

RARE AND THREATENED FLOWERING PLANTS OF SOUTH INDIA

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A catalogue of 224 species of flowering plants presumably in danger of extinction in South India is given, based on the information from the distribution of species available in MH and relevant literature. It is hoped that the list, which provides the essential preliminary to any Nature Conservation programme in South India, will be used by the Conservationists to select suitable biotic communities for the preservation of flora and fauna.

The establishment of various international bodies, like International Union for Conservation of Nature and Natural Resources, have initiated programmes for rational and prudent approach to the exploitation of natural resources and conservation of biotic communities by considering the status of rare and threatened species of plants and animals and their habitats. Tinker (1971) reports that "twenty thousand plant species—in danger of extinction. The essential preliminary to any conservation programme is a precise catalogue of what these species are, but so far only 68 are listed in IUCN's Red Data Book."

About 14,000 species of wild flowering plants have been reported in India, and the great mountain chains of Himalayas, Western Ghats, Vindhya and Satpura ranges, Eastern Ghats, Khasi and Mizo Hills harbour about 90% of them. Due to indiscriminate encroachment of forest areas for agriculture, plantation crops and hydro-electric projects, the "refugia" for the wild species have been disturbed, and these no doubt pose a threat to the very existence of the comparatively

rare/endemic local plants which illustrate definite evolutionary processes and potentialities. As correctly pointed out by Subramanyam & Nayar (1971) "there is no alternative to natural habitats in the propagation of rare plants, though botanic gardens and seed banks are the only temporary answers to the solution of Conservation".

In the Enumeration, 224 wild species of flowering plants presumably in danger of extinction in South India are listed, based on the information for the distribution of species available in MH and relevant literature. For each species the type locality including the maximum known range of distribution and habitats (if available) is given, followed by remarks, if any, on its probable present status. For easy reference, the species are grouped under their respective families following the classification of Bentham and Hooker, with present day delimitation of certain families. The list is by no means complete, and further additions will be published in subsequent series. It is our sincere hope that the list, which provides the essential preliminary to any Nature Conservation programme in South India, will be used by the Conservationists to select suitable biotic communities for the preservation of flora and fauna.

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ENUMERATION

ANNONACEAE

- Desmos viridiflorus** (Bedd.) Safford
Unona viridiflora Bedd.
 Banks of Sholayar river, Anamalais, Coimbatore Dt., Tamil Nadu; Udumanparai, Anamalais.
 Scarce.
- Polyalthia rufescens** Hook. f. & Thoms.
 Cochin in Ernakulam Dt., Kerala; Travancore; Tirunelveli hills, Tamil Nadu.
 Scarce.
- Popowia beddomeana** Hook. f. & Thoms.
 Southern Tirunelveli Dt., Tamil Nadu and Southern Travancore, in evergreen forests; Attraymallay in Trivandrum Dt., Kerala.
 Scarce.
 Located in the evergreen forests of Agastyamalai in Tirunelveli Dt., Tamil Nadu in 1963.

VIOLACEAE

- Hybanthus travancoricus** (Bedd.) Melch.
Ionidium travancoricum Bedd.
 Hills of Tirunelveli, Tamil Nadu and Travancore.
 Located along streams in Agastyamalai in Tirunelveli Dt., Tamil Nadu in 1963.

HYPERICACEAE

- Hypericum japonicum** Thunb. var. **major**
 Fyson
 Nilgiris on western downs, Tamil Nadu.
 Rare. No specimens in MH.

GUTTIFERAE

- Garcinia imberti** Bourd.
 Southern Travancore—in evergreen forests.
 No specimens in MH.

DIPTEROCARPACEAE

- Vateria macrocarpa** B. L. Gupta
 Muthukulam, Bolampatty range, Coimbatore Dt., Tamil Nadu.
 No specimens in MH.

MALVACEAE

- Decaschistia rufa** Craib
 Tiruvallur and Kambakkam hills in Chingleput Dt., Tamil Nadu and from the 'Peninsula' (without precise locality).
 No specimens in MH.

ELAEOCARPACEAE

- Elaeocarpus venustus** Bedd.
 Muthukuzhivayal, Kanyakumari Dt., Tamil Nadu; Chimunji, S. Travancore.
 Scarce and little known.
 Located in the type locality in evergreen forests in 1976-1977.

BALSAMINACEAE

- Impatiens aliciae** C. E. C. Fischer
 Travancore; Munnar—Neriamangalam ghat road, Idikki Dt., Kerala—along streams.
 No specimens in MH.
- I. anaimudica** C. E. C. Fischer
 Anaimudi, Idikki Dt., Kerala—in dense undergrowth in sholas.
 No specimens in MH.
- I. cochinica** Hook. f.
 Kavalay, Cochin, Ernakulam Dt., Kerala—near streams.
 No specimens in MH.
- I. coelotropis** C. E. C. Fischer
 Naimakad gap & Anaimudi slopes, High range, Idikki Dt., Kerala—in sholas and evergreen forests.
 Located in the type locality during 1965.

- I. concinna** Hook. f.
W. Ghats in Malabar, Kerala (precise locality not known).
No specimens in MH.
- I. dendricola** C. E. C. Fischer
Thandiadamolu, Coorg, Karnataka.
No specimens in MH.
- I. johnii** Barnes
Kalaar Valley, High Range, Idikki Dt., Kerala—in dense evergreen forest.
No specimens in MH.
- I. laticornis** C. E. C. Fischer
Kundahs, Nilgiris, Tamil Nadu—on wet rocks in deep shade.
Not located since the type collection.
- I. macrocarpa** Hook. f.
Devicolam in Idikki Dt., Kerala.
No specimens in MH.
- I. munnarensis** Barnes
Near Munnar, High Range, Idikki Dt., Kerala—in streams and marshy places.
No specimens in MH.
- I. nataliae** Hook. f.
Kumsi in Shimoga in N.W. Mysore, Karnataka.
No specimens in MH.
- I. neo-barnesii** C. E. C. Fischer
Kundahs, Nilgiris, Tamil Nadu—on trunks & branches of trees exposed to much rain and mist from Malabar.
Located in Nilgiri Peak R.F., Kundahs, during 1970.
- I. nilgirica** C. E. C. Fischer
Kundahs, Nilgiris, Tamil Nadu—among grass and on rocks.
Not located since the type collection.
- I. pallidiflora** Hook. f.
Devicolam in Idikki Dt., Kerala—among grass on hill tops.
Located from Periakanal and Santanpara areas in Devicolam, Idikki Dt., Kerala by E. Barnes during 1931-37.
No specimens in MH.
- I. pandata** Barnes
Anaimudi slopes, Idikki Dt., Kerala—on wet rocks in tufts of moss and on cliffs at high elevation; Karankulam, Idikki Dt., Kerala.
Located in the type locality during 1967.
- I. platyadena** C. E. C. Fischer
Anaimudi, Idikki Dt., Kerala; Naimakad gap & Kadaaara, High Range, Idikki Dt., Kerala—in evergreen forest and wet sholas.
No specimens in MH.
- I. rivulicola** Hook. f.
Puriar Valley, Travancore—along the borders of streams.
Located in and near Munnar, Lockhart gap, Periakanal in Idikki Dt., Kerala along streams and rocky slopes by E. Barnes during 1931-37.
No specimens in MH.
- I. stocksii** Hook. f.
Thandiadamolu, Coorg, Karnataka.
No specimens in MH.
- I. verecunda** Hook. f.
Periakanal and Devicolam, Idikki Dt., Kerala—on steep mossy embankments under trees.
No specimens in MH.

BURSERACEAE

- Boswellia ovalifoliolata** Balak. & Henry
Tirupathi Hills, Chittor Dt., & Nallamalai, Kurnool Dt., Andhra Pradesh.

MELIACEAE

- Aglaia canarensis** Gamble
W. Ghats of S. Kanara, Karnataka.
Not located since the type collection.
- A. maiae** Bourd.
Ariyaukam and Colatoorpolay in Travancore,—in evergreen forests.
No specimens in MH.

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AQUIFOLIACEAE

- Ilex gardneriana** Wt.
Sispara Ghat in Nilgiris, Tamil Nadu.
Scarce. No specimens in MH.

CELASTRACEAE

- Microtropis densiflora** Wt.
Below Sispara at Nilgiris, Tamil Nadu—in dense jungles.
Scarce. Located in Pykara, Nilgiris during 1971.

HIPPOCRATEACEAE

- Loeseneriella bourdillonii** (Gamble) Raju
Hippocratea bourdillonii Gamble
Colatoorpolay, Travancore—in evergreen forests.
No specimens in MH.
- Salacia beddomei** Gamble
Anamalai hills of Coimbatore Dt., Tamil Nadu; Wynaad.
Not located since the type collection.
- S. malabarica** Gamble
S. Kanara, Karnataka and Travancore—in plains and in moist forests.
Not located since the type collection.

RHAMNACEAE

- Ventilago goughii** Gamble
Coorg, and Coonor ghat, Nilgiri Dt., Tamil Nadu; Segur ghat, Nilgiris.
Located in Kunjapanai, Nilgiris and Thirukarungudi in Tirunelveli Dt., Tamil Nadu during 1972.

ANACARDIACEAE

- Buchanania barberi** Gamble
Nadarai in Travancore.
Not located since the type collection.

- Nothopegia aureo-fulva** Bedd. ex Hook. f.
Hills above Courtallam, Tirunelveli Dt., Tamil Nadu.
Not located since the type collection.

CONNARACEAE

- Ellipanthus neglectus** Gamble
Tirunelveli, Tamil Nadu and Colatoorpolay, Travancore—in evergreen forests.
Not located since the type collection.

PAPILIONACEAE

- Indigofera constricta** (Thw.) Trimen
Ceylon; Kavalay, Cochin, Ernakulam Dt., Kerala, Nikund ghat, N. Kanara, Karnataka.
Rare. Located in Ranni R. F., Quilon Dt., Kerala during 1976.
- Rhynchosia jacobii** Chandr. & Shetty
Thulukkanparai—eastern slope of Mahendragiri hills, Tirunelveli Dt., Tamil Nadu.
- Smithia venkobarrowii** Gamble
Peermade, Idikki Dt., Kerala.
No specimens in MH.

CAESALPINIACEAE

- Cynometra mimosoides** Wall.
W. Ghats in S. Travancore; Cannanore.
Apparently very scarce.
- Humboldtia laurifolia** Vahl
Ceylon & W. Ghats in Malabar.
Apparently very scarce.
One collection (without locality) available in MH collected during 1873.

MIMOSACEAE

- Acacia hohenackeri** Craib
Kundah range, Nilgiris, Tamil Nadu.
Located in Bimka Shola, Nilgiris, Tamil Nadu in 1970.

A. wightii Baker

Travancore, and Tirunelveli, Tamil Nadu—
on the sea coast.
No specimens in MH.

MYRTACEAE

Eugenia discifera Gamble

Near Chimunji, Travancore—in evergreen
forests.
No specimens in MH.

Jambosa beddomei (Duthie) Gamble

Trichnangudi, Tirunelveli hills, Tamil Nadu.
No specimens in MH.

J. bourdillonii Gamble

Merchiston, Ponmudi hill, Trivandrum Dt.
—in evergreen forests.
Not located since the type collection.

J. courtallensis Gamble

Courtallum, Tirunelveli Dt., Tamil Nadu &
Ceylon.
No specimens in MH.

Meteoromyrtus wynaadensis (Bedd.) Gamble

Devala (Nilgiris, Tamil Nadu) South East
Wynaad.
No specimens in MH.

Syzygium benthamianum (Wt. ex Duthie)
Gamble

Sispara in Nilgiri hills, Tamil Nadu.
No specimens in MH.

S. palghatense Gamble

Palghat hills, Kerala.
No specimens in MH.

S. travancoricum Gamble

Low Country of Travancore—in swampy
places.
Not located since type collection.

MELASTOMATACEAE

Kendrickia walkeri Hook. f.

Anamalai hills, Coimbatore Dt., Tamil
Nadu. Ceylon.
Reported from Peninsular India based on
a single collection from Anamalai.

No specimens (from South India) in MH.

Memecylon flavescens Gamble

Avalanche and Sispara, Kundahs, Nilgiris,
Tamil Nadu—in evergreen shola forests.
Located in shola forests in the type locality
in 1972.

M. lawsoni Gamble

South East Wynaad; Devala, Nilgiris, Tamil
Nadu.
Collections from the type locality, available
in MH.

M. madgolense Gamble

Madgol hills of Visakhapatnam Dt., Andhra
Pradesh.
No specimens in MH.

M. sisparensis Gamble

Sispara ghat, Nilgiri hills, Tamil Nadu.
Collection from the type locality available
in MH.

Sonerila barnesii C. E. C. Fischer

Nadugani, Tirunelveli hills, Tamil Nadu.
No specimens in MH.

S. nemakadensis C. E. C. Fischer

Naimakad gap, High range, Idikki Dt.,
Kerala.
No specimens in MH.

S. pulneyensis Gamble

Pambar ravine, Pulney hills, Madurai Dt.,
Tamil Nadu.
Subsequent collection from the type locality
made during 1901 available in MH.

S. wynaadensis Nayar

Wynaad, Kerala.
Not located since the type collection.

LYTHRACEAE

Lagerstroemia rottleri Clarke

Deccan (exact locality not known).
Little known tree. No specimens in MH.

L. thomsonii Koehne

Mysore and Carnatic; probably W. Ghats.
Apparently very rare. No specimens in MH.

CUCURBITACEAE

- Luffa umbellata** (Klein) Roem.
Travancore, Kerala; Coromandel—(precise locality not known).
Scarce. A single collection without precise locality is available in MH.

UMBELLIFERAE

- Peucedanum anamallayense** Clarke
Anamalai hills, Coimbatore Dt., Tamil Nadu.
No specimens in MH.
- Pimpinella pulneyensis** Gamble
Near shola, Kodaikanal, Madurai Dt., Tamil Nadu—in damp and cool places near sholas.
Not located since the type collections.
- P. tirupatiensis** Balak. & Subr.
Japalathirtha, Tirupati hills, Chittoor Dt., Andhra Pradesh.
Subsequently collected from the type locality during 1974.

ARALIACEAE

- Schefflera bourdillonii** Gamble
Near Chimunji, Travancore, Kerala—in evergreen forests.
No specimens in MH.

RUBIACEAE

- Coffea crassifolia** Gamble
Ayerpadi, Anamalais, Coimbatore Dt., Tamil Nadu & Peermade, Idikki Dt., Kerala.
Not located since the type collection.
- Hedyotis anamalayana** (Gamble) Rolla Rao & Hemadri
Oldenlandia anamalayana Gamble
Anamalai hills in high ranges, Coimbatore Dt., Tamil Nadu.

- Not located since the type collection.
- H. barberi** (Gamble) Henry & Subr.
Oldenlandia barberi Gamble
Agastyamalai peak, Tirunelveli Dt., Tamil Nadu—in rocky places.
Located in the type locality in 1964.
- H. beddomei** Hook. f.
Oldenlandia beddomei (Hook. f.) O. Ktze.
Palghat hills, Kerala—in open grassy places.
Collection from the type locality available in MH.
- H. bourdillonii** (Gamble) Rolla Rao & Hemadri
Oldenlandia bourdillonii Gamble
Travancore—in scrub forests.
No specimens in MH.
- H. gamblei** Henry & Subr.
Manjanamparai, Tirunelveli Dt., Tamil Nadu.
- H. ramarowii** (Gamble) Rolla Rao & Hemadri
Oldenlandia ramarowii Gamble
Ponmudi, Trivandrum Dt., Kerala; Chimunji, Travancore; Kalakad, Tirunelveli Dt., Tamil Nadu.
- H. santapau** Shetty & Vivek.
Umaiyamalai, Anaimudi slopes, Devicolam, Idikki Dt., Kerala and Anamalais, Coimbatore Dt., Tamil Nadu; subsequently collected from the type locality.
- H. shuteri** (Hook. f.) Rolla Rao & Hemadri
Oldenlandia shuteri Hook. f.
Near Madras—east coast, Tamil Nadu.
No specimens in MH.
- H. stocksii** (Hook. f. & Thoms.) Rolla Rao & Hemadri
Oldenlandia stocksii Hook. f. & Thoms.
Bababudan hills of Mysore (Malabar), Karnataka—Growing among grass.
Not located since the type collection.
- H. travancorica** Bedd.
Oldenlandia travancorica (Bedd.) O. Ktze.
Hills of Travancore, and Tirunelveli, Tamil

- Nadu—in humus soil; Trivandrum, Kerala. Located in Agastyamalai, Tirunelveli Dt., Tamil Nadu during 1963 & 1964.
- H. villostipulata** (Gamble) Rolla Rao & Hemadri
Oldenlandia villostipulata Gamble
 Muthukuzhivayal, Kanyakumari Dt., Tamil Nadu.
 Not located since the type collections.
- H. wynaadensis** (Gamble) Rolla Rao & Hemadri
Oldenlandia wynaadensis Gamble
 Chambra peak forests, Wynaad, Kerala.
 Not located since the type collections.
- Ixora johnsoni** Hook. f.
 Near Wenna Mala in Cochin. Ernakulam Dt., Kerala; Travancore, Kerala.
 Apparently scarce. No specimens in MH.
- I. lawsoni** Gamble
 Mananthody, Cannanore Dt., Kerala & Coorg, Karnataka.
 Not located since the type collection.
- I. monticola** Gamble
 High Wavy mountain near Cumbum, Madurai Dt., Tamil Nadu—in clayey soil.
 Located from Sultan's Battery, Calicut Dt. and Karapara river side in Palghat Dt., Kerala during 1969 & 1975 respectively.
- I. saulierei** Gamble
 Pulney hills, Madurai Dt., Tamil Nadu.
 Not located since the type collection.
- Knoxia linearis** Gamble
 Mahendragiri hills, Tirunelveli Dt., Tamil Nadu.
 Not located since the type collection.
- Morinda reticulata** Gamble
 Murchison and Kulathurpolay, Travancore, Kerala—in evergreen forest.
 Not located since the type collection.
- Ophiorrhiza barnesii** C.E.C. Fischer
 Kalaar Valley, High Range, Idikki Dt., Kerala.
 No specimens in MH.
- O. caudata** C.E.C. Fischer
 Kalaar, High Range, Idikki Dt., Kerala—in evergreen forests.
 No specimens in MH.
- O. incarnata** C.E.C. Fischer
 Near Nadgani, Nilgiri Dt., Tamil Nadu (Wynaad)—in Pandanus swamp.
 No specimens in MH.
- O. munnarensis** C.E.C. Fischer
 Munnar ghat road, High Range, Idikki Dt., Kerala.
 No specimens in MH.
- O. pykarensis** Gamble
 Pykara falls, Nilgiris, Tamil Nadu.
 Not located since the type collection.
- Plectronia pergracilis** (Bourd.) Gamble
 Colatoorpolay, Travancore,—in evergreen forests.
 Not located since the type collection.
- Psychotria barberi** Gamble
 Udubanparai, Anamalai Hills, Coimbatore Dt., Tamil Nadu & Piska Camp, near Munnar, Idikki Dt., Kerala.
 Not located since the type collection.
- P. globicephala** Gamble
 Courtallam, Tirunelveli Dt., Tamil Nadu.
 Not located since the type collection.

COMPOSITAE

- Anaphalis barnesii** C.E.C. Fischer
 High Ranges, Idikki Dt., Kerala.
 No specimens in MH.
- Centrantherum mayurii** C.E.C. Fischer
 Kemmangundi hills, Mysore, Karnataka.
 No specimens in MH.
- Helichrysum perlanigerum** Gamble
 Anamalai hills, at higher elevations, Coimbatore Dt., Tamil Nadu.
 Not located since the type collections.
- Vernonia anaimudica** Shetty & Vivek.
 Rajamallay,—Anaimudi slopes, Devicolam,

Idikki Dt., Kerala.

SYMPLOCACEAE

- V. anamallica** Bedd. ex Gamble
Anamalai higher ranges, Coimbatore Dt.,
Tamil Nadu.
Located from Pettimudi, Devicolam, Idikki
Dt., Kerala during 1965 & 1970.

- Symplocos candolleana** Brand
Anamalais, Coimbatore Dt., Tamil Nadu;
Coorg, Karnataka.
Very little known. No specimens in MH.

OLEACEAE

- V. gossypina** Gamble
Between Naterikal and Sengaltheri, Tirunel-
veli Dt., Tamil Nadu.
Located from Singampatti, Tirunelveli Dt.,
in 1958.

- Jasminum wightii** Clarke
Boluvampatty, Coimbatore Dt., Tamil
Nadu.
No specimens in MH.

- V. heynii** Bedd. ex Gamble
Travancore hills in Kerala.
Located from Mahendragiri hills, Kanya-
kumari Dt., Tamil Nadu in 1969.

ASCLEPIADACEAE

- V. membranacea** Bedd. ex S. Moore
Sispara, Nilgiris, Tamil Nadu & Attraima-
lais, Trivandrum Dt., Kerala.
No specimens in MH.

- Brachystelma bourneae** Gamble
Pulney hills, Madurai Dt., Tamil Nadu—
at low levels in eastern slopes.
No specimens in MH.

- V. multibracteata** Gamble
Peermade, Idikki Dt., Kerala.
No specimens in MH.

- B. brevitubulatum** (Bedd.) Gamble
Vellore, North Arcot Dt., Tamil Nadu—dry
rocky hills.
No specimens in MH.

- V. pulneyensis** Gamble
Banks of Pambar river at Kodaikanal, Ma-
durai Dt., Tamil Nadu.
No specimens in MH.

- B. glabrum** Hook. f.
Hills of Cuddapah, Andhra Pradesh.
No specimens in MH.

- V. recurva** Bedd. ex S. Moore
Anamalais, Coimbatore Dt., Tamil Nadu.
No specimens in MH.

- B. rangacharii** Gamble
Hassanur, Mysore, Karnataka.
Not located since the type collection.

- V. shevaroyensis** Gamble
Shevaroy hills, Salem Dt., Tamil Nadu.
Located in the type locality in 1966.

- B. volubile** Hook. f.
Cuddapah hills, Andhra Pradesh.
No specimens in MH.

- Senecio kundaicus** C.E.C. Fischer
Kundahs, Nilgiri hills, Tamil Nadu.
No specimens in MH.

- Caralluma diffusa** (Wt.) N.E. Br.
Coimbatore, Tamil Nadu—arid rocky hills.
No specimens in MH.

- S. mayurii** C.E.C. Fischer
Kemmangandi hills, Mysore, Karnataka.
No specimens in MH.

- C. nilagiriana** Kumari & Subba Rao
Anaikatty to Ebanad, Nilgiri Dt., Tamil
Nadu.

- Youngia nilgiriensis** Babcock
Sispara, Nilgiri Dt., Tamil Nadu.
No specimens in MH.

- Ceropegia beddomei** Hook. f.
Peermade, Idikki Dt., Cochin, Ernakulam
Dt., Kerala.
Located from Pachakkanam in Idikki Dt.,
during 1975.

C. brevicollis Hook. f.

Anamalai hills, Coimbatore Dt., Tamil Nadu.

No specimens in MH.

Marsdenia tirunelvelica Henry & Subr.

Agastyamalai hills, Tirunelveli Dt., Tamil Nadu.

Oianthus beddomei Hook. f.

Beigoor forests, Mysore, Karnataka & (Wynaad).

No specimens in MH.

Streptocaulon kleinii Wt. & Arn.

Deccan Peninsula (exact locality not known).
No specimens in MH.

Toxocarpus beddomei Gamble

Attraimalai hills, Tirunelveli Dt., Tamil Nadu.

Not located since the type collections.

Tylophora zeylanica Decne.

Ceylon; Travancore.

No specimens in MH.

BORAGINACEAE

Cordia diffusa Jacob

Nanjundapuram, Coimbatore Dt., Tamil Nadu; in and around Coimbatore town.

Tournefortia wightii Clarke

Deccan Peninsula (exact locality not known), probably Anamalai hills, Coimbatore Dt., Tamil Nadu.

No specimens in MH.

CONVOLVULACEAE

Argyreia arakuensis Balak.

Araku Valley, Visakhapatnam Dt., Andhra Pradesh—near a stream.

GESNERIACEAE

Didymocarpus lyrata Wt.

Courtallam, Tirunelveli Hills, Tamil Nadu, —in moist shady places.

No specimens in MH.

D. macrostachya Barnes

Ottaparai Ridge, High Range, Idikki Dt., Kerala.

No specimens in MH.

D. wightii Gamble

Sivagiri Hills in Tirunelveli Dt.; Anamalai Hills, Coimbatore Dt., Tamil Nadu.

Apparently very rare. No specimens in MH.

OROBANCHACEAE

Christisonia saulierei Dunn

Kodaikanal, Madurai Dt., Tamil Nadu.

No specimens in MH.

SCROPHULARIACEAE

Adenosma malabaricum Hook. f.

Malabar, Kerala.

No specimens in MH.

ACANTHACEAE

Adhatoda beddomei Clarke

S. Travancore.

Located from Sengumal Estate (Near Panagudi), Kanyakumari Dt., Tamil Nadu in 1972.

Andrographis beddomei Clarke

Nallamalais, Kurnool District; Lankamalai hills, Cuddapah Dt., Andhra Pradesh.

No specimens in MH.

A. nallamalayana Ellis

Ahobilam, Nallamalais, Kurnool Dt., Andhra Pradesh.

Subsequently collected in and around the type locality.

Dicliptera beddomei Clarke

Nallamalais, Kurnool Dt., Andhra Pradesh.

No specimens in MH.

Nilgirianthus circarensis (Gamble) Brem.

Strobilanthes circarensis Gamble

Hills of Visakhapatnam, Andhra Pradesh.
No specimens in MH.

Rostellularia simplex Wt.

Justicia notha Clarke
"Station not known"; subsequently collected along exposed dry grassy slopes, Kuthiraivetti, Singampatti, R.F., Tirunelveli Dt., Tamil Nadu in 1963.

Santapaua madurensis Balak. & Subr.

Nallakulam, Alagar hills, Madurai Dt., Tamil Nadu.

Stenosiphonium diandrum Wt.

Courtallam in Tirunelveli Dt., Tamil Nadu.
No specimens in MH.

S. setosum T. And.

Mysore or Carnatic.
No specimens in MH.

Strobilanthes dupeni Bedd. ex Clarke

Top of Nelliampathy Ghat, Palghat Dt., Kerala.

No specimens in MH.

VERBENACEAE

Premna glaberrima Wt.

Courtallam, Tirunelveli Dt., Tamil Nadu;
Coorg, Karnataka.
Located in Mukkali Forest (Red gravelly soil) in Palghat Dt., Kerala in 1966.

P. paucinervis (Clarke) Gamble

Anamalais, Coimbatore Dt., Tamil Nadu.
A very little known species.
No specimens in MH.

P. procumbens Moon

Ceylon, Mundanthorai in Papanasam R. F. of Tirunelveli Dt., Tamil Nadu.
No specimens in MH.

LABIATAE

Acrocephalus palniensis Muker.

Upper Pulneys, Madurai Dt., Tamil Nadu.
No specimens in MH.

Dysophylla rugosa Hook. f.

Tirunelveli Hills, Tamil Nadu.
No specimens in MH.

Leucas mukerjiana Subba Rao & Kumari

Cherukonda, Visakhapatnam Dt., Andhra Pradesh; subsequently collected from the type locality and Galikonda (Araku Valley side) in Visakhapatnam Dt.

Plectranthus bourneae Gamble

Pulney Hills (near Kodaikanal), Madurai Dt. and near Coonoor, Nilgiri Hills, Tamil Nadu—along streams especially in rocky places.
No specimens in MH.

P. fruticosus Hook. f.

Pulney hills, Madurai Dt., Nilgiris, and Anamalais, Coimbatore Dt., Tamil Nadu—along banks of lakes and streams.
No collections in MH.

P. lushopianus Gamble

Pulney hills at Kodaikanal, Mudurai Dt., Tamil Nadu—in shola forests.
No specimens in MH.

P. rivularis Wt. ex Hook. f.

Sispara in Nilgiris, and Anamalai Hills, Coimbatore Dt., Tamil Nadu—in wet places; Atrimalai Hills, Kerala.
No specimens in MH.

P. subincisus Benth.

Courtallam, Tirunelveli Dt., Dindigul, Madurai Dt., and Ceylon. Scarce.
No specimens in MH.

Pogostemon nilagiricus Gamble

Nilgiris, Tamil Nadu—outskirts of woods and in neglected broken ground.
No specimens in MH.

P. rotundatus Benth.

Deccan Peninsula (exact locality not known); Anamalais in Coimbatore Dt., Tamil Nadu.
No specimens in MH.

PODOSTEMACEAE

- Hydrobryum johnsonii** (Wt.) Willis
Malabar—in mountain streams.
No specimens in MH.

ARISTOLOCHIACEAE

- Apama barberi** Gamble
Kannikatti, Tirunelveli Dt., Tamil Nadu.
Located in evergreen forests of Agastyamalai, Tirunelveli Dt., during 1963.

PIPERACEAE

- Piper barberi** Gamble
Kannikatti, Tirunelveli Dt., Tamil Nadu.
A little known species. Located in the evergreen forests of Agastyamalai in Tirunelveli Dt., and Kilaviarumalai, Balamore in Kanyakumari Dt., Tamil Nadu during 1963 & 1976.

LAURACEAE

- Cinnamomum gracile** Hook. f.
Tirunelveli Hills and Anamalai hills, Coimbatore Dt., Tamil Nadu; Travancore.
Located in Agastyamalai, Tirunelveli Dt., Tamil Nadu in 1963.
- C. riparium** Gamble
Banks of Periyar river near Malayattur, Ernakulam Dt., foot of Coorg ghats, Karnataka, and Udubanparai, Anamalai in Coimbatore Dt., Tamil Nadu.
Not located since the type collections.
- C. travancoricum** Gamble
Chimunji, Travancore (Kerala) in evergreen forests.
Not located since the type collection.
- Litsea mysorensis** Gamble
Bisli ghat and Aglatti, Karnataka; Wynaad in Kerala.
No specimens in MH.

EUPHORBIACEAE

- Aporusa fusiformis** Thw.
Ceylon; Travancore hills.
Rather less so in Madras. Recently collected from Anaimudi, Idikki Dt., Kerala in 1966.
- Euphorbia santapau** Henry
Agastyamalai hills, Tirunelveli Dt., Tamil Nadu.
- Macaranga flexuosa** Wt.
Courtallam, Tirunelveli Dt., Tamil Nadu.
No specimens in MH.
- Phyllanthus narayanaswami** Gamble
Rampa Hills, Godavari, Andhra Pradesh.
Located in Cherukonda, Visakhapatnam Dt., Andhra Pradesh in 1966.
- Reidia beddomei** Gamble
Chokampatti hills, Tirunelveli Dt., Tamil Nadu, and hills of Travancore.
No specimens in MH.
- R. gageana** Gamble
South Tirunelveli, Tamil Nadu, and Cola-toorpolay, Kerala.
No specimens in MH.
- R. megacarpa** Gamble
Devala, Nilgiris, Tamil Nadu.
Not located since the type collection.
- R. singampattiana** Seb. & Henry
Kakachi, Singampatti R.F., Tirunelveli Dt., Tamil Nadu.
- R. stipulacea** Gamble
Anamalai, Coimbatore Dt., along edge of Pambar stream in thick undergrowth, Pulney hills, Madurai Dt., Tamil Nadu.
Not located since the type collection.

URTICACEAE

- Debregeasia ceylanica** Hook. f.
Ceylon; Anamalai Hills of Coimbatore Dt., Tamil Nadu; Hills of Travancore, Kerala.
Little known in South India.
Located in Pambanar, Velara-Near Neriya-mangalam, Idikki Dt., Kerala in 1965.

BURMANNIACEAE

- Haplothismia exannulata** Airy Shaw
Parambikulam, Trichur Dt., Kerala (Travancore—Cochin State).
No specimens in MH.

ORCHIDACEAE

- Acampe congesta** Lindl.
Malabar, Kerala; Ceylon.
No specimens in MH.
- Anoectochilus rotundifolius** (Blatter) Balak.
Odontochilus rotundifolius Blatter
High wavy Mountains, Madurai Dt., Tamil Nadu—in evergreen forests.
No specimens in MH.
- Bulbophyllum mysorensis** J. J. Smith
Hills of Mysore, Karnataka.
Apparently scarce.
No specimens in MH.
- Chilochista pusilla** (Willd.) Schlecht.
Cochin, Ernakulam Dt., Kerala. Nilgiris, Tamil Nadu; Ceylon.
Located recently in Ponmudi, Trivandrum Dt., and Peermade in Idikki Dt., Kerala.
- Chrysoglossum halbergii** Blatter
High Wavy Mountains, Madurai Dt., Tamil Nadu.
No specimens in MH.
- Cirrhopetalum acutiflorum** Hook. f.
Nilgiris, Tamil Nadu.
Apparently scarce. No specimens in MH.
- C. aureum** Hook. f.
Wynaad, Kerala.
No specimens in MH.
- C. elegantulum** (Rolfe.) J. J. Smith
Coorg, Karnataka.
Located in Kudini, Nilgiris, Tamil Nadu during 1972.
- Coelogyne mossiae** Rolfe
Nilgiri hills; Pulney hills, Madurai Dt., Tamil Nadu—epiphyte or lithophyte.

- Located in Rajamalay, Idikki Dt., Kerala in 1970.
- Dendrobium haemoglossum** Thw.
Ceylon; Wynaad.
Rare.
Located in Sultan's Battery, Calicut Dt., and Thekkady, Idikki Dt., Kerala during 1964 & 1972 respectively.
- Eria pseudoclavicaulis** Blatter
High Wavy Mountains, Madurai Dt., Tamil Nadu.
No specimens in MH.
- Eulophia macrostachya** Lindl.
Courtallam, Tirunelveli Dt., and Nilgiris, Tamil Nadu; Ceylon.
- Habenaria denticulata** Reichb. f.
Tamil Nadu in 1974.
- Habenaria denticulata** Reichb. f.
Nilgiri Hills, Tamil Nadu.
Very rare.
No specimens in MH.
- H. flabelliformis** Summerh.
Anaimudi slopes, Idikki Dt., Kerala.
No specimens in MH.
- H. polyodon** Hook. f.
H. fimbriata Wt.
Nilgiris, Tamil Nadu.
No specimens in MH.
- Liparis biloba** Wt.
Nilgiri hills, Tamil Nadu.
Located in Kollimund, Kundah range, Nilgiris during 1972.
- Paphiopedilum druryi** (Bedd.) Pfitz.
Kalakad Hills and Agastyamalai in Tirunelveli Dt., Tamil Nadu.
Recently reported to be collected from Agastyamalai hills.
No specimens in MH.
- Peristylus brachyphyllus** A. Rich.
Bababudan Hills in Karnataka and Nilgiri Hills in Tamil Nadu.
Located in grassland from Lakkadi—Kun-

dahs, Nilgiris, Tamil Nadu during 1972.

Proteroceras holttumii Joseph & Vajravelu
Eastern slope of Vellingiri hills, Coimbatore Dt., Tamil Nadu—epiphyte on moss clad branchlets of trees of the evergreen shola forests.

Taeniophyllum scaberulum Hook. f.
Kottayam, Kerala.
Very rare.
No specimens in MH.

Vanda wightii Reichb. f.
Nilgiri hills, Tamil Nadu.
Very rare. No specimens in MH.

Vanilla wightiana Lindl.
“Deccan Peninsula”—Travancore, Kerala.
No specimens in MH.

ZINGIBERACEAE

Amomum hypoleucum Thw.
Ceylon; Anamalai hills, Coimbatore Dt., Tamil Nadu.
No specimens in MH.

DIOSCOREACEAE

Dioscorea wightii Hook. f.
Courtallam; hills in Tirunelveli Dt., Tamil Nadu.
Located in the evergreen forests of Agast-yamalai hills in Tirunelveli Dt., Tamil Nadu, during 1963.

PANDANACEAE

Pandanus canaranus Warb.
Near Mangalore, Karnataka.
Little is known of this plant.
No collections in MH.

ARACEAE

Arisaema attenuatum Barnes & C.E.C. Fischer
High ranges near Munnar, Idikki Dt.,

Kerala—in evergreen forests and shady grassy places.

No specimens in MH.

A. auriculata Barnes
Nilambur ghat, Malappuram Dt., Wynaad, Kerala.
No specimens in MH.

A. peltatum C. E. C. Fischer
Near Munnar, Naimakad, Pallivasal, High Ranges, Idikki Dt., Kerala.
No specimens in MH.

A. psittiacus Barnes
Chunduvurrai and Mannavan Shola, High Ranges, Idikki Dt., Kerala.
Specimens from type locality available in MH.

Theriophonum sivaganganum (Ramam. & Seb.) Bogner
Esani forest, Sivaganga, Tamil Nadu.

CYPERACEAE

Ascopholis gamblei C.E.C. Fischer
Ooty, Nilgiris, Tamil Nadu.
No specimens in MH.

Fimbristylis aggregata C.E.C. Fischer
Anamalai Hills, Coimbatore Dt., Tamil Nadu.
No specimens in MH.

GRAMINEAE

Agrostis schmidii (Hook. f.) Bor
Calamagrostis schmidii Hook. f.
Nilgiri Hills, Tamil Nadu.
No specimens in MH.

Chrysopogon velutinus (Hook. f.) Bor
Andropogon velutinus Hook. f.
Cuddapah, Andhra Pradesh.
No specimens in MH.

Cymbopogon travancoriensis Bor
Courtallam, Tirunelveli Dt., Tamil Nadu.
No specimens in MH.

- Dichanthium pallidum** (Hook. f.) Stapf ex **I. fischeri** Bor
 C. E. C. Fischer
 Fisch.
 Nilgiri hills, Tamil Nadu.
 No specimens in MH.
- Dimeria bialata** C.E.C. Fischer
 Siradi, S. Kanara Dt., Karnataka.
 No specimens in MH.
- Eragrostis rottleri** Stapf
 Tranquebar, Tanjore Dt., Tamil Nadu.
 Little is known of this grass which has not
 been collected for well over 100 years
 (Bor).
 No specimens in MH.
- Heteropogon polystachyos** (Roxb.) Schult.
Andropogon polystachyos Roxb.
 Deccan (precise locality not known).
 A very obscure species.
 No specimens in MH.
- Isachne decanensis** Bor
 Ootacamund, Nilgiris, Tamil Nadu — in
 downs.
 No specimens in MH.
- I. meeboldii** C.E.C. Fischer
 Mysore, Karnataka—apparently grows in
 rice fields as a weed.
 No specimens in MH.
- I. setosa** C.E.C. Fischer
 Cochin, Ernakulam Dt., Kerala and Tra-
 vancore.
 Recently located in Lockhart gap, Devico-
 lam, Idikki Dt., Kerala during 1963.
- Limnopoa meeboldii** (C.E.C. Fischer) C. E.
 Hubbard
Coelachne meeboldii C.E.C. Fischer
 Chalakudi, Trichur Dt., Kerala—in tanks.
 No specimens in MH.
- Ochlandra beddomei** Gamble
 Wynaad, Kerala.
 No specimens in MH.
- Zenkeria sebastinei** Henry & Chandr.
 Agastyamalai, Tirunelveli Dt., Tamil Nadu.

REFERENCES

- SUBRAMANYAM, K. & NAYAR, M. P. (1971): Plant
 Taxonomy—its past role and future lines of action
 in India. *Bull. bot. Surv. India* 13 (1 & 2): 147-
 151.
- TINKER, J. (1971): *New Scientist* 50: 408.