was paid to collect the ephemerals which complete the life cycle in a few days and vanish.

The specimens were identified with the help of available literature, proper dissections of the materials and finally comparing with the authentic herbarium sheets.

Geology

The greater part of the area surveyed is undulating. Geologically the area has varied rocks ranging from granite, quartz and quartzite on the upper and steeper slopes of the hills. The rocks are generally exposed resulting in denudated and shallow soils.

Climate

Weatherwise it is quite pleasant for the greater part of the year with only a short span of hot weather from April to May. The southwest monsoon is active from June to September. October and November constitute the post-monsoon season.

The air is generally dry except during monsoon when the humidity exceeds 70%, the summer months are the driest when the relative humidity in the afternoon is 20° to 25°.

Past work

Haines (1916) has mentioned a few plants from Taroba. There is no other published work except those of Malhotra and Moorthy (1972, 1973, 1974, 1977). In the present work, the authors have attempted to consolidate the vegetation of the area briefly in a floristic form in order to be of help to the National Park lovers, forest officers, research workers and general public.

VEGETATION

The vegetation of the area is of mixed deciduous type. In the forests of Taroba lake vicinity at Pandarpani, Khantundi, Ramdegi, Kantejhari, Khatoda etc., the prominent tree species occurring frequently are *Albizia lebeck*, *Anogeissus latifolia*, *Bauhinia racemosa*, *Dalbergia latifolia*, *Diospyros melanoxylon*, *Haldina cordifolia*, *Mitragyna parvifolia*, *Sterculia urens*, *Tectona grandis*, *Terminalia bellirica*, *T. chebula*, *T. crenulata*. The other small trees and shrubs are often represented by *Acacia chundra*, *Bridelia retusa*, *Cleistanthus collinus*, *Semecarpus*

anacardium, *Xeromphis spinosa*, etc. The lianas and slender climbers like *Cissampelos pareira* var. *hirsuta*, *Cryptolepis buchananii*, *Mucuna pruriens*, *Pergularia daemia* etc. are often noticed. Several trees are infested by stem parasites like *Dendrophthoe falcata*, *Viscum nepalense* etc., while on a few others orchids like *Vanda tessellata* occur as epiphytes.

The undergrowth is generally rich after the monsoon. In the deep interiors of the forests, herbs, grasses and a few under-shrubs like *Abutilon indicum*, *Alternanthera sessilis*, *Andrographis paniculata*, *Barleria cristata*, *Biophytum sensitivum*, *Canscora diffusa*, *Cassia absus*, *Chrysopogon fulvus*, *Coldenia procumbens*, *Corchorus aestuans*, *Costus speciosus*, *Cyperus cyperoides*, *C. iria*, *Dactyloctenium aegyptium*, *Desmodium triflorum*, *Eclipta prostrata*, *Goniogyna hirta*, *Heteropogon contortus*, *Hibiscus lobatus*, *Launaea fallax*, *Paspalidium flavidum*, *Peristrophe paniculata*, *Phyllanthus maderaspatensis*, *Pupalia lappacea*, *Scleria* spp., *Sida* spp., *Triumfetta rhomboidea* etc. are frequently met with.

On the hillocks a distinctive vegetation can be noticed along the base, slopes and the top. Amongst the plants at the base of hillocks are trees like *Aegle marmelos*, *Melia azadirach*, *Tamarindus indica* and shrubs like *Adhatoda zeylanica*, *Calotropis procera*, *Dodonaea viscosa* etc. Amongst the herbs like *Cassia tora*, *Peristylis plantagineus*, *Sida acuta*, *Sphaeranthus indicus*, *Triumfetta rhomboidea* are common.

The slopes of the hillocks harbour trees like *Anogeissus latifolia*, *Buchanania lanzan*, *Mitragyna parvifolia*; shrubs like *Balanites aegyptiaca*, *Cleistanthus collinus*, *Ehretia laevis*, *Gardenia resinifera*, *Holarrhena antidysenterica*, *Woodfordia fruticosa*, and herbs like *Curculigo orchioides*, *Desmodium velutinum*, *Indigofera astragalina*, *Smithia conferta* etc. The plants on the top of the hillocks are represented by trees like *Bridelia retusa*, *Lannea coromandelica*, *Soymida febrifuga* etc., shrubs like *Clerodendrum multiflorum*, *Grewia hirsuta*, *G. rothii*, *Lagerstroemia indica* etc., and herbs like *Acrocephalus hispidus*, *Anisomeles heyneana*, *Cassia pumila*, *Dipteracanthus prostratus*, *Trichodesma sedgwickianum*, *Turnera ulmifolia*, *Waltheria indica* etc. Besides, Bamboos are also of not an uncommon occurrence in the area.

There are also ponds and ditches, at places stagnant waters where there is a distinct aquatic vegetation. The plant species frequently noticed are *Blyxa octandra*, *Ludwigia hyssopifolia*, *Nymphaea nouchali*, *Ottelia alismoides*, *Pistia stratiotes* etc. Roadside and avenue trees include *Albizia lebbek*, *Mangifera indica*, *Tamarindus indica*, *Tectona grandis* etc.

At certain seasons when the green herbage is low, various domestic or wild animals such as buffalos, goats, deers, bisons, blue bulls etc.

browse and graze down any green tree seedlings that may be available. In the shrub stratum grazing is concentrated on the palatable species which may be destroyed unless they are sufficiently thorny as in the case of *Zizyphus* and *Acacia* spp.

Most of the tree species in the area are used for shelter purposes. Bisons generally prefer a tree with a thick canopy of branches over it while a deer can avail even the tall gasses as its source of shelter. Some of the plants used as shelter by animals are *Aegle marmelos*, *Albizia odoratissima*, *Bauhinia racemosa*, *Bridelia retusa*, *Cleistanthus collinus*, *Dalbergia latifolia*, *Diospyros melanoxylon*, *Mangifera indica*, *Sterculia urens*, *Tamarindus indica* etc.

UTILITY OF THE MAJOR COMPONENTS

There are many plants which are used as forest products and also timber and are used by the residents of the area as follows :

(a) *Timbers used for carpentry and cabinet work :*

Some of the trees and shrubs which are used for carpentry and cabinet works are *Albizia lebbek*, *Anogeissus latifolia*, *Boswellia serrata*, *Gardenia latifolia*, *Lagerstroemia parviflora*, *Mangifera indica*, *Mitragyna parvifolia*, *Pterocarpus marsupium*, *Tectona grandis*, *Terminalia bellirica* etc.

(b) *Plants used in the manufacture of Bidis, Match boxes and in paper industry :*

The leaves of *Diospyros melanoxylon* are extensively used for wrapping the Bidis. The collection of 'tendu' leaves as it is commercially known, is quite common and is a big trade in the area. The plants such as *Bombax ceiba*, *Buchanania lanzan* etc. are used in the manufacture of match boxes. *Dendrocalamus strictus* is extensively used in the manufacture of paper. The collection and sale of this bamboo also is a big trade in the area.

(c) *Plants used for agricultural implements :*

Trees such as *Anogeissus latifolia*, *Bridelia retusa*, *Embllica officinalis*, *Lagerstroemia parviflora*, *Mitragyna parvifolia*, *Pterocarpus marsupium* etc., are used for agricultural implements.

(d) *Plants used for tanning :*

Terminalia chebula is the main source for tanning purposes. However, the bark of the tree species such as *Acacia chundra*, *Anogeissus latifolia*, *Boswellia serrata*, *Bridelia retusa*, *Cassia fistula*, *Cleistanthus collinus* and *Embllica officinalis* is also used for such purposes.

(e) *Gum and resin yielding plants :*

Anogeissus latifolia, *Bauhinia racemosa*, *Butea monosperma*, *Gardenia gummifera*, *Sterculia urens* are some of the gum yielding plants. Resin is obtained from the trees of *Boswellia serrata* and *Mitragyna parvifolia*.

(f) *Plants used for medicinal purposes :*

Many plants in the area are used for medicinal purposes in one way or the other. Such important species are : *Aegle marmelos*, *Cassia fistula*, *Emblica officinalis*, *Helicteres isora*, *Holarrhena antidysenterica*, *Mitragyna parvifolia*, *Tamarindus indica*, *Terminalia bellirica* and *Vitex negundo*.

ANTHROPOGENIC EFFECT ON THE VEGETATION

Fire and grazing have played an extremely influential part in determining the forest type occupying the land. These practices invariably have the effect of rendering the site less favourable to tree growth through a reduction of moisture levels in air and soil and often through erosion of the top soil. Grazing has an indirect effect on the standing trees in that associated with it are the practices of lopping for fodder and burning both to reduce the density of the canopy cover and to induce grass growth. The vital direct effect is in the inhibition of regeneration.

The tree felling has become more significant as the human population pressures have increased and the demand for fuel and timber augmented correspondingly. Due to the road building and mining activities the vegetation is not just damaged in the direct vicinity but much additional damage is done in the hilly areas because of the necessary incision and soil accumulation.

In short, excessive felling of forests has a serious effect on the development of soil and regeneration in the area.

PRESENT WORK

Floristic analysis :

The following enumeration includes both Angiosperms and Pteridophytes comprising 667 species, 393 genera and 110 families. Keys to the families/genera/species are given. The correct binomial is followed by local names if any. Brief notes have been provided. Phenological data covering only the flowering, fruiting period has also been mostly followed by frequency of their occurrence within the area and the habitat. The specimens are deposited in the herbarium of the Botanical Survey of India, Pune (*BSI*). The ten dominant families in the area in the order of their highest representation of species are Fabaceae, Poaceae, Cyperaceae, Euphorbiaceae, Asteraceae, Acanthaceae, Rubiaceae, Scrophulari-

aceae, Lamiaceae and Amaranthaceae. The genera and species representation of the same is as follows :

Sl. No.	Name of the family	Genera	Species
1.	Fabaceae	32	77
2.	Poaceae	45	76
3.	Cyperaceae	11	37
4.	Euphorbiaceae	15	35
5.	Asteraceae	22	26
6.	Acanthaceae	16	26
7.	Rubiaceae	13	21
8.	Scrophulariaceae	12	19
9.	Lamiaceae	8	14
10.	Amaranthaceae	9	12

Fabaceae is represented by 77 species and is thereby the dominant family in the area and Amaranthaceae with only 12 species is less represented. The genera within the family and the species within the genus are arranged alphabetically.

ACKNOWLEDGEMENTS

The authors are thankful to Dr. S.K. Jain, and Dr. M.P. Nayar, Ex-Directors, Botanical Survey of India for facilities. The authors are equally thankful to Dr. B. D. Sharma, Director, Botanical Survey of India for encouragement.

KEY TO ANGIOSPERMIC PLANT FAMILIES

1. Plants 2-cotyledonous, rarely one by reduction ; vascular bundles usually arranged in a single ring ; cambium present ; leaves usually reticulately veined :
 2. Perianth distinguishable into sepals and petals :
 3. Petals free :
 4. Sepals usually free :
 5. Torus small or elongated but not expanded :
 6. Flowers trimerous **ANNONACEAE**
 6. Flowers not trimerous, usually 4-5-merous :
 7. Stamens few, usually not more than 10 :
 8. Twining or sarmentose, rarely trailing herbs or shrubs ; carpels free **MENISPERMACEAE**
 8. Herbs, shrubs or trees ; carpels united :
 9. Flowers actinomorphic :
 10. Placentation free-central **CARYOPHYLLACEAE**
 10. Placentation parietal :
 11. Petals cruciform ; stamens 6, tetradynamous ; disc in the form of 4 glands opposite sepals **BRASSICACEAE**
 11. Petals not cruciform ; stamens often indefinite and if 6, not tetradynamous ; disc never in the form of glands **CAPPARACEAE**
 9. Flowers zygomorphic :
 12. Inner 2 sepals enlarged, petaloid, stamens 8, filaments united at the lower half ; placentation axile **POLYGALACEAE**

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12. Sepals 5, none specially enlarged but all are well developed ; stamens 5, free or in two bundles ; placentation parietal VIOLACEAE
7. Stamens numerous, often more than 15 :
13. Carpels 2 or more syncarpous :
14. Placentation parietal :
15. Plants without sap ; petals absent FLACOURTIACEAE
15. Plants with yellow sap ; petals bright yellow with maroon centre PAPAVERACEAE
14. Placentation not parietal :
16. Placentation free-central or basal-central PORTULACACEAE
16. Placentation usually axile, sometimes basal :
17. Stamens distinct TILIACEAE
17. Stamens monadelphous :
18. Anthers 1-celled MALVACEAE
18. Anthers 2-celled STERCULIACEAE
13. Carpels usually many (but sometimes reduced to one), apocarpous :
19. Terrestrial (plants) trees ; leaves distinctly longer than broad DILLENIACEAE
19. Aquatic plants ; leaves more or less orbicular :
20. Leaves floating ; ovules parietal ; endosperm and perisperm present and sometimes arillate NYMPHAEACEAE
20. Leaves above water ; ovule pendulous ; no endosperm or perisperm NELUMBONACEAE
5. Torus expanded or thickened into a fleshy disc :
21. Flowers zygomorphic SAPINDACEAE

21. Flowers actinomorphic :
22. Styles 5, free or if solitary, with 5 linear stigmatose branches :
23. Plants usually woody, twining or sarmentose ; fruits winged MALPIGHIACEAE
23. Plants neither twining nor sarmentose ; fruits not winged OXALIDACEAE
22. Styles more or less connate or solitary :
24. Plants usually climbing or twining VITACEAE
24. Plants not climbing, if climbing, armed or unarmed erect herbs, shrubs or trees :
25. Leaves gland-dotted, aromatic RUTACEAE
25. Leaves not as above :
26. Stamens monadelphous MELIACEAE
26. Stamens free :
27. Plants usually with acrid resinous juice ; stamens bearing resinous passages ANACARDIACEAE
27. Plants not as above :
28. Inflorescence leaf-opposed LEEACEAE
28. Inflorescence not leaf-opposed :
29. Leaves simple :
30. Flowers in axillary fascicles ; ovule one in each locule :
31. Stamens 3 HIPPOCRATEACEAE
31. Stamens 4-5 RHAMNACEAE
30. Flowers cymose ; ovules 2 or more in each locule :
32. Calyx accrescent ; stamens 3 OLACACEAE
32. Calyx not accrescent ; stamens 4-5 CELASTRACEAE

29. Leaves compound :
33. Herbs or under-shrubs; ovules 2 in each locule **ZYGOPHYLLACEAE**
33. Trees ; ovules solitary in each locule **SIMAROUBACEAE**
4. Calyx of united sepals :
34. Leaves usually simple :
35. Plants tendril bearing climbers **CUCURBITACEAE**
35. Plants not bearing tendrils :
36. Plants aquatic :
37. Styles solitary ; fruits indehiscent spinous **TRAPACEAE**
37. Styles 2 or 4 ; fruits 4-furrowed or separating into 4 cocci, not spinous **HALORAGACEAE**
36. Plants terrestrial :
38. Stamens usually definite, often not more than 12 :
39. Ovary either inferior or at the most half-superior :
40. Calyx lobes imbricate **MELASTOMATACEAE**
40. Calyx lobes valvate at least in buds :
41. Fruit a capsule, not winged **ONAGRACEAE**
41. Fruit usually an indehiscent coriaceous or drupaceous and frequently winged **COMBRETACEAE**
39. Ovary superior :
42. Soft wooded trees with latex ; leaves palmately fid to partite with long, hollow petioles **CARICACEAE**

- 42. Herbs or shrubs and if trees, not with latex ; leaves and petioles not as above :
 - 43. Placentation parietal :
 - 44. Herbs ; flowers white or pink, never yellow, plants insectivorous DROSERACEAE
 - 44. Shrubs ; flowers usually yellow ; plants not insectivorous TURNERACEAE
 - 43. Placentation axile or basal :
 - 45. Petals usually present, though minute, (rarely absent) ; seeds not reniform, smooth LYTHRACEAE
 - 45. Petals absent ; seeds reniform, variously striate, rugulose or muriculate MOLLUGINACEAE
- 38. Stamens usually indefinite :
 - 46. Leaves opposite, glandular-punctate with intra-marginal nerves MYRTACEAE
 - 46. Leaves alternate, neither glandular-punctate nor with intra-marginal nerves :
 - 47. Ovary 1-celled ALANGIACEAE
 - 47. Ovary more than 1-celled :
 - 48. Locules of the ovary suppressed ; flowers red or orange ; fruit a berry with hard woody rind PUNICACEAE
 - 48. Ovary 4-loculed ; flowers white ; fruit a fibrous drupe LECYTHIDACEAE
- 34. Leaves mostly compound, rarely simple :
 - 49. Flowers actinomorphic MIMOSACEAE
 - 49. Flowers zygomorphic :
 - 50. Flowers with typical papilionaceous corolla FABACEAE

50. Flowers not with papilionaceous corolla CAESALPINIACEAE
3. Petals usually united :
51. Flowers epi or perigynous :
52. Inflorescence an involucrate head ; calyx absent or variously modified pappus ; ovary 1-celled ASTERACEAE
52. Inflorescence not as above ; calyx present ; ovary 2 or more celled :
53. Leaves opposite ; stipules inter or intra-petiolar RUBIACEAE
53. Leaves alternate ; exstipulate :
54. Corolla equal or subequal ; anthers free CAMPANULACEAE
54. Corolla distinctly 2-lipped ; anthers connivent into a ring LOBELIACEAE
51. Flowers hypogynous :
55. Parasitic or insectivorous plants :
56. Parasitic plants CUSCUTACEAE
56. Insectivorous plants LENTIBULARIACEAE
55. Neither parasitic nor insectivorous plants :
57. Carpels 2, if more than 2, then plants aquatic :
58. Plants with milky latex or greenish-yellow sap :
59. Anthers sagittate, pollen not formed into pollinia APOCYNACEAE
59. Anthers not as above ; pollen formed into pollinia :
60. Filaments free ; anthers without horny wings PERIPLOCACEAE
60. Filaments united ; anthers with horny wings ASCLEPIADACEAE
58. Plants without any latex or greenish-yellow sap :
61. Flowers actinomorphic :

62. Floating herbs with flowers terminating on apparent petioles **MENYANTHACEAE**
62. Plants not as above :
63. Inflorescences one sided cymes (secund) :
64. Ovules indefinite in each locule ; fruit a capsule **HYDROPHYLLACEAE**
64. Ovules definite in each locule ; fruit a drupe or of four nutlets :
65. Ovary deeply 4-lobbed ; style gynobasic (except in *Trichodesma* L.) **BORAGINACEAE**
65. Ovary entire or slightly 4-lobbed ; style terminal :
66. Style solitary **HELIOTROPIACEAE**
66. Styles 2-4 :
67. Styles 2 **EHRETIACEAE**
67. Styles 4 **CORDIACEAE**
63. Inflorescences not as above :
68. All or atleast lower leaves opposite :
69. Stamens 2 **OLEACEAE**
69. Stamens 4-5 :
70. Ovary 1-celled ; placentation parietal or free-central **GENTIANACEAE**
70. Ovary 2-celled ; placentation axile :
71. Stipules absent **SCROPHULARIACEAE**
71. Stipules present or represented by a raised line joining the bases or petioles **LOGANIACEAE**

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68. Leaves usually alternate :
72. Plants erect or diffuse but not twining ; ovary 2-celled, ovules many in each locule SOLANACEAE
72. Plants chiefly twining, at times trailing, diffuse or erect ; ovary 2-celled ; ovules 2 in each locule or 4-celled with one ovule in each locule CONVULVULACEAE
61. Flowers zygomorphic :
73. Fruits opening elastically from the apex of 2 loculicidal valves ; seeds usually supported or on upcurved process from the placentas ACANTHACEAE
73. Fruits not opening elastically, rarely indehiscent :
74. Leaves usually compound, if simple, seeds winged ; fruits much elongated BIGNONIACEAE
74. Leaves usually simple ; seeds not winged ; fruits not as above :
75. Flowers with extra floral glands at the base of the pedicels :
76. Placentation axile ; fruit a capsule or indehiscent and spinous PEDALIACEAE
76. Placentation parietal ; fruits with hooked prongs MARTYNIACEAE
75. Flowers without extra floral glands at the base of the pedicels :
77. Plants often aromatic ; inflorescence a verticillaster ; style gynobasic LAMIACEAE
77. Plants usually non-aromatic ; inflorescence not as above ; style terminal VERBENACEAE

57. Carpels more than 2 :
- 78. Flowers usually unisexual ; stamens inserted on the receptacle (not epipetalous) EBENACEAE
 - 78. Flowers bisexual ; stamens epipetalous :
 - 79. Calyx often with stipitate glands ; styles 5 or if one, then with 5 terminal stigmatose branches PLUMBAGINACEAE
 - 79. Calyx without stipitate glands ; style 1 SAPOTACEAE
2. Perianth not distinguishable into sepals and petals :
- 80. Flowers epigynous :
 - 81. Parasitic plants ; flowers actinomorphic ; fruits drupes or berries LORANTHACEAE
 - 81. Non-parasitic plants ; flowers zygomorphic ; fruits capsules ARISTOLOCHIACEAE
 - 80. Flowers hypogynous :
 - 82. Flowers unisexual or polygamous :
 - 83. Ovary 3-celled EUPHORBIACEAE
 - 83. Ovary 1-celled :
 - 84. Filaments not inflexed ULMACEAE
 - 84. Filaments inflexed (in bud) :
 - 85. Style undivided URTICACEAE
 - 85. Style branches 2 MORACEAE
 - 82. Flowers usually bisexual :
 - 86. Parasitic or non-parasitic plants ; anthers with valvular dehiscence :
 - 87. Parasitic twining herbs ; often leafless or with minute scales CASSYTHACEAE
 - 87. Non-parasitic trees or shrubs ; leaves well developed LAURACEAE
 - 86. Non-parasitic plants ; dehiscence of anthers not so :
 - 88. Leaves stipulate, stipules ochreate POLYGONACEAE
 - 88. Leaves exstipulate :
 - 89. Perianth petaloid NYCTAGINACEAE
 - 89. Perianth not petaloid ; if petaloid, bracts and bracteoles scarious AMARANTHACEAE

1. Plants 1-cotyledonous ; vascular bundles scattered, not in a ring ; cambium absent ; leaves mostly parallel veined :
90. Perianth absent ; flowers subtended, dry, chaffy, usually inflorescence various of spikelets, imbricating glumes (bracts) :
91. Stems mostly hollow, cylindrical or flattened ; leaves ligulate, leaf sheaths split ; fruit a caryopsis POACEAE
91. Stems obtusely to distinctly trigonous, usually solid ; leaves not ligulate, sheaths not split ; fruit a compressed or trigonous nut CYPERACEAE
90. Perianth present ; inflorescence not of spikelets ; flowers not subtended as above :
92. Perianth represented only by scales or bristles :
93. Flowers and fruits (inflorescence) densely papose and drying TYPHACEAE
93. Flowers and fruits (inflorescence) glabrous and fleshy ARACEAE
92. Perianth present but not as above :
94. Perianth uniseriate APONOGETONACEAE
94. Perianth biseriate :
95. Only outer perianth corolline :
96. Ovary inferior HYDROCHARITACEAE
96. Ovary superior ALISMATACEAE
95. Both series of perianth corolline :
97. Flowers epigynous :
98. Flowers usually actinomorphic ; stamens 3 or more, petaloid, staminodes absent :
99. Twining or climbing plants ; leaves simple or compound but reticulately veined ; flowers unisexual ; capsules winged or not but seeds winged DIOSCOREACEAE
99. Plants not as above ; leaves parallel veined ; if reticulate, leaves much lobed ; flowers bisexual ; fruits and seeds not winged :
100. Leaves reticulately veined, variously lobed ; placentation parietal TACCACEAE

100. Leaves parallel veined, entire ; placentation axile **HYPOXIDACEAE**
98. Flowers strongly zygomorphic ; fertile stamens 1-2, at times only 1/2 stamens (anther lobe) fertile, the other being transformed into petaloid staminodes :
101. Stems spirally twisted **COSTACEAE**
101. Stems not so :
102. Corolla spurred ; pollen often agglutinated into pollinia ; gynostegium typical ; ovary spirally twisted **ORCHIDACEAE**
102. Corolla not spurred ; pollinia and gynostegium absent ; ovary not as above :
103. Sepals free ; only 1/2 stamens (anther lobe) fertile **CANNACEAE**
103. Sepals connate ; 1 stamen fertile **ZINGIBERACEAE**
97. Flowers hypogynous :
104. Leaves reduced to cladodes **ASPARAGACEAE**
104. Leaves well developed :
105. Plants climbing or twining **LILIACEAE**
105. Plants not as above ;
106. Plants radical ; flowers in terminal, compact, solitary heads **ERIOCAULACEAE**
106. Leaves and flowers not as above **COMMELINACEAE**

KEY TO PTERIDOPHYTIC PLANT FAMILIES

1. Sporangia in sporocarps born at the bases of leaves MARSILEACEAE
1. Sporangia not in sporocarps :
 2. Sporangia are sunk in leaf-bases ; outer leaves have megasporangia and the inner microsporangia ISOETACEAE
 2. Sporangia are not sunk in leaf-bases and they are otherwise :
 3. Sporangia initiating from a group of cells ; sporangial walls more than 1-cell thick ; annulus absent, dehiscing by a slit into 2 valves OPHIOGLOSSACEAE
 3. Sporangia initiating from a single cell ; sporangial walls 1-cell thick ; annulate ; dehiscence irregular ADIANTACEAE

DILLENACEAE

DILLENIA L.

Dillenia pentagyna Roxb. *Kankera*.

Trees. Flowers yellow. Fruits pendulous.

Fl. & Fr. : March May. Infrequent in dense forests.

ANNONACEAE

ANNONA L.

Annona squamosa L. *Sitaphal*. Custard Apple.

Shrubs. Flowers cream coloured. Fruits green.

Fl. & Fr. : June December. Infrequent as an escape in open forests. Also planted.

MENISPERMACEAE

- | | |
|---|--------------------|
| 1. Inflorescence supported by foliar bracts ; carpels solitary | CISSAMPELOS |
| 1. Inflorescence not supported by foliar bracts ; carpels 3 or more : | |
| 2. Leaves glabrous ; seeds oblong or globose | TINOSPORA |
| 2. Leaves densely pubescent ; seeds horse-shoe shaped | COCCULUS |

CISSAMPELOS L.

Cissampelos pareira L. var. **hirsuta** (Buch.-Ham. ex DC.) Forman
Pahadmul. False Pareira Brava.

Climbing shrubs. Flowers pale white. Drupes scarlet.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

COCCULUS A.P.DC. *nom. cons.*

Cocculus hirsutus (L.) Diels, *Vasanvel*.

Climbing undershrubs. Flowers dirty white. Fruits black.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

TINOSPORA Miers

Tinospora cordifolia (Willd.) Miers ex Hook. f. & Thoms. *Gulancha tinospora*.

Climbing shrubs. Flowers yellow. Drupes red.

Fl. & Fr. : August November. Infrequent in open forests.

NYMPHAEACEAE

NYMPHAEA L.

- | | |
|---|--------------------|
| 1. Leaves sharply toothed ; anthers without appendages | <i>N. nouchali</i> |
| 1. Leaves entire or wavy ; anthers with long appendages | <i>N. stellata</i> |

Nymphaea nouchali Burm. f. *Kamal*. Indian red water-lily.

Aquatic herbs. Flowers blue or violet. Berries globose.

Fl. & Fr. : Greater part of the year. Frequent in ponds.

N. stellata Willd. *Lahan kamal*. Indian blue water lily.

Floating aquatic herbs. Flowers light blue, purple or violet. Fruits globular.

Fl. & Fr. : August November. Frequent in ponds.

NELUMBONACEAE

NELUMBO Adans.

Nelumbo nucifera Gaertn. *Suryakamal*. Sacred lotus.

Aquatic herbs. Flowers pink. Fruits ovoid.

Fl. & Fr. : August November. Frequent in ponds and pools.

PAPAVERACEAE

ARGEMONE L.

Argemone mexicana L. Prickly Poppy.

Prickly herbs. Flowers yellow. Capsules oblong-ellipsoid.

Fl. & Fr. : Greater part of the year. Frequent weed in wastelands.

BRASSICACEAE

(*nom. alter.* CRUCIFERAE)

- | | |
|---------------------|----------|
| 1. Pods dehiscent | BRASSICA |
| 1. Pods indehiscent | RAPHANUS |

BRASSICA L.

Brassica nigra Koch. *Mohri*. Black mustard.

Annuals. Flowers yellow. Pods subulate, torulose.

Fl. & Fr. : September February. Infrequent as an escape.

RAPHANUS L.

Raphanus sativus L. *Moola*. Radish.

Herbs. Flowers lilac. Pods terete, torulose.

Fl. & Fr. : September December. Infrequent as an escape.

CAPPARACEAE

- | | |
|--------------------|----------------|
| 1. Shrubs or trees | <i>Crateva</i> |
| 1. Herbs | <i>Cleome</i> |

CLEOME L.

- | | |
|---|--------------------|
| 1. Flowers white ; andro and gynophores present | <i>C. gynandra</i> |
| 1. Flowers yellow ; andro and gynophores absent | <i>C. viscosa</i> |

Cleome gynandra L.

Hispid herbs. Flowers pale. Capsules striate.

Fl. & Fr. : Greater part of the year. Frequent weed in cultivated fields and wastelands.

C. viscosa L.

Annual herbs. Flowers yellow. Capsules rigid.

Fl. & Fr. : Greater part of the year. Frequent weed in cultivated fields.

CRATEVA L.

Crateva nurvala Buch.-Ham.

Trees. Flowers yellow or white. Berries papillate.

Fl. & Fr. : March - June. Infrequent in open forests. Also planted.

VIOLACEAE

HYBANTHUS Jacq. *nom. cons.*

Hybanthus enneaspermus (L.) F.v. Muell. *Rathanparas*.

Herbs. Flowers red. Capsules yellow.

Fl. & Fr. : Greater part of the year. Frequent as forest undergrowth.

FLACOURTIACEAE

FLACOURTIA L. Herit.

Flacourtia indica (Burm. f.) Merr. *Kutian*.

Trees. Flowers white. Berries red.

Fl. & Fr. : March - June. Infrequent in open forests.

POLYGALACEAE

POLYGALA L.

1. Racemes 0.5-1.5 cm long ; capsules densely ciliate *P. arvensis*

1. Racemes 5-15 cm long ; capsules ciliate *P. elongata*

Polygala arvensis Willd. *auct. non. L. Bijnori*.

Herbs. Flowers yellow. Capsules didymous.

Fl. & Fr. : May - November. Frequent in moist habitats.

P. elongata Klein ex Willd.

Herbs. Flowers yellow. Capsules oblique.

Fl. & Fr. : July - November. Frequent in moist habitats.

CARYOPHYLLACEAE

POLYCARPÆA Lam.

Polycarpaea corymbosa (L.) Lam. *Bhiska*.

Herbs. Flowers white. Capsules 3-nerved.

Fl. & Fr. : August December. Frequent in open forests.

PORTULACACEAE

PORTULACA L.

Portulaca oleracea L. *Pasalei*. Common Purslane.

Herbs. Flowers yellow. Capsules ovoid.

Fl. & Fr. Greater part of the year. Frequent weed in cultivated fields and moist situations.

MALVACEAE

1. Fruits dehiscent capsules :
 2. Calyx spathaceous, deciduous ABELMOSCHUS
 2. Calyx not spathaceous :
 3. Style branches 5 HIBISCUS
 3. Style not branched THESPESIA
1. Fruits indehiscent or schizocarps of 5 or more cocci separating from the central axis :
 4. Epicalyx present :
 5. Epicalyx foliaceous ; flowers in capitate inflorescence MALACHRA
 5. Epicalyx not foliaceous ; flowers not in capitate inflorescence :
 6. Epicalyx 5 ; fruits glochidiolate URENA
 6. Epicalyx more than 5 ; fruits not glochidiolate PAVONIA
 4. Epicalyx absent :
 7. Carpels 1-seeded SIDA
 7. Carpels 2 or more seeded ABUTILON

ABELMOSCHUS Medic.

- | | |
|--|---------------------|
| 1. Stems hispid ; epicalyx segments 6-16 | <i>A. moschatus</i> |
| 1. Stems not hispid ; epicalyx segments 4-8 : | |
| 2. Epicalyx segments small, linear-lanceolate, deciduous | <i>A. ficulneus</i> |
| 2. Epicalyx segments large, ovate, persistent | <i>A. manihot</i> |

Abelmoschus ficulneus (L.) Wight & Arn. ex Wight

Annuals. Flowers light purple. Capsules oblong, 5-angled.

Fl. & Fr. : September - December. Frequent weed in cultivated fields.

A. manihot (L.) Medic.

Herbs or undershrubs. Flowers yellow or purple. Capsules hispid, 5-angled.

Fl. & Fr. : September - December. Frequent in wastelands.

A. moschatus (L.) Medic. Kapuskanda.

Herbs. Flowers yellow. Capsules globose, hispid.

Fl. & Fr. : September - November. Infrequent in open forests.

ABUTILON Mill.

- | | |
|--|--------------------|
| 1. Ripe carpels obtuse, awned or mucronate | <i>A. pannosum</i> |
| 1. Ripe carpels awned or mucronate | <i>A. indicum</i> |

Abutilon indicum (L.) Sweet, Karkoti. Country Mallow.

Undershrubs. Flowers yellow. Fruits (carpels) awned.

Fl. & Fr. : Greater part of the year. Infrequent in open forests.

A. pannosum (Forst. f.) Schlect.

Undershrubs. Flowers yellow. Fruits globose.

Fl. & Fr. : August - December. Frequent in open forests.

HIBISCUS L.

- 1 Flowers yellow with deep purple or chocolate brown at the centre *H. vitifolius*
1. Flowers white or pale to deep pink *H. lobatus*

Hibiscus lobatus (J.A. Murr.) Kuntze

Herbs. Flowers white. Capsules slightly longer than calyx.

Fl. & Fr. : August - December. Frequent as forest undergrowth.

H. vitifolius L.

Herbs. Flowers yellow. Capsules winged, hairy.

Fl. & Fr. : March November. Frequent along water courses.

MALACHRA L.

Malachra capitata (L.) L.

Herbs. Flowers yellow. Fruits subglobose.

Fl. & Fr. : August December. Frequent in open forests.

PAVONIA Cav. *nom. cons.*

1. Capsules slightly winged ; cocci glabrous *P. zeylanica*
1. Capsules not winged ; cocci hairy *P. odorata*

Pavonia odorata Willd.

Herbs. Flowers light pink. Capsules subglobose.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

P. zeylanica (L.) Cav.

Suffruticose herbs. Flowers white to light pink. Fruits globose.

Fl. & Fr. : November. Frequent in open forests.

SIDA L.

- | | |
|--|-----------------------|
| 1. Cocci aristate | <i>S. cordifolia</i> |
| 1. Cocci not aristate, merely acute : | |
| 2. Pedicels jointed below the middle | <i>S. rhombifolia</i> |
| 2. Pedicels jointed above the middle : | |
| 3. Pedicels longer than the leaves | <i>S. cordata</i> |
| 3. Pedicels shorter than the leaves : | |
| 4. Flowers solitary, axillary | <i>S. acuta</i> |
| 4. Flowers in axillary panicles | <i>S. mysorensis</i> |

Sida acuta Burm. f.

Suffruticose herbs. Flowers yellow. Fruits awned.

Fl. & Fr. : Greater part of the year. Frequent along roadsides of the forests.

S. cordata (Burm. f.) Boiss.

Suffruticose herbs. Flowers yellow. Fruits globose.

Fl. & Fr. : Greater part of the year. Frequent as forest undergrowth.

S. cordifolia L. *Chikna*.

Herbs. Flowers yellow. Fruits aristate.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

S. mysorensis Wight & Arn.

Viscid herbs. Flowers yellow. Mericarps not curved.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

S. rhombifolia L. *Guleatada*.

Erect herbs. Flowers yellow. Fruits awned.

Fl. & Fr. : August April. Frequent as forest undergrowth.

THESPESIA Soland. ex Corr. *nom. cons.***Thespesia lampas** (Cav.) Dalz. & Gibs.

Undershrubs. Flowers yellow. Capsules ovoid.

Fl. & Fr. : August April. Frequent in open forests.

URENA L.

Urena lobata L.

Undershrubs. Flowers pink. Carpels glochidiate.

Fl. & Fr. : September May. Frequent in wastelands and also as forest undergrowth.

STERCULIACEAE

- | | |
|---|------------|
| 1. Flowers unisexual ; petals absent | STERCULIA |
| 1. Flowers bisexual ; petals present : | |
| 2. Ovary raised on a gynophore ; follicles spirally twisted | HELICTERES |
| 2. Ovary not raised on a gynophore ; follicles not spirally twisted : | |
| 3. Petals deciduous, appendaged | BYTTNERIA |
| 3 Petals persistent, not appendaged : | |
| 4. Flowers yellow, ovary 1-celled | WALTHERIA |
| 4. Flowers rosy, ovary 5-celled | MELOCHIA |

BYTTNERIA Loebl. nom. cons.

Byttneria herbacea Roxb.

Trailing herbs. Flowers purplish. Fruits globose, glochidiate.

Fl. & Fr. : July - December. Frequent in gravelly soils of hillocks.

HELICTERES L.

Helicteres isora L. *Murudphal, Murudseng.* East Indian Screw Tree.

Shrubs. Flowers red. Fruits of twisted follicles.

Fl. & Fr. : July December. Frequent in open forests.

MELOCHIA L.

Melochia corchorifolia L.

Erect herbs. Flowers white or pink. Capsules globose.

Fl. & Fr. : Greater part of the year. Frequent near marshy places.

STERCULIA L.

- | | |
|--|-------------------|
| 1. Leaves entire, not lobed | <i>S. guttata</i> |
| 1. Leaves palmately lobed : | |
| 2. Panicles erect ; follicles with irritant hairs | <i>S. urens</i> |
| 2. Panicles drooping ; follicle hairs not irritant | <i>S. villosa</i> |

***Sterculia guttata* Roxb.**

Trees. Flowers pale brown. Follicles woody.

Fl. & Fr. : January - June. Infrequent in dense forests.

***S. urens* Roxb. Karu.**

Trees. Flowers yellowish. Follicles ovoid.

Fl. & Fr. : November - March. Infrequent in open forests.

***S. villosa* Roxb.**

Trees. Flowers pinkish. Follicles oblong.

Fl. & Fr. : December - March. Infrequent in open forests.

WALTHERIA L.

***Waltheria indica* L.**

Herbs. Flowers yellow. Capsules membranous.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

TILIACEAE

- | | |
|---|-------------------|
| 1. Fruits echinate or bristly | <i>Triumfetta</i> |
| 1. Fruits not echinate, not bristly : | |
| 2. Petals glandular at base ; fruits drupaceous, often 2-4-lobed | <i>Grewia</i> |
| 2. Petals eglandular at base ; fruits capsular, elongate or globose | <i>Corchorus</i> |

CORCHORUS L.

- | | |
|--|------------------------|
| 1. Capsules globose | <i>C. capsularis</i> |
| 1. Capsules elongate : | |
| 2. Capsules 3-winged | <i>C. aestuans</i> |
| 2. Capsules not winged : | |
| 3. Beak of capsules 3-fid, spreading | <i>C. tridens</i> |
| 3. Beak of capsules entire : | |
| 4. Capsules scabrous or aculeate, 3 winged, beak short | <i>C. trilocularis</i> |
| 4. Capsules glabrous, 10-ribbed, beak long | <i>C. olitorius</i> |

Corchorus aestuans L.

Herbs. Flowers yellow. Capsules winged.

Fl. & Fr. : September March. Frequent in moist or marshy places.

C. capsularis L.

Herbs. Flowers yellow. Capsules subglobose.

Fl. & Fr. : September December. Frequent weed in wastelands.

C. olitorius L.

Herbs. Flowers yellow. Capsules linear-cylindric.

Fl. & Fr. : July December. Frequent weed in cultivated fields.

C. tridens L.

Herbs. Flowers yellow. Capsules subcylindric.

Fl. & Fr. : August October. Infrequent weed in cultivated fields.

C. trilocularis L.

Herbs. Flowers yellow. Capsules hairy.

Fl. & Fr. : August - October. Frequent in moist places.

GREWIA L.

- | | |
|---|------------------------|
| 1. Subscandent shrubs ; leaves 3-ribbed | <i>G. flavescens</i> |
| 1. Erect shrubs ; leaves 3-5-ribbed : | |
| 2. Peduncles shorter than petioles | <i>G. abutilifolia</i> |
| 2. Peduncles longer than petioles : | |
| 3. Flowers white | <i>G. hirsuta</i> |
| 3. Flowers pale yellow | <i>G. rothii</i> |

***Grewia abutilifolia* Vent. ex Juss.**

Shrubs. Flowers whitish-green. Drupes fleshy.

***Fl. & Fr.* : August - December. Frequent in open forests.**

***G. flavescens* A. Juss.**

Subscandent shrubs. Flowers yellow. Drupes 1-4-lobed.

***Fl. & Fr.* : June - October. Infrequent in open forests.**

***G. hirsuta* Vahl, *Chatrani*.**

Shrubs. Flowers whitish. Drupes wrinkled.

***Fl. & Fr.* : July - November. Frequent in open as well as dense forests.**

***G. rothii* DC.**

Shrubs. Flowers light yellow. Fruits hoary.

***Fl. & Fr.* : May - October. Frequent in open forests.**

TRIUMFETTA L.

- | | |
|--|------------------------|
| 1. Leaves 3-5-lobed ; bristles of capsules short, glabrous | <i>T. rhomboidea</i> |
| 1. Leaves orbicular ; bristles of capsules puberulous | <i>T. rotundifolia</i> |

***Triumfetta rhomboidea* Jacq. Bur Bush.**

Undershrubs. Flowers yellow. Fruits globose.

***Fl. & Fr.* : Greater part of the year. Frequent as forest undergrowth.**

Triumfetta rotundifolia Lam.

Undershrubs. Flowers yellow. Capsules globose.

Fl. & Fr. : Greater part of the year. Frequent as forest undergrowth.

MALPIGHIACEAE

ASPIDOPTERIS A. Juss.

Aspidopteris cordata (Heyne ex Wall.) A. Juss.

Woody climbers. Flowers white. Fruits of oblong samaras.

Fl. & Fr. : August December. Frequent in open forests.

ZYGOPHYLLACEAE

TRIBULUS L.

Tribulus terrestris L. *Gokhru*. Puncture Vine.

Trailing herbs. Flowers yellow. Fruits globose.

Fl. & Fr. : August March. Frequent weed in cultivated fields.

OXALIDACEAE

BIOPHYTUM DC.

1. Pedicels as long as or longer than calyx ; seeds spirally warty

B. candolleianum

1. Pedicels much shorter than calyx ; seeds transversely ridged or striate

B. sensitivum

Biophytum candolleianum Wight

Herbs. Flowers yellow. Capsules ovoid.

Fl. & Fr. : August December. Infrequent weed in wastelands.

B. sensitivum (L.) DC.

Herbs. Flowers yellow. Capsules ovoid.

Fl. & Fr. : September December. Frequent weed in cultivated fields and wastelands.

RUTACEAE

- | | |
|---|---------|
| 1. Leaflets 3, rachis not winged ; stamens numerous | AEGLE |
| 1. Leaflets more than 3, rachis winged ; stamens less than 15 | LIMONIA |

AEGLE *Corr. nom. cons.*

Aegle marmelos (L.) *Corr. Bel.* The Bael Tree.

Trees. Flowers greenish-white. Fruits globose.

Fl. & Fr. : April October. Frequent in outskirts of villages, usually planted.

LIMONIA L.

Limonia acidissima L. *Kawit.*

Trees. Flowers greenish yellow. Fruits ovoid or globose.

Fl. & Fr. : May December. Frequent in wastelands, especially in the village outskirts.

SIMAROUBACEAE

BALANITES *Delile nom. cons.*

Balanites aegyptiaca (L.) *Delile, Hingan.*

Trees. Flowers yellow. Fruits oblong-ovoid.

Fl. & Fr. : February June. Frequent along water courses.

MELIACEAE

- | | |
|---------------------------------|-------------|
| 1. Seeds not winged : | |
| 2. Leaves 2 or 3 pinnate | MELIA |
| 2. Leaves once pinnate | AZADIRACHTA |
| 1. Seeds winged : | |
| 3. Filaments united into a tube | SOYMIDA |
| 3. Filaments distinct | CHLOROXYLON |

AZADIRACHTA A. Juss.

Azadirachta indica A. Juss. *Nim.* Margosa Tree.

Trees. Flowers white. Fruits greenish.

Fl. & Fr. : January - June. Frequent along the fields as well as roadsides in the villages.

CHLOROXYLON A.P. DC. *nom. cons.*

Chloroxylon swietenia DC. *Bhirra.* East Indian Satin Wood.

Trees. Flowers white. Capsules ovoid.

Fl. & Fr. : March June. Frequent in open forests.

MELIA L.

Melia azadirach L. Bead Tree.

Trees. Flowers white. Fruits fleshy.

Fl. & Fr. : March June. Frequent near habitations.

SOYMIDA A. Juss.

Soymida febrifuga A. Juss. *Rohan.*

Small trees. Flowers greenish-white. Fruits woody when ripe.

Fl. & Fr. : Greater part of the year. Frequent in open and dense forests.

OLACACEAE

OLAX L.

- | | |
|---|---------------------|
| 1. Armed shrubs, drupes <i>ca</i> 1 cm long | <i>O. scandens</i> |
| 1. Unarmed shrubs, drupes <i>ca</i> 2 cm long | <i>O. imbricata</i> |

Olax imbricata Roxb.

Scandent shrubs. Flowers white. Fruits ovate-oblong.

Fl. & Fr. : February June. Infrequent in open and dense forests.

Olax scandens Roxb.

Scandent shrubs. Flowers white. Fruits ovate-oblong.

Fl. & Fr. : February June. Frequent in open forests.

CELASTRACEAE

1. Leaves alternate :

2. Unarmed, shrubby climbers, ovary free from disc CELASTRUS

2. Armed erect shrubs, ovary embedded in disc MAYTENUS

1. Leaves opposite CASSINE

CASSINE L.

Cassine glauca (Rottb.) Kuntze, *Arar.*

Trees. Flowers greenish-yellow. Fruits ovoid.

Fl. & Fr. : September February. Frequent in dense forests.

CELASTRUS L.

Celastrus paniculata Willd. *Dhimarbel.*

Stragglng shrubs. Flowers yellow. Fruits subglobose.

Fl. & Fr. : April November. Frequent in open as well as dense forests.

MAYTENUS Molina *emend.* Bose

1. Scandent, evergreen shrubs ; flowers sessile and fascicled *M. rothiana*

1. Erect, deciduous shrubs ; flowers peduncled in cymes *M. emarginata*

Maytenus emarginata (Willd.) Ding Hou

Armed shrubs. Flowers white. Capsules purple when ripe.

Fl. & Fr. : September December. Frequent in open forests.

M. rothiana (Walp.) Lobreau-Callen

Unarmed scandent shrubs. Flowers white. Fruits bright red.

Fl. & Fr. : March June. Frequent in open forests.

HIPPOCRATEACEAE

REISSANTIA Halle

Reissantia indica (Willd.) Halle

Climbing shrubs. Flowers yellow. Carpels ellipsoid.

Fl. & Fr. : April June. Infrequent in open forests.

RHAMNACEAE

- | | |
|---|-----------|
| 1. Unarmed climbers ; fruits samaroid | VENTILAGO |
| 1. Armed erect or scandent shrubs ; fruits drupaceous | ZIZIPHUS |

VENTILAGO Gaertn.

Ventilago denticulata Willd.

Extensive climbers. Flowers greenish. Fruits winged.

Fl. & Fr. : October February. Frequent in dense forests.

ZIZIPHUS Tourn. ex Mill.

- | | |
|-----------------------------------|----------------------|
| 1. Styles distinct or nearly so | <i>Z. xylopyra</i> |
| 1. Styles connate to the middle : | |
| 2. Fruits more than 1 cm across | <i>Z. mauritiana</i> |
| 2. Fruits less than 1 cm across | <i>Z. oenoplia</i> |

Ziziphus mauritiana Lam. *Ber.* Indian Jujube.

Armed trees. Flowers greenish-white. Fruits brownish.

Fl. & Fr. : September December. Frequent in open forests.

Z. oenoplia (L.) Mill.

Straggling shrubs. Flowers greenish yellow. Fruits ovoid.

Fl. & Fr. : August December. Frequent in open as well as dense forests.

Z. xylopyra (Retz.) Willd. *Ghat Bor.*

Trees. Flowers greenish. Fruits woody.

Fl. & Fr. : May October. Frequent in open as well as dense forests.

VITACEAE

- | | |
|--|--------------|
| 1. Inflorescence tendril-bearing | AMPELOCISSUS |
| 1. Inflorescence not tendril-bearing : | |
| 2. Leaves not lobed ; berry 1-seeded | CISSUS |
| 2. Leaves pedately 3-many lobed ; berry 2-4-seeded | CAYRATIA |

AMPELOCISSUS Planch. *nom. cons.*

Ampelocissus latifolia (Roxb.) Planch. *Gelinda*.

Climbers. Flowers brownish-red. Berries black.

Fl. & Fr. : July October. Frequent in open forests.

CAYRATIA A. Juss. *nom. cons.*

Cayratia trifolia (L.) Domin. Foxgrape.

Climbers. Flowers greenish-white. Berries globose.

Fl. & Fr. : May October. Frequent on thorny bushes in open forests.

CISSUS L.

- | | |
|--|---------------------|
| 1. Erect shrubs ; tendrils 0 | <i>C. woodrowii</i> |
| 1. Scandent shrubs ; tendrils leaf opposed : | |
| 2. Leaves palmately 3-5-lobed | <i>C. vitigenia</i> |
| 2. Leaves ovate or orbicular not lobed | <i>C. pallida</i> |

Cissus pallida (Wall. ex Wight & Arn.) Steud.

Straggling shrubs. Flowers reddish. Berries pyriform.

Fl. & Fr. : March June. Frequent in open forests.

C. vitigenia L.

Scandent undershrubs. Flowers greenish. Berries pyriform.

Fl. & Fr. : May October. Frequent on hedges.

Cissus woodrowii (Stapf ex Cooke) Sant.

Shrubs. Flowers green with red tinge at apex. Berries globose.

Fl. & Fr. : July September. Frequent in open forests.

LEEACEAE

LEEA L.

Leea asiatica (L.) Ridsd.

Undershrubs. Flowers white or greenish-white. Berries green.

Fl. & Fr. : July October. Frequent as forest undergrowth.

SAPINDACEAE

- | | |
|---|---------------|
| 1. Climbing herbs ; fruits inflated | CARDIOSPERMUM |
| 1 Shrubs or trees ; fruits not inflated | DODONAEA |

CARDIOSPERMUM L.

Cardiospermum halicacabum L. *Kanphuti*. Balloon Vine Hearted.

Climbers. Flowers white. Fruits inflated, pyriform.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

DODONAEA L.

Dodonaea viscosa (L.) Jacq. *Kharata*.

Shrubs. Flowers pale white. Fruits winged.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

ANACARDIACEAE

- | | |
|--|------------|
| 1. Leaves compound | LANNEA |
| 1. Leaves simple : | |
| 2. Styles 3 or more : | |
| 3. Flowers unisexual, stamens as many as petals | SEMECARPUS |
| 3. Flowers bisexual, stamens twice as many as petals | BUCHANANIA |
| 2. Styles 1 : | |
| 4. Stamens twice as many as petals, all fertile | ANACARDIUM |
| 4. Stamens rarely 4. one fertile others sterile | MANGIFERA |

ANACARDIUM L.

Anacardium occidentale L. *Kaju*. Cashewnut Tree.

Trees. Flowers yellow. Nuts reniform.

Fl. & Fr. : February May. Infrequent as an escape, planted.

BUCHANANIA Spreng.

Buchanania lanzan Spreng. *Charoli*.

Trees. Flowers white. Fruits green turning brownish-red.

Fl. & Fr. : January June. Frequent in open forests.

LANNEA A. Rich.

Lannea coromandelica (Houtt.) Merr. *Mowai*.

Trees. Flowers pale white. Fruits oblong.

Fl. & Fr. : February June. Frequent in open and dense forests.

MANGIFERA L.

Mangifera indica L. *Amba*. Mango.

Trees. Flowers white. Fruits green.

Fl. & Fr. : February July. Infrequent as an escape, planted.

SEMECARPUS L. f.

Semecarpus anacardium L. f. *Bibba*. Oriental Cashew.

Trees. Flowers pale white. Fruits black when ripe.

Fl. & Fr. : May - October. Frequent in open as well as dense forests.

FABACEAE

1. Flowers white, yellow or blue :

2. Trees or shrubs :

3. Leaflets opposite, 22-30

3. Leaflets alternate, 3-7 :

SESBANIA

- | | |
|---|--------------|
| 4. Leaflets 3-5 ; pods strap shaped | DALBERGIA |
| 4. Leaflets 5-7 ; pods orbicular, winged | PTEROCARPUS |
| 2. Herbs or climbers : | |
| 5. Marshy herbs | AESCHYNOMENE |
| 5. Terrestrial plants : | |
| 6. Erect trees | PONGAMIA |
| 6. Plants not erect : | |
| 7. Climbing or twining herbs or shrubs : | |
| 8. Leaflets 9-13 ; pods flat, narrowly winged | DERRIS |
| 8. Leaflets 3-7 ; pods linear, not winged : | |
| 9. Stamens monadelphous : | |
| 10. Anthers alternately fertile ; pods beak narrowly incurved | TERAMNUS |
| 10. Anthers all fertile ; pods beak if present, not so | CANAVALIA |
| 9. Stamens diadelphous : | |
| 11. Leaves not gland dotted : | |
| 12. Calyx teeth not distinct ; pods flattened | GALACTIA |
| 12. Calyx teeth distinct ; pods subterete | VIGNA |
| 11. Leaves gland dotted : | |
| 13. Ovules 1-2 | ATYLOSIA |
| 13. Ovules 3 or more : | |
| 14. Leaflets modified into tendrils | LATHYRUS |
| 14. Leaflets not modified into tendrils : | |
| 15. Calyx teeth accrescent | PARACALYX |
| 15. Calyx teeth not accrescent : | |
| 16. Leaves pinnate ; pods compressed | RHYNCHOSIA |

16. Leaves digitate ; pods turgid **FLEMINGIA**
7. Erect or prostrate herbs or shrubs :
17. Leaves pinnately compound ; leaflets 2-8 pairs **SMITHIA**
17. Leaves simple, bifoliate or 3-7-foliately compound, but not pinnately compound :
18. Leaves bi-or trifoliately compound :
19. Leaves bifoliately compound **ZORNIA**
19. Leaves trifoliately compound **CAJANUS**
18. Leaves simple or 3-7-foliately compound :
20. Leaves either simple or 3-7-foliately compound **CROTALARIA**
20. Leaves simple :
21. Flowers solitary, axillary **GONIOGYNA**
21. Flowers in subcapitate heads **PSORALEA**
1. Flowers orange, pink, purple, violet or lilac (rarely white in *Desmodium* and *Tephrosia*) :
22. Leaves 1-3-foliolate (except in *Clitoria*) :
23. Trees **BUTEA**
23. Herbs, shrubs or climbers :
24. Climbing shrubs :
25. Leaflets 3, pods 'S' shaped with irritant bristles **MUCUNA**
25. Leaflets 5-7, pods nearly straight, sparsely hairy **CLITORIA**
24. Erect or prostrate herbs, undershrubs or shrubs :
26. Herbs :
27. Pods linear, jointed, turgid **ALYSICARPUS**
27. Pods boat-shaped, flat **FLEIOTIS**

26. Undershrubs or shrubs (except *Desmodium trifolium* DC.) :
- 28. Pods not jointed, viscid PSEUDARTHRIA
 - 28. Pods jointed, not viscid :
 - 29. Loments of the pod not folded on one another but separating into one seeded bits at maturity DESMODIUM
 - 29. Loments of the pod folding on one another, included in the calyx even at maturity URARIA
21. Leaves 3-13-foliolate or more :
- 30. Climbing herbs ABRUS
 - 30. Erect herbs or undershrubs :
 - 31. Hairs on leaves medifixed ; anthers apiculate INDIGOFERA
 - 31. Hairs on leaves basifixed ; anthers obtuse TEPHROSIA

ABRUS Adans.

***Abrus precatorius* L. *Gunj.* Indian Liquorice.**

Climbers. Flowers white. Fruits oblong, turgid.

***Fl. & Fr.* : August March. Frequent in open forests.**

AESCHYNOMENE L.

- 1. Stems spongy ; calyx hispid *A. aspera*
- 1. Stems woody ; calyx glabrous *A. indica*

***Aeschynomene aspera* L. The Sola Pith Plant.**

Marshy herbs. Flowers yellow. Fruits jointed, asperulate.

***Fl. & Fr.* : January May. Infrequent in moist shady places.**

***A. indica* L.**

Procumbent herbs. Flowers yellow. Fruits curved.

***Fl. & Fr.* : August January. Frequent in moist shady places.**

ALYSICARPUS Desv. nom. cons.

1. Calyx as long as the first joint of the pod :
 2. Pods moniliform *A. monilifer*
 2. Pods not moniliform :
 3. Calyx shorter than first joint of the pod *A. procumbens*
 3. Calyx equal or slightly longer than the first joint of the pod *A. vaginalis*
1. Calyx much longer than the first joint of the pod :
 4. Pods not ribbed *A. bupleurifolius*
 4. Pods transversely ribbed :
 5. Pods 2-edged :
 6. Sepals acute ; pods distinctly exerted *A. rugosus*
 6. Sepals acuminate ; pods hardly exerted *A. rugosus* var. *styracifolius*
 5. Pods 4-edged *A. tetragonolobus*

***Alysicarpus bupleurifolius* (L.) DC.**

Herbs. Flowers pink. Fruits cylindrical.

Fl. & Fr. : August October. Frequent in shady places.

***A. monilifer* (L.) DC.**

Prostrate herbs. Flowers purple. Fruits moniliform.

Fl. & Fr. : October May. Frequent weed in cultivated fields.

***A. procumbens* (Roxb.) Schindler**

Procumbent herbs. Flowers light pink. Pods pale green.

Fl. & Fr. : September November. Frequent weed in open forests.

***A. rugosus* (Willd.) DC. var. *rugosus*.**

Suberect herbs. Flowers pink to light purple. Fruits exerted, jointed.

Fl. & Fr. : July December. Frequent in wastelands.

***A. rugosus* var. *styracifolius* Baker**

Spreading herbs. Flowers light pink. Fruits hardly exerted, jointed, rugose.

Fl. & Fr. : September May. Frequent in wastelands.

***Alysicarpus tetragonolobus* Edgew.**

Slender herbs. Flowers dark pink. Pods pale green.

Fl. & Fr. : August November. Frequent as forest undergrowth.

***A. vaginalis* (L.) DC.**

Spreading prostrate herbs. Flowers light pink to purple. Fruits oblong.

Fl. & Fr. : August November. Frequent weed in cultivated fields.

ATYLOSIA Wight & Arn.

1. Pods more than 1 cm, broad, clothed with short deciduous hairs

A. platycarpa

1. Pods less than 1 cm broad, clothed with spreading silky hairs

A. scarabaeoides

***Atylosia platycarpa* L.**

Trailing herbs. Flowers yellow. Pods oblong.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

***A. scarabaeoides* (L.) Benth.**

Twiners. Flowers yellow. Pods oblong.

Fl. & Fr. : Greater part of the year. Frequent on hedges.

BUTEA Roxb. ex Willd.

***Butea monosperma* (Lam.) Taub. The Flame of the Forest.**

Trees. Flowers orange-red. Fruits flat, oblong.

Fl. & Fr. : February - June. Frequent in open forests.

CAJANUS DC. *nom. cons.*

***Cajanus cajan* (L.) Millsp. Tur. Red Gram.**

Shrubs. Flowers yellow. Fruits green.

Fl. & Fr. : August December. Infrequent as an escape.

CANAVALIA Adans. *emend* DC. *nom. cons.****Canavalia ensiformis* DC. Jack Bean.**

Stout twiners. Flowers white or lilac. Fruits oblong.

Fl. & Fr.* : August December. Infrequent in open forests.*CLITORIA L.*****Clitoria ternatea* L. *Gokarni*.**

Undershrubs. Flowers blue. Pods pale green.

Fl. & Fr.* : September May. Frequent on hedges as an escape near villages.*CROTALARIA L.**

- | | |
|--|-----------------------|
| 1. Leaves 3-7-foliolate | <i>C. orixensis</i> |
| 1. Leaves simple : | |
| 2. Diffuse herbs : | |
| 3. Racemes all lateral | <i>C. prostrata</i> |
| 3. Racemes all terminal or a few also lateral : | |
| 4. Pods included or scarcely exerted | <i>C. linifolia</i> |
| 4. Pods distinctly exerted : | |
| 5. Stipules only at the forks of the branches, not at the base of leaves | <i>C. hirta</i> |
| 5. Stipules totally absent : | |
| 6. Plants exceeding 30 cm high | <i>C. albida</i> |
| 6. Plants under 30 cm high | <i>C. pusilla</i> |
| 2. Erect herbs or shrubs : | |
| 7. Pods downy | <i>C. hirsuta</i> |
| 7. Pods glabrous : | |
| 8. Stipules and bracts subulate | <i>C. retusa</i> |
| 8. Stipules and bracts foliaceous | <i>C. sericea</i> |
| 9. Flowers in terminal or lateral racemes ; pods 10-15-seeded | <i>C. juncea</i> |
| 9. Flowers in panicles ; pods 1-2-seeded | <i>C. ramosissima</i> |

Crotalaria albida Heyne ex Roth

Herbs. Flowers yellow. Pods pale green.

Fl. & Fr. : Greater part of the year. Frequent as forest undergrowth.

C. hirsuta Willd.

Herbs. Flowers yellow. Pods oblong.

Fl. & Fr. : August - November. Infrequent as forest undergrowth.

C. hirta Willd.

Decumbent herbs. Flowers yellow. Pods green.

Fl. & Fr. : September November. Infrequent as forest undergrowth.

C. juncea L. Sann Hemp.

Undershrubs. Flowers yellow. Pods pubescent.

Fl. & Fr. : September January. Frequent as an escape.

C. linifolia L. f.

Herbs. Flowers yellow. Pods ovoid-oblong.

Fl. & Fr. : July December. Frequent as forest undergrowth.

C. orixensis Willd.

Diffuse herbs. Flowers yellow. Pods oblong, stalked.

Fl. & Fr. : March December. Frequent as forest undergrowth.

C. prostrata Rottl. ex Willd.

Herbs. Flowers yellow. Pods glabrous.

Fl. & Fr. : September May. Frequent weed in cultivated fields.

C. pusilla Heyne ex Roth

Herbs. Flowers yellow. Pods oblong.

Fl. & Fr. : September November. Frequent as forest undergrowth.

C. ramosissima Roxb.

Herbs. Flowers yellow. Pods sessile, oblong.

Fl. & Fr. : September December. Infrequent in moist gritty soils as forest undergrowth.

***Crotalaria retusa* L.**

Undershrubs. Flowers bright yellow. Pods oblong.

Fl. & Fr. : August December. Frequent as forest undergrowth.

***C. sericea* Retz.**

Robust herbs. Flowers yellow. Pods stipitate, glabrous.

Fl. & Fr. : November March. Infrequent in open forests.

DALBERGIA L. f.

- | | |
|--|-----------------------|
| 1. Stamens 9 (rarely 10), monadelphous | <i>D. latifolia</i> |
| 1. Stamens 5+5 diadelphous : | |
| 2. Standard longer than broad | <i>D. paniculata</i> |
| 2. Standard as long as broad | <i>D. lanceolaria</i> |

***Dalbergia lanceolaria* L. f.**

Trees. Flowers white. Pods greenish-yellow.

Fl. & Fr. : February November. Frequent in open and dense forests.

***D. latifolia* Roxb. East Indian Rosewood.**

Trees. Flowers white. Pods slightly thickened.

Fl. & Fr. : September February. Frequent in open and dense forests.

***D. paniculata* Roxb.**

Trees. Flowers white. Pods stalked, narrowed at both ends.

Fl. & Fr. : June February. Frequent in open forests.

DERRIS Lour.

***Derris scandens* (Roxb.) Benth.**

Scandent shrubs. Flowers light pink. Pods pale green.

Fl. & Fr. : May - December. Frequent in open forests.

DESMODIUM Desv.

1. Leaves unifoliate :
2. Joints of pod longer than broad *D. gangeticum*
2. Joints of pod as long as broad *D. velutinum*
1. Leaves pinnately trifoliate :
3. Flowers hidden in persistent, orbicular bracts *D. pulchellum*
3. Flowers not hidden, bracts not orbicular :
4. Trailing herbs *D. triflorum*
4. Erect herbs or undershrubs :
5. Stipules foliaceous, auricled *D. dichotomum*
5. Stipules linear, scarious *D. heterocarpon*

Desmodium dichotomum (Willd.) DC.

Stragglng herbs. Flowers light purple. Pods linear, moniliform.

Fl. & Fr. : September - May. Frequent as forest undergrowth.

D. gangeticum (L.) DC.

Herbs. Flowers pinkish-purple. Pods 6-8-jointed.

Fl. & Fr. : August - February. Frequent as forest undergrowth.

D. heterocarpon (L.) DC.

Suffruticose herbs. Flowers light pink. Pods linear.

Fl. & Fr. : September - February. Frequent as forest undergrowth.

D. pulchellum (L.) Benth.

Herbs or undershrubs. Flowers yellow. Pods reticulate.

Fl. & Fr. : October - February. Frequent as forest undergrowth.

D. triflorum (L.) DC.

Prostrate herbs. Flowers pink. Pods flat.

Fl. & Fr. : Greater part of the year. Frequent as forest undergrowth and also as weed in cultivated fields.

Desmodium velutinum (Willd.) DC.

Herbs or undershrubs. Flowers light purple. Pods deeply indented on lower suture.

Fl. & Fr. : August - December. Frequent as forest undergrowth.

ELBIOTIS DC.**Eleiotis monophylla** (Burm. f.) DC.

Trailing herbs. Flowers light pink to purple. Pods boat-shaped, glabrous.

Fl. & Fr. : September - January. Frequent as forest undergrowth.

FLEMINGIA Roxb.

- | | |
|--|------------------------|
| 1. Leaves simple or 3-foliolate, flowers in few flowered cymes | <i>F. strobilifera</i> |
| 1. Leaves digitately 3-foliolate, flowers in globose heads | <i>F. involucrata</i> |

Flemingia involucrata Wall. ex Benth.

Shrubs. Flowers white. Pods oblong, turgid.

Fl. & Fr. : November - February. Infrequent in grassy places.

F. strobilifera (L.) R. Br.

Undershrubs. Flowers white. Pods oblong, densely pubescent.

Fl. & Fr. : November - March. Infrequent in open forests.

GALACTIA R. Br.**Galactia tenuiflora** (Klein ex Willd.) Wight & Arn.

Twining herbs. Flowers pink. Pods flat.

Fl. & Fr. : August - October. Infrequent on hedges.

GONIOGYNA DC.**Goniogyna hirta** (Willd.) Ali

Prostrate herbs. Flowers yellow. Pods flat.

Fl. & Fr. : August - November. Frequent weed in cultivated fields.

INDIGOFERA L.

- 1. Leaves simple :
 - 2. Pods 2-seeded *I. cordifolia*
 - 2. Pods 1-seeded :
 - 3. Pods sickle shaped, spiny *I. nummularifolia*
 - 3. Pods globose, not spiny *I. linifolia*
- 1. Leaves imparipinnate :
 - 4. Flowers in axillary, sessile or short peduncled heads *I. glandulosa*
 - 4. Flowers in axillary racemes :
 - 5. Leaflets 13 or more, racemes numerous, flowers large *I. cassioides*
 - 5. Leaflets less than 13, racemes more than 12 flowered, small :
 - 6. Pods glabrous, terete *I. tinctoria*
 - 6. Pods densely pubescent, tetragonous *I. astragalina*
 - 7. Leaflets 5, racemes 2 - 5-flowered *I. glabra*
 - 7. Leaflets 3, racemes 6 - 12-flowered :
 - 8. Terminal leaflets sessile *I. trifoliata*
 - 8. Terminal leaflets stalked *I. trita*

***Indigofera astragalina* DC.**

Hirsute herbs. Flowers pink to red. Fruits tetragonous.

Fl. & Fr. : August - December. Frequent as forest undergrowth.

***I. cassioides* Rottl. ex DC.**

Undershrubs or shrubs. Flowers pink. Pods glabrous.

Fl. & Fr. : October - March. Frequent in open forests.

***I. cordifolia* Heyne ex Roth**

Diffusely branched herbs. Flowers pink. Pods cylindric.

Fl. & Fr. : August - November. Frequent weed in cultivated fields.

Indigofera glabra L.

Procumbent herbs. Flowers red. Pods purplish.

Fl. & Fr. : August - November. Frequent in wastelands.

I. glandulosa Roxb. ex Willd. Befri.

Erect herbs. Flowers red. Pods oblong.

Fl. & Fr. : August - December. Frequent weed in wastelands.

I. linifolia Retz.

Prostrate herbs. Flowers bright red. Pods globose.

Fl. & Fr. : July - November. Frequent weed in wastelands.

I. nummularifolia (L.) Lerera ex Alston

Spreading herbs. Flowers pink to red. Pods sickle-shaped, beaked.

Fl. & Fr. : August - October. Frequent in rocky crevices.

I. tinctoria L. Indian Indigo.

Undershrubs. Flowers pink. Pods cylindrical.

Fl. & Fr. : Greater part of the year. Infrequent weed in wastelands.

I. trifoliata L.

Diffuse herbs. Flowers red. Pods linear.

Fl. & Fr. : August - November. Frequent as forest undergrowth.

I. trita L. f.

Erect herbs. Flowers pink. Pods rigid.

Fl. & Fr. : August - January. Frequent as forest undergrowth.

LATHYRUS L.

Lathyrus sativus L. Grass Pea.

Glabrous herbs. Flowers solitary, white, bluish or red. Pods oblong.

Fl. & Fr. : September - December. Frequent as an escape. Often cultivated.

MUCUNA Adans. *nom. cons.***Mucuna pruriens** (L.) DC.

Climbers. Flowers dark purple or violet. Pods 'S' shaped.

Fl. & Fr. : September February. Frequent on hedges.

PARACALYX Ali**Paracalyx scariosa** (Roxb.) Ali

Extensive climbers. Flowers yellow. Pods glandular, oblique.

Fl. & Fr. : October December. Infrequent in open forests.

PONGAMIA Vent.**Pongamia pinnata** (L.) Pierre, Indian Beech.

Trees. Flowers light purple. Pods woody.

Fl. & Fr. : May October. Infrequent along roadsides.

PSEUDARTHRIA Wight & Arn.**Pseudarthria viscida** Wight & Arn.

Straggling herbs. Flowers pink to purplish. Pods flat.

Fl. & Fr. : August February. Frequent as forest undergrowth.

PSORALEA L.**Psoralea corylifolia** L. *Bavachi*.

Herbs. Flowers light purple. Pods oblong-ovoid.

Fl. & Fr. : October March. Infrequent weed in harvested fields.

PTEROCARPUS Jacq. *nom. cons.***Pterocarpus marsupium** Roxb. *Bija*. Indian Kino Tree.

Trees. Flowers yellow. Pods convexly curved.

Fl. & Fr. : September March. Frequent in open forests.

RHYNCHOSIA Lour.

- | | |
|--|--------------------|
| 1. Trailing herbs ; seeds strophiolate | <i>R. capitata</i> |
| 1. Twiners ; seeds estrophiolate | <i>R. minima</i> |

Rhynchosia capitata DC.

Trailing herbs. Flowers yellow. Pods brownish.

Fl. & Fr. : September - December. Frequent as forest undergrowth.

R. minima DC.

Slender twiners. Flowers yellow. Pods compressed, turgid.

Fl. & Fr. : May November. Frequent on hedges.

SESBANIA Scop. *nom. cons.*

Sesbania bispinosa (Jacq.) F.W. Wight, Shevori.

Herbs or undershrubs. Flowers yellow. Pods turgid.

Fl. & Fr. : September - December. Frequent on hedges.

SMITHIA Ait.

Smithia conferta Sm.

Herbs. Flowers yellow. Pods 3-6-jointed.

Fl. & Fr. : September May. Frequent in moist habitats as forest undergrowth.

TEPHROSIA Pers. *nom. cons.*

- | | |
|--|---|
| 1. Stems strigose ; leaves simple | <i>T. strigosa</i> |
| 1. Stems glabrous ; leaves imparipinnate : | |
| 2. Flowers in elongated racemes : | |
| 3. Pods tomentose | <i>T. hirta</i> |
| 3. Pods glabrescent | <i>T. purpurea</i> |
| 2. Flowers 1-2 in leaf axils : | |
| 4. Pods straight | <i>T. uniflora</i>
<i>ssp. petrosa</i> |
| 4. Pods much recurved | <i>T. senticosa</i> |

Tephrosia hirta Buch.-Ham.

Herbs. Flowers pink or purple. Pods flat.

Fl. & Fr. : August May. Frequent weed in cultivated fields and wastelands.

T. purpurea (L.) Pers. Wild Indigo.

Herbs. Flowers purple. Pods linear.

Fl. & Fr. : August April. Frequent weed in cultivated fields and wastelands.

T. senticosa (L.) Pers.

Shrubs or undershrubs. Flowers pinkish. Pods linear, flattened.

Fl. & Fr. : August December. Infrequent in open forests.

T. strigosa (Dalz.) Sant. Mahesh.

Herbs. Flowers pink to purple. Pods flat, greenish.

Fl. & Fr. : September November. Frequent in moist habitats.

T. uniflora Pers. var. **petrosa** (Blatt. & Hallb.) Gillet & Ali

Suffrutescent herbs. Flowers violet. Pods hairy.

Fl. & Fr. : August December. Frequent in moist habitats.

TERAMNUS SW.

Teramnus labialis (L. f.) Spreng.

Twiners. Flowers white to pink. Pods linear.

Fl. & Fr. : August May. Frequent as forest undergrowth.

URARIA Desv.

- | | |
|-----------------------------------|-------------------------|
| 1. Upper leaves 5 - 9-foliolate | <i>U. picta</i> |
| 1. Upper leaves 1 - 3-foliolate : | |
| 2. Flowers in dense racemes | <i>U. alopecuroides</i> |
| 2. Flowers in lax racemes | <i>U. rufescens</i> |

Uraria alopecuroides (Roxb.) Wight

Undershrubs. Flowers light pink. Pods glabrous.

Fl. & Fr. : July September. Infrequent in open forests.

Uraria picta (Jacq.) Desv. ex DC.

Suffruticose herbs. Flowers pink. Pods glabrous.

Fl. & Fr. : August - October. Frequent as forest undergrowth.

U. rufescens (DC.) Schindler

Straggling undershrubs. Flowers pink. Pods 4-6-jointed.

Fl. & Fr. : September - December. Frequent as forest undergrowth.

VIGNA Savi

- | | |
|---|-----------------------|
| 1. Plants glabrous throughout | <i>V. dalzelliana</i> |
| 1. Some parts of the plants or atleast the pods hairy or hirsute : | |
| 2. Stipules not distinctly peltate ; calyx with slender teeth | <i>V. vexillata</i> |
| 2. Stipules distinctly peltate or spurred ; calyx with short, blunt lobes : | |
| 3. Leaflets entire | <i>V. radiata</i> |
| 3. Leaves lobed | <i>V. trilobata</i> |

Vigna dalzelliana (Kuntze) Verdc.

Twiners. Flowers yellow. Pods subcylindric.

Fl. & Fr. : September - December. Frequent in moist habitats.

V. radiata (L.) Wilczek, Green Gram.

Twining herbs. Flowers yellow. Pods compressed.

Fl. & Fr. : August - October. Frequent in moist habitats.

V. trilobata (L.) Verdc.

Diffuse, trailing, pubescent herbs. Flowers yellow. Pods cylindrical.

Fl. & Fr. : October - January. Frequent in moist habitats.

V. vexillata (L.) A. Rich.

Sparsely pubescent twiners. Flowers white, rose or purplish. Pods compressed.

Fl. & Fr. : August - December. Frequent in moist habitats.

ZORNIA Gmel.

Zornia gibbosa Span.

Prostrate herbs. Flowers yellow. Pods often exserted, 2-6-jointed.

Fl. & Fr. : August - November. Frequent weed in cultivated fields and wastelands.

CAESALPINIACEAE

- 1. Leaves 1 - 2-pinnate ; leaflets distinct :
 - 2, Leaves bipinnate :
 - 3. Pods winged PELTOPHORUM
 - 3. Pods not winged CAESALPINIA
 - 2. Leaves unipinnate :
 - 4. Calyx tube short, less than 0.5 cm long CASSIA
 - 4. Calyx tube elongate, more than 1.0 cm long TAMARINDUS
- 1. Leaves not pinnate, bifoliate :
 - 5. Calyx spathaceous PILIOSTIGMA
 - 5. Calyx divided into segments BAUHINIA

BAUHINIA L.

Bauhinia racemosa Lam. *Apta, Kanchan.*

Trees. Flowers white. Pods glabrous.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

CAESALPINIA L.

Caesalpinia pulcherrima (L.) Sw. Peacock Flower.

Prickly, glabrous shrubs. Flowers yellow. Pods narrow at both ends.

Fl. & Fr. : Greater part of the year. Frequent as hedge.

CASSIA L.

1. Trees ; pods terete *C. fistula*
1. Shrubs, undershrubs or herbs ; pods flat :
 2. Plants erect ; leaflets upto 12 pairs :
 3. Leaflets 2 pairs ; fertile stamens 5 *C. absus*
 3. Leaflets 3-12 pairs ; fertile stamens 7 :
 4. Gland one, placed near the base of petiole *C. occidentalis*
 4. Glands between 1 or more pairs of leaflets :
 5. Gland between each of the two lowest pairs of leaflets *C. tora*
 5. Gland between each of the lowest pair of leaflets only *C. obtusifolia*
 2. Plants prostrate ; leaflets 12-40 pairs or even more :
 6. Leaflets 10-20 pairs ; pods nearly straight *C. pumila*
 6. Leaflets more than 20 pairs ; pods curved *C. mimosoides*

Cassia absus L.

Viscid glandular herbs. Flowers yellow. Pods flat.

Fl. & Fr. : August - March. Frequent in open and dense forests.

C. fistula L. *Bhawa*. Purgive Fistula.

Trees. Flowers yellow. Pods pendulous, cylindrical.

Fl. & Fr. : August - March. Frequent in open and dense forests.

C. mimosoides L.

Procumbent herbs. Flowers yellow. Pods flat, slightly curved.

Fl. & Fr. : August - October. Frequent as forest undergrowth.

C. obtusifolia L.

Erect herbs. Flowers yellow. Pods curved, beaked, many seeded.

Fl. & Fr. : August¹ - October. Infrequent in open forests.

C. occidentalis L. *Kasoda*. The Negro Coffee.

Herbs. Flowers yellow. Pods compressed.

Fl. & Fr. : Greater part of the year. Frequent in wastelands.

Cassia pumila Lam.

Prostrate herbs. Flowers yellow. Pods linear.

Fl. & Fr. : August - October. Frequent as forest undergrowth.

C. tora L. *Tarota, Tarwad.*

Herbs. Flowers yellow. Pods subtetragonous.

Fl. & Fr. : August - April. Frequent weed in cultivated fields and wastelands.

PELTOPHORUM Walp.

Peltophorum pterocarpum (DC.) Baker ex Heyne, Copper Pod.

Trees. Flowers yellow. Fruits compressed, oblong, margins winged.

Fl. & Fr. : April - October. Frequent. Planted.

PILIOSTIGMA Hochst. *nom. cons.*

Piliostigma malabaricum (Roxb.) Benth.

Trees. Flowers cream coloured. Pods nearly straight, glabrous.

Fl. & Fr. : October - July. Infrequent in open forests.

TAMARINDUS L.

Tamarindus indica L. *Chinch.* Tamarind Tree.

Trees. Flowers yellow. Pods slightly compressed.

Fl. & Fr. : May - December. Frequent. Planted.

MIMOSACEAE

- | | |
|---|-------------|
| 1. Stamens definite, 4-10 : | |
| 2. Flowers in spikes | ADENANTHERA |
| 2. Flowers in globose heads : | |
| 3. Flowers yellow | NEPTUNIA |
| 3. Flowers pinkish | MIMOSA |
| 1. Stamens indefinite, numerous : | |
| 4. Stamens free | ACACIA |
| 4. Stamens monadelphous, atleast united below | ALBIZIA |

ACACIA Willd.

- | | |
|---|-----------------------|
| 1. Stems and branches with prickles but not stipular spines | <i>A. torta</i> |
| 1. Stamens and branches with stipular spines but without prickles : | |
| 2. Flowers in heads | <i>A. leucophloea</i> |
| 2. Flowers in elongate, cylindrical spikes : | |
| 3. Leaflets 10-20 pairs ; pods flat, thin | <i>A. catechu</i> |
| 3. Leaflets 20-40 pairs ; pods constricted between seeds | <i>A. chundra</i> |

Acacia catechu Willd.

Trees. Flowers pale yellow. Pods glabrous.

Fl. & Fr. : August - December. Frequent in open forests.

A. chundra (Roxb. ex Rottl.) Willd.

Trees. Flowers white. Pods flat.

Fl. & Fr. : August - February. Frequent in open forests.

A leucophloea (Roxb.) Willd.

Armed trees. Flowers pale white. Pods compressed.

Fl. & Fr. : August - December. Frequent along forest roads.

A. torta (Roxb.) Craib

Stragglng shrubs. Flowers white. Pods thin, flat, glabrous.

Fl. & Fr. : May - August. Infrequent in open forests.

ADENANTHERA L.**Adenanthera pavonina L. Coral Wood.**

Trees. Flowers yellow. Pods flat, falcate.

Fl. & Fr. : December - March. Infrequent in open forests. Also planted.

ALBIZIA Durazz.

- | | |
|--|------------------------|
| 1. Heads spicate ; flowers pedicelled | <i>A. lebbeck</i> |
| 1. Heads paniced ; flowers usually sessile | <i>A. odoratissima</i> |

Albizia lebbek (L.) Willd. *Chinchola*. East Indian Walnut.

Trees. Flowers greenish-white with yellow tinge. Pods linear.

Fl. & Fr. : May - December. Frequent along forest roadsides.

A. odoratissima (L. f.) Benth.

Trees. Flowers white. Pods flat.

Fl. & Fr. : April - November. Frequent in open forests.

MIMOSA L.

Mimosa hamata Willd.

Armed shrubs. Flowers pink. Pods falcate.

Fl. & Fr. : August - November. Frequent in open forests.

NEPTUNIA Lour.

Neptunia triquetra (Willd.) Benth.

Prostrate herbs. Flowers yellow. Pods oblong, glabrous.

Fl. & Fr. : March - September. Infrequent amongst grasses in open forests.

DROSERACEAE

DROSERA L.

1. Leaves all radical, spatulate

D. burmannii

1. Leaves both radical and cauline, linear

D. indica

Drosera burmannii Vahl

Herbs. Flowers white. Capsules subglobose.

Fl. & Fr. : October - May. Infrequent in moist soils.

D. indica L.

Herbs. Flowers pink. Capsules globose.

Fl. & Fr. : August - November. Infrequent in moist soils.

HALORAGACEAE

MYRIOPHYLLUM L.

Myriophyllum spathulatum Blatt. & Hallb.

Submerged aquatic herbs. Flowers pink. Fruits schizocarpus.

Fl. & Fr. : September - October. Infrequent in moist soils.

COMBRETACEAE

- | | |
|--|--------------|
| 1. Petals present | COMBRETUM |
| 1. Petals absent : | |
| 2. Inflorescence capitate ; fruits 2-winged | ANOGEISSUS |
| 2. Inflorescence of spikes or racemes, fruits not winged : | |
| 3. Climbers ; calyx accrescent ; flowers racemose | CALYCOPTERIS |
| 3. Trees or shrubs ; calyx deciduous ; flowers spicate | TERMINALIA |

ANOGEISSUS (A.P.DC.) Guill & Perr.

- | | |
|--|---------------------|
| 1. Leaves sericeous, less scabrimform on the underside | <i>A. sericea</i> |
| 1. Leaves not sericeous, more scabrimform on the underside | <i>A. latifolia</i> |

Anogeissus latifolia (DC.) Wall. ex Bedd. Dhawda.

Trees. Flowers yellow. Fruits compressed.

Fl. & Fr. : August March. Frequent in open forests.

A. sericea Brandis

Trees. Flowers greenish-white. Fruits broader than long.

Fl. & Fr. : February July. Infrequent in open forests.

CALYCOPTERIS Lam.

Calycopteris floribunda (Roxb.) Lam.

Climbers. Flowers greenish-yellow. Fruits with brownish-yellow tomentum.

Fl. & Fr. : February May. Frequent in open and dense forests.

COMBRETUM Loeffl. *nom. cons.***Combretum albidum G. Don**

Straggling shrubs. Flowers pale white. Fruits pale brown.

Fl. & Fr. : February May. Frequent in open and dense forests.

TERMINALIA L. *nom. cons.*

- 1. Fruits not winged :
 - 2. Fruits ovoid, 5-ribbed, glabrous *T. chebula*
 - 2. Fruits globose, obscurely angled ; softly velvety tomentose *T. bellirica*
- 1. Fruits winged :
 - 3. Calyx hairy *T. alata*
 - 3. Calyx glabrous :
 - 4. Glands on lower leaf-midrib *T. crenulata*
 - 4. Glands on the apex of the petiole *T. arjuna*

***Terminalia alata* Heyne ex Roth**

Trees. Flowers white. Fruits glabrous, 5-winged.

Fl. & Fr. : July March. Frequent in open forests.

T. arjuna* (Roxb. ex DC.) Wight & Arn. *Arjun.

Trees. Flowers greenish. Fruits drupaceous.

Fl. & Fr. : July February. Frequent in open and dense forests.

***T. bellirica* (Breyn ex Gaertn.) Roth, *Behda.* Belliric Myrobalan.**

Trees. Flowers yellow. Fruits softly, ferruginously silky-hairy.

Fl. & Fr. : April October. Frequent in open and dense forests.

***T. chebula* Retz. Chebulic Myrobalan.**

Trees. Flowers white. Fruits ellipsoid.

Fl. & Fr. : April - November. Frequent in open and dense forests.

T. crenulata* Roth *Ain.

Trees. Flowers light yellow. Fruits 5-winged.

Fl. & Fr. : July September. Frequent in open and dense forests.

MYRTACEAE

- 1. Flowers white, solitary or in 1 3-flowered cymes ; ovary 4 - 5-celled **PSIDIUM**
- 1. Flowers pale white or pink, in terminal cymose panicles ; ovary 2 - 3-celled **SYZYGIUM**

PSIDIUM L.

Psidium guajava L. *Peru*. Common Guava.

Shrubs or small trees. Flowers white. Fruits pyriform or globose.

Fl. & Fr. : January May. Frequent as an escape. Also planted.

SYZYGIUM Gaertn. *nom. cons.*

Syzygium cumini (L.) Skeels, *Jambus*. Black Plum.

Trees. Flowers white. Fruits dark purple.

Fl. & Fr. : April August. Frequent in wastelands.

LECYTHIDACEAE

CAREYA Roxb.

Careya arborea Roxb. *Kumbhi*. Kumbi.

Trees. Flowers white. Fruits globular.

Fl. & Fr. : March August. Infrequent in wastelands.

MELASTOMATACEAE

OSBECKIA L.

- | | |
|---|---------------------|
| 1. Stems terete ; anthers short, truncate at apex | <i>O. truncata</i> |
| 1. Stems 4-angled ; anthers abruptly beaked, beaks slender : | |
| 2. Leaves linear-lanceolate ; calyx tube glabrous | <i>O. chinensis</i> |
| 2. Leaves oblong-lanceolate ; calyx tube both with simple and stellate bristles | <i>O. zeylanica</i> |

Osbeckia chinensis L.

Herbs. Flowers mauve. Fruits ovoid.

Fl. & Fr. : September January. Infrequent in moist habitats.

O. truncata D. Don ex Wight & Arn.

Herbs. Flowers purple. Fruits subglobose.

Fl. & Fr. : September December. Frequent as forest undergrowth.

Osbeckia zeylanica Willd.

Herbs. Flowers pink. Fruits ovoid.

Fl. & Fr. : October - February. Frequent in moist habitats.

LYTHRACEAE

- 1. Herbs ; flowers small :
 - 2. Capsules septicidally dehiscent ROTALA
 - 2. Capsules circumscissile or bursting irregularly AMMANNIA
- 1. Shrubs or trees, flowers large :
 - 3. Flowers zygomorphic ; calyx tube long WOODFORDIA
 - 3. Flowers actinomorphic ; calyx tube short :
 - 4. Stamens 4 LAWSONIA
 - 4. Stamens many LAGERSTROEMIA

AMMANNIA L.

- 1. Flowers in clusters, ovary 5-celled *A. baccifera*
- 1. Flowers in cymes, ovary 4-celled *A. multiflora*

***Ammannia baccifera* L. Blistering Ammania.**

Herbs. Flowers reddish. Capsules longer than the calyx.

Fl. & Fr. : September - May. Frequent in moist habitats.

***A. multiflora* Roxb.**

Herbs. Flowers light violet. Capsules not wholly covered by the calyx.

Fl. & Fr. : August - December. Frequent in moist habitats.

LAGERSTROEMIA L.

- 1. Shrubs. Flowers variously coloured, 3-5 cm across *L. indica*
- 1. Trees. Flowers white, 1-1.5 cm across *L. parviflora*

***Lagerstroemia indica* L. Common Crape Myrtle.**

Shrubs. Flowers white, pale rose to crimson. Fruits subglobose.

Fl. & Fr. : September - December. Infrequent as an escape, usually planted.

Lagerstroemia parviflora Roxb.

Trees. Flowers white. Capsules ovoid.

Fl. & Fr. : Greater part of the year. Frequent in open forests.

LAWSONIA L.

Lawsonia inermis L. *Mehndi*. Egyptian Privet.

Shrubs. Flowers pale white. Capsules exserted.

Fl. & Fr. : September May. Frequent as hedge.

ROOTALA L.

- | | |
|--|-------------------------|
| 1. Marshy herbs, calyx appendages absent | <i>R. densiflora</i> |
| 1. Terrestrial or amphibious herbs ; calyx appendages about as long as calyx lobes | <i>R. illecebroides</i> |

Rotala densiflora (Roth ex Roem. & Schult.) Koehne

Herbs. Flowers reddish. Capsules globose.

Fl. & Fr. : September May. Frequent near streams and ponds.

R. illecebroides (Arn. ex C.B.Cl.) Koehne

Herbs. Flowers greenish. Capsules red.

Fl. & Fr. : October December. Infrequent in moist places.

WOODFORDIA Salisb.

Woodfordia fruticosa (L.) Kurz, *Dhaiti*. Fire-Flame Bush.

Shrubs. Flowers red. Fruits enclosed in persistent hypanthium.

Fl. & Fr. : February - May. Frequent in open and dense forests.

ONAGRACEAE

LUDWIGIA L.

- | | |
|---|--|
| 1. Stamens usually as many as petals | <i>L. perennis</i> |
| 1. Stamens twice as many as petals : | |
| 2. Plants glabrous ; seeds embedded in endocarp | <i>L. hyssopifolia</i> |
| 2. Plants with pubescence ; seeds free | <i>L. octovalvis</i>
<i>ssp. sessiliflora</i> |

Ludwigia hyssopifolia (G. Don) Exell.

Herbs. Flowers yellow. Capsules green.

Fl. & Fr. : August May. Frequent in moist shady situations.

L. octovalvis (Jacq.) Raven ssp. *sessiliflora* (Mich.) Raven

Herbs. Flowers yellow. Fruits capsular, obovate.

Fl. & Fr. : August November. Frequent in moist habitats.

L. perennis L.

Herbs. Flowers yellow. Fruits crowned with the disc and persistent calyx.

Fl. & Fr. : August May. Frequent in moist habitats.

TRAPACEAE

TRAPA L.

Trapa natans L. var. *bispinosa* (Roxb.) Makino, Water Chestnut.

Aquatic herbs. Flowers white. Fruits oblong.

Fl. & Fr. : August December. Infrequent in moist habitats.

TURNERACEAE

TURNERA L.

Turnera angustifolia Mill. West Indian Holly.

Undershrubs. Flowers yellow. Fruits pubescent.

Fl. & Fr. : September May. Infrequent in wastelands.

CARICACEAE

CARICA L.

Carica papaya L. Papaw Tree.

Trees. Flowers white. Fruits greenish-yellow.

Fl. & Fr. : July November. Cultivated.

CUCURBITACEAE

- | | |
|--|---------------|
| 1. Petals fimbriate | TRICHOSANTHES |
| 1. Petals entire : | |
| 2. Tendrils branched | DIPLOCYCLOS |
| 2. Tendrils simple : | |
| 3. Calyx tube closed, male peduncle bract spathaceous | MOMORDICA |
| 3. Calyx tube not closed, bract not spathaceous : | |
| 4. Fruits dry, dehiscent, endocarp fibrous | LUFFA |
| 4. Fruits soft, indehiscent, endocarp fleshy | BENINCASA |
| 5. Anthers straight | MUKIA |
| 5. Anthers sigmoid : | |
| 6. Anthers usually sygmoid, seeds turgid | SOLENA |
| 6. Anthers strongly sigmoid, seeds compressed : | |
| 7. Tendrils simple ; connectives produced beyond the anther loculi | CUCUMIS |
| 7. Tendrils 2 - 3-fid ; connectives not produced | CITRULLUS |

BENINCASA Savi

Benincasa hispida (Thunb.) Cogn. The Ash Gourd.

Climbers. Flowers yellow. Fruits densely hairy.

Fl. & Fr. : July - October. Infrequent on hedges.

CITRULLUS Schrad. nom. cons.

Citrullus lanatus (Thunb.) Mansf. *Tarbuj*.

Trailing herbs. Flowers yellow. Berries globose.

Fl. & Fr. : November - February. Infrequent as an escape in wastelands.

CUCUMIS L.

- | | |
|-------------------------------|--|
| 1. Perennials ; fruits smooth | <i>C. callosus</i> |
| 1. Annuals ; fruits bristly | <i>C. melo</i>
var. <i>agrestis</i> |

Cucumis callosus (Rottl.) Cogn.

Climbers. Flowers yellow. Fruits globose.

Fl. & Fr. : August - October. Frequent weed in wastelands.

C. melo L. var. **agrestis** Naud. Musk Melon.

Scabrid herbs. Flowers yellow. Fruits ovoid-oblong.

Fl. & Fr. : August - November. Frequent weed in wastelands.

DIPLOCYCLOS (Endl.) Post & Kuntze

Diplocyclos palmatus (L.) Jeffrey

Tuberous herbs. Flowers greenish-yellow. Berries brick red.

Fl. & Fr. : September - November. Frequent on hedges.

LUFFA Mill.

Luffa acutangula (L.) Roxb. var. **amara** (Roxb.) C.B.Cl. *Kadupadvel*.

Climbers. Flowers yellow. Fruits cylindrical.

Fl. & Fr. : August - October. Frequent on hedges.

MOMORDICA L.

Momordica charantia L. *Karela*.

Climbers. Flowers yellow. Fruits green, orange-red when ripe.

Fl. & Fr. : August - December. Frequent in wastelands as an escape.

MUKIA Arn.

Mukia maderaspatana (L.) Roem.

Climbers. Flowers yellow. Fruits globose.

Fl. & Fr. : August - November. Frequent in wastelands.

SOLENA Lour.

Solena amplexicaulis (Lam.) Gandhi, *Jangli tondra, Ran-tindu*.

Slender climbers. Flowers light yellow. Berries subglobose.

Fl. & Fr. : August - March. Infrequent in wastelands.

TRICHOSANTHES L.

1. Bracts of the male racemes large ; fruits globose *T. bracteata*
 1. Male racemes ebracteate ; fruits ovoid, conical *T. cucumerina*

Trichosanthes bracteata (Lam.) Voigt

Climbers. Flowers white. Fruits globose.

Fl. & Fr. : August - October. Infrequent weed in wastelands.

T. cucumerina L. *Padval*.

Scabrous climbers. Flowers white. Fruits ovoid-fusiform.

Fl. & Fr. : August - October. Frequent on hedges.

MOLLUGINACEAE

1. Flowers in axillary and terminal cymes ; seeds not
appendaged MOLLUGO
 1. Flowers in axillary clusters ; seeds appendaged GLINUS

GLINUS L.

1. Plants densely stellately hairy ; leaves broadly ovate-
orbicular *G. lotoides*
 1. Plants glabrous ; leaves ovate, spatulate *G. oppositifolius*

Glinus lotoides L.

Herbs. Flowers white. Capsules ovoid.

Fl. & Fr. : December - May. Frequent weed in wastelands.

G. oppositifolius (L.) A. DC.

Marshy herbs. Flowers white. Capsules oblong.

Fl. & Fr. : August - December. Frequent weed in wastelands.

MOLLUGO L.

Mollugo pentaphylla L.

Herbs. Flowers greenish-white. Capsules oblong.

Fl. & Fr. : August - December. Frequent weed in cultivated fields and wastelands.

ALANGIACEAE

ALANGIUM Lam.

Alangium salvifolium (L. f.) Wang.

Shrubs or trees. Flowers white. Fruits ellipsoid.

Fl. & Fr. : March May. Infrequent in open forests.

RUBIACEAE

1. Inflorescence in dense, globose heads ; trees or shrubs :
 2. Shrubs ; calyx tube nearly connate MORINDA
 2. Trees ; calyx tube free :
 3. Leaves cordate at base HALDINA
 3. Leaves acute or rounded at base MITRAGYNA
1. Inflorescence not capitate if so small herbs :
 4. Herbaceous or suffrutescent plants :
 5. Stipules entire DENTELLA
 5. Stipules lobed or pectinate :
 6. Ovules 1 per locule BORRERIA
 6. Ovules more than one per locule HEDYOTIS
 4. Trees or shrubs, sometimes climbing :
 7. Ovules 2 or more per locule :
 8. Ovary 1-loculed ; stipules amplexicaul :
 9. Corolla tube more than 3 cm long GARDENIA
 9. Corolla tube less than 2 cm long CERISCOIDES
 8. Ovary 2-loculed ; stipules not amplexicaul :
 10. Inflorescence axillary or at apex of branchyblasts XEROMPHIS
 10. Inflorescence terminal on normal branches TARENNA
 7. Ovule 1 per locule :
 11. Exserted portion of style shorter than corolla lobes ; drupes 2, 1-seeded pyrenes IXORA
 11. Exserted portion of style longer than corolla lobes ; drupe 1, 2-seeded pyrenes PAVETTA

BORRERIA Mey. nom. cons.

- | | |
|---|-----------------------|
| 1. Procumbent herbs ; stems subangular ; leaves ovate-oblong | <i>B. articularis</i> |
| 1. Erect herbs ; Stems four angled ; leaves linear-lanceolate | <i>B. pusilla</i> |

Borreria articularis (L. f.) F.N. Will.

Hispid herbs. Flowers white. Capsules ellipsoid, hairy.

Fl. & Fr. : August May. Frequent weed in wastelands.

B. pusilla (Wall.) DC.

Scabrid herbs. Flowers pale pink. Capsules narrow, glabrous.

Fl. & Fr. : August March. Frequent weed in wastelands.

CERISCOIDES Tirvengadam**Ceriscoides turgida (Roxb.) Tirvengadam**

Shrubs or small trees. Flowers white. Fruits globose, brownish.

Fl. & Fr. : August May. Frequent in open and dense forest.

DENTELLA J.R. & G. Forst.

- | | |
|--|-------------------------|
| 1. Capsules glabrous | <i>D. serpyllifolia</i> |
| 1. Capsules covered with thick, hyaline, blunt setae | <i>D. repens</i> |

Dentella repens (L.) J.R. & G. Forst.

Prostrate herbs. Flowers white. Capsules crowned by the persistent calyx.

Fl. & Fr. : April May. Infrequent in moist soils.

D. serpyllifolia Wall. ex Airy Shaw

Spreading herbs. Flowers white. Fruits small.

Fl. & Fr. : August October. Infrequent in wastelands.

GARDENIA J. Ellis nom. cons.

- | | |
|---------------------------------|----------------------|
| 1. Ovaries with 2 placentas | <i>G. resinifera</i> |
| 1. Ovaries with 4-5 placentas : | |
| 2. Berries globose | <i>G. latifolia</i> |
| 2. Berries ovoid or ellipsoid | <i>G. gummifera</i> |

Gardenia gummifera L. f.

Shrubs. Flowers white. Fruits ovoid or ellipsoid.

Fl. & Fr. : August - May. Frequent in open forests.

G. latifolia Ait. Boxwood Gardenia.

Trees. Flowers pale yellow. Fruits globose.

Fl. & Fr. : August - May. Frequent in open and dense forests.

G. resinifera Roth, Dikamali.

Shrubs or trees. Flowers yellow. Fruits ellipsoid.

Fl. & Fr. : August - February. Frequent in open forests.

HALDINA Ridsd.**Haldina cordifolia (Roxb.) Ridsd. Hed.**

Trees. Flowers yellow. Fruits cuneate, downy.

Fl. & Fr. : August - May. Frequent in open forests.

HEDYOTIS L.

- | | |
|--|----------------------|
| 1. Leaves whorled | <i>H. ovatifolia</i> |
| 1. Leaves opposite : | |
| 2. Upper inflorescence many flowered and paniced | <i>H. affinis</i> |
| 2. Inflorescence throughout 1 - 4-flowered : | |
| 3. Erect herbs, top of capsule round, protruding | <i>H. herbacea</i> |
| 3. Diffuse herbs, top of capsule flat | <i>H. corymbosa</i> |

Hedyotis affinis (Roem. & Schult.) DC.

Slender herbs. Flowers white or light blue. Capsules globose.

Fl. & Fr. : August - October. Infrequent in moist situations.

H. corymbosa L.

Erect herbs. Flowers white. Capsules loculicidal.

Fl. & Fr. : August - May. Frequent in wastelands.

Hedyotis herbacea (L.) Roxb.

Erect herbs. Flowers white. Capsules subglobose.

Fl. & Fr. : October December. Frequent in moist soils.

H. ovatifolia Cav.

Erect herbs. Flowers white. Capsules hemispheric, glabrous.

Fl. & Fr. : September January. Frequent weed in cultivated fields and wastelands.

IXORA L.

- | | |
|--|---------------------|
| 1. Flower buds ellipsoid, corolla-tube exceeding 0.6 cm long | <i>I. arborea</i> |
| 1. Flower buds globose, corolla-tube less than 0.6 cm long | <i>I. brachiata</i> |

***Ixora arborea* Roxb. ex Sm.**

Shrubs or small trees. Flowers white. Drupes red.

Fl. & Fr. : November May. Frequent in open forests.

***I. brachiata* Roxb.**

Shrubs or small trees. Flowers white. Fruits globose.

Fl. & Fr. : January May. Frequent in open forests.

MITRAGYNA Korth.***Mitragyna parvifolia* (Roxb.) Korth. *Karam.***

Trees. Flowers white. Capsules oblong, ribbed.

Fl. & Fr. : Greater part of the year. Frequent in open as well as dense forests.

MORINDA L.***Morinda tomentosa* Heyne ex Roth**

Shrubs or small trees. Flowers white. Fruits syncarpus, subglobose.

Fl. & Fr. : August October. Infrequent in open forests.

PAVETTA L.

***Pavetta crassicaulis* Bremek.**

Shrubs. Flowers white. Berries globose, black, smooth.

Fl. & Fr. : Greater part of the year. Infrequent in open forests.

TARENNA Gaertn.

***Tarenna asiatica* (L.) Kuntze ex K. Schum.**

Shrubs or trees. Flowers white. Berries globose, glabrous.

Fl. & Fr. : February June. Frequent in open forests.

XEROMPHIS Rafin.

- | | |
|---|---------------------|
| 1. Spines axillary ; calyx lobes persistent | <i>X. spinosa</i> |
| 1. Spines terminal ; calyx lobes deciduous | <i>X. uliginosa</i> |

***Xeromphis spinosa* (Thunb.) Keay**

Small trees. Flowers yellow. Berries ellipsoid.

Fl. & Fr. : February October. Infrequent in open forests.

***X. uliginosa* (Retz.) Mahesh.**

Trees. Flowers white. Fruits ovoid.

Fl. & Fr. : September May. Frequent in open forests.

ASTERACEAE

- | | |
|--|-----------------------|
| 1. Heads ligulate ; all or only the outer ligulate : | |
| 2. Sap of the plants milky ; all florets in a head, ligulate | LAUNAEA |
| 2. Sap of the plants not milky ; only outer florets ligulate : | |
| 3. Outer involucral bracts hooked spinous | ACANTHOSPERMUM |
| 3. Outer involucral bracts not so : | |
| 4. Leaves usually opposite or rarely only upper alternate : | |
| 5. Pappus bristles plumose | TRIDAX |
| 5. Pappus bristles not plumose, retrorsely barbellate : | |

- | | |
|---|----------------|
| 6. Leaves deeply lobed, bipinnate, pinnatisect | BIDENS |
| 6. Leaves cuneate, not deeply lobed : | |
| 7. Receptacles paleaceous | BLAINVILLEA |
| 7. Receptacles not paleaceous | ECLIPTA |
| 4. Leaves alternate : | |
| 8. Leaves deeply pinnatisect : | |
| 9. Style arms truncate, penicillate or with short appendages | GLOSSOCARDIA |
| 9. Style arms with long, hairy appendages | CHRYSANTHELLUM |
| 8. Leaves never lobed : | |
| 10. Heads axillary | CAESULIA |
| 10. Heads terminal | PULICARIA |
| 1. Heads discoid; all florets tubular : | |
| 11. Leaves all opposite or sometimes the upper alternate : | |
| 12. Heads with one floret | LAGASCEA |
| 12. Heads with many florets | AGERATUM |
| 11. Leaves alternate : | |
| 13. Achenes enclosed in an indurate, spiny involucre ; anthers not adherent | XANTHIUM |
| 13. Achenes and anthers not as above : | |
| 14. Flowers yellow (except <i>Blumea solidaginoides</i>) : | |
| 15. Anther bases tailed | BLUMEA |
| 15. Anther bases not tailed | GRANGEA |
| 14. Flowers not yellow : | |
| 16. Spiny plants ; head with one floret, all united in a compound head | ECHINOPS |
| 16. Non spiny plants ; heads simple with few to many flowers : | |
| 17. Leaves deeply pinnatisect | EMILIA |
| 17. Leaf margins various, not lobed, if lobed not more than half way to midrib of midlobe : | |
| 18. The arcoles on achenes horizontal | GONIOCAULON |

18. The areoles on achenes oblique or lateral :
19. Involucral bracts spiny AMBERBOA
19. Involucral bracts not spiny :
20. Plants aromatic ; stems narrowly winged SPHAERANTHUS
20. Plants not aromatic ; stems not winged :
21. Leaves mostly radical, rosulate ELEPHANTOPUS
21. Leaves cauline VERNONIA

ACANTHOSPERMUM Schrank

Acanthospermum hispidum DC.

Herbs. Flowers yellow. Achenes obconical.

Fl. & Fr. : August - December. Frequent weed in cultivated fields and wastelands.

AGERATUM L.

Ageratum conyzoides L. Goat Weed.

Herbs. Flowers white. Achenes black.

Fl. & Fr. : Greater part of the year. Frequent weed in wastelands.

AMBERBOA Less. *nom. cons.*

Amberboa ramosa (Roxb.) Jaffrey.

Prostrate herbs. Flowers light purple. Achenes light black.

Fl. & Fr. : October - May. Frequent weed in wastelands.

BIDENS L.

Bidens biternata (Lour.) Merr. & Sherff. ex Sherff.

Herbs. Flowers yellow. Achenes black with divergent awns.

Fl. & Fr. : August - May. Frequent in moist habitats.

BLAINVILLEA Cass.

Blainvillea acmella (L.) Phillipson

Herbs. Flowers white. Achenes shortly bristled.

Fl. & Fr. : September October. Frequent weed in cultivated fields.

BLUMEA A.P.DC. *nom. cons.*

- | | |
|------------------------------------|--------------------------|
| 1. Stems narrowly winged all along | <i>B. venkataramanii</i> |
| 1. Stems not winged : | |
| 2. Heads few : | |
| 3. Plants densely woolly | <i>B. malcolmii</i> |
| 3. Plants not densely woolly | <i>B. oxyodonta</i> |
| 2. Heads many : | |
| 4. Flowers yellow | <i>B. lacera</i> |
| 4. Flowers purple | <i>B. solidaginoides</i> |

Blumea lacera (Burm. f.) DC.

Viscid herbs. Flowers yellow. Achenes minute.

Fl. & Fr. : November January. Infrequent weed in wastelands.

B. malcolmii (C.B.Cl.) Hook. f.

Herbs. Flowers yellow. Achenes obscurely angled and silky.

Fl. & Fr. : February May. Infrequent as forest undergrowth.

B. oxyodonta DC.

Herbs. Flowers yellow. Achenes angled.

Fl. & Fr. : April - May. Infrequent in wastelands.

B. solidaginoides (Poir.) DC.

Erect herbs. Flowers pink turning purple or white on drying.
Achnes minute.

Fl. & Fr. : February May. Infrequent as forest undergrowth.

Blumea venkataramanii Rolla Rao et Hemadri

Herbs. Flowers yellowish. Achenes minute, sparsely hairy.

Fl. & Fr. : July December. Infrequent in moist soils.

CAESULIA Roxb.

Caesulia axillaris Roxb.

Herbs. Flowers white. Achenes dusty brown.

Fl. & Fr. : September May. Frequent weed in marshy places.

CHRYSANTHELLUM A. Rich.

Chrysanthellum indicum DC.

Herbs. Flowers yellow. Achenes linear-oblong.

Fl. & Fr. : July August. Infrequent as forest undergrowth.

ECHINOPS L.

Echinops echinatus Roxb.

Rigid herbs. Flowers white. Achenes villose.

Fl. & Fr. : November May. Frequent weed in wastelands.

ECLIPTA L.

Eclipta prostrata L. *Bhangera*.

Herbs. Flowers white. Achenes slightly winged.

Fl. & Fr. : Greater part of the year. Frequent in moist shady or marshy places.

ELEPHANTOPUS L.

Elephantopus scaber L.

Herbs. Flowers purple. Achenes hairy.

Fl. & Fr. : September March. Frequent as forest undergrowth.

EMILIA Cass.

Emilia sonchifolia (L.) DC. ex Wight

Herbs. Flowers purple. Achenes ribbed.

Fl. & Fr. : August May. Frequent weed in wastelands.

GLOSSOCARDIA Cass.

Glossocardia bosvallea (L. f.) DC.

Herbs. Flowers yellow. Achenes hairy.

Fl. & Fr. : August October. Frequent among grasses in open forests.

GONIOCAULON Cass. *nom. cons.*

Goniocaulon indicum (Klein ex Willd.) C.B.Cl.

Herbs. Flowers pink to light purplish. Achenes closely ribbed.

Fl. & Fr. : January June. Frequent weed in cultivated fields.

GRANGEA Forssk.

Grangea maderaspatana (L.) Poir.

Herbs. Flowers yellow. Achenes glandular.

Fl. & Fr. : January June. Infrequent in marshy places.

LAGASCEA Cav.

Lagascea mollis Cav.

Herbs. Flowers white. Achenes small, cuneate.

Fl. & Fr. : Greater part of the year. Frequent weed in wastelands.

LAUNAEA Cass.

Launaea fallax (Jaub. et Spach.) Kuntze

Herbs. Flowers yellow. Achenes polymorphous.

Fl. & Fr. : December May. Frequent weed in wastelands.

PULICARIA Gaertn.

Pulicaria foliolosa DC.

Herbs. Flowers pale. Achenes oblong.

Fl. & Fr. : January June. Infrequent in moist habitats.

SPHAERANTHUS L.

Sphaeranthus indicus L.

Herbs. Flowers whitish to purplish. Achenes glabrous.

Fl. & Fr. : November - March. Frequent in fallow and harvested fields.

TRIDAX L.

Tridax procumbens L. Mexican Daisy.

Herbs. Flowers yellow. Achenes oblong.

Fl. & Fr. : Greater part of the year. Frequent weed in wastelands.

VERNONIA Schreb. *nom. cons.***Vernonia cinerea (L.) Less. Purple Flebane.**

Herbs. Flowers purple or pinkish violet. Achenes oblong, clothed with appressed white hairs.

Fl. & Fr. : December June. Frequent weed in wastelands.

XANTHIUM L.

Xanthium strumarium L. Burweed.

Undershrubs or herbs. Flowers yellowish. Achenes glabrous.

Fl. & Fr. : January June. Frequent weed in wastelands.

LOBELIACEAE

LOBELIA L.

Lobelia alsinoides Lam.

Herbs. Flowers blue or violet. Capsules ellipsoid.

Fl. & Fr. : August November. Frequent in the marshy soils.

CAMPANULACEAE

WAHLENBERGIA Schrad. ex Roth

Wahlenbergia marginata (Thunb.) A. DC.

Herbs. Flowers purple. Capsules cuneate, turbinate, crowned with the calyx lobes.

Fl. & Fr. : December May. Infrequent in moist habitats.

PLUMBAGINACEAE

PLUMBAGO L.

Plumbago zeylanica L.

Herbs or undershrubs. Flowers white. Capsules oblong.

Fl. & Fr. : August December. Frequent in open forests and wastelands.

SAPOTACEAE

MADHUCA Gmel.

Madhuca longifolia (Koen.) Mach. var. **latifolia** (Roxb.) Chev.
Mohwa.

Trees. Flowers cream coloured. Fruits ovoid-ellipsoid.

Fl. & Fr. : September - May. Frequent in open forests.

EBENACEAE

DIOSPYROS L.

- | | |
|--|-----------------------|
| 1. Leaves subopposite | <i>D. melanoxylon</i> |
| 1. Leaves alternate : | |
| 2. Male calyx glabrous outside ; staminodes 4 | <i>D. montana</i> |
| 2. Male calyx glabrous inside ; staminodes 7-9 | <i>D. chloroxylon</i> |

Diospyros chloroxylon Roxb. Greene Ebony Persimmon.

Thorny trees. Flowers white. Fruits globose.

Fl. & Fr. : August March. Frequent in open forests.

D. melanoxylon Roxb. Coromandel Ebony Persimmon.

Trees. Female flowers solitary and males in cymes. Fruits ovoid or globose.

Fl. & Fr. : August May. Frequent in open and dense forests.

D. montana Roxb. Mountain Persimmon.

Trees. Flowers white. Fruits glabrous.

Fl. & Fr. : August May. Frequent in open and dense forests.

OLEACEAE

- | | |
|--|------------|
| 1. Twiners, seldom erect trees or shrubs ; fruit a berry | JASMINUM |
| 1. Trees or shrubs ; fruit a capsule : | |
| 2. Capsules flat, thin | NYCTANTHES |
| 2. Capsules pyriform, woody | SCHREBERA |

JASMINUM L.

Jasminum auriculatum Vahl

Scandent shrubs. Flowers white. Berries globose.

Fl. & Fr. : September December. Frequent on hedges.

NYCTANTHES L.

Nyctanthes arbor-tristis L. Night Jasmine.

Trees. Flowers white. Capsules compressed.

Fl. & Fr. : September - November. Frequent in open forests.

SCHREBERA Roxb. *nom. cons.*

Schrebera swietenoides Roxb.

Trees. Flowers cream coloured. Capsules pear shaped.

Fl. & Fr. : August - November. Infrequent in open forests.

APOCYNACEAE

- | | |
|---|-----------------|
| 1. Herbs or undershrubs | CATHARANTHUS |
| 1. Shrubs or trees : | |
| 2. Plants climbing or scandent | ICHNOCARPUS |
| 2. Plants erect : | |
| 3. Anthers adhering to the stigma : | |
| 4. Flowers solitary or few flowered cymes ; follicles beaked | TABERNAEMONTANA |
| 4. Flowers in terminal cymose panicles ; follicles not beaked but connate at apex | WRIGHTIA |
| 3. Anthers not adhering to the stigma | |
| 5. Armed shrubs | CARISSA |
| 5. Unarmed shrubs : | |
| 6. Leaves alternate ; flowers yellow | THEVETIA |
| 6. Leaves opposite ; flowers white | HOLARRHENA |

CARISSA L. *nom. cons.*

Carissa congesta Wight

Armed shrubs. Flowers white. Fruits ovoid-oblong.

Fl. & Fr. : August - December. Frequent in open forests.

CATHARANTHUS G. Don

Catharanthus pusillus (Murr.) G. Don

Herbs. Flowers white. Follicles thin, glabrous.

Fl. & Fr. : August March. Frequent as forest undergrowth.

HOLARRHENA R. Br.

Holarrhena antidysenterica (Roth) A. DC.

Shrubs. Flowers white. Fruit a pair of follicles.

Fl. & Fr. : August May. Frequent in open and dense forests.

ICHNOCARPUS R. Br.

Ichnocarpus frutescence (L.) R. Br.

Twining shrubs. Flowers white. Follicles rusty villous.

Fl. & Fr. : August May. Frequent in open as well as dense forests.

TABERNAEMONTANA L.

Tabernaemontana divaricata (L.) R. Br.

Shrubs. Flowers white. Follicles spreading and recurved.

Fl. & Fr. : August February. Frequent as an escape, also planted.

THEVETIA L. *nom. cons.***Thevetia peruviana** (Pers.) K. Schum. Yellow Oleander.

Shrubs. Flowers yellow. Drupes ellipsoid.

Fl. & Fr. : August April. Frequent as an escape.

WRIGHTIA R. Br.

Wrightia tinctoria R. Br. *Pandra-kuda*. Pala Indigo Plant.

Trees. Flowers white. Fruit a pair of follicles.

Fl. & Fr. : July October. Infrequent in open forests.

ASCLEPIADACEAE

- | | |
|---|------------|
| 1. Plants erect | CALOTROPIS |
| 1. Plants twining, procumbent or straggling : | |
| 2. Leaves absent or reduced or caducous | CEROPEGIA |
| 2. Leaves well developed : | |
| 3. Corolla entirely glabrous | TYLOPHORA |
| 3. Corolla pubescent atleast within or on the margins : | |
| 4. Corolla without fleshy lobes | PERGULARIA |
| 4. Corolla with fleshy lobes | |
| 5. Corolla lobes imbricate | GYMNBMA |
| 5. Corolla lobes subcampanulate, overlapping to the right | WATTAKAKA |

CALOTROPIS L.

- | | |
|--|--------------------|
| 1. Corona lobes shorter than the staminal column with two obtuse auricles below the apex | <i>C. gigantea</i> |
| 1. Corona lobes equalling or longer than the staminal column without auricles below the apex | <i>C. procera</i> |

Calotropis gigantea (L.) R. Br.

Shrubs. Flowers white with purple tinge. Fruit a pair of follicles.

Fl. & Fr. : August - May. Frequent in wastelands.

C. procera (Ait.) R. Br. Bel-palas.

Shrubs. Flowers white with purplish tinge. Fruit a pair of follicles.

Fl. & Fr. : September - March. Infrequent in wastelands.

CEROPEGIA L.

Ceropegia bulbosa Roxb.

Twiners. Flowers greenish with purplish tinge. Follicles glabrous.

Fl. & Fr. : August - October. Infrequent in open forests.

GYMNEMA R. Br.

Gymnema sylvestre (Retz.) R. Br. ex Schult.

Twining herbs. Flowers greenish-yellow. Fruit a pair of follicles.

Fl. & Fr. : August - October. Infrequent in open forests.

PERGULARIA L.

Pergularia daemia (Forssk.) Chiov.

Twiners. Flowers yellow with purple tinge. Follicles echinate.

Fl. & Fr. : August - May. Frequent in open forests.

TYLOPHORA R. Br.

Tylophora fasciculata Buch.-Ham.

Tuberous rooted herbs. Flowers brownish. Follicles ovoid.

Fl. & Fr. : August - September. Infrequent in open forests.

WATTAKAKA Hassk.

Wattakaka volubilis (L. f.) Stapf

Twiners or climbers. Flowers greenish yellow. Follicles paired.

Fl. & Fr. : August - December. Frequent on hedges in open forests.

PERIPLOCACEAE

- | | |
|--|-------------|
| 1. Leaf nerves united intramarginally ; flowers yellowish | CRYPTOLEPIS |
| 1. Leaf nerves not united intramarginally ; flowers greenish | HEMIDESMUS |

CRYPTOLEPIS R. Br.

Cryptolepis buchmanii Roem. & Schult.

Twiners or climbers. Flowers pale. Follicles straight, rigid.

Fl. & Fr. : August - May. Frequent in open forests.

HEMIDESMUS R. Br.

Hemidesmus indicus (L.) Schult. *Anantmul*, Indian Sarsaparilla.

Twining herbs. Flowers greenish with reddish-brown centre. Fruit a pair of long follicles.

Fl. & Fr. : August April. Frequent in open forests.

LOGANIACEAE

- | | |
|--|------------|
| 1. Flowers 2-3 cymose ; corolla 5-lobed | CYNOCTONUM |
| 1. Flowers solitary or clustered ; corolla 4-lobed | MITRASACME |

CYNOCTONUM Gmel.

Cynoctonum mitreola (L.) Britt.

Herbs. Flowers white. Capsules wedge shaped, glabrous.

Fl. & Fr. : September November. Frequent as forest undergrowth.

MITRASACME Labill.

Mitrasacme alsinoides R. Br.

Herbs. Flowers white. Capsules globose, surrounded by the persistent calyx.

Fl. & Fr. : August - October. Infrequent as forest undergrowth.

GENTIANACEAE

- | | |
|---|------------|
| 1. Flowers zygomorphic : | |
| 2. Stems angled, winged ; perfect stamens one | HOPPEA |
| 2. Stems not angled or winged ; perfect stamens two | CANSCORA |
| 1. Flowers actinomorphic : | |
| 3. Flowers sessile in axillary clusters | ENICOSTEMA |
| 3. Flowers pedicelled in terminal cymes | EXACUM |

CANSCORA Lam.

- | | |
|-----------------------------------|---------------------|
| 1. Calyx prominently winged | <i>C. decussata</i> |
| 1. Calyx not winged : | |
| 2. Stems 4-angled, but not winged | <i>C. diffusa</i> |
| 2. Stems 4-winged | <i>C. decurrens</i> |

Canscora decurrens Dalz.

Herbs. Flowers light pink. Capsules cylindrical.

Fl. & Fr : October - November. Infrequent weed in cultivated fields.

C. decussata (Roxb.) Schult. & Schult.

Herbs. Flowers white. Capsules oblong.

Fl. & Fr. : September February. Frequent in moist habitats.

C. diffusa (Vahl) R. Br.

Herbs. Flowers light purple. Capsules cylindric.

Fl. & Fr. : September May. Frequent in moist shady places.

ENICOSTEMA DC.**Enicostema hyssopifolium (Willd.) Verdoon. Talavadi.**

Herbs. Flowers white or yellowish. Capsules ellipsoid.

Fl. & Fr. : August February. Frequent among grasses in moist soils.

EXACUM L.**Exacum pumilum Griseb.**

Herbs. Flowers violet. Capsules subglobose.

Fl. & Fr. : September October. Infrequent in moist habitats.

HOPPEA Willd.**Hoppea dichotoma Willd.**

Herbs. Flowers greenish-yellow. Capsules ellipsoid, glabrous.

Fl. & Fr. : October December. Infrequent in moist habitats.

MENYANTHACEAE

NYMPHOIDES Sag.

Nymphoides hydrophylla (Lour.) Kuntze

Rhizomatous floating herbs. Flowers white. Capsules ellipsoid-oblong, glabrous.

Fl. & Fr. August May. Frequent in ponds and ditches.

HYDROPHYLLACEAE

HYDROLEA L.

Hydrolea zeylanica (L.) Vahl

Herbs. Flowers blue. Capsules ovoid or globose.

Fl. & Fr. : November December. Infrequent weed in cultivated fields.

BORAGINACEAE

1. Flowers axillary ; styles 2 ; fruits of lobed pyrenes

COLDENIA

1. Flowers axillary or terminal ; style 1 ; fruits of nutlets

TRICHODESMA

COLDENIA L.

Coldenia procumbens L.

Scabrid herbs. Flowers white. Fruits dry, 4-lobed, pyramidal.

Fl. & Fr. : May - August. Frequent in harvested fields.

TRICHODESMA R. Br. *nom. cons.*

1. Calyx lobes rounded at the base

T. zeylanicum

1. Calyx lobes cordate or hastate at the base :

2. Anthers included, connivent but free

T. sedgwickianum

2. Anthers exerted, combined into a complete cone

T. indicum

Trichodesma indicum (L.) Lehm.

Hispid herbs. Flowers white. Fruits of pyramidal nutlets.

Fl. & Fr. : October - November. Frequent weed in cultivated fields.

T. sedgwickianum Banerjee

Herbs. Flowers light pink. Fruits of 4 nutlets.

Fl. & Fr. : August - April. Frequent weed in wastelands.

T. zeylanicum (Burm. f.) R. Br.

Softly hispid herbs. Flowers blue. Fruit of 4 nutlets.

Fl. & Fr. : February - October. Infrequent weed in wastelands.

HELIOTROPIACEAE**HELIOTROPIMUM L.**

- | | |
|---|-----------------------|
| 1. Anthers united by their produced connectives | <i>H. strigosum</i> |
| 1. Anthers free : | |
| 2. Calyx lobes not divided half-way down the tube ; nutlets obscurely tuberculate on the back | <i>H. supinum</i> |
| 2. Calyx deeply divided ; nutlets densely hairy on the back | <i>H. ovalifolium</i> |

Heliotropium ovalifolium Forssk.

Decumbent herbs. Flowers white. Nutlets subglobose, hairy.

Fl. & Fr. : April - August. Infrequent in drying ponds and ditches.

H. strigosum Willd.

Procumbent herbs. Flowers white. Fruits ovoid.

Fl. & Fr. : November - December. Infrequent in moist soils.

H. supinum L.

Prostrate herbs. Flowers white. Nutlets pale brown.

Fl. & Fr. : March - May. Infrequent in moist soils.

EHRETIACEAE

- | | |
|---|----------------|
| 1. Leaves crowded on short, lateral branches or fasciculate ;
style simple, solitary | ROTULA |
| 1. Leaves alternate to subopposite ; style once forked making
a pair | EHRETIA |

EHRETIA L.**Ehretia laevis** Roxb.

Trees. Flowers white. Fruits subglobose.

Fl. & Fr. : February August. Infrequent in dense forests.**ROTULA Lour.****Rotula aquatica** Lour.

Shrubs. Flowers purple. Drupes deep orange-red, globose.

Fl. & Fr. : October - February. Frequent along river banks.**CORDIACEAE****CORDIA L.****Cordia dichotoma** Forst. f.

Trees. Flowers white. Fruits ovoid, acute.

Fl. & Fr. : January May. Infrequent in dense forests.**CUSCUTACEAE****CUSCUTA L.****Cuscuta reflexa** Roxb. *Nirmali*.

Twiners. Flowers whitish. Capsules globose, glabrous.

Fl. & Fr. : October April. Frequent on hedges.

CONVOLVULACEAE

- 1. Fruits indehiscent, woody or fleshy
 - 2. Corolla salver-shaped ; stigmas linear-oblong RIVEA
 - 2. Corolla funnel-shaped ; stigmas biglobular or capitate ARGYREIA
- 1. Fruits dehiscent, not woody :
 - 3. Bands on corolla lobes clearly defined ; pollen echinulate IPOMOEA
 - 3. Bands on corolla lobes rarely clearly defined ; pollen not echinulate :
 - 4. Plants not twining ; styles 2, free or partly united below EVOLVULUS
 - 4. Plants twining ; styles entire :
 - 5. Ovary 1-celled HEWITTIA
 - 5. Ovary 2 - 4-celled :
 - 6. Stigmas elongate JACQUEMONTIA
 - 6. Stigmas biglobose MERREMIA

ARGYREIA Lour.

- 1. Ovary 4-celled *A. sericea*
- 1. Ovary 2-celled :
 - 2. Bracts broadly ovate, obtuse *A. strigosa*
 - 2. Bracts linear or oblong, acute *A. hirsuta*

Argyrea hirsuta Wight & Arn.

Climbers. Flowers purplish. Fruits baccate, yellow.

Fl. & Fr. : August - November. Frequent in open and dense forests.

A. sericea Dalz.

Appressedly hairy twiners. Flowers pink. Capsules globose.

Fl. & Fr. : September - October. Infrequent in open forests.

A. strigosa (Roth) Sant. & Patel

Climbers. Flowers rose coloured. Fruits ovoid, red.

Fl. & Fr. : August - November. Infrequent in open forests.

EVOLVULUS L.

Evolvulus alsinoides L.

Spreading herbs. Flowers light blue. Capsules subglobose.

Fl. & Fr. : August May. Frequent weed in wastelands.

HEWITTIA Wight & Arn.

Hewittia scandens (Milne) Mabberley

Vines, mostly prostrate. Flowers white or yellowish. Capsules ovoid to subglobose, pilose.

Fl. & Fr. : November February. Infrequent in open forests.

IPOMOEA L.

- | | |
|--|---|
| 1. Straggling or erect shrubs | <i>I. carnea</i>
<i>ssp. fistulosa</i> |
| 1. Climbers or twiners : | |
| 2. Leaves entire : | |
| 3. Sepals not recurved at fruiting time | <i>I. triloba</i> |
| 3. Sepals recurved at fruiting time : | |
| 4. Flowers less than 1.0 cm long in subsessile heads : | |
| 5. Leaves ovate ; capsules hairy ; seeds glabrous | <i>I. eriocarpa</i> |
| 5. Leaves oblong-hastate ; capsules glabrous ; seeds velvety | <i>I. sindica</i> |
| 4. Flowers more than 1.0 cm long in distinctly pedunculate cymes or panicles : | |
| 6. Plants aquatic | <i>I. aquatica</i> |
| 6. Plants not aquatic : | |
| 7. Sepals awned at or below the apex | <i>I. turbinata</i> |
| 7. Sepals not awned : | |
| 8. Sepals acute | <i>I. obscura</i> |
| 8. Sepals obtuse | <i>I. sepiaria</i> |
| 2. Leaves lobed : | |
| 9. Flowers pink or purple | <i>I. nil</i> |

9. Flowers neither pink nor purple :

10. Flowers white, sessile

I. pes-tigridis

10. Flowers red, pedicellate

I. quamoclit

***Ipomoea aquatica* Forssk. Swamp Cabbage.**

Aquatic trailing herbs. Flowers purple. Capsules ovoid-globose.

Fl. & Fr. : September November. Frequent in ponds and marshy places.

***I. carnea* Jacq. subsp. *fistulosa* (Mart. ex Choisy) D. Austin**

Straggling shrubs. Flowers light pink. Capsules ovoid to subglobose.

Fl. & Fr. : Greater part of the year. Frequent near ponds, puddles, ditches and other marshy places around villages.

***I. eriocarpa* R. Br.**

Slender, hispid twiners. Flowers light pink. Capsules globose, hairy.

Fl. & Fr. : September May. Frequent weed in wastelands.

***I. nil* (L.) Roth**

Slender climbers. Flowers pink. Capsules globose, glabrous.

Fl. & Fr. : September November. Frequent on hedges.

***I. obscura* (L.) Ker-Gawl.**

Slender climbers. Flowers white or yellowish. Capsules ellipsoid.

Fl. & Fr. : September December. Infrequent on hedges.

***I. pes-tigridis* L.**

Densely hairy climbers. Flowers light pink. Capsules subglobose, glabrous.

Fl. & Fr. : September October. Frequent on hedges.

***I. quamoclit* L. Indian Pink.**

Slender twiners. Flowers red. Capsules subglobose, glabrous.

Fl. & Fr. : September October. Frequent on hedges.

***Ipomoea sepiaria* Roxb.**

Climbers. Flowers light purple. Capsules ovoid, glabrous.

Fl. & Fr. : September - October. Frequent on hedges.

***I. sindica* Stapf**

Trailing or twining, hispid herbs. Flowers light purple. Capsules globose, glabrous.

Fl. & Fr. : September - October. Frequent in wastelands.

***I. triloba* L.**

Twining. Flowers bluish-grey. Capsules globose.

Fl. & Fr. : September - December. Infrequent on hedges.

***I. turbinata* Lag.**

Stout twining or climbing. Flowers light purple. Capsules ellipsoid, smooth.

Fl. & Fr. : September - October. Frequent on hedges.

JACQUEMONTIA Choisy

- | | |
|---|----------------------|
| 1. Bracts less than 0.5 cm long ; corolla 1 cm long | <i>J. paniculata</i> |
| 1. Bracts 0.5-1.0 cm long ; corolla 1.5 - 2.0 cm long | <i>J. pentantha</i> |

***Jacquemontia paniculata* (Burm. f.) Hall. f.**

Sparsely hairy, slender twining. Flowers yellow. Capsules subglobose, smooth, glabrous.

Fl. & Fr. : September - November. Frequent on hedges.

***J. pentantha* (Jacq.) G. Don**

Slender twining. Flowers bluish. Capsules globose, glabrous.

Fl. & Fr. : Greater part of the year. Frequent on hedges.

MERREMIA Dennst.

- | | |
|-----------------------------|----------------------|
| 1. Leaves reniform, unlobed | <i>M. gangetica</i> |
| 1. Leaves not as above | <i>M. tridentata</i> |

Merremia gangetica (L.) Cufod.

Sparsely hairy, slender twiners. Flowers yellow. Capsules subglobose, glabrous.

Fl. & Fr. : September May. Frequent in moist wastelands.

M. tridentata (L.) Hall. f.

Slender, prostrate herbs. Flowers smaller, yellow. Capsules globose, glabrous.

Fl. & Fr. : August May. Frequent in wastelands.

RIVEA Choisy

Rivea hypocrateriformis (Desv.) Choisy, Midnapore Creeper.

Extensive, woody climbers. Flowers white. Capsules ovoid, brown, glabrous.

Fl. & Fr. : August March. Frequent on hedges.

SOLANACEAE

- | | |
|----------------------------------|-----------------|
| 1. Fruiting calyx much enlarged | PHYSALIS |
| 1. Fruiting calyx not enlarged : | |
| 2. Fruits capsular | DATURA |
| 2. Fruits berries | SOLANUM |

DATURA L.

- | | |
|---|-------------------|
| 1. Plants sparsely hairy ; capsules spinous | <i>D. innoxia</i> |
| 1. Plants glabrous ; capsules tuberculate | <i>D. metel</i> |

Datura innoxia Mill.

Undershrubs. Flowers white. Capsules globose, slender thorny.

Fl. & Fr. : August February. Infrequent in wastelands.

D. metel L.

Undershrubs. Flowers pale white. Fruits drooping with deltoid spines.

Fl. & Fr. : September February. Infrequent in wastelands.

PHYSALIS L.

Physalis minima L.

Herbs. Flowers yellow. Berries enclosed in an enlarged bladder like calyx.

Fl. & Fr. : August - March. Infrequent in wastelands and open forests.

SOLANUM L.

- | | |
|-------------------------------|----------------------|
| 1. Plants unarmed | <i>S. nigrum</i> |
| 1. Plants armed with prickles | <i>S. surattense</i> |

Solanum nigrum L. Kamoni. Black Nightmare.

Herbs. Flowers white. Fruits globose berries.

Fl. & Fr. : Greater part of the year. Frequent weed in wastelands.

S. surattense Burm. f. Kateriangini. Yellow-Berried Night Shade.

Herbs. Flowers light purple. Berries yellow.

Fl. & Fr. : Greater part of the year. Frequent weed in wastelands.

SCROPHULARIACEAE

- | | |
|---|--------------|
| 1. Leaves all alternate | VERBASCUM |
| 1. Lower leaves atleast if not all opposite : | |
| 2. Plant semi or total parasites | STRIGA |
| 2. Plants not parasitic : | |
| 3. Anthers with only one cell perfect : | |
| 4. Calyx spathaceous | CENTRANTHERA |
| 4. Calyx equally 5-lobed | SOPUBIA |
| 3. Anthers 2-celled : | |
| 5. Calyx winged or ribbed | TORENIA |
| 5. Calyx neither winged nor ribbed : | |
| 6. Anthers in pairs | LINDERNIA |

6. Anthers not as above :

7. Plants fleshy

DOPATRIUM

7. Plants not fleshy :

8. Corolla bi-lipped :

9. Placentae either separating in fruits
or if conjoined, a wingless column ;
seeds terete

STEMODIA

9. Placentae always conjoined into a
winged column

LIMNOPHILA

8. Corolla not bi-lipped :

10. Plants glandular hairy ; leaves
pinnatifid

SUTERA

10. Plants glabrous or atleast without
glandular hairs ; leaves not as
above :

11. Leaves pinnatisect

RHAMPHICARPA

11. Leaves not pinnatisect

BACOPA

BACOPA Aubl. *nom. cons.*

Bacopa monnieri (L.) Pennell. Brahmi.

Herbs. Flowers light blue or purple. Capsules ovoid.

Fl. & Fr. : December May. Frequent in moist situations.

CENTRANTHERA R. Br.

Centranthera indica (L.) Gamble

Herbs. Flowers light purple. Capsules ovoid.

Fl. & Fr. : August December. Infrequent in moist soils.

DOPATRIUM Buch.-Ham.

Dopatrium junceum (Roxb.) Buch.-Ham. ex Benth.

Herbs. Flowers light pink or purple. Capsules globose.

Fl. & Fr. : August December. Frequent weed in moist places.

LIMNOPHILA R. Br. *nom. cons.*

- | | |
|--|--------------------|
| 1. Leaves undivided throughout stem | <i>L. rugosa</i> |
| 1. Leaves on lower or submerged part of stem pectinate to capillary-multifid : | |
| 2. Aerial stems patent-hirsute ; flowers pedicellate | <i>L. aquatica</i> |
| 2. Aerial stems not patent-hirsute ; flowers usually sessile | <i>L. indica</i> |

***Limnophila aquatica* (Roxb.) Alston**

Aquatic or marshy herbs. Flowers pale violet. Capsules globose.

Fl. & Fr. : September May. Frequent in ponds and ditches.

***L. indica* (L.) Druce**

Aquatic or marshy herbs. Flowers light purple. Capsules glabrous, smooth.

Fl. & Fr. : September May. Frequent in water logged or moist places.

***L. rugosa* (Roth) Merr.**

Stout herbs. Flowers light purple. Capsules compressed, ovoid.

Fl. & Fr. : September January. Infrequent in marshy places.

LINDERNIA All.

- | | |
|--|----------------------|
| 1. Leaves palmately 3-5-nerved | <i>L. parviflora</i> |
| 1. Leaves penni-nerved : | |
| 2. Stamens 2 ; staminodes 2 | <i>L. ciliata</i> |
| 2. Stamens 4 ; didynamous : | |
| 3. Mature capsules twice the length* of calyx | <i>L. anagallis</i> |
| 3. Mature capsules equalling or slightly exceeding calyx | <i>L. crustacea</i> |

***Lindernia anagallis* (Burm. f.) Pennell.**

Decumbent herbs. Flowers pink or violet, capsules oblong, glabrous.

Fl. & Fr. : March - September. Frequent in marshy soils.

Lindernia ciliata (Colsm.) Pennell.

Herbs. Flowers light purple. Capsules linear-cylindric.

Fl. & Fr. : August December. Frequent in moist soils.

L. crustacea (L.) F.v. Muell.

Prostrate herbs. Flowers bluish-purple. Capsules ovoid-oblong.

Fl. & Fr. : August December. Frequent in moist soils.

L. parviflora (Roxb.) Haines

Herbs. Flowers white or purple. Capsules oblong.

Fl. & Fr. : February July. Infrequent in moist soils.

RHAMPHICARPA Benth.

Rhamphicarpa longiflora (Arn.) Benth.

Herbs. Flowers white or pale pink. Fruits ovoid.

Fl. & Fr. : August December. Infrequent in moist habitats.

SOPUBIA Buch.-Ham.

Sopubia delphinifolia (L.) G. Don

Herbs. Flowers rose coloured. Capsules oblong-ellipsoid, glabrous.

Fl. & Fr. : August December. Frequent in moist soils.

STEMODIA *L. nom. cons.***Stemodia viscosa** Roxb.

Herbs. Flowers blue or violet. Capsules ovoid, glabrous.

Fl. & Fr. : December May. Infrequent in moist soils.

STRIGA Lour.

- | | |
|---|------------------------|
| 1. Calyx tube 5-ribbed | <i>S. densiflora</i> |
| 1. Calyx tube 10-15-ribbed : | |
| 2. One calyx rib terminating at tip of each lobe, the rest terminating in the sinuses | <i>S. asiatica</i> |
| 2. Three calyx ribs terminating at tip of each lobe | <i>S. angustifolia</i> |

Striga angustifolia (D. Don) Sald.

Scabridly hairy herbs. Flowers white. Capsules ellipsoid-oblong.

Fl. & Fr. : August - December. Frequent among grasses in open forests.

S. asiatica (L.) Kuntze

Rigid herbs. Flowers yellow. Capsules oblong-ellipsoid.

Fl. & Fr. : November - January. Infrequent in moist gravelly soils.

S. densiflora (Benth.) Benth.

Strigose herbs. Flowers white. Capsules included in calyx, oblong-ovoid.

Fl. & Fr. : August - November. Infrequent in moist gravelly soils.

SUTERA Roth

Sutera dissecta (Del.) Walp.

Diffuse herbs. Flowers white or light purple. Capsules ellipsoid-oblong.

Fl. & Fr. : September - December. Infrequent in moist places.

TORENIA L.

Torenia indica Sald.

Sparsely hairy herbs. Flowers blue. Capsules oblong, acute.

Fl. & Fr. : August - December. Infrequent among grasses.

VERBASCUM L.

Verbascum chinense (L.) Sant.

Erect, glandular, hairy herbs. Flowers yellow. Capsules ovoid.

Fl. & Fr. : Greater part of the year. Infrequent weed in wastelands.

LENTIBULARIACEAE

UTRICULARIA L.

- | | |
|--|------------------|
| 1. Leaves whorled ; leaf segments capillary with bladders | <i>U. aurea</i> |
| 1. Leaves not whorled ; leaf segments linear, spatulate without bladders | <i>U. bifida</i> |

Utricularia aurea Lour.

Floating, aquatic herbs. Flowers yellow. Capsules globose, beaked with persistent style.

Fl. & Fr. : November February. Infrequent in ponds.

U. bifida L.

Herbs. Flowers yellow. Capsules subglobose.

Fl. & Fr. : August December. Infrequent in moist habitats.

BIGNONIACEAE

- | | |
|---|----------------------|
| 1. Shrubs, flowers yellow | TECOMA |
| 1. Trees, flowers not yellow : | |
| 2. Corolla spathaceous, tube not inflated | DOLICHANDRONE |
| 2. Corolla not spathaceous, tube inflated | STEREOSPERMUM |

DOLICHANDRONE Seem.**Dolichandrone falcata** Seem. *Medsing.*

Trees. Flowers white. Fruits flat, glabrous.

Fl. & Fr. : September March. Infrequent in open and dense forests.

STEREOSPERMUM Cham.**Stereospermum suaveolens** (Roxb.) DC. *Spardri.*

Trees. Flowers purple. Capsules cylindrical, woody.

Fl. & Fr. : September May. Infrequent in open and dense forests.

TECOMA Juss.**Tecoma stans** (L.) H.B. & K.

Bushy shrubs. Flowers yellow. Capsules subcylindric, beaked.

Fl. & Fr. : November February. Infrequent as an escape in open places. Also planted.**PEDALIACEAE**

- | | |
|---|-----------------|
| 1. Flowers yellow ; fruits spinous drupes | PEDALIUM |
| 1. Flowers pink or light purple ; fruits unarmed capsules | SESAMUM |

PEDALIUM L.**Pedaliium murex** L.

Herbs. Flowers yellow. Fruits pyramidal-ovoid.

Fl. & Fr. : July January. Infrequent in wastelands.**SESAMUM L.****Sesamum orientale** L. Gingelly.

Erect herbs. Flowers white or violet. Capsules glandular pubescent, beaked.

Fl. & Fr. : August - November. Frequent in wastelands.**MARTYNIACEAE****MARTYNIA L.****Martynia annua** L. Tiger Claw.

Glandularly pubescent herbs. Flowers light purple. Capsules curved, beaked or two hooked.

Fl. & Fr. : July October. Frequent in wastelands.

ACANTHACEAE

- 1. Ovules many in two rows in each locule ; seeds not supported on hard retinacula :
 - 2. Calyx 4-partite ; stamens 2 **NELSONIA**
 - 2. Calyx 5-partite ; stamens 4 **STAUROGYNE**
- 1. Ovules 2 in each locule, if more, in one row only ; seeds supported on hard retinacula :
 - 3. Ovules 2 in each cell ; capsules 4 or less seeded :
 - 4. Stamens 2 **ERANTHEMUM**
 - 4. Stamens 4 **PETALIDIUM**
 - 3. Ovules more than 2 in each cell ; capsules 6 or more seeded :
 - 5. Corolla distinctly 2-lipped **HYGROPHILA**
 - 5. Corolla of 5 subequal lobes :
 - 6. Inflorescence a capituliform compound spike **GANTELBUA**
 - 6. Inflorescence not as above :
 - 7. Inflorescence of more or less elongated, simple spikes **HEMIGRAPHIS**
 - 7. Inflorescence not in spikes but in cymes **DIPTERACANTHUS**
 - 8. Ovules 2, rarely 1 in each cell :
 - 9. Corolla lobes 5, subequal **BARLERIA**
 - 9. Corolla distinctly 2-lipped **LEPIDAGATHIS**
 - 10. Anther cells spurred :
 - 11. Inflorescence secund ; placentae separating elastically **RUNGIA**
 - 11. Inflorescence not secund ; placentae not separating elastically **JUSTICIA**
 - 10. Anther cells not spurred :
 - 12. Corolla shorter than bracts **PERISTROPHE**
 - 12. Corolla longer than bracts **ADHATODA**
- 8 Ovules 3-10 in each cell :
 - 13. Capsules linear-oblong **ANDROGRAPHIS**
 - 13. Capsules elliptic **INDONEBIELLA**

ADHATODA Mill.

Adhatoda zeylanica Medic. *Adulsa*.

Shrubs. Flower dusty white. Fruits oblong, mucronate.

Fl. & Fr. : December June. Infrequent in wastelands.

ANDROGRAPHIS Wall. ex Nees

Andrographis paniculata (Burm. f.) Wall. ex Nees, The Creat.

Stout, glabrous herbs. Flowers creamy white. Capsules linear-oblong.

Fl. & Fr. : August February. Frequent weed in wastelands.

BARLERIA L.

1. Armed plants

B. prionitis

1. Unarmed plants

B. cristata

Barleria cristata L. *Sapti ka Dahul*.

Herbs or undershrubs. Flowers white or pale blue. Capsules ellipsoid.

Fl. & Fr. : September - January. Frequent as forest undergrowth.

B. prionitis L. *Madarangi*.

Erect, bushy undershrubs. Flowers yellow. Capsules ovoid, brown, beaked.

Fl. & Fr. : September - February. Frequent in open forests.

DIPTERACANTHUS Nees *emend.* Bremek.

1. Leaves acute ; capsules pubescent

D. prostratus

1. Leaves obtuse ; capsules glabrous

D. patulus

Dipteracanthus patulus (Jacq.) Nees

Suberect herbs. Flowers light purple. Capsules glabrous.

Fl. & Fr. : October February. Infrequent in moist soils.

Dipteracanthus prostratus (Poir.) Nees

Prostrate herbs. Flowers pale violet. Capsules pubescent.

Fl. & Fr. : April November. Frequent as forest undergrowth.

ERANTHEMUM L.

- | | |
|---|------------------------|
| 1. Bracts white with green nerves ; spikes upto 7.5 cm long | <i>E. roseum</i> |
| 1. Bracts green ; spikes more than 7.5 cm long | <i>E. purpurescens</i> |

Eranthemum purpurescens Nees, *Gulasham*.

Herbs or undershrubs. Flowers blue. Capsules clavate-oblong, glabrous.

Fl. & Fr. : September - February. Frequent in open forests.

E. roseum (Vahl) R. Br.

Erect herbs. Flowers blue. Capsules oblong, glabrous.

Fl. & Fr. : November March. Infrequent in open forests.

GANTELBUA Bremek.

Gantelbua urens (Heyne ex Roth) Bremek.

Strigosely hairy herbs. Flowers blue or purplish. Capsules linear-oblong, glabrous.

Fl. & Fr. : December - March. Frequent in wastelands.

HEMIGRAPHIS Nees

Hemigraphis latebrosa (Heyne ex Roth) Nees

Herbs. Flowers blue or light blue. Capsules linear-oblong.

Fl. & Fr. : September March. Frequent as forest undergrowth.

HYGROPHILA R. Br.

- | | |
|--|----------------------|
| 1. Plants armed, erect ; flowers in axillary whorls at each node | <i>H. auriculata</i> |
| 1. Plants unarmed, prostrate or ascending ; flowers in terminal spikes | <i>H. serpyllum</i> |

Hygrophila auriculata (Schum.) Heine

Stout, thorny, erect herbs. Flowers purple. Capsules linear-oblong, pointed, glabrous.

Fl. & Fr. : August May. Frequent in damp places.

H. serpyllum (Nees) T. Anders.

Unarmed prostrate herbs. Flowers purple. Capsules linear-oblong, pointed, glabrous.

Fl. & Fr. : September May. Frequent in moist situations.

INDONEESIELLA Sreem.

Indoneesiella echioides (L.) Sreem.

Hairy herbs. Flowers dusty white. Capsules elliptic-lanceolate, pilose.

Fl. & Fr. : August February. Frequent weed in wastelands.

JUSTICIA L.

- | | |
|---|---------------------------|
| 1. Calyx 5 partite | <i>J. glauca</i> |
| 1. Calyx 4 partite : | |
| 2. Spikes cylindric ; bracts and bracteoles as long as or longer than calyx lobes | <i>J. simplex</i> |
| 2. Spikes linear ; bracts and bracteoles shorter than calyx lobes : | |
| 3. Bracts, bracteoles and calyx lobes obtuse at apex | <i>J. quinquangularis</i> |
| 3. Bracts, bracteoles and calyx lobes acute at apex | <i>J. diffusa</i> |

Justicia diffusa Willd.

Herbs. Flowers light purple. Capsules glabrous.

Fl. & Fr. : August - February. Frequent in wastelands and also as forest undergrowth.

J. glauca Rottl.

Diffuse herbs. Flowers white to light purple. Capsules oblong, pointed.

Fl. & Fr. : August January. Frequent in moist places.

Justicia quinquangularis Koen. ex Roxb.

Slender herbs. Flowers light pink or purple. Capsules oblong, glabrous.

Fl. & Fr. : August - November. Infrequent along water courses.

J. simplex D. Don

Herbs. Flowers pale pink to purple. Capsules linear-oblong, mucronate.

Fl. & Fr. : August - February. Frequent in moist places.

LEPIDAGATHIS Willd.

- | | |
|---|---------------------|
| 1. Bracts spinous pointed ; calyx 4-partite | <i>L. cristata</i> |
| 1. Bracts with recurved apical spines ; calyx 5-partite | <i>L. trinervis</i> |

Lepidagathis cristata Willd. *Bhingend.*

Herbs. Flowers white or pale pink. Capsules ovoid, glabrous.

Fl. & Fr. : September - February. Infrequent in open and dense forests.

L. trinervis Wall. ex Nees

Suffruticose herbs. Flowers white, spotted with yellow, brown and purple. Capsules ovoid-lanceolate, compressed.

Fl. & Fr. : August - February. Frequent in open and dense forests.

NELSONIA R. Br.

Nelsonia canescens (Lam.) Spreng.

Suffruticose, diffuse herbs. Flowers bluish-purple. Capsules ovoid, glabrous.

Fl. & Fr. : January - April. Infrequent in open forests.

PERISTROPHE Nees

Peristrophe paniculata (Forssk.) Brummit

Erect herbs. Flowers pink. Capsules ellipsoid, pubescent.

Fl. & Fr. : September - February. Frequent in open forests.

PETALIDIUM Nees***Petalidium barlerioides* (Roth) Nees**

Undershrubs. Flowers yellow. Capsules linear, cylindric compressed.

Fl. & Fr. : December March. Infrequent in open forests.

RUNGIA Nees

1. Bracts uniform; upper lip of corolla notched or emarginate :
 2. Stems decumbent, glabrescent; capsules ovoid, acute *R. repens*
 2. Stems erect, densely hairy; capsules obovoid, obtuse *R. elegans*
1. Bracts dimorphic, upper lip of corolla neither emarginate or notched :
 3. Fertile bracts glabrous except the ciliate margins *R. parviflora*
 3. Fertile bracts villous *R. pectinata*

***Rungia elegans* Dalz. & Gibs.**

Erect herbs. Flowers blue. Capsules obovoid, pubescent.

Fl. & Fr. : March January. Infrequent in open forests.

***R. parviflora* Nees**

Herbs. Flowers blue. Capsules compressed.

Fl. & Fr. : August April. Infrequent in open forests.

***R. pectinata* (L.) Nees**

Suberect or diffuse herbs. Flowers blue. Capsules compressed, ovoid, pubescent at tip.

Fl. & Fr. : September - February. Frequent in wastelands and open forests.

***R. repens* (L.) Nees**

Herbs. Flowers pinkish-blue. Capsules ovoid, pointed, glabrous.

Fl. & Fr. : August - February. Frequent weed in wastelands.

STAUROGYNE Wall.

Staurogyne glauca (Nees) Kuntze

Erect. viscid-pubescent herbs. Flowers purplish in axillary or terminal spikes. Capsules oblong.

Fl. & Fr. : October - February. Frequent in wastelands.

VERBENACEAE

- | | |
|---|--------------|
| 1. Leaves digitately 3 - 7-foliolate | VITEX |
| 1. Leaves simple : | |
| 2. Large trees ; fruiting calyx much inflated | TECTONA |
| 2. Herbs, shrubs or small trees, fruiting calyx slightly accrescent : | |
| 3. Inflorescence subtended by a whorl of 6, foliaceous, accrescent bracts ; stamens 6 or more | SYMPHOREMA |
| 3. Inflorescence without a whorl of bracts; stamens 4 or less : | |
| 4. Creeping herbs ; fruits dry | PHYLA |
| 4. Shrubs ; fruits fleshy | LANTANA |
| 5. Calyx with 2 glands ; corolla distinctly 2-lipped | GMELINA |
| 5. Calyx without any glands ; corolla limb slightly oblique | CLERODENDRUM |

CLERODENDRUM L.

- | | |
|--|-----------------------|
| 1. Leaves often in whorls of 3 ; calyx lobes short, broadly triangular | <i>C. serrata</i> |
| 1. Leaves opposite ; calyx lobes long, ovate acuminate | <i>C. multiflorum</i> |

Clerodendrum multiflorum (Burm. f.) Kuntze

Shrubs. Flowers white. Fruits obovoid, glabrous.

Fl. & Fr. : September - March. Frequent in wastelands.

C. serratum (L.) Moon, Bharangi.

Undershrubs or shrubs. Flowers blue or purplish-blue. Fruits obovoid.

Fl. & Fr. : July - December. Frequent in wastelands.

GMELINA L.**Gmelina arborea** Roxb.

Trees. Flowers yellow. Fruits yellow-orange when ripe.

Fl. & Fr. : January May. Infrequent in open forests.

LANTANA L.**Lantana camara** L. var. **aculeata** (L.) Mold.

Straggling shrubs. Flowers white, yellow-orange or red and even mixed in one compact spike. Fruits black.

Fl. & Fr. : Greater part of the year. Frequent on hedges.

PHYLA Lour.**Phyla nodiflora** (L.) Greene

Prostrate, creeping herbs. Flowers white or pale purple. Fruits globose.

Fl. & Fr. : Greater part of the year. Frequent in moist situations.

SYMPHOREMA Roxb.

1. Leaves ovate-elliptic, subacute, corolla 6 - 8-lobed *S. involucratum*

1. Leaves broadly ovate, acuminate, corolla 12 - 16-lobed *S. polyandrum*

Symphorema involucratum Roxb.

Climbers. Flowers white. Fruits subglobose, glabrous or nearly so.

Fl. & Fr. : March May. Infrequent in open forests.

S. polyandrum Wight

Straggling shrubs. Flowers white. Fruits enclosed in the persistent calyx.

Fl. & Fr. : February - May. Infrequent in open forests.

TECTONA L. f. nom. cons.

Tectona grandis L. f. Sag. Teak.

Trees. Flowers white. Fruits enclosed by the enlarged calyx.

Fl. & Fr. : June October. Frequent in open and dense forests.

VITEX L.

Vitex negundo L. Nirgudi.

Shrubs or trees. Flowers blue or bluish-purple. Fruits black.

Fl. & Fr. : Greater part of the year. Frequent in wastelands.

LAMIACEAE

- 1. Flower whorls capitate :
 - 2. Leaves cordate at base ; corolla bilipped ANISOCHILUS
 - 2. Leaves acute at base ; corolla obscurely bilipped ACROCEPHALUS
- 1. Flower whorls various, not capitate :
 - 3. Calyx 6 - 10-toothed :
 - 4. Calyx teeth spinescent ; lower lip of corolla smaller than upper lip LEONOTIS
 - 4. Calyx teeth not spinescent ; lower lip of corolla equalling or larger than upper lip LEUCAS
 - 3. Calyx 5-lobed :
 - 5. Stamens erect, ascending or spreading ANISOMELES
 - 5. Stamens declinate, lying upon or enclosed in the lower lip :
 - 6. Flower whorls axillary HYPTIS
 - 6. Flower whorls in a terminal spike or raceme :
 - 7. Corolla tube exerted ; stigma subentire, capitate ORTHOSIPHON
 - 7. Corolla tube not or little exerted ; stigma 2-fid, not capitate OCIMUM

ACROCEPHALUS Benth.**Acrocephalus hispidus (L.) Nicolson & Sivadasan**

Slender herbs. Flowers bluish-purple. Nutlets ellipsoid, smooth.

Fl. & Fr. : August November. Frequent as forest undergrowth.

ANISOCHILUS Wall.**Anisochilus carnosus (L.) Wall.**

Erect, stout herbs. Flowers light purple. Nutlets orbicular.

Fl. & Fr. : September January. Frequent on rocky slopes.

ANISOMELES R. Br.

1. Plants glabrous ; cymes few flowered, pedunculate, flowers white or creamy white

A. heyneana

1. Plants densely pubescent ; cymes many flowered, sessile, flowers purple

A. indica

Anisomeles heyneana Benth.

Herbs or undershrubs. Flowers white. Nutlets brown.

Fl. & Fr. : August December. Infrequent in open forests.

A. indica (L.) Kuntze

Herbs or undershrubs. Flowers purple. Nutlet black, shining.

Fl. & Fr. : October February. Frequent in wastelands.

HYPTIS Jacq.**Hyptis suaveolens (L.) Poit.**

Aromatic herbs. Flowers blue. Nutlets ovoid.

Fl. & Fr. : August March. Frequent in cultivated fields and wastelands.

LEONOTIS R. Br.

Leonotis nepetifolia (L.) R. Br.

Herbs. Flowers orange-red. Nutlets obovoid, brown.

Fl. & Fr. : September February. Frequent in wastelands.

LEUCAS R. Br.

- | | |
|--------------------------------------|----------------------|
| 1. Calyx mouth straight or nearly so | <i>L. stricta</i> |
| 1. Calyx mouth oblique : | |
| 2. Calyx mouth not villous within | <i>L. aspera</i> |
| 2. Calyx mouth villous within : | |
| 3. Leaves linear, entire | <i>L. zeylanica</i> |
| 3. Leaves ovate, crenate | <i>L. cephalotes</i> |

Leucas aspera (Willd.) Spreng.

Erect herbs. Flowers white. Nutlets oblong.

Fl. & Fr. : October February. Infrequent in wastelands.

L. cephalotes (Roxb. ex Roth) Spreng.

Pubescent herbs. Flowers white. Nutlets obovoid-oblong, smooth, brown.

Fl. & Fr. : August February. Frequent in open forests.

L. stricta Benth.

Herbs. Flowers white. Nutlets smooth, brown.

Fl. & Fr. : September January. Frequent as forest undergrowth.

L. zeylanica R. Br.

Herbs. Flowers white. Nutlets obovoid-oblong, trigonous.

Fl. & Fr. : August December. Frequent in open forests.

OCIMUM L.

- | | |
|---|---------------------|
| 1. Calyx glabrous within ; nutlets smooth | <i>O. sanctum</i> |
| 1. Calyx hairy within ; nutlets pitted | <i>O. basilicum</i> |

Ocimum basilicum L.

Aromatic herbs. Flowers white. Nutlets ellipsoid, glabrous.

Fl. & Fr. : Greater part of the year. Frequent as an escape.

O. sanctum L. Sacred Basil.

Aromatic herbs. Flowers light pink to purple. Nutlets broadly ellipsoid.

Fl. & Fr. : Greater part of the year. Frequent as an escape.

ORTHOSIPHON Benth.

1. Leaves gland-dotted ; corolla tube nearly equalling the calyx

O. pallidus

1. Leaves not gland-dotted ; corolla tube longer than calyx

O. thymiflorus

Orthosiphon pallidus Royle ex Benth.

Herbs or undershrubs. Flowers white or pale purple. Nutlets subglobose, pale brown.

Fl. & Fr. : July November. Frequent in open forests.

O. thymiflorus (Roth) Sleesen

Herbs or undershrubs. Flowers white or pale pink. Nutlets ellipsoid or subglobose, brown.

Fl. & Fr. : April October. Infrequent in open forests.

NYCTAGINACEAE**BOERHAVIA L.**

1. Erect or suberect herbs ; fruits eglandular

B. erecta

1. Prostrate or straggling herbs ; fruits glandular

B. diffusa

Boerhavia diffusa L.

Diffuse herbs. Flowers white, pink or red. Fruits glandular.

Fl. & Fr. : Greater part of the year. Frequent in wastelands.

B. erecta L.

Erect or suberect herbs. Flowers white. Fruits eglandular.

Fl. & Fr. : August December. Frequent in wastelands.

AMARANTHACEAE

- 1. Leaves alternate :
 - 2. Flowers pilose ; staminodes present AERVA
 - 2. Flowers not pilose ; staminodes absent :
 - 3. Styles long ; stigmas capitate ; fruits membranous CELOSIA
 - 3. Styles, stigmas and fruits not as above :
 - 4. Flowers unisexual ; stigmas 3-fid AMARANTHUS
 - 4. Flowers bisexual ; stigmas otherwise :
 - 5. Flowers in capitate heads ; perianth subequal ; filaments connate ALLMANIA
 - 5. Flowers in spiciform racemes perianth equally 5-lobed ; filaments free DIGERA
- 1. Leaves opposite or whorled :
 - 6. Anthers bicelled :
 - 7. Staminodes absent, filaments free PUPALIA
 - 7. Staminodes present, filaments connate ACHYRANTHES
 - 6. Anthers unicelled :
 - 8. Flowers in axillary clusters ; stigmas capitate ALTERNANTHERA
 - 8. Flowers in terminal heads ; stigmas bifid GOMPHRENA

ACHYRANTHES L.

***Achyranthes aspera* L. *Uttarni*.**

Straggling undershrubs. Flowers light pink-purple. Fruits oblong-cylindric, glabrous.

Fl. & Fr. : Greater part of the year. Frequent in wastelands.

AERVA Forssk.

- 1. Leaves linear ; perianth 4-lobed *A. monsoniae*
- 1. Leaves elliptic ; perianth 5-lobed :
 - 2. Flowers in clustered pubescent spikes *A. lanata*
 - 2. Flowers in cylindrical villous spikes *A. sanguinolenta*

Aerva lanata (L.) Juss.

Grey tomentose herbs. Flowers white. Nutlets minute, ovoid.

Fl. & Fr. : July December. Frequent in wastelands.

A. monsoniae (L.f.) Mart.

Tomentose herbs. Flowers pale pink. Nutlets ovoid.

Fl. & Fr. : July December. Frequent in sandy soils.

A. sanguinolenta (L.) Blume

Herbs. Flowers white. Nutlets minute, broadly ovoid.

Fl. & Fr. : September January. Frequent in wastelands and also as forest undergrowth.

ALLMANIA R. Br. ex Wight**Allmania nodiflora (L.) R. Br. ex Wight**

Prostrate or diffuse herbs. Flowers brownish. Fruits subglobose.

Fl. & Fr. : July November. Infrequent as forest undergrowth.

ALTERNANTHERA FORSSK.**Alternanthera sessilis (L.) R. Br. ex DC.**

Prostrate herbs. Flowers white with light brownish tinge. Nutlets small.

Fl. & Fr. : September December. Frequent in moist shady places.

AMARANTHUS L.

- | | |
|---|--------------------|
| 1. Armed plants ; flowers in dense, axillary clusters | <i>A. spinosus</i> |
| 1. Unarmed plants ; flowers in long, axillary and terminal spikes | <i>A. caudatus</i> |

Amaranthus caudatus L.

Undershrubs. Flowers crimson. Fruits small.

Fl. & Fr. : Greater part of the year. Infrequent as an escape.

Amaranthus spinosus L.

Erect herbs. Flowers greenish often with brownish tinge. Capsules ovoid, membranous, rugose.

Fl. & Fr. : September December. Frequent weed in wastelands.

CELOSIA L.**Celosia argentea L. Quail Grass.**

Suberect to erect herbs. Flowers white with pinkish tinge. Capsules ellipsoid.

Fl. & Fr. : October April. Frequent weed in cultivated fields and wastelands.

DIGERA Forssk.**Digera muricata (L.) Mart.**

Erect herbs. Flowers pinkish. Fruits globose.

Fl. & Fr. : September December. Frequent weed in cultivated fields and wastelands.

GOMPHRENA L.**Gomphrena celosioides Mart.**

Herbs. Flowers yellow. Fruits small.

Fl. & Fr. : October February. Frequent weed in cultivated fields and wastelands.

PUPALIA Juss. nom. cons.**Pupalia lappacea (L.) Juss.**

Straggling undershrubs. Flowers white. Fruits oblong.

Fl. & Fr. : August December. Frequent in wastelands.

POLYGONACEAE

1. Climbing herbs

ANTIGONON

1. Erect herbs

POLYGONUM

ANTIGONON Endl.

Antigonon leptopus Hook. & Arn.

Climbers. Flowers white-pink. Fruits ovoid or subglobose.

Fl. & Fr. : September December. Frequent in wastelands, also planted.

POLYGONUM L.

- | | |
|---|--------------------|
| 1. Plants prostrate ; leaves small | <i>P. plebeium</i> |
| 1. Plants erect ; leaves well developed : | |
| 2 Stipules not strigosely ciliate | <i>P. glabrum</i> |
| 2 Stipules strigosely ciliate : | |
| 3. Styles 2 ; nuts biconvex | <i>P. pulchrum</i> |
| 3. Styles 3 ; nuts trigonous | <i>P. barbatum</i> |

Polygonum barbatum L.

Erect herbs. Flowers white often with pink tinge. Nuts trigonous.

Fl. & Fr. : September December. Frequent in marshy places.

P. glabrum Willd.

Glabrescent herbs or undershrubs. Flowers pink or red. Nuts biconvex.

Fl. & Fr. : September December. Frequent near moist situations.

P. plebeium R. Br.

Diffuse, much branched, slender herbs. Flowers bright pink to red. Nuts trigonous.

Fl. & Fr. : March June. Frequent in wastelands and cultivated fields.

P. pulchrum Blume

Softly silky-tomentose, large herbs. Flowers white. Nuts biconvex.

Fl. & Fr. : August December. Infrequent in moist places.

ARISTOLOCHIACEAE

ARISTOLOCHIA L.

Aristolochia indica L. The Indian Birthwort.

Climbers. Flowers greenish-white. Fruits oblong.

Fl. & Fr. : November March. Frequent in open forests.

CASSYTHACEAE

CASSYTHA L.

Cassytha filiformis L.

Herbaceous, leafless, parasitic twiners. Flowers greenish. Fruits white, globose.

Fl. & Fr. : September December. Frequent in open forests.

LAURACEAE

LITSEA Lam. *nom. cons.*

Litsea polyantha Juss.

Trees. Flowers greenish. Fruits ellipsoid.

Fl. & Fr. : March August. Infrequent near streams.

LORANTHACEAE

1. Leafless parasites ; flowers small, unisexual

VISCUM

1. Leafy parasites ; flowers large, bisexual

DENDROPHTHOE

DENDROPHTHOE Mart.

Dendrophthoe falcata (L.f.) Etting.

Parasitic herbs. Flowers greenish-white turning red. Fruits ovoid-oblong, greenish turning red and black.

Fl. & Fr. : January June. Frequent in open and dense forests.

VISCUM L.

Viscum nepalense Spreng.

Parasitic, leafless usually pendulous herbs. Flowers white. Berries globose.

Fl. & Fr. : June - October. Frequent in open and dense forests.

EUPHORBIACEAE

- | | |
|--|--------------|
| 1. Male and female flowers much reduced and enclosed in a common involucre making the inflorescence a cyathium | EUPHORBIA |
| 1. Male and female flowers not as above i.e. not a cyathium : | |
| 2. Petals present in both sexes or atleast sepals petaloid when petals absent : | |
| 3. Herbs | CHROZOPHORA |
| 3. Shrubs or trees : | |
| 4. Fruits drupaceous, with 1-2 (usually single) seeded cocci or pyrenes | BRIDELIA |
| 4. Fruits capsular with three, 2-valved cocci | CLEISTANTHUS |
| 2. Petals absent in both the sexes : | |
| 5. Plants with stinging hairs | TRAGIA |
| 5. Plants not with stinging hairs : | |
| 6. Cocci faintly spinous or with two rows of spinules on back of each coccus | SEBASTIANA |
| 6. Cocci not as above : | |
| 7. Trees : | |
| 8. Plants monoecious | EMBLICA |
| 8. Plants dioecious | ANTIDESMA |
| 7. Herbs, undershrubs or shrubs but not trees : | |
| 9. Herbs or undershrubs : | |
| 10. Female flowers with accrescent leafy bracts | ACALYPHA |
| 10. Female flowers not as above | BALIOSPERMUM |
| 9. Shrubs : | |
| 11. Male and female flowers in axillary or intra-axillary spikes | HOMONOIA |

- 11. Male flowers axillary, solitary or clustered :
 - 12. Stamens 5 in 2 series, 3-inner filaments connate KIRGANELIA
 - 12. Stamens 3, filaments united :
 - 13. Disc present PHYLLANTHUS
 - 13. Disc absent :
 - 14. Styles confluent along short column or cone GLOCHIDION
 - 14. Styles separate, if partly connate, the style arms and stigmas free SAUROPLUS

ACALYPHA L.

- 1. Bracts concealing the capsule :
 - 2. Bracts fimbriate ; capsules glabrous *A. ciliata*
 - 2. Bracts toothed ; capsules hispid *A. indica*
- 1. Bracts not concealing the capsule :
 - 3. Bracts glabrous ; capsules glabrous or nearly so *A. malabarica*
 - 3. Bracts hairy ; capsules hispid *A. lanceolata*

***Acalypha ciliata* Forssk.**

Erect herbs. Flowers greenish. Capsules glabrous.

Fl. & Fr. : July October. Infrequent weed in wastelands.

***A. indica* L.**

Erect herbs. Flowers greenish-yellow. Capsules hirsute.

Fl. & Fr. : March November. Frequent in moist shady places.

***A. lanceolata* Willd.**

Hirsute herbs. Flowers greenish-yellow. Capsules hirsute.

Fl. & Fr. : September November. Frequent in wastelands and open forests.

***A. malabarica* Muell.-Arg.**

Stout herbs. Flowers greenish, minute. Capsules glabrous.

Fl. & Fr. : August October. Infrequent in wastelands.

ANTIDESMA L.

1. Leaves obtuse ; calyx 5 7-partite ; stamens 4-7 *A. ghaesembilla*
 1. Leaves acute or acuminate ; calyx 4-lobed ; stamens 2 *A. acidum*

Antidesma acidum Retz.

Shrubs or trees. Flowers greenish. Fruits purplish-red.

Fl. & Fr. : July - November. Frequent in open and dense forests.

A. ghaesembilla Gaertn.

Trees. Flowers greenish. Drupes reddish-purple.

Fl. & Fr. : July - October. Frequent in open forests.

BALIOSPERMUM Blume

Baliospermum montanum (Willd.) Muell.-Arg.

Stout undershrubs. Flowers pale yellow. Capsules tri-lobed, obovoid, pubescent.

Fl. & Fr. : September - February. Infrequent in cultivated fields.

BRIDELIA Willd.

1. Trees ; flowers dioecious *B. retusa*
 1. Straggling shrubs ; flowers monoecious :
 2. Leaves thin ; apex acute or obtusely acuminate *B. hamiltoniana*
 2. Leaves rather thick ; oblong, often obtuse, rounded *B. scandens*

Bridelia hamiltoniana Wall. ex Hook. f.

Straggling or scandent shrubs. Flowers greenish-yellow. Drupes globose, glabrous, black.

Fl. & Fr. : August - December. Frequent in open and dense forests.

B. retusa (L.) Spreng.

Trees. Flowers dusty white or creamy on terminal spikes. Drupes globose, black.

Fl. & Fr. : August - February. Frequent in open and dense forests.

Bridelia scandens (Roxb.) Willd.

Scandant shrubs. Flowers greenish. Drupes globose, turning black.

Fl. & Fr. : November March. Infrequent in open forests.

CHROZOPHORA Neck. ex Juss. *nom. cons.*

Chrozophora prostrata Dalz.

Prostrate herbs. Flowers creamy. Capsules stellately woolly.

Fl. & Fr. : Greater part of the year. Frequent in harvested fields.

CLEISTANTHUS Hook. f. ex Planch.

Cleistanthus collinus (Roxb.) Benth. *Garari*.

Shrubs or trees. Flowers pale green. Capsules chestnut coloured, shining.

Fl. & Fr. : April October. Frequent in open and dense forests.

EMBLICA Gaertn.

Emblica officinalis Gaertn.

Trees. Flowers greenish-yellow. Drupes fleshy, globose.

Fl. & Fr. : April October. Frequent in open and dense forests.

EUPHORBIA L.

- | | |
|---|----------------------|
| 1. Armed shrubs | <i>E. nivulia</i> |
| 1. Unarmed herbs : | |
| 2. All leaves alternate or only a few upper most floral leaves opposite | <i>E. geniculata</i> |
| 2. All leaves opposite : | |
| 3. Gland of involucre with a conspicuous petaloid limb : | |
| 4. Cyathia in crowded cymes with a common peduncle | <i>E. parviflora</i> |
| 4. Cyathia solitary or 2-3 together : | |
| 5. Leaves less than 2.5 cm long, capsules hairy | <i>E. elegans</i> |

5. Leaves more than 2.5 cm long ; capsules glabrous *E. pycnostegia*
var. *zornioides*
3. Gland of involucre without a petaloid limb :
6. Leaves more than 1.0 cm long ; stems and branches patently hairy *E. hirta*
6. Leaves less than 1.0 cm long ; stem and branches usually glabrous :
7. Capsules glabrous *E. orbiculata*
7. Capsules hairy or pubescent on angles or all over :
8. Capsules hairy on angles *E. prostrata*
8. Capsules hairy all over *E. thymifolia*

***Euphorbia elegans* Spreng.**

Dichotomously branched herbs. Flowers greenish-yellow. Capsules hairy.

Fl. & Fr. : July - November. Infrequent in moist soils.

***E. geniculata* Orteg**

Erect herbs. Flowers greenish. Capsules 3-lobed.

Fl. & Fr. : Greater part of the year. Frequent weed in cultivated fields and wastelands.

***E. hirta* L.**

Procumbent or decumbent herbs. Flowers greenish-yellow. Capsules hairy.

Fl. & Fr. : Greater part of the year. Frequent weed in wastelands.

***E. nivulia* Buch.-Ham.**

Shrubs. Flowers greenish. Capsules obovoid.

Fl. & Fr. : November - April. Frequent hedge along the edges of cultivated fields.

***E. orbiculata* H.B. & K.**

Herbs. Flowers greenish. Capsules minute, yellow-brown.

Fl. & Fr. : October - May. Frequent weed in cultivated fields and wastelands.

Euphorbia parviflora L.

Herbs. Flowers greenish-yellow. Capsules globose, hairy.

Fl. & Fr. : July November. Frequent weed in wastelands.

E. prostrata Ait.

Procumbent herbs. Flowers greenish-yellow. Capsules obovoid.

Fl. & Fr. : July December. Frequent weed in wastelands.

E. pycnostegia Boiss. var. **zornioides** (Boiss.) Sant.

Erect herbs. Flowers greenish-white. Capsules subglobose.

Fl. & Fr. : October February. Infrequent in wastelands.

E. thymifolia L.

Prostrate herbs. Flowers greenish in axillary cymes. Capsules pubescent.

Fl. & Fr. : Greater part of the year. Frequent weed in wastelands.

GLOCHIDION J.R. & G. Forst. *nom. cons.***Glochidion zeylanicum** (Gaertn.) A. Juss.

Trees. Flowers greenish. Capsules subglobose, obscurely lobed.

Fl. & Fr. : Greater part of the year. Infrequent in open forests.

HOMONOIA Lour.

- | | |
|--|-------------------|
| 1. Leaves linear-lanceolate ; spikes 5-12 cm long | <i>H. riparia</i> |
| 1. Leaves oblanceolate or obovate ; spikes 2.5-3.5 cm long | <i>H. retusa</i> |

Homonoia retusa Muell.-Arg.

Shrubs. Flowers greenish ; capsules globose.

Fl. & Fr. : April October. Infrequent along the water course.

H. riparia Lour.

Shrubs. Flowers greenish. Capsules globose.

Fl. & Fr. : January May. Frequent among boulders along the water course.

KIRGANELIA A. Juss.

Kirganelia reticulata (Poir.) Baillon

Straggling shrubs. Flowers dusty white. Berries globose.

Fl. & Fr. : August May. Frequent along the banks of streams and also amidst rocks in open forests.

PHYLLANTHUS L.

1. Stipules peltate :

2. Leaves closely set ; capsules echinate, stem and branches red

P. urinaria

2. Leaves distant, capsules not echinate, stem and branches not red :

3. Leaves cuneate-obovate

P. maderaspatensis

3. Leaves linear-oblong

P. virgatus

1. Stipules epeltate :

4. Stamens free

P. debilis

4. Stamens united into a column :

5. Leaves usually acute at apex ; seed with irregular ribs

P. asperulatus

5. Leaves obtuse or subacute at apex ; seed with regular parallel ribs

P. fraternus

Phyllanthus asperulatus Hutch.

Erect herbs. Flowers greenish-white. Capsules globose.

Fl. & Fr. : July October. Frequent weed in cultivated fields and wastelands.

P. debilis Klein ex Willd.

Erect, slender herbs Flowers dusty white. Capsules globose.

Fl. & Fr. : August October. Infrequent weed in wastelands.

P. fraternus Webbst.

Small herbs. Flowers yellowish. Capsules depressed globose.

Fl. & Fr. : July December. Infrequent in moist soils.

Phyllanthus maderaspatensis L.

Much branched herbs with obovate, cuneate leaves. Flowers dusty white. Capsules globose, glabrous.

Fl. & Fr. : July - December. Frequent weed in cultivated fields and wastelands.

P. urinaria L.

Herbs. Flowers pale. Capsules globose, echinate.

Fl. & Fr. : August - November. Frequent weed in wastelands.

P. virgatus Forst. f.

Suberect or procumbent herbs. Flowers creamy-white. Capsules globose, crustaceous.

Fl. & Fr. : August - December. Frequent in wastelands.

SAUROPUS Blume**Sauropus quadrangularis (Klein ex Willd.) Muell.-Arg.**

Herbs. Flowers greenish. Fruits globose.

Fl. & Fr. : June - October. Infrequent in open forests.

SEBASTIANA Spreng.**Sebastiania chamaelea (L.) Muell.-Arg.**

Herbs. Flowers yellowish. Fruits 3-lobed, dehiscent into 3-cocci.

Fl. & Fr. : July - December. Frequent as forest undergrowth.

TRAGIA L.**Tragia plukenetii A. R. Sm.**

Climbing shrubs. Flowers greenish. Capsules 3-lobed, hirsute.

Fl. & Fr. : May - October. Infrequent in wastelands.

ULMACEAE

HOLOPTELEA Planch.

Holoptelea integrifolia (Roxb.) Planch.

Trees. Flowers brownish. Fruits samaroid, orbicular, retuse.

Fl. & Fr. : January April. Infrequent in open forests and wastelands.

URTICACEAE

ELATOSTEMA J.R. & G. Forst. *nom. cons.***Elatostema cuneatum** Wight

Annual herbs. Flowers in sessile heads. Achenes ellipsoid, ribbed, yellow.

Fl. & Fr. : September November. Infrequent as forests undergrowth.

MORACEAE

FICUS L.

- | | |
|---|---|
| 1. Leaves opposite | <i>S. hispida</i> |
| 1. Leaves alternate : | |
| 2. Receptacles in clusters on old trunks or on special branches | <i>F. racemosa</i> |
| 2. Receptacles not as above : | |
| 3. Bracts small, scarious | <i>F. amplissima</i> |
| 3. Bracts distinct, not scarious | <i>F. virens</i>
var. <i>sublanceolata</i> |

Ficus amplissima J. E. Sm.

Trees. Leaves ovate-oblong or elliptic-oblong, glabrous. Figs purple when ripe.

Fl. & Fr. : April October. Infrequent along the forest roads.

Ficus hispida L. f.

Trees. Leaves ovate-oblong or obovate, coriaceous. Receptacles clustered on the tubercles of the stem.

Fl. & Fr. : August March. Frequent in open forests.

F. racemosa L.

Trees. Leaves ovate-oblong or elliptic-lanceolate, glabrous, coriaceous. Receptacles ovoid or subglobose on short, warted, tubercled branches.

Fl. & Fr. : August February. Frequent in open forests.

F. virens Ait. var. *sublanceolata* (Miq.) Corner

Trees. Leaves ovate-lanceolate. Receptacles axillary in pairs, sessile, globose.

Fl. & Fr. : January June. Infrequent in open forests.

HYDROCHARITACEAE

- | | |
|---------------------------|---------|
| 1. Spathes broadly winged | OTTELIA |
| 1. Spathes not winged | BLYXA |

Blyxa Noronha ex Du Petit-Thous.

- | | |
|---|--------------------|
| 1. Flowers unisexual ; stamens often 9 or more ; seeds with 8 rows of spines | <i>B. octandra</i> |
| 1. Flowers bisexual ; stamens 3 ; seeds obscurely echinate, tubercled or smooth | <i>B. aubertii</i> |

Blyxa aubertii L.

Monoecious, acaulescent herbs. Capsules cylindrical.

Fl. & Fr. : December January. Infrequent in open forests along the moist habitats.

B. octandra (Roxb.) Planch. ex Thw.

Deciduous, acaulescent, aquatic herbs. Fruits torulose finely ribbed.

Fl. & Fr. : December January. Infrequent in open forests along moist habitats.

OTTELIA Pers.

Ottelia alismoides (L.) Pers.

Aquatic herbs. Flowers white, solitary. Capsules ellipsoid, enclosed in spathes.

Fl. & Fr. : September February. Frequent in ponds, ditches and puddles.

ORCHIDACEAE

- | | |
|--|------------|
| 1. Epiphytes | VANDA |
| 1. Terrestrials : | |
| 2. Scapes lateral | EULOPHIA |
| 2. Racemes or spikes terminal : | |
| 3. Sepals unequal ; stigmatic surfaces stipitate ; ovaries and capsules spreading | HABENARIA |
| 3. Sepals subequal and more or less connivent ; stigmatic surfaces sessile ; ovaries and capsules appressed to flowering axils | PERISTYLUS |

EULOPHIA R. Br. *nom. cons.***Eulophia ochreatea Lindl.**

Tuberous rooted, erect herbs. Flowers membranous. Fruits green, broadly ovoid, strongly ridged.

Fl. & Fr. : May July. Infrequent in open forests.

HABENARIA Willd.

- | | |
|--|--------------------------|
| 1. Petals 2 partite | <i>H. gibsonii</i> |
| 1. Petals entire : | |
| 2. Leaves usually 2 (rarely more), flat on the ground | <i>H. crassifolia</i> |
| 2. Leaves cauline or radical but not flat on the ground : | |
| 3. Ovary long beaked ; segments of lip filiform ; tube of anther cells long | <i>H. commelinifolia</i> |
| 3. Ovary scarcely beaked ; segments of lip not filiform ; tube of anther cells short | <i>H. marginata</i> |

Habenaria commelinifolia Wall. ex Lindl.

Tuberous herbs. Flowers white. Capsules sessile, fusiform.

Fl. & Fr. : August - October. Frequent in open forests.

H. crassifolia A. Rich.

Herbs. Flowers white in elongated, many flowered racemes. Capsules elliptic, ribbed.

Fl. & Fr. : August - October. Infrequent in open forests.

H. gibsonii Hook. f.

Terrestrial herbs. Flowers white, bracteate. Capsules more or less curved, ribbed.

Fl. & Fr. : July - September. Infrequent in open forests.

H. marginata Colebr.

Tuberous herbs. Flowers greenish-yellow. Capsules fusiform, turgid.

Fl. & Fr. : September - October. Infrequent in moist rocky slopes.

PERISTYLUS Blume *nom. cons.***Peristylus plantagineus** Lindl.

Tuberous herbs. Flowers white. Capsules curved at the apex.

Fl. & Fr. : July - August. Infrequent as a forest undergrowth.

VANDA R. Br.**Vanda tessellata** (Roxb.) Hook. ex G. Don

Epiphytic herbs. Flowers large, purplish-blue to red with white or white with yellow streaks. Capsules oblong, sharply winged.

Fl. & Fr. : August - February. Frequent in open as well as dense forests.

COSTACEAE

COSTUS L.

Costus speciosus (Koen.) Sm.

Stout herbs. Flowers large, white. Capsules trigonous, red.

Fl. & Fr. : August November. Frequent as forest undergrowth.

CANNACEAE

CANNA L.

Canna indica L.

Erect herbs. Flowers yellow to scarlet. Fruits oblong or subglobose.

Fl. & Fr. : Greater part of the year. Infrequent as an escape, also planted.

ZINGIBERACEAE

- | | |
|---|------------|
| 1. Leaves often tufted ; connectives of anthers spurred at the base ; corolla tube funnel shaped | CURCUMA |
| 1. Leaves if present usually distichous ; connectives of anthers not spurred ; corolla tube long, slender : | |
| 2. Flowering spikes lateral from the rhizome ; lateral staminodes 0 or small | ZINGIBER |
| 2. Flowering spikes from between the leaves ; lateral staminodes broad : | |
| 3. Leafy stems tall | HEDYCHIUM |
| 3. Leafy stems 0 | KAEMPFERIA |

CURCUMA L.

Curcuma pseudomontana Grah.

Scapigerous herbs. Flowers yellow. Capsules subglobose, 3-valved.

Fl. & Fr. : September November. Frequent as forest undergrowth.

HEDYCHIUM Koen.

Hedychium coronarium Koen. Common Ginger Lily.

Herbs with perennial root stocks. Flowers white. Capsules oblong, glabrous.

Fl. & Fr. : August - October. Frequent as forest undergrowth.

KAEMPFERIA L.

Kaempferia scaposa Benth.

Erect herbs. Flowers in dense, terminal spikes. Capsules obovoid, red.

Fl. & Fr. : July - December. Infrequent as forest undergrowth.

ZINGIBER Boehmer *nom. cons.*

Zingiber neesatum (Grah.) Ramam.

Erect herbs with perennial tubers. Scapes long, flowers 2 - 3 per bract, orange-yellow. Capsules obovoid, orange-red.

Fl. & Fr. : July - October. Infrequent as forest undergrowth.

HYPOXIDACEAE

CURCULIGO Gaertn.

Curculigo orchioides Gaertn.

Slender, tuberous rooted herbs. Flowers yellow. Capsules beaked.

Fl. & Fr. : April - October. Frequent amongst grasses in open forests.

TACCACEAE

TACCA Forst.

Tacca leontopetaloides (L.) Kuntze, Fiji Arrowroot.

Erect stout herbs. Flowers yellow. Fruits ovoid, 6 ribbed, yellow on ripening.

Fl. & Fr. : August - December. Infrequent in open forests.

DIOSCOREACEAE

DIOSCOREA L.

1. Leaves compound :
2. Stamens 6, female flowers in solitary, distant spikes *D. hispida*
2. Stamens 3 alternating with 3 staminodes ; female flowers in 2 - 3-nate racemes on the spike axis *D. pentaphylla*
1. Leaves simple :
3. Leaves opposite, ovate *D. oppositifolia*
3. Leaves alternate, broadly ovate-cordate *D. bulbifera*

Dioscorea bulbifera L. Air Potato.

Climbers. Flowers greenish-white or pink. Capsules winged, dusty brown.

Fl. & Fr. : August - October. Frequent in open and dense forests.

D. hispida Dennst.

Hirsute, prickly twiners. Flowers greenish-yellow. Capsules oblong, winged.

Fl. & Fr. : July - October. Infrequent in open forests.

D. oppositifolia L.

Climbers. Flowers greenish. Capsules winged.

Fl. & Fr. : August - February. Infrequent in open forests.

D. pentaphylla L.

Climbers. Flowers greenish-white. Capsules 3-angled, winged.

Fl. & Fr. : August - April. Frequent in open and dense forests.

ASPARAGACEAE

ASPARAGUS L.

Asparagus racemosus Willd.

Scandent undershrubs or shrubs. Flowers white. Berries small, globose.

Fl. & Fr. : July - February. Infrequent in open forests.

LILIACEAE

- | | |
|---|--------------|
| 1. Plants climbing by means of leaf tips modified as tendrils | GLORIOSA |
| 1. Plants not climbing : | |
| 2. Leaves cauline, broad ; flowers purple | IPHIGENIA |
| 2. Leaves radical ; flowers white, pinkish or reddish-brown : | |
| 3. Root stock a bulb | SCILLA |
| 3. Root stock not a bulb | CHLOROPHYTUM |

CHLOROPHYTUM Ker Gawl.

- | | |
|--|-------------------|
| 1. Flowers remotely scattered in racemes, solitary or in pairs | <i>C. laxum</i> |
| 1. Flowers in dense racemes | <i>C. glaucum</i> |

Chlorophytum glaucum Dalz.

Herbs. Flowers densely arranged in the upper half, 1-3 together. Capsules 3-winged.

Fl. & Fr. : July October. Infrequent in moist soils.

C. laxum R. Br.

Tuberous rooted herbs. Flowers white. Fruits greenish.

Fl. & Fr. : July October. Infrequent in moist grassy slopes.

GLORIOSA L.

Gloriosa superba L. Malabar Glory Lily.

Herbaceous climbers. Flowers green-yellow and red towards apex. Capsules coriaceous.

Fl. & Fr. : July December. Frequent in open forests.

IPHIGENIA Kunth

Iphigenia indica (L.) A. Gray

Herbs. Flowers dark brown. Capsules oblong, grooved.

Fl. & Fr. : July October. Frequent as forest undergrowth.

SCILLA L.

Scilla hyacinthina (Roxb.) Macb.

Perennial herbs with tunicated bulbs. Flowers lilac-purple. Capsules 3-lobed.

Fl. & Fr. : June August. Infrequent in open forests.

COMMELINACEAE

- | | |
|--|-----------------|
| 1. Leaf sheaths inflated | AMISCHOPHACELUS |
| 1. Leaf sheaths not inflated : | |
| 2. Inflorescence a panicle or a cluster of 1 - 3-flowers | MURDANNIA |
| 2. Inflorescence a cyme : | |
| 3. Floral bracts inconspicuous, staminodes present | COMMELINA |
| 3. Floral bracts large, imbricated ; staminodes absent | CYANOTIS |

AMISCHOPHACELUS Rolla Rao & Kammathy**Amischophacelus axillaris** (L.) Rolla Rao & Kammathy

Prostrate herbs. Flowers blue or purple. Capsules oblong, beaked.

Fl. & Fr. : August November. Frequent in moist situations.

COMMELINA L.

- | | |
|---|------------------------|
| 1. Spathes long acuminate-caudate at apex | <i>C. attenuata</i> |
| 1. Spathes not so : | |
| 2. Capsules 2-celled, 2-seeded | <i>C. suffruticosa</i> |
| 2. Capsules 3-celled, 3 - 5-seeded : | |
| 3. Capsules 3-seeded : | |
| 4. Inflorescence subtended by smaller leaves in addition to natural leaves ; spathes directly peduncled | <i>C. paleata</i> |
| 4. Inflorescence not subtended by smaller leaves ; spathes sessile or nearly so | <i>C. paludosa</i> |

3. Capsules 5-seeded :

5. Leaves ovate-lanceolate ; capsules apiculate ;
seeds smooth or tuberculate

C. hasskarlii

5. Leaves ovate-elliptic ; capsules emarginate ;
seeds pitted

*C. benghalensis****Commelina attenuata* Koen. ex Vahl**

Slender herbs. Flowers blue, spathes attenuate. Capsules enclosed.

Fl. & Fr. : September November. Infrequent in moist soils.

***C. benghalensis* L.**

Diffuse herbs. Flowers blue with truncate spathes. Capsules enclosed.

Fl. & Fr. : August November. Frequent in moist places.

***C. hasskarlii* C.B.Cl.**

Branched herbs. Flowers blue with ovate-lanceolate spathes. Capsules subtruncate, membranous.

Fl. & Fr. : August November. Frequent as forest undergrowth.

***C. paleata* Hassk.**

Suberect or prostrate herbs. Flowers blue. Capsules subglobose, 3-celled.

Fl. & Fr. : September October. Infrequent in moist soils.

***C. paludosa* Blume**

Stout, subscandent herbs. Flowers blue. Frequent trilocular.

Fl. & Fr. : August December. Frequent in open forests.

***C. suffruticosa* Blume**

Herbs, rooting at basal nodes. Spathes terminal, pedunculate. Capsules quadrate-oblong.

Fl. & Fr. : August December. Frequent in open forests.

CYANOTIS D. Don

1. Glabrous herbs ; cymes scorpioid

C. cristata

1. Woolly herbs ; cymes not scorpioid

C. fasciculata

Cyanotis cristata (L.) D. Don

Suberect herbs. Flowers light pink or purple. Capsules oblong, trigonous.

Fl. & Fr. : August - December. Frequent in moist situations.

C. fasciculata (Heyne ex Roth) Schult. f.

Erect herbs. Flowers pink or light purple. Capsules oblong.

Fl. & Fr. : August - October. Infrequent in moist situations.

MURDANNIA Royle

- | | |
|---|---------------------|
| 1. Inflorescence arising from the base as a scape | <i>M. edulis</i> |
| 1. Inflorescence either axillary or terminal : | |
| 2. Ovary with a single ovule in each locule | <i>M. vaginata</i> |
| 2. Ovary with more than a solitary ovule in each locule : | |
| 3. Ovary 2-ovulate in each locule | <i>M. nudiflora</i> |
| 3. Ovary 3-many ovulate in each locule | <i>M. spirata</i> |

Murdannia edulis (Stokes) Faden

Tufted herbs. Leaves radical. Flowers in erect, elongate panicles. Capsules obovoid.

Fl. & Fr. : April - June. Infrequent as forest undergrowth.

M. nudiflora (L.) Brenan

Suberect or diffuse herbs. Flowers purple. Capsules globose.

Fl. & Fr. : August - October. Frequent in moist situations.

M. spirata (L.) Brueckn.

Herbs. Flowers light purple or blue. Capsules oblong, mucronate.

Fl. & Fr. : October - April. Frequent in wastelands.

M. vaginata (L.) Brueckn.

Herbs. Flowers pink, 1-3 together. Capsules globose.

Fl. & Fr. : August - October. Frequent weed in cultivated fields.

TYPHACEAE

TYPHA L.

Typha angustata Bory & Chaub. Lesser Indian Reed-Mace.

Robust herbs. Flowers in brownish, cylindric spikes. Nutlets minute, ellipsoid, brown.

Fl. & Fr. : October - May. Frequent in marshy places.

ARACEAE

- | | |
|---|-------------------|
| 1. Floating herbs ; leaves obovate-cuneate | PISTIA |
| 1. Terrestrial tuberous herbs ; leaves not as above | SAUROMATUM |

PISTIA L.

Pistia stratiotes L.

Floating herbs. Flowers in spathes of greenish-white or pale. Spadix shorter than spathes.

Fl. & Fr. : September - January. Frequent in ponds and ditches.

SAUROMATUM Schott

Sauromatum pedatum (Willd.) Schott

Perennial, tuberous herbs. Flowers appearing before leaves. Spathes greenish-yellow with purple blotches. Spadix equalling or longer than spathe.

Fl. & Fr. : March July. Infrequent in open forests.

ALISMATACEAE

LIMNOPHYTON Miq.

Limnophyton obtusifolium (L.) Miq.

Erect herbs. Flowers pale blue or white. Achenes, obovoid, cuneate, compressed.

Fl. & Fr. September January. Frequent in ponds and ditches.

APONOGETONACEAE

APONOGETON L.

Aponogeton natans (L.) Engl. & Krause

Aquatic herbs. Flowers white or pink. Follicles subglobose, beaked.

Fl. & Fr. : August January. Frequent in ponds and ditches.

ERIOCAULACEAE

ERIOCAULON L.

- | | |
|--|--------------------------|
| 1. Plants 2-4 cm tall ; involucral bracts twice as long as heads | <i>E. xeranthemum</i> |
| 1. Plants more than 4 cm tall, involucral bracts shorter than heads : | |
| 2. Leaves turning red ; flowers trimerous ; heads black-grey | <i>E. quinquangulare</i> |
| 2. Leaves not turning red ; flowers trimerous or one perianth segment absent, heads white, black or black-grey : | |
| 3. Involucral bracts hairy | <i>E. sedgwickii</i> |
| 3. Involucral bracts glabrous : | |
| 4. One of the petals in male flowers much enlarged and projecting beyond floral bracts ; plants smelling | <i>E. odoratum</i> |
| 4. Petals of male flowers are similar, neither enlarged nor projecting, plants not smelling | <i>E. dianae</i> |

Eriocaulon dianae Fyson

Erect herbs. Flowers in hemispherical heads. Nuts glabrous.

Fl. & Fr. : September November. Frequent in open forests.

***E. odoratum* Dalz.**

Herbs. Heads globose, white. Nuts more or less compressed.

Fl. & Fr. : August October. Infrequent in open forests.

***E. quinquangulare* L.**

Herbs. Peduncles many, heads globose or ovoid, grey or white. Nuts ellipsoid or subglobose, pale, smooth.

Fl. & Fr. : September December. Frequent in marshy places.

Eriocaulon sedgwickii Fyson

Tufted herbs. Heads globose, white. Nuts 3-angled.

Fl. & Fr. : September - January. Frequent in moist places.

E. xeranthemum Mart.

Herbs. Heads white. Nuts narrowly oblong, yellow, papillose.

Fl. & Fr. : September - October. Infrequent in marshy places.

CYPERACEAE

- | | |
|---|----------------|
| 1. Spikelets unisexual | SCLERIA |
| 1. Spikelets bisexual : | |
| 2. Glumes distichous : | |
| 3. Flowers bearing glumes with winged keels | INDOCOURTOISIA |
| 3. Flowers bearing glumes not winged on the keels : | |
| 4. Rachilla deciduous as a whole | KYLLINGIA |
| 4. Rachilla persistent | CYPERUS |
| 2. Glumes spirally imbricate or the lower only distichous : | |
| 5. Hypogynal structures i.e. bristles or scales present : | |
| 6. Hypogynous bristles absent ; scales present | LIPOCARPHA |
| 6. Hypogynous bristles present ; scales absent | RHYNCHOSPORA |
| 7. Leaves developed | FUIRENA |
| 7. Leaves reduced to sheaths or almost to a mucro : | |
| 8. Inflorescence terminal ; bristles glume like | ELEOCHARIS |
| 8. Inflorescence pseudolateral ; bristles appearing stem like | SCHOENOPECTUS |
| 5. Hypogynal structures i.e. bristles or scales absent : | |
| 9. Style flat, hairy usually persistent | FIMBRISTYLIS |
| 9. Style linear, glabrous, usually deciduous | BULBOSTYLIS |

BULBOSTYLIS Kunth

Bulbostylis barbata (Rottb.) C.B.Cl.

Tufted, glabrous herbs. Spikelets few. Nuts obovate, triquetrous, transversely punctate.

Fl. & Fr. : August - December. Frequent in sandy soils.

CYPERUS L.

- | | |
|---|--|
| 1. Nut angles corky, thickened | <i>C. platystylis</i> |
| 1. Nut angles not as above : | |
| 2. Spikelets few flowered ; rachilla of spikelets deciduous | <i>C. castaneus</i> |
| 2. Spikelets many flowered ; rachilla of spikelets persistent : | |
| 3. Nuts always trigonous : | |
| 4. Spikelets digitate or clustered : | |
| 5. Spikelets few, digitate ; nut warty | <i>C. tenuispica</i> |
| 5. Spikelets numerous, clustered in a head ; nut punctate | <i>C. difformis</i> |
| 4. Spikelets not digitate : | |
| 6. Spikelets shortly spicate : | |
| 7. Glumes mucicous mucronulate | <i>C. corymbosus</i> |
| 7. Glumes mucronate : | |
| 8. Spikelets strongly compressed ; rachilla <i>ca</i> 0.1 cm broad | <i>C. niveus</i> |
| 8. Spikelets compressed rachilla <i>ca</i> 0.2 cm broad | <i>C. compressus</i> |
| 6. Spikelets distinctly spicate : | |
| 9. Annuals with tufted stems : | |
| 10. Glumes dorsally 3 - 5-nerved ; back smooth | <i>C. iria</i> |
| 10. Glumes dorsally 5 - 7-nerved : back spinulose-ciliate or allulate | <i>C. alulatus</i> |
| 9. Perennials with rhizomes and often with long stolons : | |
| 11. Secondary rays normally present | <i>C. nutans</i>
<i>var. eleusinoides</i> |

- 11. Secondary rays absent :
 - 12. Leaves strongly septate-nodulose *C. javanicus*
 - 12. Leaves not as above :
 - 13. Spikelets golden, compressed when young, quadrangular in fruit *C. tenuiculmis*
 - 13. Spikelets red-brown, more or less compressed even in fruit *C. rotundus*
- 3. Nuts not trigonous :
 - 14. Nuts compressed laterally *C. flavidus*
 - 14. Nuts compressed dorasally *C. pulchellus*

Cyperus alulatus Kern

Herbs. Spikelets pale brown, alulate at margin. Nuts triquetrous, obovate.

Fl. & Fr. : August December. Frequent in moist situations.

C. castaneus Willd.

Herbs. Spikelets linear, often multifarious. Nuts red or black, usually oblong.

Fl. & Fr. : September - October. Infrequent in moist soils.

C. compressus L. emend. Dandy

Diffuse herbs. Spikelets compressed. Nuts obovoid or ellipsoid.

Fl. & Fr. : August October. Infrequent in moist habitats.

C. corymbosus Rottb.

Perennial herbs. Spikelets ovate. Nuts ovate-oblong, trigonous.

Fl. & Fr. : November February. Infrequent weed in wastelands.

C. difformis L.

Glabrous herbs. Spikelets linear or oblong-linear. Nuts trigonous, ellipsoid or obovoid.

Fl. & Fr. : September - December. Frequent in moist situations.

Cyperus flavidus Retz.

Annual herbs. Spikelets linear-oblong, compressed. Nuts laterally compressed, biconvex.

Fl. & Fr. : August November. Frequent in moist places.

C. iria L.

Herbs. Spikelets oblong-linear. Nuts obtusely trigonous, ellipsoid or obovate.

Fl. & Fr. : September January. Frequent in moist situations.

C. javanicus Houtt.

Perennial rhizomatous herbs. Spikelets oblong-lanceolate. Nuts trigonous, ellipsoid.

Fl. & Fr. : September December. Infrequent in moist soils.

C. niveus Retz.

Perennial herbs. Spikelets pale yellow. Nuts triquetrous.

Fl. & Fr. : August November. Infrequent in moist wastelands.

C. nutans Vahl var. eleusinoides (Kunth) Haines

Rhizomatous herbs. Spikelets few flowered. Nuts trigonous.

Fl. & Fr. : August December. Frequent in swampy places.

C. platystylis R. Br.

Perennial herbs. Spikelets in clusters. Nuts ellipsoid.

Fl. & Fr. : October - December. Infrequent in moist soils.

C. pulchellus R. Br.

Perennial, tufted herbs. Spikelets compressed. Nuts spiculate, trigonous.

Fl. & Fr. : August October. Infrequent in moist soils.

C. rotundus L. Nut Grass.

Perennial herbs. Spikelets linear, cylindrical. Nuts trigonous.

Fl. & Fr. : September - February. Frequent in various habitats from gravelly to moist situations.

Cyperus tenuiculmis Boeck.

Perennial herbs. Spikelets elliptic, acute. Nuts broadly elliptic, red-brown.

Fl. & Fr. : August November. Infrequent in moist wastelands.

C. tenuispica Steud.

Diffuse herbs. Spikelets digitately arranged in clusters. Nuts globose ovoid, trigonous.

Fl. & Fr. : September December. Frequent weed in cultivated fields.

ELAEOCHARIS R. Br.

Elaeocharis geniculata (L.) Roem. & Schult.

Tufted herbs. Spikelets in subglobose heads. Nuts obovoid-oblong.

Fl. & Fr. : May October. Infrequent in swampy soils.

FIMBRISTYLIS Vahl

- | | |
|--|------------------------|
| 1. Nuts linear with almost parallel sides | <i>F. tetragona</i> |
| 1. Nuts obovoid or suborbicular : | |
| 2. Stigmas 2 ; nuts lenticular : | |
| 3. Stems bearing 1-3 spikelets | <i>F. schoenoides</i> |
| 3. Stems bearing 4 to numerous spikelets : | |
| 4. Leaves ligulate ; nuts trabiculate | <i>F. bisumbellata</i> |
| 4. Leaves not ligulate ; nuts not trabiculate | |
| 5. Styles hairy | <i>F. aestivalis</i> |
| 5. Styles glabrous | <i>F. cymosa</i> |
| 2. Stigmas 3 ; nuts trigonal : | |
| 6. Stems bearing 1-3 spikelets ; nuts 0.2-0.3 cm long | <i>F. ovata</i> |
| 6. Stems bearing 1-numerous spikelets ; nuts 0.4-0.5 cm long | <i>F. fulcata</i> |
| 7. Cauline leaves with well developed blades | <i>F. microcarya</i> |
| 7. Cauline leaves atleast the upper reduced to bladeless sheaths | <i>F. miliacea</i> |

***Fimbristylis aestivalis* (Retz.) Vahl**

Tufted herbs. Spikelets few or solitary, oblong. Nuts broadly ellipsoid, compressed.

Fl. & Fr. : December - June. Frequent in moist soils.

***F. bisumbellata* (Forssk.) Bub.**

Annual herbs. Spikelets polygonal. Nuts obovoid.

Fl. & Fr. : November - February. Infrequent in moist soils.

***F. cymosa* R. Br.**

Stout herbs. Spikelets in compound umbels. Nuts broadly obovoid, compressed.

Fl. & Fr. : May - August. Infrequent in wastelands.

***F. falcata* (Vahl) Kunth**

Herbs. Spikelets in umbels or capitate spikes. Nuts obovoid or oblong.

Fl. & Fr. : April - October. Infrequent in shady places.

***F. microcarya* F.v. Muell.**

Annual herbs. Spikelets solitary, ovoid to oblong-lanceolate, angular, acute. Nuts trigonous.

Fl. & Fr. : September - February. Frequent in wastelands.

***F. miliacea* (L.) Vahl**

Glabrous herbs. Spikelets in compound or decomposed umbels. Nuts trigonous, obovoid.

Fl. & Fr. : August - April. Frequent weed in cultivated fields and wastelands.

***F. ovata* (Burm. f.) Kern**

Perennial, tufted herbs. Spikelets ovate-lanceolate. Nuts obtusely trigonous.

Fl. & Fr. : August - December. Frequent in moist soils.

***F. schoenoides* (Retz.) Vahl**

Herbs. Spikelets globose-ovoid or oblong-ovoid. Nuts orbicular-oblong or ellipsoid, biconvex.

Fl. & Fr. : August - October. Frequent weed in cultivated fields and wastelands.

Fimbristylis tetragona R. Br.

Perennial herbs. Spikelets globose, ovoid. Nuts oblong, cylindrical.

Fl. & Fr. : August - October. Frequent in swampy places.

FUIRENA Hassk.

- | | |
|---|--------------------|
| 1. Hypogynous scales oblong, hastate, thickened at the centre | <i>F. tuwensis</i> |
| 1. Hypogynous scales not as above | <i>F. ciliaris</i> |

Fuirena ciliaris (L.) Roxb.

Annual herbs. Spikelets terete, squarrose. Nuts smooth, obovoid.

Fl. & Fr. : December - May. Frequent in marshy places.

F. tuwensis Desh. & Saha

Perennial tufted herbs. Spikelets ovoid-oblong or ellipsoid-oblong. Nuts acutely trigonous.

Fl. & Fr. : October - December. Infrequent in marshy soils.

INDOCOURTOISIA Bennet & Raiz.

Indocourtoisia cyperoides (Roxb.) Bennet & Raiz.

Glabrous herbs. Spikelets globose, congested. Nuts linear-oblong.

Fl. & Fr. : September - December. Infrequent in marshy places.

KYLLINGA Rottb. *nom. cons.*

Kyllinga nemoralis (Forst.) Dandy ex Hutch.

Herbs. Spikelets snow white. Nuts biconvex, laterally compressed.

Fl. & Fr. : August - February. Frequent in moist soils.

LIPOCARPHA R. Br.

- | | |
|---------------------------------------|----------------------|
| 1. Stems terete ; heads greyish white | <i>L. chinensis</i> |
| 1. Stems trigonous ; heads red-brown | <i>L. sphacelata</i> |

Lipocarpa chinensis (Osborn) Kern

Tufted herbs. Spikelets ovoid. Nuts oblong, brown.

Fl. & Fr. : September - December. Frequent in marshy places.

L. sphacelata (Vahl) Kunth

Tufted, glabrous herbs. Spikelets ovoid. Nuts ovoid-oblong, brown.

Fl. & Fr. : September - October. Infrequent in moist places.

RHYNCHOSPORA Vahl *nom. cons.*

- | | |
|---------------------------|----------------------|
| 1. Nuts with obtuse edges | <i>R. longisetis</i> |
| 1. Nuts with sharp edges | <i>R. wightiana</i> |

Rhynchospora longisetis R. Br.

Annual herbs. Spikelets linear-lanceolate. Nuts oblong, strongly dorsi-ventrally compressed.

Fl. & Fr. : October - December. Infrequent as forest undergrowth.

R. wightiana (Nees) Steud.

Tufted herbs. Spikelets linear-lanceolate, compressed. Nuts oblong or obovate-oblong, strongly compressed.

Fl. & Fr. : September - January. Frequent in moist soils.

SCHOENOPECTUS (Reich.) Palla *nom. cons.***Schoenoplectus lateriflorus (J. F. Gmel.) Lye**

Tufted herbs. Spikelets ellipsoid. Nuts obovoid or subglobose, rugose, black.

Fl. & Fr. : September - May. Frequent weed in wastelands.

SCLERIA Berg.

- | | |
|-------------------------------------|----------------------|
| 1. Leaves lanceolate ; disc cupular | <i>S. annularis</i> |
| 1. Leaves linear ; disc 3-lobed | <i>S. tessellata</i> |

Scleria annularis Nees ex Steud.

Annual herbs. Spikelets sessile. Nuts shorter than the glumes, ovoid.

Fl. & Fr. : September December. Infrequent in moist soils.

S. tessellata Willd.

Herbs. Spikelets solitary or in clusters. Nuts shorter than the glumes, ellipsoid or subglobose.

Fl. & Fr. : August November. Frequent in wastelands.

POACEAE

(including **Bambusaceae**)

- | | |
|---|----------------------|
| 1. Culms woody with culm-sheaths (reduced leaves) | DENDROCALAMUS |
| 1. Culms not woody ; leaves not reduced to culm-sheaths : | |
| 2. Spikelets awned : | |
| 3. Spikelets 2-flowered, falling entire at maturity, frequently dorsally compressed : | |
| 4. Spikelets often paired with one sessile and the other pedicelled ; upper lemma usually awned : | |
| 5. Inflorescence spathed : | |
| 6. Involucral spikelets absent : | |
| 7. Basal joints of racemes bulbous | APLUDA |
| 7. Basal joints of racemes not bulbous | ANDROPOGON |
| 6. Involucral spikelets present : | |
| 8. Involucral spikelets sessile, either at the same level or in superposed pairs | THEMEDA |
| 8. Involucral spikelets pedicelled at the same level | ISEILEMA |
| 5. Inflorescence not spathed : | |
| 9. Spikelets in threes, one sessile, the other two pedicelled | CHRYSOPOGON |
| 9. Spikelets solitary or binate : | |
| 10. Spikelets solitary | DIMERIA |

10. Spikelets binate :
11. Pedicelled spikelets well developed :
12. One spikelet long, the other short pedicelled **ISCHAEMUM**
12. One spikelet sessile, the other pedicelled :
13. Inflorescence a solitary raceme (rarely 2) :
14. Lower glume of sessile spikelet obtuse or acute, not grooved **HETEROPOGON**
14. Lower glume of sessile spikelet 2 toothed or cuspidate deeply grooved **SEHIMA**
13. Inflorescence of digitate, fascicled corymbose racemes or panicles :
15. Upper lemma 2-fid or lobed, awned from the sinus **VETIVERIA**
15. Upper lemma awned from the back, often just above the base **ARTHRAOXON**
11. Pedicelled spikelet usually reduced often to a pedicel :
16. Lower glume of sessile spikelet rounded at apex, never pitted **DICHANTHIUM**
16. Lower glume of sessile spikelet subacute, often pitted **BOTHRIOCHLOA**
4. Spikelets solitary or paired ; upper lemma usually awnless :
17. Upper lemma shortly aristate ; lower lemma muticous **ALLOTROPSIS**
17. Upper lemma muticous ; lower lemma muticous or awned :
18. Lower, upper glumes and lower lemma awned **OPLISMENUS**

- 18. Lower glume muticous :
 - 19. Lower lemma awned ECHINOCHLOA
 - 19. Lower lemma muticous PSEUDORAPHIS

- 3. Spikelets 1-many flowered, breaking up at maturity above the more or less persistent glumes, if falling entire, then not 2-flowered, usually more or less laterally compressed or terete :
 - 20. Spikelets 1-flowered :
 - 21. Glumes well developed ARISTIDA
 - 21. Glumes often reduced or absent :
 - 22. Glumes minute, subulate ORYZA
 - 22. Glumes absent HYGRORHIZA
 - 20. Spikelets 2-many flowered :
 - 23. Glumes toothed or notched at apex TRIPOGON
 - 23. Glumes entire, muticous or aristate DACTYLOCTENIUM

- 2. Spikelets awnless :
 - 24. Spikelets 2-flowered, falling entire at maturity :
 - 25. Male and female spikelets in separate inflorescences :
 - 26. Female spikelets enclosed by a structure formed by the hardened lower glume or embeded in the joints of rachis CHIONACHNE
 - 26. Female spikelets entirely enclosed in a globose or ovoid basal bract COIX
 - 25. Spikelets hermaphrodite or male or barren and hermaphrodite spikelets mixed in the same inflorescence :
 - 27. Spikelets often paired with one sessile and the other pedicelled :
 - 28. Joints and pedicels free :
 - 29. Spikelets 2-nate, 1-pedicelled and the other sessile ; panicles effuse SACCHARUM
 - 29. Spikelets 2-nate, 1 short and the other long pedicelled ; panicles narrow IMPERATA
 - 28. Joints and pedicels fused :
 - 30. Racemes solitary MNESITHEA

30. Racemes fascicled or corymbose :
31. Lower glume of sessile spikelets cartilaginous, subglobose **HACKELOCHLOA**
31. Lower glume of sessile spikelets thickly coriaceous, oblong **OPHIUROS**
27. Spikelets solitary or paired :
32. Inflorescence of spiciform racemes arranged in a common axis :
33. Lower glume well developed :
34. Lower glume turned towards the axis **BRACHIARIA**
34. Lower glume turned away from the axis :
35. Spikelets flattened or depressed ; upper lemma mucronate **UROCHLOA**
35. Spikelets usually turgid ; upper lemma acute **PASPALIDIUM**
33. Lower glume usually absent, if present, minute scale like :
36. Spikelets elliptic, elliptic-oblong or lanceolate **DIGITARIA**
36. Spikelets orbicular, oblong or ovate **PASPALUM**
32. Inflorescence of panicles (except *Setaria glauca* where it is spiciform racemes) :
37. Spikelets usually subtended by an involucre of bristles :
38. Bristles rigid ; upper lemma rugose or transversely striate **SETARIA**
38. Bristles soft ; upper lemma smooth **PENNISSETUM**
37. Spikelets not subtended by bristles :
39. Spikelets gibbous **SACCOLEPIS**
39. Spikelets not gibbous **PANICUM**

24. Spikelets 1-many flowered, breaking up at maturity above, more or less persistent glumes :

40. Spikelets 1-flowered :

41. Inflorescence a panicle SPOROBOLUS

41. Inflorescence of spikes or spiciform racemes CYNODON

40. Spikelets 2-many flowered :

42. Inflorescence of panicles :

43. Florets 2 ISACHNE

43. Florets 3-many ERAGROSTIS

42. Inflorescence of spikes, heads or racemes :

44. Spikes solitary ERAGROSTIELLA

44. Spikes few in a whorl, occasionally 1-2 spikes below the whorl ELEUSINE

**ALLOTEROPSIS J.S. Presl ex C.B. Presl
emend. Hitchc**

***Alloteropsis cimicina* (L.) Stapf**

Tufted grass ; nodes hairy. Leaves 2-8 × 1-2.2 cm, ovate-lanceolate. Inflorescence in racemes ; spikelets 0.3-0.4 cm long.

Fl. & Fr. : October - February. Frequent in moist clayey or gritty soils.

ANDROPOGON L.

***Andropogon pumilus* Roxb.**

Annual, slender herbs. Inflorescence a raceme 1-2 cm long in nearly equal pairs.

Fl. & Fr. : December May. Frequent in moist clayey or gritty soils.

APLUDA L.

***Apluda mutica* L.**

Densely tufted, suberect grass with 20 × 1 cm blades. Glumes 0.5-0.6 cm with or without awns, if awned, awns upto 1.8 cm long.

Fl. & Fr. : August October. Frequent in various habitats.

ARISTIDA L.

1. Lateral awns much reduced *A. redacta*
1. Lateral awns well developed :
2. Articulation present between lemma and awns :
3. Upper glumes less than half the length of lower glumes *A. stocksii*
3. Upper glumes more than half the length of lower glumes *A. funiculata*
2. No articulation between the lemma and awns :
4. Inflorescence of effuse panicles ; spikelets yellowish at maturity *A. hystrix*
4. Inflorescence of contracted panicles ; spikelets green to brown at maturity :
5. Glumes short awned (2 mm) or not, upper emarginate, mucronate at tip *A. adscensionis*
5. Glumes long awned ; awn 4-5 mm *A. setacea*

Aristida adscensionis L.

Erect or suberect herbs. Inflorescence a linear panicle of fascicled spikes. Column of lemma upto 1.5 cm long.

Fl. & Fr. : More or less throughout the year. Frequent in moist clayey soils.

A. funiculata Trin. ex Rupr.

Tufted, annual grass upto 30 cm high. Inflorescence in terminal panicles. Column of lemma *ca* 3.5 cm long with an articulation below the middle.

Fl. & Fr. : September October. Frequent in moist clayey soils.

A. hystrix L. f.

Suberect grass. Leaves *ca* 50 cm. Glumes long awned, glume one, 1-3 cm (including awn) ; glume 2, 3-4 cm long (including awn).

Fl. & Fr. : Almost throughout the year. Frequent in moist clayey and gritty soils.

A. redacta Stapf

Tufted, erect grass, 15-40 cm tall. Inflorescence in lax panicles.

Column of the lemma 1.5-2.5 cm long ; awn solitary or with 1-2 rudimentary ones.

Fl. & Fr. : September - November. Infrequent in moist soils.

***Aristida setacea* Retz.**

Herbs ; blades 50 cm long, involute. Glumes long awned. Glume 1, 1.3 cm long (including awn). Glumes 2, 1-4 cm (including awn).

Fl. & Fr. : Almost throughout the year. Frequent in moist clayey and gritty soils.

***A. stocksii* (Hook. f.) Domin**

Tufted, annual grass upto 20 cm tall. Column of the lemma 2.7-4.5 cm long.

Fl. & Fr. : September - October. Infrequent in moist clayey soils.

ARTHRAOXON P. Beauv.

- | | |
|--|-----------------------|
| 1. Lower glumes of sessile spikelets 2-keeled | <i>A. echinatus</i> |
| 1. Lower glumes of sessile spikelets rounded on the back, not keeled | <i>A. lancifolius</i> |

***Arthraxon echinatus* (Nees) Hochst.**

Annual grass ; spikelets greenish-yellow. Lower glume of sessile spikelet narrowly lanceolate, nerves on back echinulate.

Fl. & Fr. : August - November. Infrequent in moist clayey soils.

***A. lancifolius* (Trin.) Hochst.**

Weak, annual grass, 10-40 cm long, tufted or rooting at lower nodes. Inflorescence racemes 2-6 ; sessile spikelets 0.3-0.35 cm long, awned ; pedicelled spikelets 0.2-0.25 cm long and awned ; grains terete, brown.

Fl. & Fr. : September - October. Frequent in moist clayey and gritty soils.

BOTHRIOCHLOA O. Kuntze

***Bothriochloa pertusa* (L.) A. Camus**

Tufted, perennial grass, often stoloniferous and rooting at nodes. Inflorescence racemes upto 8 cm long ; spikelets 0.3-0.4 cm long, sessile

pitted, awned, awns about 2 cm long, pedicelled awnless, lower glume pitted or with 2-3 pitlike depressions.

Fl. & Fr. : September - October. Frequent in moist clayey soils.

BRACHIARIA Griseb

Brachiaria ramosa (L.) Stapf

Erect, annual grass, 0.5-1.0 m tall, sometimes rooting at lower nodes ; panicles subpyramidal, racemes distant, spikelets usually in pairs. Fruits *ca* 0.25 cm long, broadly ellipsoid with pointed ends, rugose.

Fl. & Fr. : July - November. Frequent in moist clayey soils.

CHIONACHNE R. Br.

Chionachne koenigii (Spreng.) Thw.

Erect, grass, 1-1.5 m high, sometimes tufted and stunted. Leaves very long. Spikes few and distantly arranged in the upper leaf-axils on weak peduncles. Grains embeded within the long glume.

Fl. & Fr. : September - December. Infrequent in moist clayey and gritty soils.

CHRYSOPOGON Trin.

Chrysopogon fulvus (Spreng.) Chiov.

Erect, tufted, perennial grass *ca* 1 m tall ; spikelets yellow with bright brown callus arranged in threes at apex of long, capillary, partial peduncles. Grains *ca* 0.42 cm long, flat, lanceolate.

Fl. & Fr. : August - October. Frequent in moist clayey and gritty soils.

COIX L.

- | | |
|--|------------------------|
| 1. Staminate spikelets more than 0.8 cm long | <i>C. gigantea</i> |
| 1. Staminate spikelets less than 0.8 cm long | <i>C. lacryma-jobi</i> |

Coix gigantea Koenig ex Roxb. Wild Adlay.

Coarse, stilt rooted, annual grass, 1-2 m tall. Leaf-blade and sheaths clothed with bristly hairs. Racemes one or many on peduncles. Wings of

lower glumes 0.15-0.25 cm broad. Grains reddish-brown, flat, broadly ovate.

Fl. & Fr. : September - March. Frequent in moist clayey soils.

***Coix lacryma-jobi* L.**

Erect, annual grass *ca* 0.5-1.5 m tall. Racemes one or many on peduncles. Wings of lower glumes upto 0.1 cm broad. Grains flat, reddish-brown.

Fl. & Fr. : October - December. Frequent in moist clayey soils.

CYNODON Rich. ex Pers.

***Cynodon dactylon* (L.) Pers.**

Perennial grass with ascending culms and nodal roots. Inflorescence of 3-5 digitate spikes of 1.5-5.5 cm long; spikelets 0.2-0.3 cm long. Grains *ca* 0.1 cm long, opaque, more or less obovoid.

Fl. & Fr. : Almost throughout the year. Infrequent in moist clayey soils.

DACTYLOCTENIUM Willd.

***Dactyloctenium aegyptium* (L.) P. Beauv.**

Tufted grass, 10-40 cm long. Spikes usually 2-4, digitate, 3×0.7 cm, arranged in about 4 rows, each 3-5-flowered. Grains *ca* 0.1 cm long, more or less subglobose, dorsally compressed, reddish, strongly rugose.

Fl. & Fr. : August - October. Frequent in moist clayey and gritty soils.

DENDROCALAMUS Nees

***Dendrocalamus strictus* (Roxb.) Nees, Solid Bamboo.**

Perennial bamboo in erect culms of about 8 m tall and about 8 cm across; culm-sheaths very large, shining within. Flowers yellowish-white in 20-25 cm long panicles; spikelets spinescent, hairy, fertile inter-mixed with sterile ones.

Fl. & Fr. : December - March. Frequent in clayey and gritty soils.

DICHANTHIUM Willem.

Dichanthium annulatum (Forssk.) Stapf

Tufted annual grass. Racemes 1-8 in number, 4-8 cm long, sessile ; spikelets *ca* 0.3 cm long ; anthers 3, upto 0.2 cm long. Grains *ca* 0.17 cm long, compressed, obovate, brown.

Fl. & Fr. : August November. Frequent in moist clayey soils.

DIGITARIA (Heist. ex Fabr.) Haller

- | | |
|--|----------------------|
| 1. Spikelets binate in the whole inflorescence ; abscission of pedicels truncate : | |
| 2. Spikelets either homomorphous and bristled or heteromorphous | <i>D. bicornis</i> |
| 2. Spikelets homomorphous in the entire raceme, never bristled | <i>D. ciliaris</i> |
| 1. Spikelets ternate atleast in the middle of racemes ; abscission of pedicels discoid to cupuliform : | |
| 3. Spikelets upto 0.17 cm long ; upper glumes as long as the spikelets | <i>D. longiflora</i> |
| 3. Spikelets 0.18-0.25 cm long ; upper glumes longer than spikelets | <i>D. abludens</i> |

Digitaria abludens (Roem. ex Schult.) Veldk.

Annual or perennial, erect, 15-25 cm tufted herbs. Spikes 2-5 in number 2.5-5.5 cm long, racemosely arranged on short peduncles. Spikelets 0.13-0.15 cm long, ovate or elliptic, appressed to trigonous, slightly winged rachis.

Fl. & Fr. : July November. Infrequent in moist clayey and gritty soils.

D. bicornis (Lam.) Roem. & Schult.

Culms rooting at nodes, glabrous. Racemes 2 or more, 6-10 cm long ; spikelets in dimorphic pairs, lanceolate, 0.3-0.35 cm long, pedicellate ones with long, spreading hairs, sessile, glabrous.

Fl. & Fr. : August December. Infrequent in moist clayey and gritty soils.

***Digitaria ciliaris* (Retz.) Koel.**

30-45 cm, slender, tufted, prostrate or basally geniculate herbs. Racemes 4-12 in number, 7-15 cm long, subdigitate, erect or spreading. Sterile lemmas are characterised by the absence of stiff, tubercle based hairs along the margins.

Fl. & Fr. : July October. Infrequent in moist clayey and gritty soils.

***D. longiflora* (Retz.) Pers.**

Diffuse, annual grass with ascending culms, 20-60 cm long and rooting at nodes. Panicles 2-3, digitate; racemes 2.0-7.5 cm long; spikelets 0.17-0.22 cm long. Fruits as long as spikelets.

Fl. & Fr. : September December. Infrequent in moist clayey soils.

DIMERIA R. Br.***Dimeria stapfiana* C.E. Hubb. ex Pilg.**

Erect, annual grass, 20-35 cm; leaves mostly basal; racemes 2 per peduncle, 3-6 cm long, drying yellowish; spikelets 0.5-0.65 cm long; awns 1.5 cm long; stamens 2, anthers 0.15 cm long.

Fl. & Fr. : September December. Frequent in moist clayey and gritty soils.

ECHINOCHLOA P. Beauv.

1. Lower lemma and upper glume equally acute or cuspidate, not awned

E. colonum

1. Lower lemma and upper glume acuminate, cuspidate, the former often produced into a considerable awn

E. crusgalli

***Echinochloa colonum* (L.) Link**

Erect or ascending grass of about 50 cm high, sometimes stunted and tufted, spikes upto 2 cm long; spikelets 0.2-0.32 cm long. Grains about 0.15 cm long, nearly as broad, flat, white.

Fl. & Fr. : August October. Frequent in moist clayey and gritty soils.

***E. crusgalli* (L.) P. Beauv.**

Erect, annual grass. Spikes 5-10 in number ca 3 cm long; spikelets 0.4-0.55 cm long, awns 0.5-1.5 cm long, sometimes very short. Grains about 0.22 × 0.2 cm, compressed, light brown.

Fl. & Fr. : October December. Frequent in moist clayey and gritty soils.

ELEUSINE Gaertn.

Eleusine indica (L.) Gaertn. Crowfoot Grass.

Tufted, perennial grass *ca* 50 cm tall. Spikes 2-5 or more, spikelets alternately biseriate ; florets upto 6. Grains *ca* 0.15 cm long, more or less triquetrous, rugose, opaque and dark brown.

Fl. & Fr. : Greater part of the year. Frequent in clayey and gritty soils.

ERAGROSTIELLA Bor

Eragrostiella brachyphylla (Stapf) Bor

Erect, perennial, tufted grass *ca* 50 cm tall ; spikes 8-20 cm long. spikelets ovate-oblong ; florets upto 20. Grains subovoid, reddish-brown.

Fl. & Fr. : August - March. Frequent in [moist clayey and gritty soils.

ERAGROSTIS P. Beauv.

1. Spikelets breaking up from above downwards ; rachis fragile :
 2. Lemmas ciliate on margins *E. ciliata*
 2. Lemmas not ciliate on margins :
 3. Keels of the palea more or less ciliate :
 4. Panicles spiciform or compact and dense *E. ciliaris*
 4. Panicles effuse *E. tenella*
 3. Keels of the palea scabrid or smooth but not ciliate :
 5. Stems robust ; panicle branches 5-12 cm long *E. namaquensis*
var. *diplachnoides*
 5. Stems slender ; panicle branches not more than 5 cm long *E. japonica*
1. Spikelets breaking up from below upwards ; rachis tough :
 6. Perennials *E. nutans*
 6. Annuals :
 7. Lemmas upto 0.15 cm long *E. pilosa*

7 Lemmas more than 0.15 cm long :

8. Sheaths bearded at the mouth ; paleas persistent, grains subglobose *E. cilianensis*

8. Sheaths not bearded at the mouth ; petals deciduous ; grains ovoid-ellipsoid, compressed *E. unioloides*

***Eragrostis cilianensis* (All.) Vignolo-Lutati ex F.T. Hubb.**

Erect grass, 30-75 cm high. Panicles 10-20 cm long ; spikelets 0.5-1.75 × 0.25-0.35 cm. Grains 0.03 cm across, globose, reddish-brown.

Fl. & Fr. : August - February. Frequent in moist clayey and gritty soils.

***E. ciliaris* (L.) R. Br.**

Tufted grass. Spikes cylindrical upto 2.5 cm long ; lemmas *ca* 0.1 cm long, densely ciliate on the keels. Grains *ca* 0.04 cm long, spindle shaped, reddish-brown.

Fl. & Fr. : October - December. Frequent in moist clayey and gritty soils.

***E. ciliata* (Roxb.) Nees**

Perennial, 30-75 cm tall, erect herbs. Panicles 5-7.5 × 0.6-0.8 cm long, cylindric, compact. Spikelets 0.25-0.4 cm long, much compressed 6-12-flowered.

Fl. & Fr. : October - December. Frequent in moist clayey and gritty soils.

***E. japonica* (Thunb.) Trin.**

Tufted, 60-75 cm tall, geniculately erect, glabrous herbs. Panicles 20-30 cm long. Spikelets minute, often purplish or pinkish, ovate-linear.

Fl. & Fr. : October - February. Frequent in moist clayey soils.

***E. namaquensis* Schrad. var. *diplochneoides* (Steud.) W.D. Clayton**

Perennials. Culms upto 1-1.5 m tall. Leaves usually flat, lanceolate, acuminate. Panicles slender, branches whorled, 3-5 cm long, rachilla articulate ; spikelets few flowered ; glumes shorter than lemmas, 1-nerved.

Fl. & Fr. : November - March. Infrequent in moist clayey soils.

Eragrostis nutans (Retz.) Nees ex Steud.

Densely tufted, 30-45 cm tall, erect or geniculately ascending, simple or branched, perennial herbs. Panicles ovate or oblong or sublinear, suberect or nodding. Spikelets 0.4-0.6 cm long, 20-30 flowered.

Fl. & Fr. : October December. Infrequent in clayey and gritty soils.

E. pilosa (L.) P. Beauv.

Erect annual grass 10-60 cm tall. Panicles *ca* 3/4 length of the plant ; spikelets narrow, 0.3-0.6 cm long with long, capillary pedicels. Grains *ca*. 0.08 cm long, more or less ellipsoid, reddish-brown.

Fl. & Fr. : August October. Frequent in moist clayey and gritty soils.

E. tenella (L.) P. Beauv. ex Roem. & Schult.

Annual tufted grass *ca* 30 cm tall. Panicles *ca* 1/2 the length of the plant ; rachis with long hairs ; spikelets 0.25-0.4 cm long. Grains 0.03 cm long, ellipsoid, reddish-brown.

Fl. & Fr. : October December. Frequent in moist clayey and gritty soils.

E. unioides (Retz.) Nees ex Steud.

Annual grass, usually erect or sometimes spreading on the ground. Panicles 5-20 cm long ; spikelets pink. Grains *ca* 0.06 cm long, more or less ellipsoid, reddish-brown.

Fl. & Fr. : September December. Frequent in moist clayey and gritty soils.

HACKELOCHLOA Kuntze

Hackelochloa granularis (L.) Kuntze

Erect, annual grass, 5-30 cm high ; racemes upto 1.5 cm long, axillary and terminal, peduncled ; sessile spikelets *ca* 0.15 cm across, subglobose and rugose ; pedicelled spikelets flat.

Fl. & Fr. : August December. Frequent in moist clayey and gritty soils.

HETEROPOGON Pers.**Heteropogon contortus (L.) P. Beauv. Spear Grass.**

Annual tufted or perennial grass. Racemes 2.5-6 cm long excluding coarse awns *ca* 7-10 cm long. Grains enclosed by lemmas.

Fl. & Fr. : September December. Frequent in moist clayey and gritty soils.

HYGRORHIZA Nees**Hygrorhiza aristata (Retz.) Nees ex Wight & Arn.**

Floating glabrous herbs with inflated sheaths. Panicles 3-5 cm long and as much broad triangular in outline. Spikelets narrow, 0.5-0.6 cm long with 1.3-1.5 cm long awns.

Fl. & Fr. : September December. Infrequent in moist clayey soils.

IMPERATA Cyr.**Imperata cylindrica (L.) Raeuschel, Thatch Grass.**

Erect, simple, slender, 45-75 cm tall herbs. Panicles 4-8 cm long, spikelike, cylindric, compact branches and branchlets numerous, crowded, appressed ; spikelets lanceolate.

Fl. & Fr. : September May. Frequent in moist clayey and gritty soils.

ISACHNE R. Br.**Isachne globosa (Thunb.) Kuntze**

Erect, tufted grass. Panicles upto 10 cm long ; spikelets 0.2 - 0.3 cm long, subglobose. Lemmas unequal ; lower lemmas thin, elliptic ; upper lemmas thick, suborbicular.

Fl. & Fr. : Greater part of the year. Frequent in moist clayey soils.

ISCHAEMUM L.

1. Margins of the lower glume of the sessile spikelet expanded below the middle :
2. Leaves glabrous, puberulous, hirtellous or appressed-pubescent

I. indicum

2. Leaves and sheaths villous with erect hairs *I. indicum*
var. *indicum*
sub. var. *villosum*
1. Margins of the lower glume of the sessile spikelet narrowly and evenly inturned :
3. Pedicel of the pedicelled spikelets more than 1/3 the length of the sessile spikelet *I. pilosum*
3. Pedicel of the pedicelled spikelets less than 1/3 the length of the sessile spikelet *I. rugosum*

***Ischaemum indicum* (Houtt.) Merr.**

Erect or suberect, tufted grass *ca* 50 cm tall. Racemes 2-3, terminal, 2-7 cm long ; spikelets 0.4-0.5 cm long.

Fl. & Fr. : September November. Frequent in moist clayey and gritty soils.

***I. indicum* var. *indicum* sub-var. *villosum* (Nees) Bor**

Suberect grass. Leaf sheaths and inflorescence villous with erect herbs.

Fl. & Fr. : September October. Frequent in moist clayey soils.

***I. pilosum* (Klein ex Willd.) Wight**

Erect, perennial grass 1-1.5 m tall. Racemes 5 or more, 10-20 cm long ; spikelets 0.6-0.7 cm long, densely white hairy ; awns of sessile spikelets *ca* 0.7 cm long.

Fl. & Fr. : September November. Infrequent in moist clayey and gritty soils.

***I. rugosum* Salisb.**

Annuals, 30-45 cm tall, tufted. Leaves 8-15 × 0.4-1.5 cm narrowly-lanceolate, flat. Racemes 2.5-4.0 cm long, terminal, solitary or paired, brownish ; spikelets 0.4-0.5 cm long. glabrous. Grains transversely rugose.

Fl. & Fr. : September November. Frequent in moist clayey and gritty soils.

ISEILEMA Anderss.

1. Tubercles not present on the spatheoles or spikelets *I. laxum*
1. Tubercles present on the spatheoles and/or on the margins of the involucreal spikelets :

2. Lower glume of hermaphrodite spikelet convexly humped, appressed hairy at base and ciliate on margins in the basal quarter ; nodes glabrous

I. antheboroides

2. Lower glume of hermaphrodite spikelets flat or depressed longitudinally, glabrous and ciliate in the lower quarter ; nodes bearded

I. prostratum

***Iseilema antheboroides* Hack.**

Erect or prostrate, perennial grass. Spikes supported by spathes. Grains 0.28-0.3 cm long, ellipsoid, brown.

Fl. & Fr. August November. Frequent in moist clayey and gritty soils.

***I. laxum* Hack.**

Erect, tufted, perennial grass. Spikes supported by spathes. Grains 0.25-0.35 cm long, oblong, ellipsoid, brown.

Fl. & Fr. : September October. Frequent in moist gritty soils.

***I. prostratum* (L.) Anderss.**

40-60 cm tall, geniculately ascending perennials. Leaves 2.5-15 × 0.2-0.4 cm, linear, to linear-lanceolate, flat, scabridly ciliate. Racemes of distant, axillary, pedunculate fascicles, 0.8-1.2 cm long.

Fl. & Fr. : August November. Infrequent in clayey soils.

MNESITHEA Kunth

***Mnesithea laevis* (Retz.) Kunth**

Annual grass. Spikes slightly exerted pedicelled ; spikelets suppressed. Lower glume of the sessile spikelet oblong with a slightly oblique apex.

Fl. & Fr. : September October. Infrequent in moist clayey soils.

OPHIUROS Gaertn.

***Ophiuros exaltatus* (L.) Kuntze**

Erect, perennial, tufted grass 1-2 m tall. Spikes 5-12 cm long, many, arising from a leafy spathe. Spikelets sunken in the rachis.

Fl. & Fr. : September November. Infrequent in moist clayey soils.

OPLISMENUS P. Beauv.

Oplismenus burmannii (Retz.) P. Beauv.

Ascending grass, 0.5-0.75 m long ; spikes upto 10 cm long on elongated panicles each 0.5-2.5 cm long. Spikelets 0.25-0.3 cm long, excluding aristae. Grains *ca* 0.12 cm long, ellipsoid-oblong, firmly enclosed by the hardened lemma and palea.

Fl. & Fr. : September December. Frequent in moist clayey and gritty soils.

ORYZA L.

- | | |
|--|---------------------|
| 1. Plants cultivated ; spikelets persistent | <i>O. sativa</i> |
| 1. Plants wild ; spikelets caducous or persistent : | |
| 2. Erect or trailing herbs, spikelets in paniced racemes, caducous | <i>O. nivara</i> |
| 2. Tufted herbs, spikelets sub-imbricate, oblong, beaked | <i>O. latifolia</i> |

Oryza latifolia Desv.

Suberect grass with greenish-yellow nodding inflorescence in panicles.

Fl. & Fr. : September December. Infrequent in moist clayey soils.

O. nivara Sharma & Shastri

Perennial, often aquatic, culms below usually spongy ; spikelets long-awned from the tip, deciduous.

Fl. & Fr. : August December. Frequent in moist clayey and gritty soils.

O. sativa L. Paddy.

Suberect-erect herbs. Inflorescence drooping. Grains oblong-ellipsoid.

Fl. & Fr. : October February. Infrequent as an escape.

PANICUM L.

Panicum maximum Jacq. Guinea Grass.

Perennial, densely tufted grass, 1.5-3.0 m tall, stout, simple or branched. Leaves 10-60 × 4-18 cm, hirsute, linear, flat, scabrous or spinulose scabrid. Panicles erect and nodding, 10-45 cm long; primary branches whorled, 2.5-7.5 cm long; spikelets 0.35-0.4 cm long.

Fl. & Fr. : August November. Infrequent in clayey soils.

PASPALIDIUM Stapf.

- | | |
|---------------------------------------|---------------------|
| 1. Spikes shorter than the internodes | <i>P. flavidum</i> |
| 1. Spikes longer than the internodes | <i>P. geminatum</i> |

Paspalidium flavidum (Retz.) A. Camus

Suberect grass, 0.5-1.0 m tall. Leaves mostly basal. Spikes 1.5-2.5 cm long; spikelets sessile. Grains *ca* 0.15 cm long, compressed, ellipsoid, pale.

Fl. & Fr. : September November. Frequent in moist clayey and gritty soils.

P. geminatum (Forssk.) Stapf

Ascending, perennial grass upto 1 m long. Spikes 15 or more, 1-2.5 cm long; spikelets *ca* 0.22 × 0.12 cm.

Fl. & Fr. : September November. Infrequent in moist clayey soils.

PASPALUM L.

Paspalum scrobiculatum L. Kodo Millet.

Tufted herbs. Leaves erect, lanceolate, acuminate, flat, pubescent. Racemes 2-6, sagittate. Spikelets in two rows, imbricate, brown.

Fl. & Fr. : September December. Frequent in moist clayey soils.

PENNISETUM Rich. ex Pers.

- | | |
|---|------------------------|
| 1. Spikelets woolly; palea folded or toothed | <i>P. pedicellatum</i> |
| 1. Spikelets plumose; palea linear, scaberulous | <i>P. polystachyon</i> |

Pennisetum pedicellatum Trin.

30-90 cm tall annuals. Leaves 15-25×0.5-1.0 cm, flat, flaccid, glabrous or sparsely hairy. Racemes 5-12.5 cm long, cylindric, involucre sessile ; inner bristles numerous, 1.0 cm long or more ; spikelets 0.4 cm long, shortly pedicellate, usually solitary within involucre.

Fl. & Fr. : August October. Frequent in moist clayey or gritty soils.

P. polystachyon (L.) Schult. Thin Napier Grass.

Tall, robust grass. Leaves lanceolate. Panicles spiciform, 15-25 cm long, rachis angled, flexuosus ; spikelets sessile, solitary in a plumose-bristly involucre ; bracts 2, upper bisexual and the lower male or reduced to lemmas, glumes and lemmas unequal.

Fl. & Fr. : September November. Infrequent in moist clayey soils.

PSEUDORAPHIS Griff.

Pseudoraphis spinescens (R. Br.) Vickery

Annual, marshy herbs, often rooting at lower nodes. Leaves 4-8.5 cm long, flat or involute, linear-lanceolate. Panicles 3.5-10 cm long. Spikelets 0.5-0.7 cm long, lanceolate, dorsally compressed.

Fl. & Fr. : August October. Infrequent in moist clayey soils.

SACCHARUM L.

Saccharum spontaneum L.

Erect, perennial, tufted grass, 1-3 m tall. Panicles large, densely clothed with long, silvery silky hairs, spikelets *ca* 0.3 long.

Fl. & Fr. : Greater part of the year. Frequent in moist clayey soils.

SACCIOLEPIS Nash

1. Lower glume less than 1/3 the length of the spikelet ; spikes in interrupted, crowded fascicles

S interrupta

1. Lower glume 1/2 the length of the spikelet ; spikes continuous, rarely interrupted

S. indica

Sacciolepis indica (L.) A. Chase

Culms tufted, 10-20 cm tall. Leaves lanceolate, 5-8×0.5 cm. Spikes 2-4 cm long; spikelets *ca* 0.2 cm long, ovoid, glumes and lemmas unequal, many nerved.

Fl. & Fr. : September - December. Frequent in moist clayey and gritty soils.

S. interrupta (Willd.) Stapf

Tall grass with spongy, delicate culms rooting below. Leaves lanceolate. Spikelets green or purplish, lanceolate, 0.3-0.4 cm long, glabrous. Lower glume 0.15-0.2 cm long, obtuse.

Fl. & Fr. : July - October. Frequent in moist clayey soils.

SEHIMA Forssk.

Sehima nervosum (Rottl.) Stapf

Tufted, perennial grass. Spikes 5-9 cm long. Grains *ca* 0.33 cm long, oblong with pointed ends, brown.

Fl. & Fr. : October - January. Infrequent in moist clayey soils.

SETARIA P. Beauv.

- | | |
|---|---------------------|
| 1. Inflorescence narrow panicles, sometimes loosely lobed | <i>S. tomentosa</i> |
| 1. Inflorescence cylindric, false spikes : | |
| 2. Upper lemma coarsely rugose, boat-shaped and slightly keeled upwards | <i>S. glauca</i> |
| 2. Upper lemma usually finely rugose, narrow and dorsally gently curved, not keeled | <i>S. pumila</i> |

Setaria glauca (L.) P. Beauv. Yellow Foxtail Millet.

Erect, annual grass, 40-80 cm tall. Spikes 4-8×0.4-0.6 cm; spikelets 0.27-0.3×0.15 cm. Grains plano-convex, greyish.

Fl. & Fr. : September - November. Frequent in moist clayey soils.

S. pumila (Poir.) Roem. & Schult. Syst. Veg. 2 : 891. 1817.

Tufted grass. Leaves linear, slightly broad at base. Panicles linear, cylindric. Grains plano-convex, greyish.

Fl. & Fr. : January - May. Frequent in moist clayey soils.

Setaria tomentosa (Roxb.) Kunth

Erect or ascending grass. Panicles 7-20 cm long ; spikelets *ca* 0.2 cm long. Grains orange-yellow, *ca* 0.1 cm long, plano-convex.

Fl. & Fr. : August November. Frequent in moist clayey soils.

SPOROBOLUS R. Br.

Sporobolus indicus (L.) R. Br. var. **diander** (Retz.) Jov. & Gued.

Erect, perennial, tufted grass, 20-60 cm tall. Panicles 9-20 cm long ; spikelets 0.15-0.18 cm long, green or grey ; stamens 2. Grains more or less obovate, compressed, reddish-brown.

Fl. & Fr. : August October. Frequent in moist clayey soils.

THEMEDA Forssk.

Themeda quadrivalvis (L.) Kuntze, Kangaroo Grass.

Erect, annual, tufted grass. Spikes in leafy interrupted panicles. Involucral spikelets 4 in number, 0.6-0.75 cm long with tubercle based hairs ; hermaphrodite spikelets solitary, 0.5-0.6 cm long, awned. Grains 0.25 cm long, linear, brown.

Fl. & Fr. : September November. Frequent in moist clayey soils.

TRIPOGON Roem. & Schult.

Tripogon bromoides Roem. & Schult.

Erect, tufted grass upto 40 cm tall. Spikes 6-20 cm long ; spikelets 0.4-0.5 cm long ; florets upto 8 in number, lemmas distinctly 3-awned. Grains 0.12 cm, subterete, reddish-brown.

Fl. & Fr. : September October. Infrequent in clayey and gritty soils.

UROCHLOA P. Beauv.

Urochloa panicoides P. Beauv. var. **velutina** (Henr.) Bor

Tufted grass, culms ascending. Leaves ovate-lanceolate. Racemes 2-many 3.0-5.5 cm long ; spikelets ovate-lanceolate, *ca* 0.5 × 0.2 cm, densely pubescent, lower lemma being fringed by soft, white hairs along the margins. Grains *ca* 0.23 × 0.18 cm, ellipsoid and compressed.

Fl. & Fr. : August November. Frequent in moist clayey soils.

VETIVERIA Bory de St.-Vincent

Vetiveria zizanioides (L.) Nash

Perennial, rhizomatous, tufted grass. Leaves linear. Panicles larger with whorls of racemes. Spikelets 2-nate, one sessile and bisexual and the other pedicellate and male ; glumes equal, lower rounded on the back, upper keeled, both muricate ; lemma hyaline.

Fl. & Fr. : September May. Frequent in moist clayey soils.

PTERIDOPHYTES

ADIANTACEAE

ADIANTUM L.

Adiantum incisum Forssk.

Suberect herbs. Leaf (frond) margins incised. Sori brownish along the margins.

Fl. & Fr. : August October. Frequent in moist clayey and rocky soils.

A. philippense L.

Suberect, wiry herbs. Leaf (frond) margins shallowly incised. Sori brownish-black along the margins.

Fl. & Fr. : August October. Frequent in moist shady places.

CERATOPTERIS Brongn.

Ceratopteris thalictroides (L.) Brongn.

Aquatic herbs. Leaves entire to much dissected. Sori brownish.

Fl. & Fr. : September December. Frequent in marshy places along slow flowing streams.

OPHIOGLOSSACEAE

OPHIOGLOSSUM L.

Ophioglossum costatum R. Br.

Erect, small herbs. Inflorescence in suberect spikes, greenish.

Fl. & Fr. : July December. Frequent in moist soils.

Ophioglossum nudicaule L. f.

Erect tiny herbs. Inflorescence greenish in suberect spikes.

Fl. & Fr. : July December. Infrequent in moist clayey soils.

ISOETACEAE

ISOETIS L.

Isoetis coromandelensis L. f.

Erect, bushy, branched herbs. Inflorescence greenish-yellow, axillary.

Fl. & Fr. : September December. Infrequent in moist clayey soils.

MARSILEACEAE

MARSILEA L.

Marsilea minuta L.

Marshy or aquatic herbs. Leaves 2 pairs at the apex, obovate. Inflorescence at the base. Sporocarps greenish, turning brownish.

Fl. & Fr. : September February. Frequent in marshy places.

REFERENCES

- Haines, H.H. Descriptive list of trees, shrubs and economic herbs of the Southern Circle, Central Provinces, Allahabad. 1916.
- Malhotra, S.K. & S. Moorthy Materials for the Flora of Chandrapur District, Maharashtra State. *Bull. Bot. Surv. India* 13 (3 & 4) : 292 - 318. (1971) 1972.
- & ——— Some useful and medicinal plants of Chandrapur District, Maharashtra State. *Ibid.* 15 (1 & 2) : 13 21. 1973.
- & ——— Plant records for Maharashtra State from Chandrapur District. *Journ. Bombay Nat. Hist. Soc.* 70 (1) : 232 - 233. 1973.
- & ——— A note on the distribution of some plants in Chandrapur District, Maharashtra State. *Ibid.* 70(3) : 599-601. 1974.
- & ——— Plant records for Maharashtra State from Chandrapur District. III. *Ibid.* 73 (2) : 430 431. 1977.

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