

VASCULAR PLANTS OF VEDANTHANGAL WATER BIRDS SANCTUARY AND SURROUNDING REGIONS IN CHINGLEPUT DISTRICT, TAMIL NADU¹

A. N. HENRY AND M. S. SWAMINATHAN²

208 taxa of vascular plants recorded in the Vedanthangal Water Birds Sanctuary and surrounding regions including Karikili Water Fowl Refuge are enumerated in this paper.

The urgent need to preserve the existing flora and fauna has led to the creation of many Wild life Sanctuaries and National Parks in India. The Vedanthangal Water Birds Sanctuary is perhaps the oldest Bird Sanctuary in South India preserved since 1790, but officially recognised from 1936. The Botanical Survey of India took up the Survey of this sanctuary in 1974-1976, on priority basis, to assess its floristic wealth. Also the data collected by floristic studies will greatly help in understanding plant and bird relationship and consequently in improving the conditions for mutual benefit.

The Sanctuary is situated 82 km south of Madras City, in Madurantakam Taluk, Chingleput District. It is about 120 m above MSL, and less than 48 km inland from the Coromandal Coast. The Sanctuary includes the 30 hectare Vedanthangal tank. The average annual rainfall is 115 cm, most of which falls during north-east monsoon from September to December. The hottest months are April, May and June.

The countryside surrounding Vedanthangal is flat comprised primarily rocky plains and paddy fields interspersed with bushes and scattered trees. There are a few low ridged hillocks, and tanks or small lakes dotting the landscape like Karikili Water Fowl Refuge.

The Vedanthangal tank which comprises the Sanctuary, and Karikili are the only places in this region that provide compact groves of *Barringtonia acutangula* trees suitable for nesting of birds. The western bund of Vedanthangal tank impounds the water. *Acacia nilotica* ssp. *indica*, *Alangium salvifolium*, *Albizia lebbek*, *Antidesma ghaesembilla*, *Borassus flabellifer*, *Cassia fistula*, *Derris indica*, *Polyalthia suberosa* and *Streblus asper* are some of the trees observed along the slope of the bund. These trees were often interspersed with thick growth of *Calamus rotang*, *Derris scandens* and *Solanum trilobatum*. The common herbaceous plants which colonise the semi-marshy area of the tank are *Chrysophora rotleri*, *Cleome chelidonii*, *Coldenia procumbens*, *Echinochloa colonum*, *Eclipta alba*, *Euphorbia serpens*, *Glinus oppositifolius*, *Heliotropium indicum*, *Marsilea minuta*, *Panicum repens* and *Phyla nodiflora*. *Aeschynomene aspera*, *Lemna perpusilla*, *Limnophyton obtusifolium*, *Nechamandra alternifolia* and *Ottelia alismoides* are the aquatics of this region.

Surrounding the Vedanthangal tank, there are vast stretches of agricultural lands mostly used for paddy cultivation and these afford food for the birds gathering here during breeding season. Further the tank water contains high fertilizing properties due to the droppings of birds and hence agricultural fields irrigated from Vedanthangal tank give a good yield. The birds by eating the pests and insects of

¹ Accepted November 1979.

² Botanical Survey of India, Coimbatore.

the fields also help man. Thus man and bird are mutually benefitted.

For an account of the water birds visiting the Sanctuary, Spillett (1968) may be referred to.

208 taxa of vascular plants have been recorded. The specimens are deposited in the herbarium of the Southern Circle. Botanical Survey of India, Coimbatore (MH). For each species mentioned in the list, the collection number of A. N. Henry is given.

It may be mentioned here that though Wild Life Sanctuaries and National Parks are created, in general, for the protection of wild fauna and flora, in India much remains to be done in respect of protection to the flora for the sake of fauna. Most of the Sanctuaries have not been kept as exclusive reserves for the preservation of the local flora and fauna to improve conditions for their mutual benefit. The overgrazing of domestic livestock in the Vedanthangal Sanctuary area poses a great threat to the very existence of the comparatively rare taxa of the local plants; only a few widespread pantropical weeds are able to resist this threat. Further the rare local plants which illustrate evolutionary process and potentialities are disappearing and will not be available for study unless strenuous efforts are made to preserve them. Hence it is suggested that restrictions on domestic livestock grazing be imposed, so that the flora of Vedanthangal Water Birds Sanctuary is kept in as natural a state as possible.

ISOETACEAE

Isoetes coromandeliana Linn. 47080

MARSILEACEAE

Marsilea minuta Linn. 47060

ANNONACEAE

Polyalthia suberosa (Roxb.) Thw. 45422, 47008

MENISPERMACEAE

Tiliacora acuminata (Lamk.) Miers 45424
Tinospora cordifolia (Willd.) Miers ex Hk. f. & Thoms. 45434

CAPPARACEAE

Cadaba fruticosa (Linn.) Druce
(*C. indica* Lamk.) 45480
Cleome aspera Koenig ex DC. 45468
C. chelidonii Linn. f. 45447
C. viscosa Linn. 45430

VIOLACEAE

Hybanthus enneaspermus (Linn.) F. v. Muell.
(*Ionidium suffruticosum* (Linn.) Ging ex DC.) 45402

POLYGALACEAE

Polygala chinensis Linn. 45439

MALVACEAE

Abelmoschus ficulneus (Linn.) Wt. & Arn. ex Wt.
(*Hibiscus ficulneus* Linn.) 47068
Abutilon indicum (Linn.) Sweet 47026
Hibiscus micranthus Linn. f. 47038
H. vitifolius Linn. 45511, 47028
Sida cordata (N. Burman) Borssum
(*S. veronicifolia* Lam.) 47056

STERCULIACEAE

Melochia corchorifolia Linn. 45449, 47015

TILIACEAE

Corchorus aestuans Linn.
(*C. acutangulus* Lam.) 47040
Triumfetta rhomboidea Jacq. 47023

ELAEOCARPACEAE

Muntingia calabura Linn. 45425

ZYGOPHYLLACEAE

Tribulus terrestris Linn. 47078

OXALIDACEAE

Biophytum nervifolium Thw.

(*B. sensitivum* (Linn.) DC. var. *nervifolium*
(Thw.) Edgew. & Hook. f.) 45491, 47077

RUTACEAE

Citrus medica Linn. var.? 45436

Glycosmis mauritiana (Lam.) Tanaka
(*G. cochinchinensis* sensu Gamble p.p.)
45481

Toddalia asiatica (Linn.) Lamk. var. *gracilis*
Gamble 45517

RHAMNACEAE

Scutia myrtina (Burm. f.) Kurz 47101

Ziziphus oenoplia (Linn.) Mill. 47049

VITACEAE

Cissus quadrangularis Linn. 45464

C. setosa Roxb. 47095

C. vitiginea Linn. 45435

SAPINDACEAE

Allophyllus serratus (Roxb.) Kurz 45518

Cardiospermum halicacabum Linn. var. *micro-*
carpum Bl. 45459

Lepisanthes tetraphylla (Vahl) Radlk. 47105

PAPILIONACEAE

Abrus precatorius Linn. 47018

Aeschynomene aspera Linn. 47104

A. indica Linn. 47046, 47065

Alysicarpus rugosus (Willd.) DC. var. *pilifer*
Prain 45441

Atylosia scarabaeoides (Linn.) Benth. 47091

Crotalaria linifolia Linn. f. 45488

C. verrucosa Linn. 47009

Derris indica (Lam.) Bennett
(*Pongamia glabra* Vent.) 45405

Derris scandens (Roxb.) Benth. 45519

Desmodium biarticulatum Benth. 45497

Indigofera linifolia (Linn. f.) Retz. 47088

I. linnaei Ali

(*I. enneaphylla* Linn.) 45415

I. tinctoria Linn. 45456

Lablab purpureus (Linn.) Sweet
(*Dolichos lablab* Linn.) 45510, 47019

Mucuna pruriens (Linn.) DC.
(*M. prurita* Hook.) 47022

Pseudarthria viscida (Linn.) Wt. & Arn. 47017

Stylosanthes fruticosa (Retz.) Alston
(*S. mucronata* Willd.) 45495

Tephrosia hirta Ham. 47097

T. purpurea (Linn.) Pers. 45408

Teramnus labialis (Linn. f.) Spreng. 47006

Vigna trilobata (Linn.) Verdc.
(*Phaseolus trilobus* sensu Aiton) 47029

CAESALPINIACEAE

Cassia auriculata Linn. 45475

C. fistula Linn. 45414

C. pumila Lamk. 45483

Piliostigma racemosa (Lamk.) Benth.
(*Bauhinia racemosa* Lamk.) 45516

MIMOSACEAE

Acacia caesia Willd. 47050

A. nilotica (Linn.) Willd. ex Del. subsp.
indica (Benth.) Brenan

(*A. arabica* auct. non (Lamk.) Willd.) 45401

Albizzia lebbek (Linn.) Willd. 47010

Leucaena leucocephala (Lamk.) de Wit
(*L. glauca* Benth.) 47109

Pithecellobium dulce (Roxb.) Benth. 47003

DROSERACEAE

Drosera burmanni Vahl 47115

LECYTHIDACEAE

Barringtonia acutangula (Linn.) Gaertn. 45413

LYTHRACEAE

Ammannia baccifera Linn. 47099

Nesaea brevipes Koehne 47051

Rotala verticillaris Linn. 47092

ONAGRACEAE

Ludwigia perennis Linn.

(*L. parviflora* Roxb.) 47111

PASSIFLORACEAE

Passiflora foetida Linn. 45420

CUCURBITACEAE

Blastania garcini (Linn.) Cogn. 47032

Coccinia grandis (Linn.) Voigt

(*C. indica* Wt. & Arn.) 45427, 47042

Cucumis melo Linn. var. *agrestis* Naud.

(*C. pubescens* Willd.) 45451

Diplocyclos palmatus (Linn.) C. Jeffrey

(*Bryonopsis laciniosa* sensu Naud.) 47004

Mukia maderaspatana (Linn.) M. Roem.

(*Melothria maderaspatana* (Linn.) Cogn.)
47016

AIZOACEAE

Trianthema portulacastrum Linn. 45452

MOLLUGINACEAE

Glinus oppositifolius (Linn.) A.DC.

(*Mollugo oppositifolia* Linn.) 45429

M. pentaphylla Linn. 45492

RUBIACEAE

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

(*B. hispida* (Linn.) K. Sch.) 45453

Canthium parviflorum Lamk.

(*Plectronia parviflora* (Lamk.) Bedd.) 45410

Dentella repens (Linn.) J.R. & G. Forst. 45463

Morinda coreia Buch.-Ham.

(*M. tinctoria* Roxb.) 45412

Oldenlandia herbacea (Linn.) Roxb. 47054

Tarenna asiatica (Linn.) Alston

(*Chomelia asiatica* O. Kze.) 47073

Thecagonum biflorum (Linn.) Babu

(*Oldenlandia biflora* Linn.) 45461

COMPOSITAE

Ageratum conyzoides Linn. 47039

Blumea bifoliata DC. 47082

Eclipta alba (Linn.) Hassk.

(*E. prostrata* (Linn.) Linn.) 45442

Epaltes pygmaea DC. 47093

Sphaeranthus indicus Linn. 47069

Vernonia cinerea (Linn.) Less. 47036

PLUMBAGINACEAE

Plumbago zeylanica Linn. 47024

EBENACEAE

Diospyros chloroxylon Roxb. 47079

APOCYNACEAE

Catharanthus pusillus (Murr.) G. Don

(*Lochnera pusilla* K. Schum.) 45484

ASCLEPIADACEAE

Calotropis gigantea (Linn.) R. Br. 45411

Hemidesmus indicus (Linn.) R. Br. 47005

Pergularia daemia (Forsk.) Chiov.

(*P. extensa* (N. Jacq.) N.E.Br.) 45419

Tylophora indica (N. Burman) Merr.

(*T. asthmatica* (Linn. f.) Wt. & Arn.) 45479

GENTIANACEAE

Canscora heteroclita (Linn.) Gilg.

(*C. sessiliflora* Roem. & Schult.) 47113

Enicostemma hyssopifolium (Willd.) I. C. Verdoorn
(*E. littorale* Bl.) 45496

HYDROPHYLLACEAE

Hydrolea zeylanica Vahl 47075

BORAGINACEAE

Carmona retusa (Vahl) Masamune
(*C. microphylla* (Lamk.) Don) 45501
Coldenia procumbens Linn. 45432
Heliotropium indicum Linn. 45416
H. marifolium Retz.
(*H. scabrum* Retz.) 45466

CONVOLVULACEAE

Argyrea cymosa Sweet 47021
Ipomoea aquatica Forsk.
(*I. reptans* Poir.) 47098
I. coptica (Linn.) Roth ex Roem. & Schult.
(*I. dissecta* Willd.) 47085
Merremia hederacea (Burm. f.) Hall. f.
(*M. chryseides* Hall. f.) 47072
Operculina turpethum (Linn.) Silva Manso
47030

SOLANACEAE

Physalis minima Linn. 45421
Solanum trilobatum Linn. 45403

SCROPHULARIACEAE

Centranthera tranquebarica (Spreng.) Merr.
(*C. humifusa* Wall. ex Benth.) 45487
Linnophila aquatica (Willd.) Santapau
(*L. polystachya* Benth.) 47100
L. indica (Linn.) Druce
(*L. gratioloides* R. Br.) 47071
Striga angustifolia (D. Don) Sald.
(*S. euphrasioides* sensu Benth.) 45489
S. densiflora (Benth.) Benth. 45467

PEDALIACEAE

Martynia annua Linn. 45513
Pedaliium murex Linn. 45426

ACANTHACEAE

Asystasia gangetica (Linn.) T. And. 47013
Dipteracanthus prostratus (Poir.) Nees
(*Ruellia prostrata* Poir.) 47007
Echbolum viride (Forsk.) Alston
(*E. linneanum* Kurz) 45508
Hygrophila auriculata (Schum.) Heine
(*Asteracantha longifolia* (Linn.) Nees) 47076
Indoneesiella echioides (Linn.) Sreem.
(*Andrographis echioides* Nees) 45457
Lepidagathis cristata Willd. 45498
Rostellularia prostrata (Roxb. ex Cl.) Majumdar
(*Justicia prostrata* (Roxb. ex Cl.) Gamble)
47035

VERBENACEAE

Gmelina asiatica Linn. 45490, 45520
Phyla nodiflora (Linn.) Greene
(*Lippia nodiflora* (Linn.) A. Rich.) 45440
Premna corymbosa Rottl. & Willd. 45500

LABIATAE

Anisomeles malabarica (Linn.) R. Br. ex Sims
47027
Basilicum polystachyon (Linn.) Moench.
(*Moschosma polystachyum* Benth.) 47012
Geniosporum tenuiflorum (Linn.) Merr.
(*G. prostratum* Benth.) 45486, 47086
Hyptis suaveolens (Linn.) Poit. 45409, 47070
Leucas lavandulaefolia Rees
(*L. linifolia* (Roth) Spreng.) 45431

NYCTAGINACEAE

Boerhavia diffusa Linn. 45503
Pisonia aculeata Linn. 47048

AMARANTHACEAE

- Achyranthes aspera** Linn. 47037
Aerva lanata (Linn.) Juss. 45515
A. monsoniae (Linn. f.) Mart. 47089
Ailmania nodiflora (Linn.) R. Br. var. **dichotoma** (Roth) Hook. f. 45470
Amaranthus spinosus Linn. 45423
Celosia argentea Linn. 45485
Pupalia lappacea (Linn.) Juss.
 (*P. atropurpurea* Moq.) 47002

CASSYTHACEAE

- Cassytha filiformis** Linn. 45469

LORANTHACEAE

- Dendrophthoe falcata** (Linn. f.) Etting
 (*Loranthus longiflorus* Desr.) 47074

EUPHORBIACEAE

- Acalypha lanceolata** Willd. 45471, 45509
Antidesma ghaesembilla Gaertn. 45505
Chryzophora rottleri (Geis.) A. Juss. ex
 Spreng. 45450
Croton bonplandianum Baill.
 (*C. sparsiflorum* Morong.) 45407
Drypetes sepiaria (Wt. & Arn.) Pax & Hoffm.
 (*Hemicyclea sepiaria* Wt. & Arn.) 47106
Euphorbia hirta Linn. 45446
E. serpens H.B.K.
 (*E. microphylla* sensu Gamble *p.p.*) 45428
Jatropha gossypifolia Linn. 45482
Kirganelia reticulata (Poir.) Baill. 45506
Phyllanthus fraternus Webster
 (*P. niruri* auct. plur. (non Linn.) 45433
P. maderaspatensis Linn. 45454
P. virgatus Forst. f.
 (*P. simplex* Retz.) 45458
Sebastiania chamaelea (Linn.) Muell.-Arg.
 45494
Securinega leucopyrus (Willd.) Muell.-Arg.
 (*Fluggea leucopyrus* Willd.) 45406

- Synostemon bacciforme** (Linn.) Webster
 (*Agyneia bacciformis* (Linn.) A. Juss. 45462
Tragia involucrata Linn. 45460

URTICACEAE

- Pouzolzia zeylanica** (Linn.) Benn.
 (*P. indica* Gaud.) 45463

MORACEAE

- Fiscus hispida** Linn. f. 45504
F. racemosa Linn.
 (*F. glomerata* Roxb.) 47110
F. religiosa Linn. 45404
F. tomentosa Roxb. ex Willd. 47107
Streblus asper Lour. 45514, 47044

HYDROCHARITACEAE

- Nechamandra alternifolia** ((Roxb.) Thw.
 (*Lagerosiphon alternifolius* Druce) 47059
Ottelia alismoides (Linn.) Pers. 47067

LILIACEAE

- Asparagus racemosus** Willd. 47031

XYRIDACEAE

- Xyris pauciflora** Willd. 47116

COMMELINACEAE

- Commelina benghalensis** Linn. 45473
C. ensifolia R. Br. 45418
Murdannia spirata (Linn.) Bruckn.
 (*Aneilema spiratum* Br.) 47062

PALMAE

- Phoenix farinifera** Roxb. 45477
P. sylvestris (Linn.) Roxb. 47014

LEMNACEAE

- Lemna perpusilla** Torr.
 (*L. paucicostata* Hegelm.) 45512

ALISMATACEAE

Limnophyton obtusifolium (Linn.) Miq. 47103

ERIOCAULACEAE

Eriocaulon quinquangulare Linn. 47114

CYPERACEAE

Bulbostylis barbata (Rottb.) Cl. 45474

Cyperus bulbosus Vahl 45478

C. distans Linn. f. 45472

C. kyllingia Endl.

(*Kyllingia monocephala* Rottb.) 45502

Cyperus pumilus Linn.

(*Pycneus pumilus* Dom.) 47064

Cyperus rotundus Linn. 45444

C. tenuispica Steud. 47055

C. triceps (Rottb.) Endl.

(*Kyllingia triceps* Rottb.) 47063

Fimbristylis argentea (Rottb.) Vahl 45417

F. ovata (N. Burman) Kern

(*F. monostachya* (Linn.) Hassk.) 45476, 47083

Schoenoplectus articulatus (Linn.) Palla

(*Scirpus articulatus* Linn.) 47058

S. lateriflorus (J. F. Gmelin) Lye

(*Scirpus supinus* auct. non Linn.) 47066

GRAMINEAE

Alloteropsis cimicina (Linn.) Stapf 45499

Apluda mutica Linn.

(*A. aristata* Linn.) 47057

Arundo donax Linn. 45507

Bothriochloa pertusa (Linn.) A. Camus

(*Amphilophis pertusa* (Linn.) Nash ex Stapf) 47112

Chloris barbata Sw. 45455, 47033

Echinochloa colonum (Linn.) Link 45443

Enteropogon monostachyos (Vahl) K. Schum. & Engl. 47108

Eragrostiella brachyphylla (Stapf) Bor

(*Eragrostis brachyphylla* Stapf) 45493

E. riparia (Willd.) Nees 47096

E. tenella (Linn.) P. Beauv. ex Roem. & Schult.

(*E. plumosa* (Retz.) Link) 47025

Eriochloa procera (Retz.) C. E. Hubb. 45445

Opismenus compositus (Linn.) P. Beauv. 47047

Panicum repens Linn. 45437

Paspalidium geminatum (Forssk.) Stapf 47045

Saccharum spontaneum Linn. 47041

Sporobolus tremulus (Willd.) Kunth 45448

Vetiveria zizanioides (Linn.) Nash 47084

ACKNOWLEDGEMENTS

We are thankful to Dr. N. C. Nair, Deputy Director, Southern Circle, Botanical Survey of India for facilities and to the Wild Life Warden and staff of the Tamil Nadu Forest Department for their co-operation and help.

REFERENCE

SPILLET, J. JUAN (1968): A report on Wild Life Surveys in South and West India. *J. Bombay nat. Hist. Soc.* 65 (3): 646-653.



Henry, A N and Swaminathan, M S. 1981. "Vascular Plants of Vedanthangal Water Birds Sanctuary and Surrounding Regions in Chingleput District Tamil nadu India." *The journal of the Bombay Natural History Society* 78, 292–298.

View This Item Online: <https://www.biodiversitylibrary.org/item/187326>

Permalink: <https://www.biodiversitylibrary.org/partpdf/151437>

Holding Institution

Smithsonian Libraries and Archives

Sponsored by

Biodiversity Heritage Library

Copyright & Reuse

Copyright Status: In Copyright. Digitized with the permission of the rights holder

License: <http://creativecommons.org/licenses/by-nc/3.0/>

Rights: <https://www.biodiversitylibrary.org/permissions/>

This document was created from content at the **Biodiversity Heritage Library**, the world's largest open access digital library for biodiversity literature and archives. Visit BHL at <https://www.biodiversitylibrary.org>.