

AN ACCOUNT OF THE FLOWERING PLANTS OF INDORE DISTRICT
IN MADHYA PRADESH *

A. S. RAO AND A. R. SASTRY

Botanical Survey of India, Eastern Circle, Shillong

ABSTRACT

This account of the flowering plants of Indore district is based on the observations made during 1961, 1962 and 1963. The enumeration includes 566 species 373 genera and 94 families of the flowering plants. The nomenclature has been revised to conform to modern taxonomic usage in accordance with the Montreal Code.

Indore, now a district of Madhya Pradesh comprises part of the Malwa plateau, lying approximately within Lat. $22^{\circ}22'$ N. and Long. $75^{\circ}15'$ E. It has natural boundaries in three directions, extending from a little way west of the Chambal river to Sipra river in the east. The southern boundary runs along the ridges of the Vindhya mountains between Karam river and Choral river. The northern boundary with Ujjain district is an artificial line. The Bombay-Agra Highway runs diagonally in the middle passing through Indore city, located almost in the centre of the district; other roads radiate in different directions from Indore city.

Much of the district is flat, plain country, with only the southern strip having elevated hills, forming part of the Vindhya mountains. The entire area is traversed by innumerable streams and a few rivers.

Geologically the area consists of crystalline rocks, mostly granite and with tongues of the Deccan Trap. The soil is gravely, coarse and dry in the hills, and black clayey in the plains.

The climate varies to extremes, the temperature reaching 40°C in summer, and falling to 5°C in winter. The annual rainfall is about 100 cm with the hills receiving more rain than the plains.

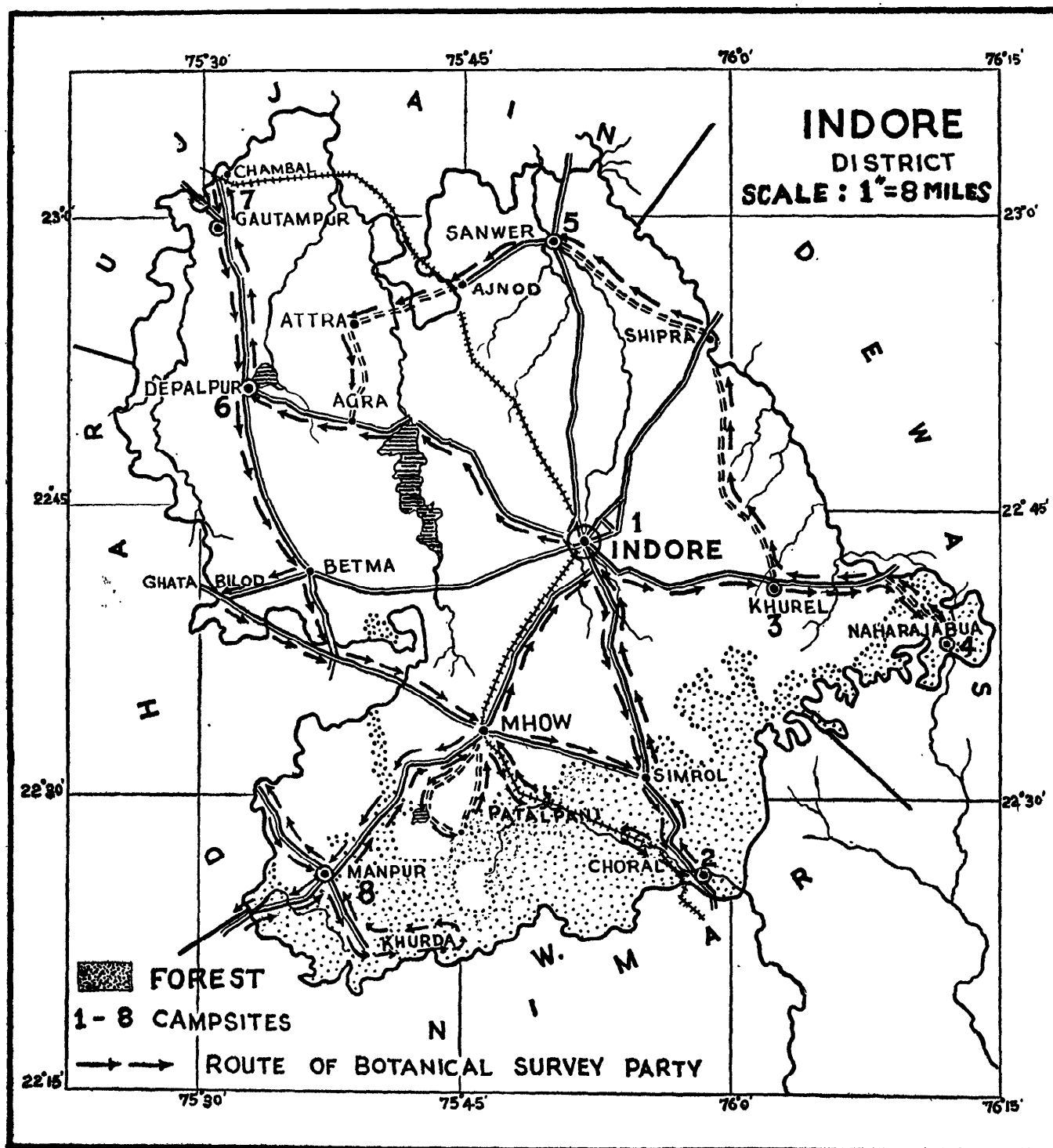
Botanically this area has received little attention, although in a general way the botany of central India and adjacent regions has been known mainly due to the efforts of Forsyth, Brandis and a few others. For the then princely state of Indore, a very short note with an account of some of the common plants, has been provided in the Imperial Gazetteer (1908). For the same area Biscoe, a Conservator of Forests in that State, has published a list of woody plants (1910). However, this work professing to be a 'nearly complete' account of the trees and shrubs, was compiled in a hurry 'on the eve of his departure to England without access to any collections of specimens and almost wholly from personal observation in the field'. Accordingly the present account of the flowering plants of Indore district is based on three fairly long periods (14 to 22 December, 1961; 18 to 26 October, 1962

and 17 to 26 April, 1963) of plant collection and vegetation study throughout the district. Large areas could be sampled and collected as the survey work was undertaken in a 'Jeep' vehicle. The route and the camping sites are indicated in the Map.

The vegetation in the narrow strip of the southern hill tracts stretching from Manpur to Naharjabua is dense, consisting of dry deciduous forests. *Tectona grandis* L. dominates throughout with *Terminalia tomentosa* W. & A., *T. bellirica* Roxb., *T. arjuna* W. & A., *Sterculia urens* Roxb., *Bombax ceiba* L. and *Butea monosperma* (Lamck.) Taub. as most noticeable associates. *Anogeissus latifolia* Wall., *Mitragyna parviflora* (Roxb.) Korth, *Albizia* sp. and *Embllica officinalis* Gaertn. constitute others frequently found throughout. Nowhere are trees lofty, with most of them ranging 15-20 m in height. The forest is more or less open, with very little stratification, and consisting mostly of tall and medium-sized trees, and large shrubs. In many places in the Manpur Forest Range it appears as if there is only a tree zone, with the shrub stratum composed of saplings of *Butea* of varying ages. However in the Choral and Naharjabua Forest Ranges there are well defined shrub strata, with *Nyctanthes arbor-tristis* L., *Vitex negundo* L., and *Helicteres isora* L. mainly composing this zone. Often, *Zizyphus* sp. and *Grewia* sp. also occur here. The forest floor is covered with gregarious growth of Asteraceae (Compositae) and Amaranthaceae herbs and low grasses with some Leguminosae and Acanthaceae herbs dispersed here and there.

There are not many climbers. A conspicuous twiner within and on the edge of forests is *Cylista scariosa* Roxb. Frequently on thickets of *Carissa congesta* Wt., *Acacia concinna* DC., and *Capparis zeylanica* L. other twiners like *Phaseolus* sp., *Mucuna* sp. and *Cocculus hirsutus* (L.) Diels, form dense canopies intertwining amongst themselves;

* An abstract of this paper is included in the proceedings of the Golden Jubilee Session of the Indian Science Congress. Also a summary of this has been contributed to the Gazetteer of Indore district by the senior author.



Map of Indore District

and with the supporting shrubs or stragglers. In the forest often twining up, and with the foliage only at the very top, and their dangling ropelike twisted stems, are climbers like *Tinospora cordifolia* Miers., *Cryptolepis buehneri* R. & S. and *Dregea volubilis* (L. f.) Benth. These can often be seen over small trees of *Anogeissus*, *Butea* or *Lagerstroemia*. Epiphytes like the Orchids, Peperomias, so conspicuous in the rain forests, are absent. Similarly, phanerogamic parasites are rare. The most common one is *Cuscuta reflexa* Roxb. forming golden-yellow stringy masses over many host plants, along fences, on avenue trees, along the edge of forest, and in disturbed areas. A rare stem parasite is the twiggy much forked *Viscum articulatum* Burm. on *Terminalia tomentosa*. The forest is much exploited and disturbed. The tribal people have a free option and repeatedly cut twigs of *Nyctanthes* for wicker work. Their cattle and goats penetrate into the forest, carry and spread weed seeds. Throughout the forest floor occur gregarious patches of plants like *Tridax procumbens* L., *Xanthium strumarium* L., *Acanthospermum hispidum* DC., *Achyranthes aspera* L., *Celosia argentea* L. and *Martynia annua* L. The herbs are not very conspicuous on the forest floor, and mostly belong to the Leguminosae, Acanthaceae, and Rubiaceae.

During October the aspect of vegetation in the plain areas and in certain cleared areas in the vicinity of hamlets located in forest areas, is very different from what had been observed during December. Much of the uncultivated open areas looked dreary and desolate, with dried grass stubs, and parched up, caky soil, and the scattered Date-palms and spiny Acacias emphasized the dryness of the area during that season. However, the October landscape was a refreshing change, the flat land bringing forth and supporting a rich, dense, lush growth of grasses. In the gentle breeze, the vast area of these grasslands, rippled and heaved; with the rhythmic swaying of the tall grasses a varying shade of green from light green to almost yellow, pervaded everywhere. Throughout the area amidst which Indore part of the Bombay-Agra Highway runs, these grasslands abounded and stretched for miles. Also all along the way there was a regular procession of ox carts loaded with hay, evidently the rich harvest from the neighbouring grasslands.

The grasslands also occur amidst the dry deciduous, teak dominated forest, significantly in the vicinity of hamlets and in the region of regular camping sites of the nomadic tribals. These areas are mostly in the lower reaches of the hilly zones, constituting the southern part of Indore district. The grassland here is still not homogeneous. A sprinkling of stunted trees of *Butea monosperma*, young saplings of *Terminalia* sp. and *Acacia* sp., can all be noticed and these become denser at the margin

and gradually merge into the forest. However, in the further northern region of the district which constitutes a flat, plain area the grasslands tend to be more or less pure, with practically no woody plants amidst. All the same, careful observation would indicate areas where woody vegetation did exist and occasional doggedly persisting old trees of *Phoenix*, *Acacia*, *Butea* and *Terminalia* can be spotted. These observations would undoubtedly lead to the conclusion, that like in many other areas of the country the grasslands are man made, and have come into being consequent on the gradual opening of the forest by clearing for fuel and timber. The grasses have taken over the land thus opened, have found the environment and the soil congenial, and have become well established.

The species composition of the grasslands, whether in the clearings of the deciduous forests, or in the open plain flat areas, is practically the same. In certain wet or marshy patches, in the neighbourhood of temporary rainwater ponds or seasonal streams, there are large stands of the very tall grass *Coix lacryma-jobi* L. and of *Saccharum spontaneum* L. conspicuous due to its white feathery spikes. The generally dominant species are *Themeda quadrivalvis* (L.) Ktze., *Heteropogon contortus* (L.) P. Beauv., *Apluda mutica* L., *Chrysopogon fulvus* (Spr.) Chiov. and *Pseudanthistiria hispida* Hk. f. Not so conspicuous, but evident enough, is *Cymbopogon martinii* (Roxb.) Wats. These are all tall grasses, growing to a height of about 2 m. Amidst the grasses also occur several leguminous plants, equally good for fodder. These are several species of *Alysicarpus*, *Indigofera* and *Crotalaria*.

All the grasses are harvested by the close of October and stored as hay for feeding cattle through the rest of the year. Considering that much of the area is flat, and the grasslands are all practically simultaneously harvested, leaving the soil exposed to the intense Sun of the summer months, and the breeze, would undoubtedly contribute to soil erosion, even though not evident now. This needs a little careful attention and a method whereby the soil binding effect of the grasses can be retained, even when they are harvested, has to be worked out.

Much of the rest of the district is cultivated. Cotton, wheat, sorghum, and Cajan-pea are the main crops, and in some places sugarcane, tobacco, Linum, and coriander. Semi-wild trees like *Tamarindus indica* L., *Madhuca longifolia* (Koenig) Macb. and *Azadirachta indica* Juss. and fruit trees like *Mangifera indica* L. occur in clumps or groves here and there, and indicate village or hamlet sites. Within the hamlets and near temples and such like buildings obviously grown with great care, are trees of *Aegle marmelos* Corr., *Michelia*

champaca L., and *Bauhinia variegata* L. The interspersed uncultivated land supports a scattered scrub vegetation. The most prominent is the wild date-palm *Phoenix sylvestris* L. In between these gaunt palms occur the spiny *Acacia* trees with their crooked, twiggy branches and spreading crown. Species of *Zizyphus*, mostly *Zizyphus nummularia* L. also contribute to the scene, with the well-armed Compositae herb *Echinops echinatus* Roxb. Even these which are at the mercy of local populations of goats remain stunted.

The many streams overflow during the rains and dry up during the summer months. On the banks of these water-courses and in the waterholes and ponds formed temporarily, occur herbs commonly associated with such localities. *Polygonum glabrum* Willd., and *Hygrophila auriculata* (Schumacher) Heine form dense gregarious growths, with *Caesulia axillaris* Roxb. and *Coix lacryma-jobi* L. forming small patches here and there. *Alternanthera sessilis* (L.) R. Br., *Portulaca oleracea* L., *Amaranthus polygamus* L. are common on the moist sandy banks. *Limnophyton obtusifolium* Miq., *Vallisneria spiralis* L. are rooted in water with *Ipomoea aquatica* Forsk. stretching on the water surface with rosettes of *Trapa natans* L. var. *bispinosa* Roxb. In between these forming rusty-green patches float the little water-fern *Azolla*, and at the edges *Marseelia quadrifolia* L. another water-fern. Often at the margin of the ponds can be noticed round patches of a liver-wort, *Ricciocarpus natans* (L.) Cord., and several green algae *Chara* sp., *Spirogyra* sp., *Zygnema* sp., *Oedogonium* sp. and *Voucheria*.

The land-ferns and the fern-allies which form very attractive constituents of rain forests are practically absent. *Actiniopteris australis* Link, with its small fan like fronds occurs in crags of granite, as also the silver fern *Cheilanthes farinosa* (Forsk.) Klf. At Choral and in the gorge at Patalpani, in moist crevices, in cool shade, clumps of *Adiantum caudatum* L. and *A. philippense* L. may be found. *Equisetum* sp. and *Selaginella* sp. also are present, but quite rare.

An analysis of the data indicates the following 8 families as dominant, in the order of abundance: Leguminosae (*sensu lato*) (48 G., 56 sp.); Poaceae (Gramineae) (40 G., 56 sp.); Asteraceae (Compositae) (27 G., 32 sp.); Euphorbiaceae (11, G., 22 sp.); Acanthaceae (15 G., 21 sp.); Rubiaceae (12 G., 15 sp.); and Malvaceae (8 G., 12 sp.). The enumeration that follows includes 566 species, 373 genera and 94 families of flowering plants. The collections on which the list is based are deposited in the herbarium of the Botanical Survey of India, Western Circle, Poona. Further, the list includes plants mentioned by Biscoe also. Wherever it has been possible to verify his data in the field, but no herbarium specimen could be made due to the plant

being in a vegetative state only, our verification is indicated by an !. Whenever there is no collection number or an exclamation mark, the plant is included only on the authority of Biscoe and needs verification. The annotation includes, after the botanical name, local name as used in the Indore area (taken after Biscoe and verified), habitat, frequency, and locality, with the collector and his number. The reference to Biscoe's work is indicated by B with the numeral immediately following denoting the page number. Nomenclature has been revised to conform to modern taxonomic usage and in accordance with the current Montreal Code.

A LIST OF FLOWERING PLANTS FROM INDORE DISTRICT

MAGNOLIACEAE

***Michelia champaca* L.!**

Champa. B. 7. Grown in Gardens and Parks.

ANNONACEAE

***Annona squamosa* L.**

Sitaphal B. 8. Mhow, A. S. Rao 83944.

***Millettia tomentosa* (Roxb.) Sinclair, *Saccopetalum tomentosum* Hook. f. & Th.**

Om. B. 8. In Teak forests, rare. Patalpani, Sastry 87507; Manpur, Sastry 87534.

***Polyalthia longifolia* Benth. & Hk. f.!**

Ashoka. B. 8. Grown in Gardens.

MENISPERMACEAE

***Cocculus hirsutus* (L.) Diels, *C. villosus* DC.**

In Teak forests, common. Simrol, A. S. Rao 79096; Manpur, A. S. Rao 83802; Bheru ghat-Choral, Sastry 84228.

***Tinospora cordifolia* (Willd.) Miers.**

Rare. Simrol, A. S. Rao 79182.

PAPAVERACEAE

***Argemone mexicana* L.**

Along river bed, common. Kalakund, Sastry 84258.

BRASSICACEAE (CRUCIFERAE)

***Brassica nigra* Koch.!**

Commonly cultivated for seeds.

***Rorippa indica* (L.) Hoch., *Nasturtium indicum* DC.**

In moist open fields, rare. Simrol, A. S. Rao 79087.

CAPPARACEAE (CAPPARIDACEAE)

***Capparis decidua* (Forsk.) Edgew., *C. aphylla* Roth**

Kateria, Kori. B. 9. Along the dry Chambal river banks, common. Gautampura Road, Sastry 87661.

***C. grandis* L. f.**

B. 9. Rare.

***C. sepiaria* L.**

Kauthar. In open dry places, few. Patalpani, Sastry 87506; Gautampura Road, Sastry 87658.

***C. zeylanica* L., *C. horrida* L.**

Ardanda, Afua. B. 9. In outskirts of villages, common. Simrol, A. S. Rao 79094; Manpur, Sastry 87659.

Cleome felina L. f.

In dry rocky river bed, few. Kalakund, Sastry 84260A.

C. simplicifolia Hook. f. & Th.

Common in open areas, Manpur, A. S. Rao 83813.

Crataeva religiosa Forst. l

B. 9. Roadside tree, rare.

BIXACEAE

Cochlospermum religiosum (L.) Alston, *C. gossypium* DC.

B. 10. Few. Choral, Sastry 84247.

FLACOURTIACEAE

Flacourtia indica (Burm. f.) Merr., *F. sepiaria* Roxb.

B. 10. Along river banks, frequent. Choral, A. S. Rao 84000; Kalakund, Sastry 84268; Khurda, Sastry 87582.

POLYGALACEAE

Polygala chinensis L.

Scattered in open areas and along moist river banks, scarce. Indore, A. S. Rao 79083; Khurda, A. S. Rao 84150; Ghata Billod, A. S. Rao 84195.

P. erioptera DC.

Along dry river banks and open fields, frequent. Choral, A. S. Rao 79148; Choral, A. S. Rao 83968.

P. persicariaefolia DC.

On dry soil, rare. Manpur, A. S. Rao 87873.

PORTULACACEAE

Portulaca oleracea L.

Along roadsides and cultivated fields, frequent. Gautampura Road, Sastry 87620; Manpur, Sastry 87545.

P. quadrifida L.

On wet clayey soil, frequent. Sanwer, A. S. Rao 79252; Manpur, Sastry 87592.

TAMARICACEAE

Tamarix ericoides Rottl.

B. 11. Scattered along dry rocky river bed. Kalakund, Sastry 84271.

MALVACEAE

Abelmoschus manihot (L.) Medik., *Hibiscus manihot* L.

Jungli Bhendi. In Teak forest, along stream, common. Naharjabua, A. S. Rao 79214, 84126; Khurdi, A. S. Rao 83884.

Abutilon indicum G. Don

Along cultivated fields, frequent. Simrol, A. S. Rao 79114.

Gossypium arboreum L.

Devkapas. Cultivated. Depalpur, A. S. Rao 79278.

Hibiscus lobatus (Murr.) O. Ktze.

Frequent. Manpur, A. S. Rao 83857; Mhow, A. S. Rao 83947.

H. panduraeformis Burm.

Along cultivated fields, frequent. Manpur, A. S. Rao 83941; Gautampura Road, Sastry 87626.

H. rugosus Mast.

In a cultivated field, rare. Yeshwantsagar, A. S. Rao 84173.

Kydia calycina Roxb.

Dhaman. B. 11. In Teak forest, frequent. Jhanakpur, A. S. Rao 79198; Naharjabua, A. S. Rao 84116.

Malvastrum coromandelianum Garcke.

In dry open fields, common. Khurel, A. S. Rao 84160; Manpur, Sastry 87597; Gautampura Road, Sastry 87619.

Sida grewioides Gwill.

Rare. Simrol, A. S. Rao 79121.

S. veronicifolia Lamk., *S. humilis* Willd.

On clayey soils, frequent. Simrol, A. S. Rao 79112; Naharjabua, A. S. Rao 79212; Manpur, A. S. Rao 83855; Choral, A. S. Rao 84017.

Thespesia lampas (Cav.) Dalz. & Gibs., *Hibiscus lampas* Cav.

Bankapas. B. 12.

T. populnea (L.) Soland. ex Corr.

B. 12. In temple gardens; Ghata Billod, A. S. Rao 84202.

BOMBACACEAE

Adansonia digitata L.

Khurasani Imli. B. 12. Rare. Bargunda near Mhow; near Inspection Bungalow, Sanwer.

Bombax ceiba L., *Salmalia malabarica* (DC.) Schott & Endl.

Bankapas. B. 11. Few. Choral, A. S. Rao 84066.

STERCULIACEAE

Eriolaena candollei Wall.

Dhaman, *Bhothi*. In Teak forest, rare. Naharjabua, A. S. Rao 84113.

E. hookeriana Wt. & Arn.

B. 14. Rare.

Helicteres isora L.

Marorphali. B. 13. Frequent. Naharjabua, A. S. Rao 84075; Choral, Sastry 84229.

Melhanian futteyporensis Munro ex Mast.

Rare. Patalpani Falls, A. S. Rao 79293.

Sterculia urens Roxb.

B. 13. Frequent. Choral, A. S. Rao 79181; Choral, Sastry 84244.

TILIACEAE

Corchorus aestuans L. *C. acutangulus* Lamk.

In Teak forest, rare. Naharjabua, A. S. Rao 84117.

C. fascicularis Lamk.

In open fields and grasslands, scarce. Hasoda, A. S. Rao 83984; Khurel, A. S. Rao 84161.

C. olitorius L.

In forest floor and cultivated fields, frequent. Naharjabua, A. S. Rao 84118; Manpur, Sastry 87539; Gautampura Road, Sastry 87641.

Corchorus trilocularis L.

In open fields and grasslands, frequent. Khurel, A. S. Rao 82162.

Grewia abutifolia Vent. ex Juss.

Rare. Chapriya, A. S. Rao 83925; Baircha, A. S. Rao 84202.

G. damine Gaertn., *G. salvifolia* Heyne

Dhaman. B. 15.

G. hirsuta Vahl

Frequent. Manpur, A. S. Rao 83878; Bhadakhia near Dabalchowky, A. S. Rao 84106.

G. tiliacifolia Vahl

B. 14. Along river banks and hill slopes, frequent. Naharjabua, A. S. Rao 84109; Choral, Sastry 84279; Manpur, Sastry 87561.

Triumfetta rhomboidea Jacq.

Frequent. Manpur, A. S. Rao 83866.

T. rotundifolia Lamk.

In open areas, frequent. Khurel, A. S. Rao 84155; Gautampur, A. S. Rao 84182.

OXALIDACEAE

Biophytum sensitivum DC.

In open fields and in forests, frequent. Indore, A. S. Rao 79084; Choral, A. S. Rao 79153; Manpur, A. S. Rao 83875; Naharjabua, A. S. Rao 84121.

Oxalis corniculata L.

In moist, shady areas along railway track, rare. Kalakund, Sastry 84263.

BALSAMINACEAE

Impatiens balsamina L.

In shady moist localities, frequent. Manpur, A. S. Rao 83867.

RUTACEAE

Aegle marmelos Corr.

Bel. B. 16. Along river banks, frequent. Choral, A. S. Rao 84073; Choral, Sastry 84281.

Feronia limonia (L.) Swingle, *F. elephantum* Corr.

Kaut. B. 17. Cultivated.

Murraya koenigii (L.) Spr. I

Kari neem. B. 17. Cultivated.

SIMAROUBACEAE

Ailanthus excelsa Roxb.

Maharukh, Mahanim. B. 17. Avenue tree. Choral, Sastry 84284.

Balanites aegyptiaca (L.) Delile. B. *roxburghii* Planch.

Hingan, Hingota. B. 18. In dry open fields, frequent. Gautampura Road, Sastry 87660.

BURSERACEAE

Boswellia serrata Roxb.

Salai. B. 18. Frequent. Naharjabua, A. S. Rao 79209; Patalpani Falls, A. S. Rao 79288; Patalpani, Sastry 84288.

Commiphora mukul (Hook. ex Stocks) Engl., *Balsamodendron mukul* Hook. ex Stocks

Gugal Thad. B. 19. Rare.

Garuga pinnata Roxb.

Kakar, Adoo. B. 19. Frequent. Chapriya, village, A. S. Rao 83917; Manpur, Sastry 87559.

MELIACEAE

Azadirachta indica (L.) Juss.

Neem. B. 20. Near villages and hamlets, common.

Chloroxylon swietenia DC.

Biriya. B. 21. Rare.

Melia azedarach L.

Bakain. B. 20. Cultivated along roadsides. Simrol, A. S. Rao 79190.

Soyamida febrifuga A. Juss.

Rohini. B. 21.

CELASTRACEAE

Celastrus paniculatus Willd.

In Teak forest, frequent. Chapriya, A. S. Rao 83907; Dabalchowky, A. S. Rao 84098; Hasalpur, Sastry 87615.

Elaeodendron glaucum Pers.

Bhutankush, Jasmaaldi. B. 22. Rare. Dabalchowky, A. S. Rao 84095; Kalakund, Sastry 84273.

Gymnosporia spinosa (Forsk.) Fiori, *G. montana* Benth.

Baikul. B. 22. In forests and on exposed hills, frequent. Simrol, A. S. Rao 79097; Chapriya, A. S. Rao 83921; Choral, A. S. Rao 84065.

RHAMNACEAE

Ventilago calyculata Tul.

Rare. Patalpani, Sastry 87503.

V. maderaspatana Gaertn.

Frequent. Simrol, A. S. Rao 79095; Khurdi, A. S. Rao 83898.

Zizyphus mauritiana Lamk., *Z. jujuba* Lamk.

B. 22. Near villages, frequent. Simrol, A. S. Rao 84087.

Z. nummularia (Burm. f.) Wt. & Arn.

In open dry fields, frequent. Ramkhedi-Sethkhedi villages, A. S. Rao 79231; Depalpur, A. S. Rao 84180.

Z. oenoplia Mill.

B. 23. Frequent. Jhanakpur, A. S. Rao 79199; Manpur, A. S. Rao 83801.

Z. xylopyrus Willd.

Ghat Bor. B. 23. Rare. Naharjabua, A. S. Rao 79217.

VITACEAE

Cayratia auriculata (DC.) Gamble, *Vitis auriculata* Wall.

Rare. Choral, A. S. Rao 84080.

C. carnosia (Wall.) Gagnep., *Vitis carnosia* Wall.

Along dried stream bed, rare. Khurdi, A. S. Rao 83893.

Cissus repanda Vahl

Rare. Choral, Sastry 84221.

LEEACEAE

Leea edgeworthii Santapau, *L. aspera* Edgew.

Along stream beds, frequent. Khurdi, A. S. Rao 83901.

L. macrophylla Roxb.

B. 79. In damp forest areas, frequent. Chapriya, A. S. Rao 83915; Naharjabua, A. S. Rao 84133.

SAPINDACEAE

Cardiospermum halicacabum L.

Along roadside bushes, common. Simrol, A. S. Rao 79116; Choral, A. S. Rao 84055.

Sapindus emarginatus Vahl

Ritha. B. 24. Choral, A. S. Rao 84050.

Schleichera oleosa (Lour.) Oken, *S. trijuga* Willd.

Kusum. B. 24. Along rocky river banks, frequent. Patalpani Falls, Sastry 84291; Khurda, Sastry 87577.

ANACARDIACEAE

Buchanania lanzan Spr.

Achar, Charoli. B. 25. In Teak forest, common. Badatalai (near Manpur), A. S. Rao 79318; Choral, Sastry 84248; Manpur, Sastry 87554.

Lannea coromandelica (Houtt.) Merr., *Odina wodier* Roxb.

Mohini. B. 26. Balwada, A. S. Rao 84003; Choral, A. S. Rao 84071; Choral, Sastry 84241.

Mangifera indica L.!

Am, Amba. B. 25. Planted near villages.

Semecarpus anacardium L. f.

Bhilawa, Biba. B. 26.

MORINGACEAE

Moringa concanensis Nimmo

Frequent. Choral, A. S. Rao 79173.

M. oleifera Lamk.!, *M. pterygosperma* Gaertn.

Sejna. B. 27. Cultivated.

FABACEAE (PAPILIONACEAE)

Abrus precatorius L.

Frequent. Choral, A. S. Rao 84074; Naharjabua, A. S. Rao 84108.

Aeschynomene indica L.

Along roadside ditches, rare. Ajnod, A. S. Rao 79263.

Alysicarpus hamosus Edgew.

Along dry stream bed, rare. Manpur, A. S. Rao 83874; Choral, A. S. Rao 83992.

A. longifolius Wt. & Arn.

In dry stream bed, rare. Choral, A. S. Rao 83964.

A. pubescens Law

In grasslands, common. Hasoda, A. S. Rao 83983.

A. rugosus (Willd.) DC.

Near cultivated fields, frequent. Indore, A. S. Rao 79070; Simrol, A. S. Rao 79111; Faraspur, A. S. Rao 79237; Gautampura Road, Sastry 87628.

A. rugosus DC. var. *heyneanus* Baker

On black clayey soils, frequent. Manpur, A. S. Rao 83850; Khurda, A. S. Rao 83932; Manpur, Sastry 87588.

A. tetragonolobus Edgew.

Frequent. Indore, A. S. Rao 79078; Choral, A. S. Rao 79164; Manpur, A. S. Rao 83828.

A. vaginalis (L.) DC.

Along dry stream bed, rare. Choral, A. S. Rao 83965.

A. vaginalis (L.) DC. var. *nummularifolius* Baker

Along dry stream beds, rare. Choral, A. S. Rao 83992A.

Atylosia platycarpa Benth.

Along dry stream bed, rare. Choral, A. S. Rao 83997.

A. scarabaeoides Benth.

Along road side thicket, frequent. Choral, A. S. Rao 79161, 83966; Manpur, A. S. Rao 83825.

Butea monosperma (Lamk.) Taub.

B. 30. Along outskirts of Teak forest, common. Naharjabua, A. S. Rao 84137; Choral, Sastry 84236; Khurda, Sastry 87579.

Cajanus cajan (L.) Millsp., *C. indicus* Spr.

Cultivated. Rundi, A. S. Rao 79197; Gautampura Road, Sastry 87653.

Canavalia gladiata (Jacq.) DC., *C. ensiformis* Baker

Rare. Guradia-Patalpani, A. S. Rao 79297.

Cicer arietinum L.

Cultivated.

Crotalaria hirsuta Willd.

Along dry stream banks, frequent. Choral, A. S. Rao 79159, 83990.

C. juncea L.

Near cultivated fields as an escape, frequent. Manpur, Sastry 87551.

C. linifolia L. f.

Along roadsides, rare. Indore, A. S. Rao 79074; Chapriya, A. S. Rao 83908, 83928.

C. mysorensis Roth

Rare. Choral, A. S. Rao 79166.

C. orixensis Willd.

In Teak forest, and, along roadsides, frequent. Indore, A. S. Rao 79073; Choral, A. S. Rao 79163; Manpur, A. S. Rao 83823; Yeshwantsagar, A. S. Rao 84168.

C. prostrata Roxb.

In Teak forest, frequent. Choral, A. S. Rao 83991.

C. sericea Retz.

Along the bank of stream, rare. Naharjabua, A. S. Rao 79211.

C. vestita Baker

Along dry river beds, and cultivated fields, frequent. Choral, A. S. Rao 83996; Ghata Billod, A. S. Rao 84192; Gautampura Road, Sastry 87657.

Cyllista scariosa Roxb.

In Teak forest, frequent. Simrol, A. S. Rao 79186; Dabalchowky, A. S. Rao 84100.

Dalbergia latifolia Roxb.

Sheeshum. B. 30.

Dalbergia lanceolaria L. f.

Sheeshum, Lokhandi. B. 31. In Teak forest, frequent. Dabalchowky, A. S. Rao 84090.

D. paniculata Roxb.

Phansi. B. 31. In Teak forest, frequent. Choral, A. S. Rao 84009; Kalakund, Sastry 84267.

D. sissoo Roxb.

Sissoo, Sheeshum. B. 30. On way sides, frequent. Hathod, A. S. Rao 84165; Manpur, Sastry 87570; Gautampura Road, Sastry 87659.

Desmodium diffusum DC.

Common. Manpur, A. S. Rao 83829, 83851; Choral, A. S. Rao 83972; Ghata Billod, A. S. Rao 84194.

D. gangeticum (L.) DC.

In Teak forests, frequent. Naharjabua, A. S. Rao 84138.

D. spirale DC.

On dry stream bed, rare. Manpur, A. S. Rao 83877.

D. velutinum (Willd.) DC., *D. latifolium* DC.

B. 28.

Eleiotis sororia DC.

Along dry stream beds, frequent. Manpur, A. S. Rao 83876; Choral, A. S. Rao 83957.

Erythrina suberosa Roxb.

Gadha Palas. B. 29. Rare. Naharjabua, A. S. Rao 84119; Choral, Sastry 84249.

E. variegata L. var. *orientalis* (L.) Merrill, *E. indica* Lamk.

Pargra. B. 29.

Heylandia latebrosa DC.

Frequent, throughout. Choral, A. S. Rao 79167; Indore, A. S. Rao 79080; Patalpani, Sastry 84287.

Indigofera enneaphylla L.

In moist forest openings, frequent. Choral, A. S. Rao 79176.

I. glandulosa Roxb. ex Willd.

Common throughout. Faraspur, A. S. Rao 79236; Chapriya, A. S. Rao 83931; Choral, A. S. Rao 83973; Manpur, Sastry 87538; Gautampura Road, Sastry 87650.

I. hirsuta L.

Along stream beds, frequent. Khurdi, A. S. Rao 83883; Choral, A. S. Rao 83970.

I. linifolia Retz.

Frequent. Indore, A. S. Rao 79076; Patalpani, Sastry 87510.

I. pulchella Roxb.

Jungli nil, Baodli. B. 28.

I. tinctoria L.

In forest, frequent. Khurdi, A. S. Rao 83892; Patalpani, A. S. Rao 83960; Naharjabua, A. S. Rao 84120.

I. trifoliata L.

Frequent. Chapriya, A. S. Rao 83930; Gautampura Road, A. S. Rao 84183.

I. trita L. f.

Rare. Choral, A. S. Rao 79175.

Lathyrus sativus L.

Cultivated. Dakacha-Kshipra, A. S. Rao 79240; Gautampura Road, Sastry 87655.

Medicago sativa L.

Cultivated. Gautampura Road, Sastry 87625.

Millettia auriculata Baker

Along river banks, common. Naharjabua, A. S. Rao 79210; Khurdi, A. S. Rao 83899; Choral, Sastry 84282.

Moghania strobilifera (L.) St. Hill ex Jacks., *Flemingia strobilifera* R. Br. ex Ait.

B. 32.

Mucuna prurita Hook.

In Teak forest, common. Naharjabua, A. S. Rao 84112.

Ougeinia oojeinensis (Roxb.) Hoch., *O. dalbergioides* Benth.

Tinas, Tinsa. B. 28.

Phaseolus aconitifolius Jacq.

Along roadsides, frequent. Hasoda, A. S. Rao 83986.

P. mungo L.

Along dry stream banks, rare. Choral, A. S. Rao 83998.

P. radiatus L.

Along stream banks, rare. Choral, A. S. Rao 83999; Naharjabua, A. S. Rao 84129.

P. trilobus Ait.

Rare. Indore, A. S. Rao 79082; Manpur, A. S. Rao 83830.

Pisum sativum L.

Matar. Cultivated. Gautampura Road, Sastry 87643.

Pongamia pinnata (L.) Pierre, *P. glabra* Vent.

Karanj. B. 32. Often planted as an avenue tree. Yeshwantsagar, A. S. Rao 84171; Kalakund, Sastry 84269; Gautampura Road, Sastry 87666.

Psoralea corylifolia L.

Babacha. In cultivated fields throughout, common. Faraspur, A. S. Rao 79235; Gautampura Road, A. S. Rao 84184; Sastry 87629.

Pterocarpus marsupium Roxb.

Bija, Bijasal. B. 31. In Teak forest, common. Choral, A. S. Rao 84005; Sastry 87522.

Pueraria phaseoloides Benth.

Rare. Chapriya, A. S. Rao 83916.

Rhynchosia aurea DC.

Along dry stream bed, rare. Choral, A. S. Rao 82995.

R. minima DC.

On roadside thickets, common. Sastry 87633.

Sesbania cannabina (Retz.) Pers., *S. aculeata* Pers.

In cultivated fields, common. Manpur, Sastry 87536.

S. grandiflora Pers.

Shewari. B. 27. Planted in gardens, often. Dabalchowky, A. S. Rao 79194.

S. sesban (L.) Merr., *S. aegyptiaca* Pers.

Shewari. B. 27.

Smithia conferta Sm.

In moist places, frequent. Khurda, A. S. Rao 79304; Manpur, A. S. Rao 83858.

Teramnus labialis Spr.

On roadside bushes, and in forest, frequent. Simrol, A. S. Rao 79103; Chapriya, A. S. Rao 83906; Mhow, A. S. Rao 83946.

Triflorum pratense L.

In a cultivated field, rare. Gautampura. Road, Sastry, 87637.

Zornia diphylla (L.) Pers.

Along moist river bank, frequent. Manpur, A. S. Rao 83814.

CAESALPINIACEAE

Bauhinia purpurea L.

Cultivated in gardens. Choral, A. S. Rao 84051.

B. racemosa Lamk.

Apta, Abota. B. 35. In Teak forest, common. Manpur, A. S. Rao 83880; Naharjabua, A. S. Rao 84115; Choral, Sastry 84226, 87517; Manpur, Sastry 87558.

B. variegata L.

Kachnar. B. 36.

Caesalpinia crista L., *C. bonducella* Fleming

Kunja, Guttair, Sagargoti. B. 35.

C. decapetala (Roth) Alston, *C. sepiaria* Roxb.

Kuntar. B. 35. Along roadsides, frequent. Depalpur, A. S. Rao 84178; Hasalpur, Sastry 87616.

Cassia auriculata L.

Choti Anoli, Thurwar. B. 34.

C. fistula L.

Amaltas. B. 34. In open forest, frequent. Mhow, A. S. Rao 83943; Bargunda, A. S. Rao 84213.

C. obtusifolia L.

Along roadsides, rare. Simrol, A. S. Rao 79183.

C. occidentalis L.

Frequent. Balwada, A. S. Rao 79138.

C. pumila Lamk.

On roadsides, frequent. Choral, A. S. Rao 79177; Manpur, A. S. Rao 89872; Hasoda, A. S. Rao 83988.

C. siamea Lamk.

B. 34.

C. tora L.

In moist places in the forest, frequent. Manpur, A. S. Rao 83839.

Delonix elata (L.) Gamble, *Poinciana elata* L.

Sundaisara. B. 33.

D. regia (Boj.) Raf., *Poinciana regia* Boj.

Gulmohar. B. 33. Grown in gardens.

Hardwickia binata Roxb.

Anjan. B. 37. In Teak forest, common. The foliage and young twigs are repeatedly cut for green manure by villagers, hence most of the pollarded trees are odd shaped and stunted. Kalakund, Sastry 84275.

Parkinsonia aculeata L.

Vilayati Babul. B. 36. Often planted along roadsides. Depalpur, A. S. Rao 79281.

Pilostigma malabaricum (Roxb.) Benth., *Bauhinia malabarica* Roxb.

Apta, Katambara. B. 36.

Tamarindus indica L.

Imli, Chinch. B. 38. Planted near villages.

MIMOSACEAE

Acacia arabica Willd.

Babul. B. 39. Common throughout. Simrol, A. S. Rao 79185; Ramkhedi, A. S. Rao 79232; Hathod, A. S. Rao 84166; Choral, Sastry 87521.

A. catechu Willd.

Khair. B. 39. In Teak forest, rare. Choral, A. S. Rao 84002.

A. eburnea Willd.

Murmarti. B. 40.

A. farnesiana Willd.

Vilayati Babul. Frequent. Patalpani, A. S. Rao 79296.

A. ferruginea DC.

Gudda Khair, Sonkhair. B. 40.

A. jacquemontii Benth.

Patabauli. B. 41.

A. leucophloea Willd.

In open areas, frequent. Depalpur, A. S. Rao 79276.

A. pennata (L.) Willd.

Arali. B. 41. Rare. Chapriya, A. S. Rao 83920.

A. suma Ham.

Frequent. Naharjabua, A. S. Rao 84101.

Albizia amara Boiv.

Kustar. B. 43. Along way sides, frequent. Kak-kadada, A. S. Rao 84219.

A. lebbeck (L.) Benth.

Siris, Safed Siris. B. 43. An associate of Teak, frequent. Chapriya, A. S. Rao 83919.

A. odoratissima (L. f.) Benth.

Kala Siris. B. 43. An associate of Teak, common. Choral, A. S. Rao 84053; Dabalchowky, A. S. Rao 84094; Manpur, Sastry 87557; Yeshwantnagar, Sastry 87599.

A. procera (Roxb.) Benth.

Gurar, Safed Siris. B. 42.

Dichrostachys cinerea Wt. & Arn.

Virtuli. B. 44. Along waste lands, frequent. Choral, Sastry 87519.

Mimosa rubicaulis Lamk.

B. 42. In Teak forest, frequent. Chapriya, A. S. Rao 83918; Naharjabua, A. S. Rao 84102.

Pithecalobium dulce Benth. !

Vilayati Babul. B. 44. Planted near villages.

Prosopis cineraria (L.) MacBride, *P. spicigera* L.

Saundar, Shami. B. 38. Often planted as a hedge plant. Choral, A. S. Rao 84052; Sastry 84277.

ROSACEAE

Rosa sp. !

Many cultivators grown in parks and home gardens.

COMBRETACEAE

Anogeissus latifolia Wall.

Dhaura. B. 46. In Teak forest, common. Choral, A. S. Rao 79155, 84008; Khurda, Sastry 84583.

Anogeissus pendula Edgew.

Kala Dhokra, Kala Dhoura. B. 47.

A. sericea Brandis

Indukada. B. 47.

Combretum ovalifolium Roxb.

In Teak forest, common. Khurdi, A. S. Rao 83997; Patalpani, Sastry 84292; Choral, Sastry 84225.

Terminalia alata Heyne ex Roth, *T. tomentosa* Wt. & Arn.

Saj, Sadar, Sadada. B. 45. In Teak forest, frequent. Naharjabua, A. S. Rao 79220; Choral, A. S. Rao 84006.

T. arjuna Wt. & Arn.

Kahu, Kodia. B. 46. Along stream banks in forests, common. Naharjabua, A. S. Rao 79205; Choral, Sastry 84240; Kalakund, Sastry 84270; Khurda, Sastry 84575.

T. bellirica (Gaertn.) Roxb.

Behda. B. 44. In Teak forest, common. Chapriya, A. S. Rao 79316; Baircha, A. S. Rao 84203; Choral, Sastry 84239; Manpur, Sastry 87524.

T. catappa L.

Desi Badam. B. 45. Often grown in home gardens.

MYRTACEAE

Eucalyptus cameldulensis Dehn., *E. rostrata* Sch.

Planted. Dabalchowky, A. S. Rao 79193; Choral, Sastry 84276.

Syzygium cumini (L.) Skeels, *Eugenia jambolana* Lamk.

Jamun. B. 48. Planted along roadsides. Yeshwantnagar, Sastry 87618.

S. heyneanum Wall., *Eugenia heyneana* Duthie

Choti Jamun. B. 48. Along rocky stream beds, frequent. Choral, Sastry 84242; Patalpani, Sastry 84293; Manpur, Sastry 87529.

LECYTHIDACEAE

Careya arborea Roxb.

Kumbhi. B. 48.

LYTHRACEAE

Ammania baccifera L.

In moist clay soil, frequent. Indore, A. S. Rao 79071; Simrol, A. S. Rao 79092; Khurdi, A. S. Rao 83889; Choral, A. S. Rao 84032; Sastry 84256; Patalpani, Sastry 87512.

A. multiflora Roxb.

In moist places, frequent. Khurdi, A. S. Rao 83888.

Lagerstroemia parviflora Roxb.

Lendia, Karkaria. B. 49. Frequent. Naharjabua, A. S. Rao 79221.

Lawsonia inermis L.

Mehndi. B. 49. Along roadsides, frequent. Depalpur, A. S. Rao 79280; Choral, Sastry 87520; Gautampura Road, Sastry 87622.

Rotala tenuis (Wt.) Koehne, *Ammania tenuis* Cl.

On wet rocky stream beds, gregarious. Naharja-

bua, A. S. Rao 79206; Choral, Sastry 84243; Kalakund, Sastry 84257.

Woodfordia fruticosa (L.) Kurz

Dowry, Sonedairy. B. 49. Along nalas and streams, common. Choral, Sastry 84222.

ONAGRACEAE

Jussiaea perennis (L.) Brenan, *Ludwigia parviflora* Roxb.

In moist rocky places, frequent. Choral, A. S. Rao 84029.

TRAPACEAE

Trapa natans L. var. *bispinosa* Roxb., *T. bispinosa* Roxb.

Singhada. In tanks near villages, rare. Balwada, A. S. Rao 79140.

SAMYDACEAE

Casaria tomentosa Roxb.

Tandori, Kundaria, Kaisu. B. 50.

CUCURBITACEAE

Ctenolepis garcini (L.) C. B. Cl., *Blastania garcini* Cogn.

In forest, rare. Choral, A. S. Rao 84044.

Coccinia grandis (L.) Voigt., *C. cordifolia* (L.) Cogn.

Along roadsides, frequent. Simrol, A. S. Rao 79108; Patalpani, Sastry 87513.

Corallocarpus epigaeus C. B. Cl.

Rare. Gautampura Road, A. S. Rao 84187.

Cucumis callosus (Rottl.) Cogn., *C. trigonus* Roxb.

Frequent. Manpur, A. S. Rao 83803; Choral, A. S. Rao 84039; Khurda, Sastry 87576.

Diplocyclos palmatus (L.) C. Jeffrey, *Bryonia palmata* L.

On roadside thickets, frequent. Simrol, A. S. Rao 79104; Gautampura Road, A. S. Rao 84185.

Luffa acutangula (L.) Roxb.

Frequent. Naharjabua, A. S. Rao 84131.

Melothria maderaspatana (L.) Cogn.

Frequent. Manpur, A. S. Rao 83881; Gautampura Road, A. S. Rao 84186.

Momordica charantia L.

Stray plant along river bed. Rare. Choral, A. S. Rao 79179.

Trichosanthes cucumerina L.

Rare. Choral, A. S. Rao 84054.

CACTACEAE

Opuntia dillenii Haw. l

Nagphani. B. 50. Near villages and roadsides, frequent.

MOLLUGINACEAE

Glinus lotoides L., *Mollugo hirta* Thunb.

In loose sandy river beds, frequent. Sanwer, A. S. Rao 79244; Kalakund, Sastry 84260; Manpur, Sastry 87531.

Mollugo pentaphylla L.

Frequent. Choral, A. S. Rao 84025.

APIACEAE (UMBELLIFERAE)

- Anethum graveolens** L., *Peucedanum graveolens* Benth. & Hook.
Cultivated. Naugama, A. S. Rao 79271.
Coriandrum sativum L.
Dhania. Cultivated. Naugama, A. S. Rao 79270.
Pimpinella heyneana Wall.
In moist forest places, frequent. Chapriya, A. S. Rao 83911.
Trachyspermum stictocarpum (C. B. Cl.) Wolff
Rare. Manpur, A. S. Rao 83879.

ALANGIACEAE

- Alangium salvifolium** (L. f.) Wang., *A. lamarckii* Thw.
Akola. B. 50. Along river bank, few. Choral. A. S. Rao 84020; *Sastry* 84283.

RUBIACEAE

- Adina cordifolia** (Roxb.) Hook. f. ex Brandis, *Naucllea cordifolia* Roxb.
Haldu. B. 51.
Anotis lancifolia (Dalz.) Hook. f.
Along river bank, rare. Khurel, A. S. Rao 84149; Baircha, A. S. Rao 84206.
Borreria stricta (L. f.) Sch.
In Teak forest, frequent. Chapriya, A. S. Rao 83912; Hasoda, A. S. Rao 83989; Naharjabua, A. S. Rao 84123.
Gardenia latifolia Ait.
Papri. B. 53.
G. turgida Roxb.
Temria, *Phoetra*. B. 53.
Hamelia patens Jacq.
Often planted in gardens; Gautampura, A. S. Rao 84189.
Hymenodictyon excelsum (Roxb.) Wall.
Lolesan, *Dandra*. B. 52. In Teak forest, frequent. Naharjabua, A. S. Rao 84128.
Ixora arborea Roxb. ex Sm., *I. parviflora* Vahl
Kura, *Koiliya*. B. 54.
Mitragyna parviflora (Roxb.) Korth.
Kullan, *Kaddam*. B. 51. In Teak forest, common: Badatalai, A. S. Rao 79319; Chapriya, A. S. Rao 83904; Choral, *Sastry* 84238; Khurda, *Sastry* 87581.
Morinda tomentosa Heyne ex Roth, *M. tinctoria* Roxb. var. *tomentosa* Hook. f.
Frequent. Manpur, A. S. Rao 84218; Manpur, *Sastry* 87560.
Oldenlandia aspera DC.
Frequent. Simrol, A. S. Rao 79124; Sanwer, A. S. Rao 79242; Yeshwantsagar, A. S. Rao 84176.
O. pumila (L. f.) DC.
Khurel, A. S. Rao 79227.
Spermadictyon suaveolens Roxb. *Hamiltonia suaveolens* Roxb.
Rare. Patalpani, A. S. Rao 83953.
Xeromphis spinosa (Thunb.) Keay., *Randia dumetorum* Lamk.
Mainphal. B. 54.

- X. uliginosa** (Retz.) Maheshwari, *R. uliginosa* DC.
Kala Thaimria, *Gainpni*. B. 53.

ASTERACEAE (COMPOSITAE)

- Acanthospermum hispidum** DC.
In Teak forest, common. Choral, A. S. Rao 84068.
Ageratum conyzoides L.
In Teak forest, gregarious. Naharjabua, A. S. Rao 84139; Patalpani, *Sastry* 84299; Kalakund, *Sastry* 84266.
Bidens biternata (Lour.) Merr. & Sherff
Manpur, A. S. Rao 83865; Naharjabua, A. S. Rao 84127.
Blumea membranacea DC.
Rare. Patalpani, A. S. Rao 79291; Manpur, *Sastry* 87571; Gautampura Road, *Sastry* 87644.
B. mollis (Don.) Merr.
Along rocky stream banks, amidst granite boulders, frequent. Choral, *Sastry* 84230; Patalpani, *Sastry* 84295.
B. oxyodonta DC.
On dry gravelly soil, frequent. Manpur, *Sastry* 87572.
Caesulia axillaris Roxb.
In wet places, frequent. Balwada, A. S. Rao 79136; Hadoda, A. S. Rao 83985; Yeshwantnagar, *Sastry* 87606.
Centratherum anthelminticum O. Ktze., *Vernonia anthelmintica* Willd.
Rare. Khurdi, A. S. Rao 83902.
Cichorium endivia L.
Cultivated escape. Gautampura Road, *Sastry* 87624.
Cyathocline purpurea (Don.) O. Ktze., *C. lyrata* Cass.
Along dry rocky stream banks, frequent. Choral, A. S. Rao 79125; Naharjabua, A. S. Rao 79201; Khurdi, A. S. Rao 83890; Kalakund, *Sastry* 84254; Patalpani, *Sastry* 84294.
Echinops echinatus Roxb.
In open areas, frequent. Bargunda village, A. S. Rao 84217.
Eclipta prostrata (L.) L.
In moist localities, rare. Simrol, A. S. Rao 79093; Chapriya, A. S. Rao 79305; Gautampura Road, *Sastry*, 87646.
Emilia sonchifolia (L.) DC.
Frequent. Chapriya, A. S. Rao 79314; Manpur, A. S. Rao 83832; Choral, A. S. Rao 84036.
Flaveria contrayerba Pers.
Rare. Ajnod Road, A. S. Rao 79262.
Glossocardia bosvallea (L. f.) DC., *G. linearifolia* Cass.
In open places, frequent. Patalpani, A. S. Rao 79301; Manpur, A. S. Rao 83817; Choral, A. S. Rao 84011.
Gnaphalium indicum L.
On sandy river banks, frequent. Sanwer, A. S. Rao 79246; *Sastry* 84297.

Gnaphalium luteo-album L.

Along moist fields, frequent. Yeshwantnagar, Sastry 87607.

G. pulvinatum Del.

In sandy river bank, few. Sanwer, A. S. Rao 79245.

Guizotia abyssinica Cass.

Cultivated. Dabalchowky, A. S. Rao 84145.

Lagascea mollis Cav.

Frequent. Choral, A. S. Rao 84013; Manpur, Sastry 87548.

Launea nudicaulis Hook. f.

In open places, frequent. Ramkhedi village, A. S. Rao 79229; Kalakund, Sastry 84265; Gautampura Road, Sastry 87654.

Policaria wightiana C. B. Cl.

On rocky ledges, frequent. Choral, A. S. Rao 84021; Patalpani, Sastry 87514.

Sclerocarpus africanus Jacq.

In forest clearings, frequent. Naharjabua, A. S. Rao, 84114.

Sonchus arvensis L.

In cultivated fields, few. Manpur, Sastry 87547.

S. oleraceus L.

In cultivated fields. Manpur, Sastry 87587.

Spilanthes acmella Murr.

Along roadsides, rare. Manpur, Sastry 87591.

Tagetes erecta L.

Cultivated for its orange yellow decorative flower heads. Simrol, A. S. Rao 84089.

Tridax procumbens L.

Frequent. Choral, A. S. Rao 79143, 84019; Patalpani, Sastry 84298.

Vernonia cinerea (L.) Less.

Rare. Simrol, A. S. Rao 79120.

Vicoa indica (Willd.) DC., *V. auriculata* Cass.

In open areas, frequent. Choral, A. S. Rao 79154, 84041; Guradia, A. S. Rao 79298; Gautampura Road, Sastry 87645.

Xanthium strumarium L.

Abundant throughout. Kakkadada, A. S. Rao 84220.

Zinnia elegans Jacq.

In forests, gregarious. Apparently this garden herb has found it congenial in the forest, and it is spreading, making a splash of colour in the green forest floor in the vicinity of Khurda.

LOBELIACEAE

Lobelia alsinoides Lamk. *L. trigona* Roxb.

On wet clayey soil, gregarious. Khurdi, A. S. Rao 83887.

L. hayneana Roem. & Sch., *L. trialata* Buch.-Ham.

In marshy place, frequent. Chapriya, A. S. Rao 79309.

PLUMBAGINACEAE

Plumbago zeylanica L.

Along village hedges, frequent. Simrol, A. S. Rao 79102.

SAPOTACEAE

Madhuca longifolia (Koen.) MacBride var. *latifolia* (Roxb.) Cheval., *Bassia latifolia* Roxb.

Mahua. B. 55. In Teak forest, frequent. Badatalai, A. S. Rao 79317; Choral, Sastry 84237; Manpur, Sastry 87564.

Manilkara hexandra (Koen.) MacBride, *Mimusops hexandra* Roxb.

Khirni, *Ran*. B. 56. Planted. Ghata Billod, A. S. Rao 84201.

Mimusops elengi L.

Molserri. B. 56. Planted. Mhow, A. S. Rao 83942.

EBENACEAE

Diospyros chloroxylon Roxb.

B. 57.

D. melanoxylon Roxb.

Temru. B. 57. In Teak forest, frequent. Chapriya, A. S. Rao 83922; Kalakund, Sastry 84261; Choral, Sastry 87523; Manpur, Sastry 87556.

OLEACEAE

Jasminum rotterianum Wall.

Along the bank of a stream, rare. Naharjabua, A. S. Rao 84132.

Nyctanthes arbor-tristis L.

Sirali, *Harsinghir*. B. 58. In Teak forest, common. Slender twigs are repeatedly cut by tribal folks for basketry. Choral, A. S. Rao 79141; Dabalchowky, A. S. Rao 84091.

Schrebera swietenoides Roxb.

Mokha. B. 59.

SALVADORACEAE

Salvadora persica L.

Pilu. B. 58.

APOCYNACEAE

Carissa congesta Wt.

Karond. B. 59. Frequent all over. Akola, A. S. Rao 79285; Choral, Sastry 84227.

Holarrhena antidysenterica (L.) Wall.

Dudhi. B. 60. In Teak forest, frequent. Dabalchowky, A. S. Rao 84097; Naharjabua, A. S. Rao 84142.

Nerium indicum Mill. 1, *N. odorum* Soland.

Kanher. B. 61. Planted in home gardens.

Plumeria rubra L.

Lalchampa. B. 61. Planted.

Thevetia peruviana (Pers.) Merr., *T. nerifolia* Juss. ex Steud.

Peela Kanair. B. 61. Along fencings, near villages. Bargunda, A. S. Rao 84215; Manpur, Sastry 87526.

Wrightia tinctoria R. Br.

Dudhi. B. 59. In Teak forest, common. Naharjabua, A. S. Rao 79207; Choral, A. S. Rao 84084; Kalakund, Sastry 84264; Khurda, Sastry 87574.

W. tomentosa Roem. & Sch.

Dahakali. B. 60.

ASCLEPIADACEAE

- Calotropis gigantea** (L.) R. Br.
Ak, Madar. B. 62. Planted. Depalpur, A. S. Rao 79275.
- C. procera** R. Br.
Ak, Madar. B. 62. Along roadsides, frequent. Ajnod Road, A. S. Rao 79266; Gautampura Road, Sastry 87634.
- Cryptolepis buehneri** Roem. & Sch.
In Teak forest, frequent. Simrol, A. S. Rao 79107; Naharjabua, A. S. Rao 79204.
- Dregea volubilis** Benth. ex Hook. f., *Marsdenia volubilis* (L. f.) T. Cooke
In forest, frequent. Naharjabua, A. S. Rao 79218.
- Hemidesmus indicus** (L.) Br.
Along stream banks, frequent. Khurdi, A. S. Rao 83903; Dabalchowky, A. S. Rao 84093.
- Leptadenia reticulata** Wt. & Arn.
On roadside hedges, frequent. Yeshwantnagar, Sastry 87600.
- Pentstemon spiralis** (Forsk.) Decaisne, *P. cynanchoides* R. Br.
Along roadsides, rare. Yeshwantsagar, A. S. Rao 84167.
- Pergularia daemia** (Forsk.) Blatt. & McC., *Daemia extensa* R. Br.
On roadside thickets, common. Simrol, A. S. Rao 79105; Depalpur, A. S. Rao 79277; Choral, A. S. Rao 84059; Gautampura Road, Sastry 87638.
- Sarcostemma acidum** (Roxb.) Voigt.
In rocky ledges, rare. Choral, A. S. Rao 84077.

LOGANIACEAE

- Cynoctonum mitreola** (L.) Britton, *Mitreola oldenlandioides* Wall. ex A. DC.
Along cool, shady stream bank, few. Naharjabua, A. S. Rao 84141.
- Strychnos potatorum** L. f.
B. 63.

GENTIANACEAE

- Canascora decurrens** Dalz.
Along moist rocky river banks, in gregarious patches, frequent. Naharjabua, A. S. Rao 79203.
- C. diffusa** R. Br.
In rocky stream beds, frequent. Choral, Sastry 84245; Patalpani, Sastry 87508; Gautampura Road, Sastry 87662.
- Enicostemma verticillatum** (L.) Engl., *E. littorale* Bl.
In rock crevices, frequent. Choral, A. S. Rao 79170, 84067.
- Exacum pedunculatum** L.
In moist rocky places, frequent. Naharjabua, A. S. Rao 79219; Patalpani, A. S. Rao 79292.
- Hoppea dichotoma** Willd.
Gregarious patches on wet stream banks. Balwada, A. S. Rao 97128; Khurdi, A. S. Rao 83891; Patalpani, Sastry 87509; Yeshwantnagar, Sastry 87603.

BORAGINACEAE

- Coldenia procumbens** L.
In cultivated fields, common. Gautampura Road, Sastry 87649.
- Cordia macleodii** Hook. f. & Th.
Tahya sag. B. 64. In Teak forest, frequent. Manpur, Sastry 87555.
- C. myxa** L.
Gondi, Bhokar, Badgondi. B. 63.
- C. rothii** Roem. & Schult.
Choti Gondi. B. 64.
- Cynoglossum meeboldii** Brand.
In Teak forest, frequent. Chapriya, A. S. Rao 83914.
- Heliotropium strigosum** Willd.
In grassland, frequent. Hasoda, A. S. Rao 83987.
- Rotula aquatica** Lour.
Tamboli. B. 65.
- Trichodesma amplexicaule** Roth
On dry open places, frequent. Guradia village, A. S. Rao 79299; Chapriya, A. S. Rao 79306.
- T. indicum** R. Br.
Frequent all over. Choral, A. S. Rao 79158, 84022; Dabalchowky, A. S. Rao 79196; Patalpani, A. S. Rao 83962.

EHRETIACEAE

- Ehretia aspera** Roxb.
On rock hedges of streams, frequent. Choral, Sastry 84285.
- E. laevis** Roxb.
Tambolia. B. 64. Frequent. Patalpani, Sastry 84290; Manpur, Sastry 87525.

CONVOLVULACEAE

- Argyrea setosa** (Roxb.) Choisy, *Lettsomia setosa* Roxb.
Rare. Chapriya, A. S. Rao 83924.
- Convolvulus arvensis** L.
Near cultivated fields, frequent. Farasapur, A. S. Rao 79238; Manpur, Sastry 87593; Gautampura Road, Sastry 87642.
- C. microphyllus** Sieb. ex Spr.
On gravelly open areas, frequent. Depalpur, A. S. Rao 79282; Patalpani, Sastry 84286.
- C. pluricaulis** Choisy
Rare. Ramkhedi village, A. S. Rao 79230.
- Cuscuta reflexa** Roxb.
On gravelly open areas, frequent. Depalpur, A. S. Rao 79118; Choral, Sastry 87516.
- Evolvulus alsinoides** L.
On dry gravelly areas, frequent. Manpur, A. S. Rao 82818.
- Ipomoea angulata** Lamk., *Quamoclit phoenicea* (Roxb.) Choisy
Near village hedges, frequent. Garden estate? Simrol, A. S. Rao 79106; Choral, A. S. Rao 84058.
- I. aquatica** Forsk.
In a pond, common. Balwada, A. S. Rao 79129.

***Ipomoea cairica* (L.) Sweet**

Cultivated in gardens, often found as an escape. Simrol, A. S. Rao 79191.

***I. carnea* Jacq.**

Grown in gardens. Ajnod Road, A. S. Rao 79265.

***I. muricata* (L.) Jacq.**

Rare. Choral, A. S. Rao 84057.

***I. nil* (L.) Roth, *I. hederacea* Cl.**

Rare. Manpur, A. S. Rao 83837; Choral, A. S. Rao 84056.

***I. obscura* Ker-Gawl.**

Rare. Simrol, A. S. Rao 79119.

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

Rare. Simrol, A. S. Rao 79109.

***Merremia emarginata* Hall. f.**

In wet places, frequent. Indore, A. S. Rao 79072; Yeshwantsagar, A. S. Rao 84174.

SOLANACEAE

***Datura stramonium* L.**

In waste places, rare. Faraspur, A. S. Rao 79239; Ajnod Road, A. S. Rao 79261.

***Physalis minima* L.**

In waste places, frequent. Khurel, A. S. Rao 84152; Manpur, Sastry 87542.

***Solanum incanum* L.**

In Teak forest, rare. Manpur, A. S. Rao 83882.

***S. nigrum* L.**

In waste places, frequent. Simrol, A. S. Rao 79122; Choral, A. S. Rao 79178.

***S. surattense* Burm. f., *S. xanthocarpum* Sch. & Wend.**

On gravelly waste lands, frequent. Shipra, A. S. Rao 79241; Ghata Billod, A. S. Rao 84191; Manpur, Sastry 87573.

SCROPHULARIACEAE

***Kickxia incana* (Wall.) Pennell**

Amidst granite boulders, frequent. Patalpani, A. S. Rao 79287; Choral, A. S. Rao 84026; Sastry 84223.

***Limnophila indica* (L.) Bruce**

In marshy places, frequent. Chapriya, A. S. Rao 79310; Yeshwantnagar, Sastry 87610.

***L. racemosa* Benth.**

In ponds, frequent. Yeshwantnagar, Sastry 87611.

***Lindernia ciliata* (Colsm.) Pennell, *Bonnaya brachiata* Link & Otto.**

On grassy wet stream banks, frequent. Khurdi, A. S. Rao 83886.

***L. parviflora* (Roxb.) Haines, *Ilysanthes parviflora* Benth.**

On wet stream banks, frequent. Khurdi, A. S. Rao 83885; Choral, A. S. Rao 84030.

***Stemodia viscosa* Roxb.**

On dry clayey soil, frequent. Manpur, A. S. Rao 79320; Sastry 87567.

***Sutera distecta* (Del.) Walp., *S. glandulosa* Roth**

In wet sandy places. Sanwer, A. S. Rao 79243; Gautampura Road, Sastry 87665.

***Striga euphrasioides* (Vahl) Benth.**

Amidst grasses, frequent. Chapriya, A. S. Rao 83937.

***S. asiatica* (L.) O. Ktze., *S. lutea* Lour.**

In a cultivated field, rare. Yeshwantsagar, A. S. Rao 84175.

***Verbascum chinense* Santapau, *Celsia coromandeliana* Vahl**

Rare. Depalpur, A. S. Rao 79279.

***Veronica anagallis* L.**

In moist sandy places, frequent. Khurel, A. S. Rao 79224; Kalakund, Sastry 84255; Yeshwantnagar, Sastry 87608.

OROBANCHACEAE

***Aeginetia indica* L.**

In wet humus soil, rare. Chapriya, A. S. Rao 83905.

BIGNONIACEAE

***Dolichandrone falcata* Seem.**

Mersingh. B. 66. In Teak forest, frequent. Manpur, A. S. Rao 83842; Choral, Sastry 87518.

***Kigelia pinnata* DC.!**

B. 66. Planted.

***Millingtonia hortensis* L. f.**

Kalvala Neem. B. 65. Planted. Choral, A. S. Rao 84047.

***Oroxylum indicum* (L.) Vent.**

Sagoa. B. 67.

***Stereospermum suvelolens* DC.**

Padal. B. 65.

PEDALIACEAE

***Sesamum indicum* L.**

As an escape in the forest. Choral, A. S. Rao 84081.

MARTYNIACEAE

***Martynia annua* L.**

As a weed in waste places, frequent. Indore, A. S. Rao 79077; Naharjabua, A. S. Rao 84144.

ACANTHACEAE

***Adhatoda vasica* Nees !**

Adusa. B. 67. Often grown in gardens.

***Andrographis echioides* Nees**

In open places, frequent. Choral, A. S. Rao 79169; 84045; Patalpani, A. S. Rao 83963.

***Barleria cristata* L.**

In Teak forest, rare. Dabalchowky, A. S. Rao 84099.

***B. gibsoni* Dalz.**

Rare. Manpur, A. S. Rao 83848; Khurdi, A. S. Rao 83894.

***B. lawii* T. Anders.**

In a gregarious patch. Patalpani, A. S. Rao 83958.

***B. prionitis* L.**

In waste places, and in forest, frequent. Depal:

pur, A. S. Rao 79274; Mhow, A. S. Rao 83945; Choral, Sastry 84224.

Carvia callosa (Wall.) Brem.

Karvi. B. 67.

Dicliptera micranthes Nees

Along wet stream banks, rare. Naharjabua, A. S. Rao 79202; Khurel, A. S. Rao 79226.

Eranthemum roseum (Vahl) R. Br.

In Teak forest, frequent. Simrol, A. S. Rao 79099; Naharjabua, A. S. Rao 79215.

Gantelbua urens (Heyne ex Roth) Brem. *Hemigraphis dura* T. Anders.

On dry gravelly soil, rare. Depalpur-Betma Road, A. S. Rao 79283; Manpur, Sastry 87528.

Haplanthus verticillatus (Roxb.) Nees

In Teak forest, frequent. Chapriya, A. S. Rao 79305; Manpur, Sastry 87527.

Hemigraphis latebrosa Nees

Rare. Naharjabua, A. S. Rao 79213.

Hygrophila auriculata (Schumach.) Heine, *Asteracantha longifolia* (L.) Nees

Near ponds, frequent. Balwada, A. S. Rao 79135; Manpur, A. S. Rao 83843.

H. serpyllum (Nees) T. Anders.

In wet rocky river beds, common. Naharjabua, A. S. Rao 79200; Khurda, A. S. Rao 79302; Sastry 87578; Kalakund, Sastry 84252.

Justicia procumbens L.

In moist shady places, frequent. Choral, A. S. Rao 84060.

J. quinqueangularis Koen. ex Roxb.

Along water courses, frequent. Chapriya, A. S. Rao 79311; Manpur, A. S. Rao 84821; Baircha, A. S. Rao 84211.

Lepidagathis cristata Willd.

In gravelly dry fields, frequent. Indore, A. S. Rao 79075; Dabalchowky, A. S. Rao 79195; Choral, A. S. Rao 83971.

L. trinervis Wall. ex Nees

In stony crags, frequent. Choral, A. S. Rao 79149; Manpur, A. S. Rao 83816.

Peristrophe bicalyculata (Retz.) Nees

In waste places, frequent. Simrol, A. S. Rao 79100; Gautampura Road, Sastry 87648.

Rungia pectinata (L.) Nees

In open moist places, frequent. Indore, A. S. Rao 79068; Chapriya, A. S. Rao 79315; Choral, Sastry 84231.

R. repens (L.) Nees

In open moist places, frequent. Indore, A. S. Rao 79067; Choral, A. S. Rao 84061; Naharjabua, A. S. Rao 84122.

VERBENACEAE

Clerodendrum multiflorum (Burm. f.) O. Ktze.

Arni. B. 68. Along cultivated field, rare. Simrol, A. S. Rao 79098.

C. serratum (L.) Moon.

Bhurya. B. 69. In Teak forest, rare. Naharjabua, A. S. Rao 84130.

Duranta repens L.

Planted. Baircha, A. S. Rao 84209.

Gmelina arborea Roxb.

Shewan. B. 68.

Lantana camara L. var. *aculeata* (L.) Mold.

B. 70. Frequent all over. Patalpani, Sastry 87505.

Phyla nodiflora (L.) Green., *Lippia nodiflora* A. Rich.

In wet sandy river banks, common. Ghata Billod, A. S. Rao 84198; Yeshwantnagar, Sastry 87614.

Tectona grandis L. f.

Sagwan. B. 69. Throughout the forest, dominant. Choral, A. S. Rao 84070.

Vitex negundo L.

Nirgur. B. 68. Along water courses, common. Choral, A. S. Rao 79174, 84012; Sastry 84235.

LAMIACEAE (LABIATAE)

Anisomeles indica O. Ktze.

Along water courses, rare. Kalakund, Sastry 84246.

A. ovata R. Br.

Rare. Chapriya, A. S. Rao 83923; Baircha, A. S. Rao 84208.

Lavandula bipinnita (Roth) O. Ktze.

Amidst grasses on rock ledges, rare. Choral, A. S. Rao 79151, 83994.

Leucas biflora var. *procumbens* Gamble

Khurel, A. S. Rao 79228A.

L. cephalotus Spreng.

In waste places, frequent. Manpur, A. S. Rao 83933; Choral, A. S. Rao 84040.

L. lavaendulifolia Nees

Amidst grasses on wet sandy river bank, frequent. Choral, A. S. Rao 84038.

L. longifolia Benth.

Amidst grasses on wet sandy river bank, frequent. Khurel, A. S. Rao 84151.

L. mollissima Wall.

In waste lands, rare. Khurel, A. S. Rao 79228.

L. urticaefolia R. Br.

Frequent. Ajnod Road, A. S. Rao 79264; Choral, A. S. Rao 84037.

L. zeylanica R. Br.

On gravelly open area, rare. Choral, A. S. Rao 79127.

Ocimum americanum L.

In waste places, rare. Choral, A. S. Rao 79180; Manpur, A. S. Rao 83849.

O. basilicum L. var. *thyrsofolia* Benth.

Cultivated. Khurel, A. S. Rao 84159.

Orthosiphon pallidus Royle

On black clayey soil, rare. Indore, A. S. Rao 79081; Manpur, A. S. Rao 79323.

NYCTAGINACEAE

Boerhavia diffusa L.

In waste places, common. Choral, A. S. Rao 84014.

Boerhavia chinensis (Burm. f.) Druce, *B. repanda* Willd.
In roadsides bushes, frequent. Simrol, A. S. Rao 79101.

AMARANTHACEAE

Achyranthes aspera L.
In waste places, frequent. Choral, A. S. Rao 79171; 84015.

Aerva lanata (L.) Juss.
On open gravelly places, frequent. Sanwer, A. S. Rao 79247; Ghata Billod, A. S. Rao 84193.

Alternanthera repens (L.) Steud.
On dry gravelly soil, frequent. Patalpani, Sastry 87515.

A. sessilis (L.) R. Br.
Along water courses, common. Indore, A. S. Rao 79066; Ajnod Road, A. S. Rao 79257; Manpur, A. S. Rao 83868.

Amaranthus hybridus L.
Cultivated. Gautampura Road, Sastry 87640.

A. polygamus L.
Near cultivated fields, frequent. Ajnod Road, A. S. Rao 79255; Manpur, Sastry 87540; Gautampura Road, Sastry 87639.

A. spinosus L.
In waste places, frequent. Ajnod Road, A. S. Rao 79256.

A. viridis L.
Near cultivated fields, frequent. Gautampura Road, Sastry 87621.

Celosia argentea L.
Weed in cultivated fields, frequent. Choral, A. S. Rao 79172; Manpur, Sastry 87549.

Digera muricata (L.) Mart.
In moist shady and cultivated fields, frequent. Manpur, Sastry 87590; Gautampura Road, Sastry 87630.

Pupalia lappacea (L.) Juss.
Frequent. Patalpani, A. S. Rao 79289, 83961; Manpur, A. S. Rao 83836.

CHENOPODIACEAE

Atriplex hortensis L.
Cultivated. Gautampura Road, Sastry 87632.

Chenopodium album L.
Along wet margin of cultivated field, rare. Manpur, Sastry 87541.

C. murale L.
Rare. Ajnod Road, A. S. Rao 79259.

Spinacia oleracea L.
Cultivated. Manpur, Sastry 87535.

POLYGONACEAE

Polygonum glabrum Willd.
Along water course, gregarious. Sanwer, A. S. Rao 79251; Baircha, A. S. Rao 84207; Yeshwantnagar, Sastry 87609.

P. plebejum R. Br.
All along water courses, frequent. Simrol, A. S.

Rao 79088; Khurel, A. S. Rao 79225; Akola, A. S. Rao 79286; Patalpani, Sastry 84296.

P. stagninum Buch.-Ham. ex Meissn.
Along sandy river bank, frequent. Ghata Billod, A. S. Rao 84197.

LORANTHACEAE

Dendrophthoe falcata (L.) Etting.
On *Cordia* and *Buchanania* trees, common, parasitic. Dabalchowky, A. S. Rao 84092; Manpur, Sastry 87563.

Viscum articulatum Burm.
On *Terminalia* and *Diospyros*, frequent, parasitic. Manpur, A. S. Rao 79322; Bargunda, A. S. Rao 84216; Kalakund, Sastry 84262.

SANTALACEAE

Santalum album L.
Chandan. B. 70. Planted. Khurel, A. S. Rao 84163.

EUPHORBIACEAE

Acalypha ciliata Forsk.
Rare. Manpur, A. S. Rao 83846; Choral, A. S. Rao 84016.

A. malabarica Muell.-Arg.
Rare. Naharjabua, A. S. Rao 84124.

Baliospermum montanum (Willd.) Muell.-Arg.
In clayey soils, frequent. Kalma village, A. S. Rao 79234; Patalpani, A. S. Rao 79300; Manpur, A. S. Rao 83847.

Bridelia squamosa Gehrm.
Kaikul, *Sunkera*, *Ogun*. B. 72. In Teak forest, frequent. Simrol, A. S. Rao 79184; Baircha, A. S. Rao 84205.

Chrozophora prostrata Dalz.
In cultivated fields, common. Manpur, Sastry 87530.

C. rottleri (Geis.) A. Juss. ex Spr.
In waste places, frequent. Khurel, A. S. Rao 84146; Gautampura Road, Sastry 87631.

Euphorbia geniculata Orteg.
Common weed. Simrol, A. S. Rao 79123; Choral, A. S. Rao 84069; Manpur, Sastry 87546; Gautampura Road, Sastry 87627.

E. hirta L.
In open places, frequent. Choral, Sastry 84233; Patalpani, Sastry 87501.

E. nerifolia L.
Phali Thuar. B. 71.

E. nivulia Buch.-Ham.
Dundi Thuar. B. 71.

E. parviflora L.
Frequent. Naharjabua, A. S. Rao 84125; Manpur, Sastry 87566; Gautampura Road, Sastry 87652.

E. rosea Retz.
On gravelly soil, rare. Depalpur, A. S. Rao 79284.

E. tirucalli L.
Katali Thaur, *Danda Thaur*, B. 71.

Jatropha curcas L.
Rattanjote. B. 73. Planted as fencing. Choral, A. S. Rao 84049.

Jatropha gossypifolia L.

B. 73. In waste places, frequent. Ghata Billod, A. S. Rao 84188.

Kirganelia reticulata (Poir) Baill., *Phyllanthus reticulatus* Poir

B. 74. Rare.

Mellotus philippensis (Lamk.) Muell.-Arg.

Rainy, Kunkuma. B. 74.

Phyllanthus emblica L., *Emblica officinalis* Gaertn.

Amla. B. 72. In Teak forest, frequent. Chauriwa, A. S. Rao 79308; Manpur, A. S. Rao 83870.

P. maderaspatensis L.

Frequent. Depalpur, A. S. Rao 79273; Yeshwant-sagar, A. S. Rao 84171; Manpur, Sastry 87585; Gautampura Road, Sastry 87635.

P. niruri L.

Near cultivated fields, frequent. Manpur, Sastry 87537.

Putranjiva roxburghii Wall.!

Putterwanti. B. 73. Grown in gardens.

Securinega leucopyros (Willd.) Muell.-Arg., *Fluggea leucopyros* Willd.

Jhondri, Jowary. B. 74. Simrol, A. S. Rao 79117.

ULMACEAE

Holoptelea integrifolia Planch.

Gherole, Bykarunj, Waror. B. 75. Few. Choral, Sastry 84278.

Trema orientalis (L.) Blume

In Teak forest, frequent. Choral, A. S. Rao 84010; Patalpani, Sastry 87504.

MORACEAE

Broussonetia papyrifera L.

Herit. Planted, Manpur, Sastry 87568.

Ficus arnottiana Miq.

In crevices of granite boulders, rare. Choral, A. S. Rao 84078.

F. benghalensis L.

Bar, Burr. B. 75. Manpur, A. S. Rao 79321; Baircha, A. S. Rao 84210.

F. glomerata Roxb.

Gular Umpar. B. 77. Rare. Kalakund, Sastry 84274.

F. hispida L. f.

Katumar, Katgular. B. 77.

F. lacor Buch.-Ham., *F. infectoria* Roxb.

Pakar, Peepari. B. 76. From amidst rock crevices, frequent. Khurda, Sastry 87580.

F. religiosa L.

Peepal. In forests, frequent. Gautampura Road, A. S. Rao 84190.

F. retusa L.

Rare. Patalpani, Sastry 84289.

F. tseila Roxb.

Along the granite rock crevices of river beds, frequent. Kalakund, Sastry 84272; Manpur, Sastry 87562.

Morus alba L.

Planted. Gautampura Road, Sastry 87568.

CERATOPHYLLACEAE

Ceratophyllum sp.

Frequent. Ghata Billod, A. S. Rao 84200.

HYDROCHARITACEAE

Ottelia alismoides Pers.

In ponds, frequent. Baircha, A. S. Rao 84212.

Vallisneria spiralis L.

In ponds and streams, frequent. Balwada, A. S. Rao 79139; Sanwer, A. S. Rao 79253; Yeshwant-nagar, Sastry 87601.

ORCHIDACEAE

Acampe wightiana Lindl.

Rare. Hasalpur, Sastry 87617.

Habenaria marginata Coleb.

In moist shady places, rare. Bhadakia, A. S. Rao 84104.

ZINGEBERACEAE

Curcuma sp.

Along stream banks in forests, rare. Khurdi, A. S. Rao 83896.

AMARYLLIDACEAE

Crinum asiaticum L.

Cultivated. Khurel, A. S. Rao 84164.

C. defixum Ker-Gawl

Along tank bunds, and stream banks, frequent. Ghata Billod, A. S. Rao 84196.

AGAVACEAE

Furcraea gigantea Vent.

Hedge plant. Depalpur, A. S. Rao 84177.

TACCACEAE

Tacca leontopetaloides (L.) O. Ktze., *Leontice leontopetaloides* L., *T. pinnatifida* Forst.

In moist shade of forest, rare. Dabalchowky, A. S. Rao 84096; Naharjabua, A. S. Rao 84105.

DIOSCOREACEAE

Dioscorea bulbifera L.

In Teak forest, rare. Chapriya, A. S. Rao 83910.

D. hispida Dennst.

In Teak forest, rare. Naharjabua, A. S. Rao 84143.

D. pentaphylla L.

Rare. Chapriya, A. S. Rao 83909.

D. pentaphylla L. var. *communis* Pr. & Burk.

In Teak forest, rare. Khurdi, A. S. Rao 83895.

LILIACEAE

Asparagus racemosus Willd.

Along river bank, rare. Naharjabua, A. S. Rao 84111.

Chlorophytum laxum R. Br.

In wet clay soil, frequent. Bhadakia, A. S. Rao 84107; Choral, A. S. Rao 84064.

C. tuberosum (Roxb.) Baker

In rock crevices, rare. Choral, A. S. Rao 84063.

Gloriosa superba L.

Rare. Bargunda, A. S. Rao 84214.

COMMELINACEAE

***Commelina benghalensis* L.**

Along moist stream banks, frequent. Choral, A. S. Rao 84083.

***C. hasskarlii* C. B. Cl.**

In moist places, frequent. Ajnod Road, A. S. Rao 79258; Choral, A. S. Rao 84007.

***C. kurzii* C. B. Cl.**

In moist shady places, frequent. Simrol, A. S. Rao 84018, 84079.

***Cyanotis cristata* (L.) Don.**

Along moist river bed, frequent. Choral, A. S. Rao 84082.

***Murdannia nudiflora* (L.) Brenan**

Amidst grasses along moist stream bank, rare. Manpur, A. S. Rao 83822.

***Zygomenes cucullata* (Roth) Rolla et Kammathy, *Cyanotis cucullata* (Roth) Kunth, *Tradescantia cucullata* Roth**

In moist places and cultivated fields, frequent. Choral, A. S. Rao 84046; Yeshwantnagar, A. S. Rao 84172.

ARECACEAE (PALMAE)

***Phoenix sylvestris* Roxb. l**

Khajur. B. 78. Abundant in the northern plains of the district. Khurel, A. S. Rao 84156.

TYPHACEAE

***Typha angustata* Bory et Chaub.**

Along stream bank, frequent. Yeshwantnagar, Sastry 87613.

ARACEAE

***Amorphophallus campanulatus* Blume et Decaisne.**

Cultivated. Mhow, A. S. Rao 83950.

***Colocasia esculenta* (L.) Schott.**

In moist shady places in forest, frequent. Chapriya, A. S. Rao 83913; Naharjabua, A. S. Rao 84134.

***Sauromatum guttatum* (Wall.) Schott.**

Rare. Mhow, A. S. Rao 83951; Khurda, Sastry 87584.

ALISMACEAE

***Limnophyton obtusifolium* Miq.**

Along the tank bund, frequent. Balwada, A. S. Rao 79130.

POTAMOGETONACEAE

***Zannichellia palustris* L.**

In a stream, rare. Sanwer, A. S. Rao 79250.

ERIOCAULACEAE

***Eriocaulon* sp.**

Along wet stream bank, frequent. Manpur, A. S. Rao 83838

CYPERACEAE

***Cyperus difformis* L.**

In moist clay soils, frequent. Simrol, A. S. Rao 79089; Choral, A. S. Rao 84085.

***C. eleusinoides* Kunth**

In moist rocky crevices, frequent. Patalpani, A. S. Rao 83954; Patalpani, Sastry 84300, 87502.

***C. iria* L.**

On stream banks, frequent. Manpur, A. S. Rao 83841; Choral, A. S. Rao 84034; Simrol, A. S. Rao 84088.

***C. exaltatus* Retz.**

Amidst grasses along river banks, frequent. Khurel, A. S. Rao 84153.

***C. globosus* All., *Pycnus globosus* Reich.**

Along rocky river beds, frequent. Kalakund, Sastry 84252; Yeshwantnagar, Sastry 87605.

***C. michelianus* (L.) Link ssp. *pygmaeus* (Rottb.)**

Asch. & Graeb., *Juncellus pygmaeus* C. B. Cl. On dry clay soil, rare. Manpur, Sastry 87532.

***C. pumilus* L.**

In moist clay soils, frequent. Manpur, A. S. Rao 83827.

***C. rotundus* L.**

In moist clay soils, frequent. Simrol, A. S. Rao 84086.

***Fimbristylis complanata* Link**

Along moist stream banks, frequent. Manpur, A. S. Rao 83826; Choral, A. S. Rao 84035.

***F. dichotoma* Vahl**

In rock crevices, along water courses, frequent. Manpur, A. S. Rao 83840; Choral, Sastry 84280; Yeshwantnagar, Sastry 87612.

***Scirpus corymbosus* Heyne ex Roth**

Along water edge, gregarious. Yeshwantnagar, A. S. Rao 84170.

***S. squarrosus* L.**

In moist clay soil, in shade, frequent. Choral, A. S. Rao 84027.

***Scleria parvula* Steud., *S. tessellata* Willd. (C. B. Clarke in F. B. I. 6: 686-687, 1894).**

In wet clay soil, frequent. Manpur, A. S. Rao 83820. Bhadakia village, A. S. Rao 84103.

***S. stocksiana* Boeck**

Amidst grass in moist shady places, frequent. Manpur, A. S. Rao 83864.

POACEAE (GRAMINEAE)

***Alloteropsis cimicina* (L.) Stapf.**

On rocky wet places, frequent. Choral, A. S. Rao 84031.

***Andropogon pumilus* Roxb.**

Along streams, frequent. Choral, A. S. Rao 79147; Manpur, A. S. Rao 83809.

***Apluda mutica* L.**

Along water-courses, frequent. Manpur, A. S. Rao 83810; Chapriya, A. S. Rao 83938.

***Aristida adscensionis* L.**

Along rocky slopes, common, Choral, A. S. Rao 84042.

***A. redacta* Stapf.**

Along moist rocky slope, frequent. Choral, A. S. Rao 84043.

***A. setacea* Retz.**

Along rocky slope, frequent. Choral, A. S. Rao 79160.

Arthraxon lancifolius (Trin.) Hochst.

Gregarious along moist shady stream bank. Choral, A. S. Rao 83993.

A. prionodes (Steud.) Dandy

On rocky ledges along streams, frequent. Choral, A. S. Rao 83969.

A. quartinianus (A. Reth.) Nash

In moist shady places, common. Manpur, A. S. Rao 83815; Chapriya, A. S. Rao 83934.

Bothriochloa kuntzeana (Hack.) Henr.

In moist rocky crevices, frequent. Patalpani, A. S. Rao 83955.

B. pertusa (L.) A. Camus

In grasslands, common. Chapriya, A. S. Rao 83935.

Brachiaria eruciformis (F. E. Sm.) Griseb.

Along cultivated fields, frequent. Manpur, Sastry 87595.

B. ramosa (L.) Stapf

On rocky ledges, frequent. Choral, A. S. Rao 84033.

Capillipedium foetidum (Lisboa), Raizada et Jain

Along water courses, common. Manpur, A. S. Rao 83854; Choral, A. S. Rao 83974; Naharjabua, A. S. Rao 84136.

Chloris virgata Sw.

Along water-courses, amidst other grasses, frequent. Manpur, A. S. Rao 83806.

Chrysopogon fulvus (Spr.) Choiv.

In grasslands, common. Manpur, A. S. Rao 83819; Hasoda, A. S. Rao 83979.

Coix lacryma-jobi L.

In marshy places, abundant. Balwada, A. S. Rao 79137; Manpur, A. S. Rao 83856.

Crypsis schoenoides (L.) Lamk.

Rare. Manpur, Sastry 87532A.

Cymbopogon martinii (Roxb.) Wats.

In grasslands, common. Choral, A. S. Rao 79162; Hasoda, A. S. Rao 83978.

Cynodon dactylon (L.) Pers.

Near moist cultivated fields, common. Manpur, A. S. Rao 87594.

Dendrocalamus strictus Nees

Bans. B. 79. In Teak forest, frequent. Naharjabua, A. S. Rao 79216.

Dicanthium annulatum (Forsk.) Stapf

In rocky crevices and in grasslands, common. Patalpani, A. S. Rao 83952; Hasoda, A. S. Rao 83982.

D. caricosum (L.) Camus

In grasslands, common. Chapriya, A. S. Rao 83933.

Digitaria stricta Roth ex Roem. & Sch.

In wet clay soil, frequent. Manpur, A. S. Rao 83860.

Dinerba retroflexa (Vahl) Panz.

On wet clay soil, common. Manpur, A. S. Rao 83853; Khurel, A. S. Rao 84158; Manpur, Sastry 87550; Gautampura Road, Sastry 87651.

Eleusine indica (L.) Gaertn.

Along cultivated fields, rare. Manpur, Sastry 87552.

Eragrostis diarrhena (Sch.) Steud.

Along cultivated fields, common. Choral, A. S. Rao 79126; Manpur, Sastry 87596; Gautampura Road, Sastry 87663.

E. tenella (L.) P. Beauv.

Frequent. Choral, A. S. Rao 79145; Khurel, A. S. Rao 84157.

Eragrostiella bifaria (Vahl) Bor

On rocky ledges, frequent. Choral, A. S. Rao 84062.

Heteropogon contortus (L.) P. Beauv.

A dominant species in grasslands. Choral, A. S. Rao 79146; Patalpani, A. S. Rao 83957; Chapriya, A. S. Rao 83936.

Ischaemum rugosum Salisb.

On moist clay soils, common. Chapriya, A. S. Rao 79312, 83929; Manpur, A. S. Rao 83805; Yeshwantnagar, Sastry 87602.

Isilema antheophoroides Hack.

In grasslands, common. Choral, A. S. Rao 79150; Manpur, A. S. Rao 83811.

I. laxum Hack.

In grasslands, common. Chapriya, A. S. Rao 83927.

I. prostratum (L.) Anders.

In wet clay soil, frequent. Indore, A. S. Rao 79069; Chapriya, A. S. Rao 79313.

Melanocenchrus jacquemontii Jaub. et Spach

On dry gravelly soils, frequent. Manpur, A. S. Rao 83807.

Ophiuros exaltatus (L.) O. Ktze.

Along stream banks, frequent. Khurel, A. S. Rao 84148.

Oplismenus burmanii (Retz.) P. Beauv.

Along water-courses, frequent. Manpur, A. S. Rao 83845; Mhow, A. S. Rao 83949.

Paspalidium flavidum (Retz.) A. Camus

On wet clay soil, frequent. Manpur, A. S. Rao 83863.

Pennisetum hohenackeri Hoch. ex Steud.

In moist rocky crevices, frequent. Patalpani, A. S. Rao 83956.

P. pedicellatum Trin.

Along water-courses, frequent. Manpur, A. S. Rao 83831.

Pseudanthistiria hispida Hook. f.

In grasslands, rare. Chapriya, A. S. Rao 83939.

Saccharum spontaneum L.

Along sandy stream banks, frequent. Khurel, A. S. Rao 84147.

Sehima nervosum Stapf

In rocky crevices, frequent. Choral, A. S. Rao 79157; Khurel, A. S. Rao 84154.

Setaria glauca (L.) Beauv.

Along dry stream margins, common. Manpur, A. S. Rao 83812.

Setaria italica (L.) Beauv.

Cultivated. Manpur, A. S. Rao 83852.

S. tomentosa Kunth

In moist shades; frequent. Manpur, A. S. Rao 83862.

S. verticillata Beauv.

In moist shady areas, frequent. Manpur, A. S. Rao 82861.

Sorghum deccanense Stapf

Few. Chapriya, A. S. Rao 83940A; Hasoda, A. S. Rao 83980.

S. vulgare Pers.

Cultivated extensively. Attra, A. S. Rao 79268.

S. halapense Pers.

Along water-courses, abundant. Patalpani falls, A. S. Rao 79290; Chapriya, A. S. Rao 83940; Gautampura Road, A. S. Rao 84181.

Spodiopogon rhizophorus Pilger.

In wet clay along stream banks, frequent. Manpur, A. S. Rao 83844.

Sporobolus tetragonus Bor

Frequent, Mhow, A. S. Rao 83948.

Thelepogon elegans Roth ex Roem. & Sch.

A chief component of grasslands. Hasoda, A. S. Rao 83981.

Themeda quadrivalvis O. Ktze.

Abundant forming extensive grasslands. Manpur, A. S. Rao 83804; Chapriya, A. S. Rao 83926.

Tripogon bromoides Roem. & Sch.

In rock crevices, frequent. Choral, A. S. Rao 84062A.

T. jacquemontii Stapf

Along water-courses, frequent. Manpur, A. S. Rao 83808.

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