

ANGIOSPERMIC FLORA OF DARBHANGA (MITHILA, NORTH BIHAR)—I

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ABSTRACT

This communication is the first of a series of preliminary reports of angiospermic plants growing in Darbhanga and around. This includes 287 species, 243 genera and 93 families in total. Monocots are represented by 51 species, 47 genera and 18 families; and dicots by 236 species, 196 genera and 75 families. The arrangement of families is according to Bentham and Hooker (1862-83).

INTRODUCTION

Darbhangha is district headquarter. It is 30 km south of the Himalaya at an altitude of 76.8 m above sea-level, on latitude 26°11' N and longitude 86° E. The annual rainfall is about 1200 mm, average temperature 36°C and humidity 66%. The soil is of sandy loam type with pH 8.6 and CPNK ratio 1200:85:3:700. Hooker (1894), Haines (1922), Mooney (1950), Prain (1903), Duthie (1903), Banerjee and Banerjee (1968) and others have mentioned about plants of this area. The place is feebly surveyed from botanical point of view. The present communication forms the first of a series of reports obtained from survey of plants growing in the township and in nearby places within a radius of 5 square km. The arrangement of families in the list below is according to Bentham and Hooker (1862-83). Genera within a family and species within a genus are arranged in alphabetical order. Herbaria are deposited at Department of Botany, University of Bihar, Muzaffarpur. Collections were made during 1964-68 by author himself. Short comments about the habitat and use of plants is given to emphasise the importance of the plant concerned in the vegetation of the area. The nomenclature has been revised where necessary.

ENUMERATION

DICOTYLEDONS

RANUNCULACEAE

Ranunculus sceleratus Linn.

Winter weed near neglected ponds.

DILLENIACEAE

Dillenia indica Linn.

Ornamental tree in garden.

MAGNOLIACEAE

Michelia champaca Linn.

Arborescent garden plant.

ANNONACEAE

Annona reticulata Linn.

Cultivated for edible fruits.

A. squamosa Linn.

Cultivated for fruits, wild also.

Polyalthia longifolia (Sonner.) Thw.

On road sides and in gardens.

MENISPERMACEAE

Tinospora cordifolia Miers.

Wild climber.

NYMPHAEACEAE

Nelumbium nucifera Gaertn.

In neglected ponds.

PAPAVERACEAE

Argemone mexicana Linn.

Wild in dry alkaline soil.

FUMARIACEAE

Fumaria parviflora Lamk.

Weed in mustard and wheat fields.

CRUCIFERAE

Brassica campestris Linn. var. **sarson** Prain

Cultivated for oil.

Rorippa indicum (DC.) Beck.

Ornamental, in winter, in gardens.

Raphanus sativa Linn.

Cultivated for edible roots.

CAPPARIDACEAE

Cleome gynandra Linn.

Wild with white flowers.

C. viscosa Linn.

Abundant in waste places, flowers yellow.

POLYGALACEAE

Polygala chinensis Linn.

Gregarious in damp places.

CARYOPHYLLACEAE

Dianthus sinensis Linn.

Ornamental garden plant.

PORTULACACEAE

Portulaca grandiflora Hook.

Exotic garden plant.

P. oleracea Linn.

Abundant in usar lands.

AIZOACEAE

Mollugo spargula Linn.

In shade by the side of walls.

Trianthema portulacastrum Linn.

Under trees.

DIPTEROCARPACEAE

Shorea robusta Gaertn.

Planted on road sides.

MALVACEAE

Abelmoschus esculentus (Linn.) Moench.

Vegetable crop.

Abutilon indicum (Linn.) Sweet *emend.* Hochr.

Tree undergrowth.

Gossypium barbadense Linn.

Cultivated, in the back of houses.

Hibiscus sabdariffa Linn.

Cultivated for fibres.

Malvastrum coromandelianum (Linn.) Garcke.

Orchard undergrowth.

Sida cordifolia Linn.

Wild, abundant in uncultivated lands.

BOMBACEAE

Bombax ceiba Linn.

Wild isolated trees.

TILIACEAE

Corchorus aestuans Linn.

Cultivated for fibres.

C. capsularis Linn.

Small herb on road sides.

Grewia subinequalis DC.

Cultivated for fruits.

LINACEAE

Linum usitatissimum Linn.

Cultivated for oil.

GERANIACEAE

Biophytum sensitivum DC.

In open fields during rains,

OXALIDACEAE

Oxalis corniculata Linn.

In damp shady places.

BALSAMINACEAE

Impatiens balsamina Linn.

Ornamental plant.

RUTACEAE

Aegle marmelos Corr.

Cultivated.

Citrus medica Linn.

Cultivated for fruits.

Feronia limonia (Linn.) Swingle

Wild, on high lands.

Murraya paniculata (Linn.) Jack.

Cultivated for flowers.

MELIACEAE

Azadirachta indica Juss.

Called Bakain, grows wild.

Melia azedarach Linn.

Called Nim, wild.

Switenia mahogani Linn.

Planted on road sides.

RHAMNACEAE

Zizyphus mauritiana Lamk.

Wild, in dry places.

VITACEAE

Vitis quadrangularis Wall.

Wild climber, often in gardens.

V. trifolia Linn.

Wild, creeper.

V. vinifera Linn.

Cultivated.

SAPINDACEAE

Litchi chinensis Sonn.

Cultivated for fruits.

ANACARDIACEAE

Anacardium occidentale Linn.

In gardens.

Mangifera indica Linn.

In orchards.

MORINGACEAE

Moringa oleifera Lamk.

On road sides and back of houses.

LEGUMINOSAE

Acacia catechu Willd.

Wild,

Acacia nilotica (Linn.) Del.-var. **tomentosa** (Benth.)

Cuf.

In gardens.

Albizzia lebbek (Linn.) Benth.

Cultivated, on road sides.

Arachis hypogea Linn.

Cultivated for oil.

Bauhinia racemosa Lamk.

Wild in dry places.

B. variegata Linn.

Ornamental, on road sides.

Butea monosperma (Lamk.) Traub.

Ornamental, occasional.

Cajanus indicus Spreng.

Cultivated, pulse.

Cassia fistula Linn.

Garden plant.

C. occidentalis Linn.

Wild, large herb.

C. tora Linn.

Small widely distributed herb.

Cicer arietinum Linn.

Cultivated, pulse.

Clitoria ternatea Linn.

Garden plant.

Crotalaria juncea Linn.

Cultivated for fibres.

Dalbergia sissoo Roxb.

Common timber tree, cultivated.

Delonix regia (Boj.) Rag.

On road sides.

Dolichos lablab Linn.

Cultivated, vegetable crop.

Lathyrus sativus Linn.

Cultivated, pulse.

Lens esculenta Moench.

Cultivated pulse.

Melilotus alba Lamk.

Weed.

M. indica All.

Weed in winter crops.

Mimosa pudica Linn.

Wild, under trees.

Phaseolus mungo Linn.

Cultivated, pulse.

Pisum sativum Linn.

Cultivated, pulse.

Prosopis spicigera Linn.

Rare, on road sides.

Pterocarpus marsupium Roxb.

Cultivated for medicinal value.

Saraca asoca (Roxb.) D. Wilde.

Planted on road sides.

Sesbania aegyptica Pers.

Cultivated as hedge.

Tamarindus indica Linn.

On road sides.

Trigonella foenum-graecum Linn.

Cultivated for spices.

Vicia faba Linn.

Cultivated, vegetable crop.

ROSACEAE

Rosa alba Linn.

Ornamental, in gardens.

CRASSULACEAE

Bryophyllum calycinum Salis.

Cultivated for ornamental leaves.

Kalanchoe laciniata DC.

Ornamental, in gardens.

HALORRHAGIDACEAE

Myriophyllum indicum Willd.

Floating aquatic weed.

COMBRETACEAE

Quisqualis indica Linn.

Garden climber.

Terminalia arjuna W. & Kowa.

In gardens.

MYRTACEAE

Callistemon linearis DC.

Small garden tree.

Eucalyptus masculata Hook.

Garden tree.

Psidium guajava Linn.

Grows wild, cultivated for fruits.

Syzygium cumine (Linn.) Skeels.

Fruit and timber tree, abundant.

S. jambos (Linn.) Alston.

Cultivated for fruits.

LYTHRACEAE

Ammania baccifera Linn.

In low watery crop fields.

Lagerstroemia indica Linn.

Cultivated for ornamental flowers.

Lawsonia inermis Linn.

Cultivated as hedge.

Punica granatum Linn.

Cultivated for fruits.

ONAGRACEAE

Jussiaea repens Linn.

Floating aquatic,

TRAPACEAE

- Trapa natans** Linn. var. **bispinosa** (Roxb.) Makino.
Aquatic, wild or cultivated.

PASSIFLORACEAE

- Passiflora foetida** Linn.
Wild delicate climber.

CARICACEAE

- Carica papaya** Linn.
Cultivated for fruits.

CUCURBITACEAE

- Cephalandra indica** Naud.
Cultivated, vegetable crop.
Citrullus lantanus (Thunb.) Mansf.
Cultivated for fruits.
Cucumis melo Linn.
Cultivated for fruits.
C. sativus Linn.
Cultivated for fruits.
Cucurbita maxima Duch.
Cultivated over huts.
C. pepo Linn.
Cultivated in dry sandy soil.
Lagenaria siceraria (Roxb.) Standl.
Cultivated, vegetable crop.
Luffa acutangula Roxb.
Cultivated for vegetables.
L. cylindrica (Linn.) Roem.
Cultivated vegetable crop.
Momordica charantia Linn.
Cultivated vegetable crop.

CACTACEAE

- Opuntia monacantha** Haw.
Hedge, weed in uncultivated lands.

UMBELLIFERAE

- Anethum sowa** Roxb.
Wild, winter weed.
Centella asiatica (Linn.) Urban.
In wet places.
Coriandrum sativum Linn.
Cultivated as spices.
Daucus carota Linn.
Cultivated vegetable crop.
Trachyspermum villosum Haines
Prostrate in open fields.

RUBIACEAE

- Anthocephalus cadamba** Miq.
Grows wild, occasional.

- Hedyotis verticillata** (Linn.) Lamk.

Wild, under trees.

- Ixora arborea** Roxb. ex Sm.

Ornamental tree, cultivated.

- Oldenlandia corymbosa** Linn.

Wild, in cool places.

COMPOSITAE

- Ageratum conyzoides** Linn.

Wild, in damp places.

- Blumea flava** DC.

As weed in crop fields.

- Carthamus tinctorius** Linn.

Cultivated.

- Chrysanthemum americanum** (Linn.) Vatke.

Cultivated in gardens.

- Cosmos bipinnatus** Cav.

In gardens.

- Eclipta alba** Hassk.

Sides of water canals.

- Helianthus annuus** Linn.

In gardens.

- Launaea asplenifolia** (Roxb.) Hook. f.

Wild in play-grounds.

- Sonchus brachyotus** DC.

In open fields.

- Tagetes patula** Linn.

In gardens.

- Tridax procumbens** Linn.

In dry open fields.

- Xanthium strumarium** Linn.

On road sides, bank of ponds.

PRIMULACEAE

- Anagallis arvensis** Linn.

Weed, in moist places.

SAPOTACEAE

- Achras sapota** Linn.

Cultivated for fruits.

- Madhuca indica** Gmel.

Wild in fields and orchards.

OLEACEAE

- Jasminum auriculatum** Vahl

Wild and cultivated both.

- Nyctanthus arbor-tristis** Linn.

Cultivated for flowers.

APOCYNACEAE

- Nerium indicum** Mill.

In gardens.

- Rauvolfia serpentina** Benth. ex Kurz,

Wild in shady places.

Tabernaemontana divaricata (Linn.) R. Br.

Cultivated as hedge.

Vinca rosea Linn.

Garden plant.

ASCLEPIADACEAE

Calotropis gigantea (Linn.) Ait.

In open dry fields.

C. procera (Ait.) Ait. f.

Along with former species.

Oxystelma esculenta (Linn. f.) J. A. Schuttes.

Ornamental, in gardens.

Sarcostemma acidum (Roxb.) Voigt.

Ornamental.

LOGANIACEAE

Strychnos nux-vomica Linn.

In watery rice fields.

GENTIANACEAE

Nymphoides cristatum (Roxb.) O. Ktze.

In neglected ponds.

BORAGINACEAE

Cynoglossum lanceolatum Forsk.

In open fields.

Heliotropium indicum Linn.

On road sides.

H. ovalifolium Forsk.

Along with walls.

H. supinum Linn.

In uncultivated lands.

CONVOLVULACEAE

Evolvulus alsinoides Linn.

In play grounds.

Ipomoea aquatica Forsk.

Creeping on the side of ponds.

I. batatas Lamk.

Cultivated for edible tubers.

I. cairica (Linn.) Sweet var. **indica** Wall. f.

Garden creeper.

CUSCUTACEAE

Cuscuta reflexa Roxb.

On several types of trees.

SOLANACEAE

Capsicum annuum Linn.

Cultivated.

C. frutescens Linn.

Cultivated.

Cestrum hirsutum Jacq.

Garden plant.

Datura innoxia Mill.

Weed.

D. stramonium Linn.

Weed by road sides.

Lycopersicon lycopersicum A. Shaw

Cultivated for fruits.

Nicotiana glutinosa Linn.

Cultivated.

N. plumbaginifolia Viv.

Weed in shady moist places.

N. rustica Linn.

Cultivated.

N. tabacum Linn.

Cultivated.

Physalis minima Linn.

Under trees.

Solanum melongena Linn.

Cultivated.

S. nigrum Linn.

Weed in moist places.

S. tuberosum Linn.

Cultivated.

S. surrattense Burm. f.

In orchards, under trees.

SCROPHULARIACEAE

Lindernia crustacea (Linn.) F. Muell.

Wild in shady places.

L. hirsuta Benth.

Wild in shade.

Russelia juncea Zuccar.

Garden plant.

Scoparia dulcis Linn.

In dry open fields.

Striga angustifolia (D. Don) Saldham.

In crop fields.

S. lutea Lour.

Parasite in sugarcane.

OROBANCHACEAE

Orobanche aegyptiaca Pers.

Parasite in winter crops.

LENTIBULARIACEAE

Utricularia inflexa Forsk. var. **stellaris** (Linn.) Tayl.

Ponds and rice-fields.

PEDALIACEAE

Sesamum indicum Linn.

Cultivated for oil.

ACANTHACEAE

Adhatoda vasica Nees

Occasionally in orchards.

Andrographis paniculata (Burm.) Wall. ex Nees

In damp places.

Justicia procumbens Linn. var. **simplex** (D. Don)

Yamazaki.

In high lands.

Ruellia prostrata Poir.

Under trees in orchards.

R. tuberosa Linn.

With the former species.

Rungia pectinata (Linn.) Nees

In open dry fields.

VERBENACEAE

Clerodendron viscosum Vent.

Weed, in uncultivated lands.

Duranta repens Linn.

Used as hedge.

Gmelina arborea Roxb.

Grown for timber.

Lantana camara Linn.

Exotic, abundant, as hedge also.

Phyla nodiflora (Linn.) Greene

On soft and newly formed soil.

Tectona grandis Linn. f.

Planted on road sides for timber.

Verbena officinalis Linn.

In waste places, sides of walls.

LABIATAE

Anisomeles indica (Linn.) O. Ktze.

Weed in open fields.

Leonurus sibricus Linn.

Along with walls.

Leucas cephalotes Spreng.

In dry places, in crop fields.

Nepeta hindostana (Roth) Haines

Weed in moist places.

Ocimum basilicum Linn.

Under trees in moist places.

O. sanctum Linn.

Cultivated for medicinal and religious value.

Salvia plebeiah Br.

In gardens.

NYCTAGINACEAE

Boerhaavia diffusa Linn.

Weed, along road sides.

Bougainvillea spectabilis Willd.

In gardens.

AMARANTACEAE

Achyranthes aspera Linn.

In orchards, under trees.

Alternanthera sessilis (Linn.) DC.

In moist places.

Amarantus spinosus Linn.

Weed, on road sides.

Celosia argentea Linn. var. **cristata** Voss.

Ornamental garden plant.

Digera alternifolia Aschers.

Weed in moist places.

CHENOPODIACEAE

Beta vulgaris Linn.

Cultivated.

Chenopodium album Linn.

Weed in crop fields.

PHYTOLACACEAE

Rivinia laevis Linn.

Weed in moist places.

POLYGONACEAE

Antigonon leptopus Hook. & Arn.

In gardens.

Muehlenbeckia platyclada Meissn.

In gardens.

Polygonum limbatum Meissn.

On pond margins.

P. orientale Linn.

In ditches.

P. plebejum R. Br.

In play grounds.

PIPERACEAE

Peperomia pellucida H. B. & K.

Winter weed on the side of walls.

Piper betel Linn.

Cultivated.

LORANTHACEAE

Loranthus globosus Roxb.

On mango and guava trees.

EUPHORBIACEAE

Acalypha ciliata Forsk.

Garden plant.

A. indica Linn.

On road sides.

Croton sparsiflorus Morung.

Neglected places and road sides.

Crozophora rottleri (Geis.) A. Juss.

Wild in dry places.

Emblica officinalis Gaertn.

Cultivated for fruits, wild also.

Phyllanthus fraternus Webster.

Weed in rainy season.

Ricinus communis Linn.

Cultivated for oil.

Trewia nudiflora Linn.

Large wild tree, sides of canals.

CANNABINACEAE

Cannabis sativus (Linn.) Benn.

Weed in the back of houses.

URTICACEAE

Pouzolzia zeylanica (Linn.) Benn.

Weed in moist places.

MORACEAE

Artocarpus integrifolia Linn.

Cultivated, in orchards.

Ficus benghalensis Linn.

Wild on road sides.

F. ramosa Linn.

Wild in orchards.

F. religiosa Linn.

Wild on road sides.

F. virens Aib.

Wild on road sides.

Morus australis Poir.

Cultivated for fruits.

CASUARINACEAE

Casuarina equisetifolia Forst.

Cultivated, in gardens.

MONOCOTYLEDONS

APONOGETONACEAE

Aponogeton natans (Linn.) Engl. & Krans.

In ponds.

HYDROCHARITACEAE

Hydrilla verticillata (Linn.) Royle

In ponds.

Vallisneria spiralis Linn.

In ponds.

ARACEAE

Amorphophallus campanulatus Blume

On the back of houses.

Colocasia esculenta (Linn.) Schott.

Sides of water canals.

Pistia stratiotes Linn.

In neglected ponds.

Pothos scandens Linn.

In gardens.

LEMNACEAE

Wolffia arrhiza Wimm.

In neglected ponds.

PONTEDERIACEAE

Eichhornia crassipes (Mar.) Solms.

In ponds and ditches.

CERATOPHYLLACEAE

Ceratophyllum demersum Linn.

In ponds.

ORCHIDACEAE

Vanda parviflora Lindl.

In gardens.

Zeuxine strateumatica (Linn.) Schult.

Weed in wet soil.

ZINGIBERACEAE

Curcuma amada Roxb.

Wild.

C. domestica Linn.

Cultivated.

Zingiber officinale Rosc.

Cultivated.

CANNACEAE

Canna indica Linn.

Garden plant.

AMARYLLIDACEAE

Agave americana Linn.

In gardens, along crop fields.

BROMELIACEAE

Ananas sativus Lindl.

Cultivated for fruits.

DIOSCOREACEAE

Dioscorea oppositifolia Linn.

Wild in orchards.

MUSACEAE

Musa paradisica subsp. **sapientum** (Linn.) f. Schum.

Cultivated.

LILIACEAE

Allium cepa Linn.

Cultivated.

A. sativum Linn.

Cultivated.

Aloe barbadensis Mill.

In gardens.

Asparagus racemosus Willd.

In gardens.

Asphodelus tenuifolius Cav.

Wild in moist places.

Dracaena angustifolia Roxb.

In gardens.

Sansevieria roxburghiana Schult.

Cultivated in gardens.

Smilax zeylanica Linn.

In gardens.

Yucca aloefolia Linn.

On road sides.

COMMELINACEAE

Commelina benghalensis Linn.

On the bank of ponds.

C. nudiflora Linn.

In shallow waters.

PALMACEAE

Areca catechu Linn.

In gardens.

Borassus flabellifer Linn.

Very common, wild.

Cocos nucifera Linn.

Cultivated in gardens.

Phoenix sylvestris Roxb.

In elevated areas.

CYPERACEAE

Cyperus rotundus Linn.

Weed in crop fields.

Scirpus articulatus Linn.

In shallow waters.

GRAMINAE

Avena stellaris Linn.

Cultivated, cereal.

Bambusa arundacea Willd

Cultivated.

Cynodon dactylon Pers.

Common wild grass.

Eleusine coracana (Linn.) Gaertn.

Cultivated.

Hordeum vulgare Linn.

Cultivated.

Hygrophiza aristata Nees

Weed, on the bank of ponds.

Oryza sativa Linn.

Cultivated.

Pennisetum typhoides (Burm. f.) Stapf & Hubb.

Cultivated.

Poa synchruides Retz.

Along with railway tracks.

Saccharum officinarum Linn.

Cultivated.

S. benghalense Retz.

Wild grass.

Sorghum vulgare Pers.

Cultivated.

Triticum aestivum Linn.

Cultivated.

Zea mays Linn.

Cultivated.

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