

A PRELIMINARY SURVEY OF THE FLORA OF DHARAMPUR FORESTS IN GUJARAT

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A B S T R A C T

The present paper lists 421 taxa spread over 94 Angiosperm families collected from forests of Dharampur during 1966 & 1967. Of 421 taxa 340 are dicotyledons and 81 are monocotyledons. The forests are moist deciduous type.

INTRODUCTION

Though the flora of some parts of Gujarat is now known, there are many areas which have not yet been botanically explored. The forests range of Dharampur is one of them. In the present paper, therefore, the plants of Dharampur forests are listed from the collections made during the months of March, June, August, October and December 1966 & 1967. The collections were made from the areas in vicinity of Dharampur, Mohangarh, Bilpudi, Avadha, Malanpada, Vahiyar, Karanjveri, Bamti, Dassera pati and Tiskari. The whole range is mountainous varying in height from 153.5 to 706 m and some places plains. It is traversed by three rivers Auranga, Swargavahini (known as Vanki near Bulsar) and Par. The soil of the area is black clay in which mostly paddy is cultivated.

Dharampur is a taluka town situated at $73^{\circ} 20' E$ and $20^{\circ} 36' N$ in the south-east part of Bulsar district about 30 km from Bulsar. The latter is one of the main junction on Bombay-Ahmedabad line about 194 km north of Bombay. The State transport buses regularly ply between Bulsar and Dharampur. From Dharampur the buses ply during the fair season to the areas explored.

The forests are moist deciduous type of Champion (1936). The average annual rainfall is about 2500 mm.

The nomenclature of the plants listed is brought up-to-date in light of the current literature.

The entire collection is deposited in the herbarium, Department of Botany, Sardar Patel University, Vallabh Vidyanagar, Gujarat.

ENUMERATION

ANNONACEAE

Annona reticulata Linn.

A. squamosa Linn.

Polyalthia longifolia Thw.

MENISPERMACEAE

Cocculus hirsutus (L.) Diels.

Tinospora cordifolia (Willd.) Miers.

NYMPHAEACEAE

Nelumbo nucifera Gaertn.

Nymphaea nouchali Burm. f.

CRUCIFERAE

Cardamine trichocarpa Hochst. ex Rich.

Rorippa indica (L.) Hiern.

PAPAVERACEAE

Argemone mexicana Linn.

CAPPARACEAE (CAPPARIDACEAE)

Capparis sepiaria Linn.

C. zeylanica Linn.

Cleome burmanni W. & A.

C. gynandra Linn.

C. viscosa Linn.

VIOLACEAE

Hybanthus enneaspermus (L.) F. Muell.

PORTULACACEAE

Portulaca oleracea Linn.

CARYOPHYLLACEAE

Polycarpon prostratum (Forsk.) Aschers & Schweinf.

TAMARICACEAE

Tamarix ericoides Rottl.

ELATINEAE

Bergia ammannioides Heyne ex Roth

MALVACEAE

Abelmoschus manihot (L.) Medik.

Azanza lampas (Cav.) Alef.

Hibiscus cannabinus Linn.

H. sabdariffa Linn.

Kydia calycina Roxb.

Sida acuta Burm.

Sida rhombifolia L. var. <i>retusa</i> Mast.	ANACARDIACEAE
S. veronicaefolia Lamk.	
Thespesia populnea Soland. ex Corr.	
Urena lobata Linn.	
BOMBACACEAE	
Bombax ceiba Linn.	
STERCULIACEAE	
Helicteris isora Linn.	
Melochia corchorifolia Linn.	
Pterospermum acerifolium Willd.	
Sterculia urens Roxb.	
Waltheria indica Linn.	
TILIACEAE	
Corchorus aestuans Linn.	
C. fascicularis Lamk.	
C. olitorius Linn.	
Grewia abutilifolia Vent. ex Juss.	
G. tiliacea Vahl	
Triumfetta rhomboidea Jacq.	
OXALIDACEAE	
Biophytum sensitivum (L.) DC.	
Oxalis corniculata Linn.	
BALSAMINACEAE	
Impatiens balsamina Jacq.	
I. kleinii W. & A.	
RUTACEAE	
Aegle marmelos (L.) Corr.	
Limonia acidissima Linn.	
SIMARUBACEAE	
Ailanthus excelsa Roxb.	
BURSERACEAE	
Boswellia serrata Roxb.	
Garuga pinnata Roxb.	
MELIACEAE	
Azadirachta indica A. Juss.	
CELASTRACEAE	
Celastrus paniculata Willd.	
Maytenus senegalensis (Lamk.) Exell	
RHAMNACEAE	
Ventilago denticulata Willd.	
Zizyphus mauritiana Lamk.	
Z. nummularia (Burm. f.) W. & A.	
Z. oenoplia Mill.	
VITACEAE	
Cayratia carnosia Gagnep.	
Cissus repanda Vahl	
SAPINDACEAE	
Sapindus laurifolius Vahl	
CAESALPINIACEAE	
Bauhinia purpurea Linn.	
B. racemosa Lamk.	
Caesalpinia crista Linn. p.p.	
C. pulcherrima (L.) Swartz	
Cassia fistula Linn.	
C. pumila Lamk.	
C. tora Linn.	
Tamarindus indica Linn.	

- MIMOSACEAE
Acacia chundra (Roxb.) Willd.
A. ferruginea DC.
A. leucophloea Willd.
A. nilotica (L.) Del. var. **indica** Brenan
A. pennata Willd.
Albizia lebbeck (L.) Bth.
Pithecellobium dulce (Roxb.) Bth.
Prosopis spicigera Linn.
- ROSACEAE
Rosa sp.
- VAHLIACEAE
Vahlia digyna (Retz.) O.K.
- HALORAGACEAE
Myriophyllum spathulatum Blatt. & Hallb.
- COMBRETACEAE
Anogeissus latifolia Wall. ex Beddome
Combretum ovalifolium Roxb.
Terminalia bellirica (Gaertn.) Roxb.
T. crenulata Roth
- MYRTACEAE
Eucalyptus globulus Labill.
Syzygium cumini (L.) Skeels
- LECYTHIDACEAE
Careya arborea Roxb.
- LYTHRACEAE
Ammannia baccifera Linn.
A. multiflora Roxb.
Lagerstroemia parviflora Roxb.
Lawsonia inermis Linn.
Rotala densiflora (Roth) Koechne
R. indica (Willd.) Koechne
R. serpyllifolia (Roth) Bremek.
Woodfordia fruticosa (L.) Kurz
- ONAGRACEAE
Jussiaea repens Linn.
Ludwigia perennis Linn.
- TRAPACEAE
Trapa natans L. var. **bispinosa** Makino
- CUCURBITACEAE
Benincasa cerifera Savi
Coccinia cordifolia (L.) Cogn.
Cucumis callosus (Rottl.) Cogn.
Diplocyclos palmatus (L.) Jeffrey
Luffa acutangula (L.) Roxb. var. **amara** Clarke
L. cylindrica (L.) Roem.
Momordica dioica Roxb.
Mukia maderaspatana (L.) Roem.
- Trichosanthes cucumerina Linn.
- CACTACEAE
Opuntia elatior Mill.
- MOLLUGINACEAE
Glinus lotoides Linn.
G. oppositifolius (L.) A. DC.
Mollugo pentaphylla Linn.
- UMBELLIFERAE
Centella asiatica (L.) Urban
Pimpinella adscendens Dalz.
- ALANGIACEAE
Alangium salvifolium (L. f.) Wang.
- RUBIACEAE
Adina cordifolia (Roxb.) Hk. f. ex Brandis
Anotis foetida (Dalz.) Bth. & Hk. f.
A. rheedei Hk. f.
Borreria articularis (L. f.) F. N. Will.
B. stricta (L. f.) Schum.
Dentella repens (L.) Forst.
Mitragyna parvifolia (Roxb.) Korth
Morinda tomentosa Heyne ex Roth
Oldenlandia corymbosa Linn.
Randia uliginosa DC.
- COMPOSITAE
Acanthospermum hispidum DC.
Ageratum conyzoides Linn.
Bidens biternata (Lour.) Merr. & Sherff
Blainvillaea rhomboidea Cass.
Blumea eriantha DC.
B. membranacea DC.
B. oxyodonta DC.
Caesulia axillaris Roxb.
Cyathocline purpurea (Don) O.K.
Echinops echinatus Roxb.
Eclipta prostrata (L.) Linn.
Elephantopus scaber Linn.
Emilia sonchifolia (L.) DC.
Glossocardia bosvallaea (L. f.) DC.
Grangea maderaspatana (L.) Poir.
Guizotia abyssinica Cass.
Launaea fallax (J. & S.) O.K.
L. sarmentosa (Willd.) Alst.
Sphaeranthus indicus Linn.
Tridax procumbens Linn.
Vernonia cinerea (L.) Less.
Xanthium strumarium Linn.
- LOBELIACEAE
Lobelia alsinoides Lamk.

	PLUMBAGINACEAE	
Plumbago zeylanica Linn.		Ipomoea aquatica Forsk.
	SAPOTACEAE	I. cairica (L.) Sw.
Madhuca indica Gmel.		I. hederifolia Linn.
Mimusops elengi Linn.		I. nil (L.) Roth
	EBENACEAE	I. obscura (L.) Ker-Gawl
Diospyros melanoxylon Roxb.		I. pestigridis Linn.
	OLEACEAE	I. sinensis Choisy
Nyctanthes arbor-tristis Linn.		I. triloba Linn.
	SALVADORACEAE	Merremia gangetica (L.) Cufodont
Salvadora persica Linn.		M. hastata (Des.) Hall. f.
	APOCYNACEAE	Operculina turpethum (L.) Silva
Carissa congesta Wt.		Rivea hypocrateriformis Choisy
Holarrhena antidyserterica (L.) Wall. ex G. Don		SOLANACEAE
Nerium indicum Mill.		Datura innoxia Mill.
Plumeria acuminata Ait.		D. metel Linn.
Rauvolfia tetraphylla Linn.		Lycopersicon esculentum Mill.
Wrightia tinctoria R. Br.		Physalis minima Linn.
	ASCLEPIADACEAE	Solanum nigrum Linn.
Calotropis gigantea (L.) R. Br.		S. surattense Burm. f.
C. procera (Ait.) R. Br.		SCROPHULARIACEAE
Dregea volubilis (L. f.) Bth. ex Hk. f.		Bacopa monnierii (L.) Pennell
Oxystelma secamone (L.) Karst.		Limnophila indica (L.) Druce
	PERIPLOCACEAE	Lindenbergia indica (L.) O. K.
Cryptolepis buchanani R. & S.		Lindernia anagallis (Burm.) Pennell
Hemidesmus indicus (L.) R. Br.		L. ciliata (Colsm.) Pennell
	GENTIANACEAE	L. crustacea (L.) F. Muell.
Canscora diffusa R. Br.		L. oppositifolia (Retz.) Muk.
Centaurium roxburghii (G. Don) Druce		L. parviflora (Roxb.) Haines
Enicostema verticillatum (Willd.) Engl.		Rhamphicarpa longiflora Bth.
Exacum pedunculatum Linn.		Sopubia delphinifolia Don
Hoppea dichotoma Willd.		Stemodia viscosa Roxb.
Nymphoides cristatum (Roxb.) O. K.		Striga angustifolia (Don) Saldanha
N. indicum (L.) O. K.		S. asiatica (L.) O. K.
	HYDROPHYLLACEAE	Sutera dissecta (Del.) Walp.
Hydrolea zeylanica (L.) Vahl		Verbascum chinense (L.) Sant.
	BORAGINACEAE	LENTIBULARIACEAE
Coldenia procumbens Linn.		Utricularia gibba var. exoleta Taylor
Cordia gharaf (Forsk.) Ehrenb. & Asch.		OROBANCHACEAE
C. obliqua Willd.		Aeginetia indica Linn.
Heliotropium indicum Linn.		BIGNONIACEAE
H. supinum Linn.		Dolichandrone falcata Seem.
Rotula aquatica Lour.		PEDALIACEAE
Trichodesma zeylanicum R. Br.		Sesamum indicum Linn.
	CONVOLVULACEAE	MARTYNIACEAE
Cuscuta reflexa Roxb.		Martynia annua Linn.
Evolvulus alsinoides Linn.		ACANTHACEAE
		Adhatoda vasica Nees
		Barleria prattensis Sant.

Barleria prionitis Linn.
Blepharis maderaspatensis (L.) Roth
B. molluginifolia Pers.
Bremekampia neilgherrensis (Wt.) Sreemadhavan
B. verticillata (Roxb.) Sreemadhavan
Carvia callosa (Nees) Bremek.
Dicliptera verticillata (Forsk.) Christens
Dipteracanthus prostratus (Poir.) Nees
Eranthemum roseum (Vahl) R. Br.
Hygrophila auriculata (Schum.) Heine
H. serpyllum (Nees) T. Anders.
Justicia procumbens Linn.
J. simplex D. Don
Peristrophe bicalyculata (Retz.) Nees
Rungia parviflora Nees
R. pectinata (L.) Nees

VERBENACEAE

Clerodendron inerme Gaertn.
C. serratum Spreng.
Gmelina arborea Roxb.
Lantana camara L. var. **aculeata** (L.) Moldenke
Phyla nodiflora (L.) Greene
Tectona grandis Linn. f.
Vitex negundo Linn.

LABIATAE

Anisomelis indica (L.) O. K.
Hyptis sauveolens Poit.
Leonotis nepetaefolia (L.) R. Br.
Leucas aspera (Willd.) Spr.
L. biflora R. Br.
Ocimum americanum Linn.
Pogostemon parviflorus Bth.
Salvia plebeia R. Br.

NYCTAGINACEAE

Boerhavia diffusa Linn.

AMARANTHACEAE

Achyranthes aspera Linn.
Amaranthus gangeticus Linn.
A. spinosus Linn.
A. viridis Linn.
Alternanthera sessilis (L.) DC.
Celosia argentea Linn.

POLYGONACEAE

Polygonum barbatum Linn.
P. glabrum Willd.
P. plebejum R. Br.
P. plebejum R. Br. var. **indica** Hk. f.

PIPERACEAE

Peperomia pellucida H. B. & K.

LORANTHACEAE

Dendrophthoe falcata (L. f.) Etting.
Viscum articulatum Hk. f.

SANTALACEAE

Santalum album Linn.

EUPHORBIACEAE

Bridelia squamosa (Muell.-Arg.) Gehrm.
Chrozophora prostrata Dalz.

Emblema officinalis Gaertn.

Euphorbia bombaiensis Sant.

E. hirta Linn.

E. nerifolia Linn.

E. parviflora Linn.

E. thymifolia Linn.

E. tirucalli Linn.

Homonoia riparia Lour.

Jatropha curcas Linn.

J. gossypifolia Linn.

Kirgenelia reticulata (Poir.) Baill.

Mallotus philippensis (Lamk.) Muell.-Arg.

Phyllanthus asperatus Hutch.

P. maderaspatensis Linn.

P. simplex Retz.

Ricinus communis Linn.

ULMACEAE

Holoptelea integrifolia (Roxb.) Planch.
Trema orientalis (L.) Blume

URTICACEAE

Elatostema cuneatum Wt.
Fleurya interrupta (L.) Gaud.
Girardinia zeylanica Decne.
Pilea microphylla Liebm.
Pouzolzia zeylanica (L.) Been.

MORACEAE

Artocarpus heterophyllus Lamk.
Ficus asperrima Roxb.
F. bengalensis Linn.
F. glomerata Roxb.
F. hispida Linn. f.
F. religiosa Linn.
F. retusa Linn.

CASUARINACEAE

Casuarina equisetifolia Linn.

HYDROCHARITACEAE

Blyxa echinosperma (Clarke) Hk. f.
Hydrilla verticillata (L. f.) Royle
Ottelia alismoides Pers.
Vallisneria spiralis Linn.

	ORCHIDACEAE	
Vanda sp.		E. geniculata (L.) R. & S.
	AMARYLLIDACEAE	Fimbristylis dichotoma Vahl
Crinum brachynema Herb.		F. miliacea (L.) Vahl
	DIOSCOREACEAE	F. quinqueangularis Kth.
Dioscorea bulbifera Linn.		F. tenera Roem. & Schult.
	AGAVACEAE	F. woodrowii Clke.
Agave ingens Berger		Fuierena ciliaris (L.) Roxb.
	COMMELINACEAE	Scirpus articulatus Linn.
Commelina benghalensis Linn.		S. lateriflorus Gmelin.
C. forskalaei Vahl		GRAMINEAE
C. paludosa Bl.		Apluda mutica Linn.
Cyanotis fasciculata (Heyne ex Roth) Schult. f.		Bambusa bambos (L.) Voss
Murdannia juncoidea (Wt.) R. & S.		Bothriochloa sp.
M. nudiflora (L.) Brenan		Brachiaria ramosa (L.) Stapf
	PALMAE	Cenchrus ciliaris Linn.
Areca catechu Linn.		Chloris barbata (L.) Sw.
Borassus flabellifer Linn.		Cynodon dactylon (L.) Pers.
Cocos nucifera Linn.		Dactyloctenium aegyptium (L.) Beauv.
Phoenix sylvestris (L.) Roxb.		Dendrocalamus strictus Nees
	AROIDEAE	Dichanthium annulatum (Forsk.) Stapf
Arisaema neglectum Schott		Dinebra retroflexa (Vahl) Panz.
Colocasia antiquorum Schott		Echinochloa colonum (L.) Link
Cryptocoryne retrospiralis Kunth		Eleusine indica (L.) Gaertn.
	LEMNACEAE	Elytrophorus spicatus (Willd.) A. Camus
Lemna gibba Linn.		Eragrostis ciliaris (All.) Link
	NAIADACEAE	E. japonica (Thunb.) Trin.
Naias minor All.		E. pilosa (L.) Beauv.
	ERIOCAULACEAE	E. poaeoides Beauv.
Eriocaulon dianae Fyson		E. unioloides (Retz.) Nees ex Steud.
E. eleonare Fyson		Isachne globosa (Thunb.) O. K.
	CYPERACEAE	Melanocenchrus jacquemontii Jaub.
Cyperus alutatus Kern		Oplismenus burmannii (Retz.) Beauv.
C. compressus Linn.		Oryza rufipogon Griff.
C. difformis Linn.		O. sativa Linn.
C. iria Linn.		Panicum miliare Lamk.
C. michelianus (L.) Link subsp. pygmaeus (Rottb.)		Paspalidium flavidum (Retz.) A. Camus
Archers. & Gaerbn.		Paspalum scrobiculatum Linn.
C. pumilus Linn.		Saccharum spontaneum Linn.
C. rotundus Linn.		Sacciolepis interrupta Stapf
C. squarrosum Linn.		Setaria glauca (L.) Beauv.
C. tegetum Roxb.		Sorghum halepense (L.) Pers.
C. tenuispica Steud.		Sporobolus diander (Retz.) Beauv.
C. triceps Endl.		Themeda quadrivalvis (Roxb.) O. K.
Eleocharis atropurpurea Kth.		Tragus racemosus Hk. f. non Scop.
E. dulcis (Burm. f.) Trin. ex Henschel		

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