

Phytodiversity in the Madukkarai Hills of South Western Ghats

Jayanthi Palanisamy * and Rajendran Arumugam

Department of Botany, School of Life Sciences, Bharathiar University, Coimbatore – 641 046, Tamil Nadu, India.

* Corresponding author. E-mail: pljayanthi10@gmail.com

ABSTRACT: Qualitative floristic surveys were carried out to assess the floristic diversity of the Madukkarai Hills in the Southern Western Ghats of Coimbatore District, Tamil Nadu. A total of 300 plant species belonging to 206 genera distributed among 72 families were enumerated. Poaceae were most dominant in surveys, with 24 genera and 35 species, followed by Euphorbiaceae and Fabaceae (18 species each), Amaranthaceae (13 species) and Acanthaceae (12 species). Documenting the patterns of species diversity and distribution creates a valuable database; useful for implementing better management and conservation of tropical forests.

DOI: 10.15560/10.4.883

INTRODUCTION

India possesses a rich biological diversity and incorporates two megadiversity centres. However, large concern exists on the conservation and sustainable utilization of these rich bioresources. To achieve the Convention on Biological Diversity (CBD) there is unequivocal need for field studies to collect and taxonomically document species information, as the first step to improving or launching conservation strategies. Regional floristic studies are thus integral, and can be achieved by intensive exploration of smaller areas. Preparation of the flora of smaller areas (such as districts, protected areas, unexplored areas, etc.) is a pre-requisite for the revision of the flora of a vast country like India. It has been estimated that about 48,000 species of plants, representing 10% of the world flora, are contained within the country — which is also the homeland of 167 important cultivated plant species, and 320 species of wild relatives of domesticated crops.

The flora of Southern Western Ghats regions of Coimbatore and Nilgiri mountains were botanically described by Gardener (1845), Lushington (1902), Fischer (1906, 1921) and Bladder (1908). The flora in Coimbatore city and its environs was studied by Chandrabose (1967), and Chandrabose and Nair (1988) published the Flora of Coimbatore. Some additions to the flora of Anamalai hills of Coimbatore district were compiled by Vajravelu and Joseph (1974). Excepting these, there remains no comprehensive floristic account of the floristic diversity of Coimbatore, particularly on the plants of the Madukkarai hills of Coimbatore and its environs. Hence, the present study is the first account on a floristic diversity of Madukkarai Hills of Coimbatore District of Tamil Nadu.

MATERIALS AND METHODS

Study site

Qualitative floristic surveys were conducted at regular intervals over an area of 10 km within the Madukkarai Hills (10°54' N, 76°5' E Southern Western Ghats; a

biodiversity hotspot of Coimbatore), with observation and collective of species in flowering and fruiting conditions. The name “Madukkarai” originated from the colloquial use of the Tamil words “Mathil” (means Great Wall) + “Karai” (means Shore); as it is situated along the hill sides of the Western Ghats. The habitats in which surveys were conducted included dry deciduous forest, moist deciduous forest and scrub jungle forest.

Floristic survey

A series of extensive floristic surveys were conducted during September 2010 and August 2011. The collected specimens were identified with the help of available monographs, taxonomic literature, and field keys (Hooker 1972–1897; Gamble and Fischer 1915–1936; Nair and Henry, 1983; Henry *et al.* 1987; Chandrabose and Nair 1988; Henry *et al.* 1989; Matthew 1991; Santapu and Henry 1994; Manickam and Irudayaraj 2003; Kabeer and Nair 2009). Collected plant specimens were cross-checked for authentication at the Madras Herbarium (MH) of Botanical Survey of India, Southern Circle, Coimbatore, and Tamil Nadu. The identified voucher specimens were deposited in 2011 at the Herbarium of Department of Botany, Bharathiar University, Coimbatore, Tamil Nadu.

RESULTS AND DISCUSSION

Species diversity

In all, 300 plant species belonging to 206 genera and 72 families have been recorded from the area under study. The monocots were represented by 59 species belonging to 35 genera and 7 families, and dicots contributing 241 species belonging to 169 genera and 65 families. Based on habit classification of the enumerated plants, the majority of species were herbs (176 species) followed by climbers (53 species), trees (39 species) and shrubs (32 species). The most species rich families included Poaceae, as the dominant family with 24 genera and 35 species, followed by Euphorbiaceae and Fabaceae (18 species each), Amaranthaceae (13 species), Acanthaceae (12

species), Asteraceae (11 species) and Asclepiadaceae, Convolvulaceae and Lamiaceae (10 species each).

Endemic and Vulnerable taxa

In the present study we report 13 rare endemic and vulnerable species: *Acalypha alnifolia*, *Barleria buxifolia*, *Canthim rheedei*, *Chlorophytum malabaricum*, *Cyanotis tuberosa*, *Dolichandrone atrobirens*, *Sesamum lacianatum*, *Argyreia pomacea* (endemic to peninsular India), *Caralluma diffusa*, *Barleria acuminata* (endemic to south India), *Grewia heterotrica* (endemic to the Western Ghats), *Jasminum malabaricum* (endemic to the South Western Ghats), and *Chloroxylon swietenia* (vulnerable). This classification of species occurrence status follows the flowering plants of Kerala by Sasidharan (2004). Notable among these, *Gloriosa superba* L. is a critically endangered species in the study area, and *Chloroxylon swietenia* DC. a vulnerable endemic.

Documenting the patterns of species diversity and their distribution creates a valuable database, useful for implementing better management and conservation of tropical forests. This holds particularly true for the patchy hill complexes of southern Western Ghats. Presently, many forest sites of southern Western Ghats are subjected to various anthropogenic pressures. Data of plant diversity, such as presented in the current study on trees and shrubs will be useful in highlighting the importance of these forests for species conservation and forest management.

ACKNOWLEDGMENTS: The authors are grateful to the Department of Botany, Bharathiar University, Coimbatore for providing laboratory facilities, immense help and support, and also extend the sincere thanks to UGC-RGNF who provide the financial support for this study.

LITERATURE CITED

Arora, R.K. and E. R. Nayar. 1984. Wild relatives of crop plants in India. *National Bureau of Plant Genetic Resources Science Monograph* 7: 90.
Blatter, E. 1908. Contribution to the Flora of North Coimbatore. *Journal of the Bombay Natural History Society* 8: 390–429.

Chandrabose, M. 1967. Floristic studies in Coimbatore city and its environs. *Bulletin Botanical Survey of India* 23: 96–99.
Chandrabose, M. and N.C. Nair, 1988. *Flora of Coimbatore*. Dehra Dun: Bishen Singh Mahendra Pal Singh. 356 pp.
Fischer, C.E.C., 1906. Shrubs and trees of the evergreen sholas of North Coimbatore. *Indian Forester* 32: 481–488.
Fischer, C. E. C. 1921. A survey of the flora of the Anamalai Hills in the Coimbatore District, Madras Presidency. *Records of Botanical survey of India* 9(1): 1–218.
Gamble, J. S. and C.E.C. Fischer. 1915–1936. *Flora of the Presidency Madras*. Vols. 1–3. Calcutta: Botanical Survey of India. 2017 pp. (Reprinted 1957; London: Adlard & Co. London).
Gardner, G. 1845. On the botanical visits to Madras, Coimbatore and Nilgiri Mountains. *London Journal of Botany* 4: 393–551.
Henry, A.N., V. Chithra, and N.P. Balakrishnan. 1989. *Flora of Tamil Nadu, India: Series I: Analysis*. Vol. 3. Coimbatore: Botanical Survey of India. 171 pp.
Henry, A.N., Kumari, G.R. and V. Chithra. 1987. *Flora of Tamil Nadu, India: Series I: Analysis*. Vol. 2. Coimbatore: Botanical Survey of India. 258 pp.
Hooker, J.D. 1972–1897. *Flora of British India*. Vol. 1–7. Ashford: Reeve and Co. 5568 pp.
Jain, S.K., and R.R. Rao. 1976. *A Handbook of Field and Herbarium Methods*. New Delhi: Today and Tomorrows Publishers. 157 pp.
Kabeer, K.A.A. and V.J. Nair. 2009. *Flora of Tamil Nadu-Grasses*. Coimbatore: Botanical Survey of India. 525 pp.
Lushington, A.W. 1902. Hill forests of the North Coimbatore. *Indian Forester* 28: 134–150.
Manickam, V.S. and V. Irudayaraj, 2003. *Pteridophyte Flora of Nilgiris, South India*. Dehra Dun: Bishen Singh Mahendra Pal Singh.
Matthew, K.M. 1991. *An Excursion Flora of Central Tamil Nadu*. Thiruchirappalli: Rapinat Herbarium. 682 pp.
Nair, N.C., and A.N. Henry. 1983. *Flora of Tamil Nadu: Series I: Analysis*. Vol. 1. Coimbatore: Botanical Survey of India. 184 pp.
Santapau, H., and A.N. Henry. 1994. *A Dictionary of the Flowering Plants in India*. New Delhi: CSIR. 198 pp.
Sasidharan, N. 2004. *Flowering Plants of Kerala*. Kerala Forest Reechi, Kerala: Research Institute. 597 pp.
Vajravelu, E. and J. Joseph. 1974. Additions to the flora of Anamalai Hills, Coimbatore District, Tamil Nadu. *Bulletin Botanical Survey of India* 13(3–4): 264–273.

SUBMITTED: June 2013

ACCEPTED: February 2014

PUBLISHED ONLINE: September 2014

EDITORIAL RESPONSIBILITY: Paul A. Egan

TABLE 1. Biodiversity of Madukkarai hills of Southern Western Ghats in Coimbatore. T – Tree; S – Shrub; CL – Climber; H – Herb.

S. No.	BOTANICAL NAME	Family name	Habit	Status	Vernacular name
1	<i>Abrus precatorius</i> Wall.	Fabaceae	CL	Common	Kundumani
2	<i>Abutilon hirtum</i> (L.) Sweet.	Malvaceae	S	Rare	Vadathutti
3	<i>Abutilon indicum</i> (L.) Sweet.	Malvaceae	S	Common	Thutti
4	<i>Acacia ferruginea</i> DC.	Mimosaceae	T	Rare	Velvelam
5	<i>Acacia leucophloea</i> (Roxb) Willd.	Mimosaceae	T	Rare	Velamaram
6	<i>Acacia nilotica</i> (L.) Willd.	Mimosaceae	T	Rare	Karu- velamaram
7	<i>Acalypha alnifolia</i> Klein ex Willd.	Euphorbiaceae	H	Endemic	–
8	<i>Acalypha indica</i> L.	Euphorbiaceae	H	Common	Kuppaimeni
9	<i>Achyranthes aspera</i> L.	Amaranthaceae	H	Common	Nai-uruvi
10	<i>Aegle marmelos</i> (L.) Corr.	Rutaceae	T	Common	Vivam
11	<i>Aerva lanata</i> (L.) A.L.Juss.	Amaranthaceae	H	Common	Poolapoo
12	<i>Aerva monsoniae</i> (Retz.) Mart.	Amaranthaceae	H	Rare	Perumpoolai
13	<i>Agave augustifolia</i> Haw.	Agavaceae	S	Common	Kathalai
14	<i>Agave cantula</i> Robx.	Agavaceae	S	Common	Anakathalai
15	<i>Ageratum conyzoides</i> L.	Asteraceae	H	Common	Pumppillu
16	<i>Alangium salvifolium</i> (L.f.) Wang.	Alangiaceae	T	Rare	Alangi
17	<i>Albizia odoratissima</i> (L.f.) Benth.var.mollis Benth.	Mimosaceae	T	Rare	Sowndal
18	<i>Aloe barbadensis</i> Miller.	Liliaceae	H	Rare	Chotthu kathalai
19	<i>Alternanthera pungens</i> H. B. K.	Amaranthaceae	H	Common	Mul-poonanganny
20	<i>Alternanthera sessilis</i> (L.) R.Br.	Amaranthaceae	H	Common	Poonanganny
21	<i>Alysicarpus monilifer</i> (L.) DC.	Fabaceae	H	Common	Kaasukkodi

TABLE 1. Continued.

S. No.	BOTANICAL NAME	Family name	Habit	Status	Vernacular name
22	<i>Alysicarpus rugosus</i> (Willd.) DC.	Fabaceae	H	Common	Sangupoo
23	<i>Amaranthus caudatus</i> L.	Amaranthaceae	H	Common	–
24	<i>Amaranthus spinosus</i> L.	Amaranthaceae	H	Common	Mullu- keerai
25	<i>Amaranthus tricolor</i> L.	Amaranthaceae	H	Common	Sirukkeerai
26	<i>Amaranthus viridis</i> L.	Amaranthaceae	H	Common	Kuppaikeerai
27	<i>Ampelocissus tomentosa</i> (Heyne ex Roth) Planch.	Vitaceae	CL	Rare	–
28	<i>Anacardium occidentale</i> L.	Anacardiaceae	T	Rare	Mundiri
29	<i>Andrographis echinoides</i> (L.) Nees.	Acanthaceae	H	Common	Koburam thanki
30	<i>Andrographis paniculata</i> (Burm. f.) Wall.	Acanthaceae	H	Rare	Nila-vembu
31	<i>Andropogon pumilus</i> Roxb.	Poaceae	H	Common	Panni-korai
32	<i>Anisochilus carnosus</i> (L.f.) Wall.	Lamiaceae	H	Rare	Saetruppun thazhai
33	<i>Anisomeles malabarica</i> (L.) R. Br.	Lamiaceae	H	Rare	Peyameratti
34	<i>Annona squamosa</i> L.	Annonaceae	T	Rare	Sita pazham
35	<i>Apluda mutica</i> L.	Poaceae	H	Common	Moongil pul
36	<i>Argemone mexicana</i> L.	Papaveraceae	H	Common	Nai-Kadugu
37	<i>Argyreia pomacea</i> (Roxb.) Choisy	Convolvulaceae	CL	Endemic	–
38	<i>Aristida adscensionis</i> L.	Poaceae	H	Common	Cheevam pul
39	<i>Aristida setacea</i> Retz.	Poaceae	H	Common	Thudappam pullu
40	<i>Aristolochia indica</i> L.	Aristolochiaceae	CL	Common	Perumarunthakodi
41	<i>Asparagus asiaticus</i> L.	Liliaceae	CL	Common	–
42	<i>Asparagus fysoni</i> Macbr.	Liliaceae	CL	Rare	–
43	<i>Asparagus racemosus</i> Willd.	Liliaceae	CL	Common	Thanneervittan kizhangu
44	<i>Asystasia gangetica</i> (L.) T.	Acanthaceae	H	Common	Meddaykeerai
45	<i>Atalantia monophylla</i> (L.) Correa	Rutaceae	T	Sporadic	Kattu elumichai
46	<i>Azadirachta indica</i> A. Juss.	Meliaceae	T	Common	Veepamaram
47	<i>Barleria acuminata</i> Nees.	Acanthaceae	H	Endemic	–
48	<i>Barleria buxifolia</i> L.	Acanthaceae	H	Endemic	–
49	<i>Barleria cristata</i> L.	Acanthaceae	H	Common	Kattu-kanagambaram
50	<i>Barleria cuspidata</i> Heyne ex Nees.	Acanthaceae	H	Common	Chillimul
51	<i>Barleria prionitis</i> L.	Acanthaceae	H	Common	Kodippachalai
52	<i>Begonia malabarica</i> Lam.	Begoniaceae	H	Rare	Sengurungu
53	<i>Bidens pilosa</i> L.	Asteraceae	H	Rare	–
54	<i>Biophytum sensitivum</i> (L.) DC.	Oxalidaceae	H	Sporadic	Mukkuthipoodu
55	<i>Blepharis repens</i> (Vahl) Roth.	Acanthaceae	H	Sporadic	–
56	<i>Boerhavia diffusa</i> L.	Nyctaginaceae	H	Common	Mookkaratti
57	<i>Boerhavia erecta</i> L.	Nyctaginaceae	H	Common	–
58	<i>Borassus flabellifer</i> L.	Arecaceae	T	Sporadic	Panai
59	<i>Brachiaria distachya</i> (L.) Stapf.	Poaceae	H	Common	Murungal pul
60	<i>Brachiaria ramosa</i> (L.) Stapf.	Poaceae	H	Common	Sanam pul
61	<i>Brachiaria remota</i> (Retz.) Haines.	Poaceae	H	Common	Shanipullu
62	<i>Brachiaria reptans</i> (L.) C.A.Gardner	Poaceae	H	Common	–
63	<i>Brassica juncea</i> (L.) Czern.	Brassicaceae	H	Common	Kadugu
64	<i>Bulbostylis barbata</i> (Rottb.) Clarke.	Cyperaceae	H	Common	Mukkuthikorei
65	<i>Bulbostylis puberula</i> (Poir) Clarke	Cyperaceae	H	Common	–
66	<i>Caesalpinia pulcherrima</i> (L.) Sw.	Caesalpinaceae	S	Sporadic	Mayilkonnai
67	<i>Calotropis gigantea</i> (L.) R. Br.	Asclepiadaceae	S	Common	Yerukku
68	<i>Calotropis procera</i> (Ait.) R.Br.	Asclepiadaceae	S	Rare	Vellerukku
69	<i>Canavalia mollis</i> Wallich.	Fabaceae	CL	Sporadic	–
70	<i>Canavalia virosa</i> (Roxb.) Wight & Arn.	Fabaceae	CL	Sporadic	–
71	<i>Canthium parviflorum</i> Lam.	Rubiaceae	T	Rare	Karay cheddi
72	<i>Canthium rheedi</i> DC.	Rubiaceae	S	Endemic	–
73	<i>Capparis sepiaria</i> L.	Capparidaceae	CL	Rare	Karunjurai
74	<i>Caralluma adscendens</i> (Roxb.) Haw.	Asclepiadaceae	H	Common	Muyalkombuchedi
75	<i>Caralluma diffusa</i> (Wight) N. E. Br.	Asclepiadaceae	H	Endemic	–
76	<i>Cardiospermum canescens</i> Wall.	Sapindaceae	CL	Rare	Peria- Mudakkathan
77	<i>Cardiospermum halicacabum</i> L.	Sapindaceae	CL	Rare	Mudakkathan
78	<i>Cassia auriculata</i> L.	Caesalpinaceae	S	Common	Aavaram
79	<i>Cassia fistula</i> L.	Caesalpinaceae	T	Rare	Konnai
80	<i>Cassia occidentalis</i> L.	Caesalpinaceae	H	Common	Pei- avarai

TABLE 1. Continued.

S. No.	BOTANICAL NAME	Family name	Habit	Status	Vernacular name
81	<i>Cassia siamea</i> Lam.	Caesalpinaceae	T	Sporadic	Malai avarai
82	<i>Catharanthus pusillus</i> (Murr.) G. Don.	Apocynaceae	H	Common	Paalai chetthai
83	<i>Catharanthus roseus</i> (L.) G. Don.	Apocynaceae	H	Rare	Nithyakalyani
84	<i>Celosia cristata</i> L.	Amaranthaceae	H	Rare	Kolikondai
85	<i>Cenchrus ciliaris</i> L.	Poaceae	H	Rare	Kolukkattai-pullu
86	<i>Cereus pterogonus</i> Lemaire	Cactaceae	S	Rare	Ottha kalli
87	<i>Ceropegia juncea</i> Roxb.	Asclepiadaceae	CL	Sporadic	–
88	<i>Chloris bournei</i> Rang. & Tadul.	Poaceae	H	Sporadic	Peria kuruttu pul
89	<i>Chloris inflata</i> Link.	Poaceae	H	Common	Kodai pullu
90	<i>Chloris montana</i> Roxb.	Poaceae	H	Common	–
91	<i>Chlorophytum tuberosum</i> (Roxb.) Baker.	Liliaceae	H	Rare	Kalkilangu
92	<i>Chloroxylon swietenia</i> DC.	Flinderaceae	T	Vulnerable	Porasu
93	<i>Chorophytum malabaricum</i> Baker.	Liliaceae	H	Endemic	–
94	<i>Chromolaena odorata</i> (L.) King & Robinson	Asteraceae	H	Common	–
95	<i>Chrysopogon fulvus</i> (Spreng.) Chiov.	Poaceae	H	Common	Cholappullu
96	<i>Cipadessa baccifera</i> (Roth.) Miq.	Meliaceae	S	Rare	Pulippan chedi
97	<i>Cissampelos pareira</i> L. var. <i>hisuta</i> (Buch. - Ham. ex DC.) Forman	Menispermaceae	CL	Common	Urikka kodi
98	<i>Cissus quadrangula</i> L.	Vitaceae	CL	Common	Perandai
99	<i>Cissus setosa</i> Roxb.	Vitaceae	CL	Sporadic	–
100	<i>Cleome gynandra</i> L.	Cleomaceae	H	Common	Nallavelai
101	<i>Cleome viscosa</i> L.	Cleomaceae	H	Common	Naivelai
102	<i>Clitoria ternatea</i> L.	Fabaceae	CL	Sporadic	–
103	<i>Coccinia grandis</i> (L.) Voigt.	Cucurbitaceae	CL	Sporadic	Kovai
104	<i>Cocculus hirsutus</i> (L.) Diels.	Menispermaceae	CL	Sporadic	Kattukodi
105	<i>Commelina benghalensis</i> L.	Commelinaceae	H	Common	Kanavaazhai
106	<i>Commiphora berryi</i> (Arn.) Engler	Burseraceae	S	Sporadic	Mullukiluvai
107	<i>Commiphora caudata</i> (Wight & Arn.) Engler.	Burseraceae	T	Rare	Kiluvai
108	<i>Corallocarpus epigaceus</i> (Rott. & Wiild.) Clarke	Cucurbitaceae	CL	Common	Akashagaruden
109	<i>Corchorus aestuans</i> L.	Tiliaceae	H	Common	–
110	<i>Corchorus capsularis</i> L.	Tiliaceae	H	Common	–
111	<i>Corchorus trilocularis</i> L.	Tiliaceae	H	Sporadic	–
112	<i>Cronton bonplandianum</i> Baill.	Euphorbiaceae	H	Sporadic	Reilpoondu
113	<i>Crossandra infundibuliformis</i> (L.) Nees.	Acanthaceae	H	Sporadic	Kanagambaram
114	<i>Crotalaria calycina</i> Schrank.	Fabaceae	H	Rare	Kilikondrai
115	<i>Crotalaria laburnifolia</i> L.	Fabaceae	S	Sporadic	–
116	<i>Crotalaria mysorensis</i> Roth.	Fabaceae	H	Sporadic	–
117	<i>Crotalaria verrucosa</i> L.	Fabaceae	H	Common	Gilukiluppai
118	<i>Cucumis dipsaceus</i> Ehrenb.	Cucurbitaceae	CL	Rare	–
119	<i>Cucumis trigonus</i> Roxb.	Cucurbitaceae	CL	Rare	Peya kumutti
120	<i>Curculigo orchiodes</i> Gaertn.	Hypoxidaceae	H	Rare	Nilappanaikizhangu
121	<i>Cyanotis arachnoidea</i> Clarke	Commelinaceae	H	Sporadic	–
122	<i>Cyanotis cristata</i> (L.) D. Don.	Commelinaceae	H	Sporadic	–
123	<i>Cynotis diffusa</i> Burm.f.	Commelinaceae	H	Sporadic	–
124	<i>Cynotis fasciculata</i> (Heyne ex Roth.) Schult.	Commelinaceae	H	Sporadic	–
125	<i>Cyanotis tuberosa</i> (Roxb.) Schult.	Commelinaceae	H	Endemic	–
126	<i>Cyanotis villosa</i> (Spreng.) Schult.	Commelinaceae	H	Sporadic	–
127	<i>Cymbopogon caesius</i> (Nees ex Hook. & Arn.) Stapf.	Poaceae	H	Sporadic	Kamakshi pullu
128	<i>Cymbopogon martinii</i> (Roxb.) in At. K. Gaz.	Poaceae	H	Sporadic	Kanam pullu
129	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	H	Common	Arugam pullu
130	<i>Cyperus rotundus</i> L.	Cyperaceae	H	Sporadic	Panni-korai
131	<i>Cyperus triceps</i> (Rottb.) Endl.	Cyperaceae	H	Sporadic	–
132	<i>Dactyloctenium aegyptium</i> (L.) Willd.	Poaceae	H	Common	–
133	<i>Datura metal</i> L.	Solanaceae	H	Common	Velladi-umathi
134	<i>Datura quercifolia</i> H.B.K.	Solanaceae	H	Rare	–
135	<i>Dendrophthoe falcata</i> (L.f.) Etting.	Loranthaceae	H	Sporadic	Pulluruvi
136	<i>Desmodium triflorum</i> (L.) DC.	Fabaceae	H	Sporadic	Air pullai
137	<i>Dichrostachys cinerea</i> (L.) Wight & Arn.	Mimosaceae	T	Sporadic	Vedathalaa
138	<i>Didymocarpus tomentosa</i> Wight	Gesneriaceae	H	Rare	–
139	<i>Digera muricata</i> (L.) Mart.	Amaranthaceae	H	Sporadic	Thoyya keera

TABLE 1. Continued.

S. No.	BOTANICAL NAME	Family name	Habit	Status	Vernacular name
140	<i>Digitaria ciliaris</i> (Retz.) Koeler.	Poaceae	H	Sporadic	Arisi pullu
141	<i>Dodonaea viscosa</i> (L.) Jacq.	Sapindaceae	S	Sporadic	Velari
142	<i>Dolichadrone atrovirens</i> (Heyne ex Roth.) Spegue.	Bignoniaceae	T	Endemic	Pumbadri
143	<i>Ecbolium viride</i> (Forssk.) Alston	Acanthaceae	H	Sporadic	Nilambari
144	<i>Echinochloa colona</i> (L.) Link.	Poaceae	H	Common	Karumpullu
145	<i>Eclipta prostrata</i> (L.) Mant.	Asteraceae	H	Rare	Karisalanganni
146	<i>Elephantopus scaber</i> L.	Asteraceae	H	Rare	Anashovadi
147	<i>Enneapogon schimperanus</i> (Hochst. ex A. Rich.) Renv.	Poaceae	H	Common	-
148	<i>Eragrostiella bifaria</i> (Vahl) Bor	Poaceae	H	Common	Oothu pul
149	<i>Eragrostis amabilis</i> (L.) W. & A.	Poaceae	H	Common	Poopul
150	<i>Eriochloa procera</i> (Retz.) C.E.	Poaceae	H	Common	Karungani pullu
151	<i>Eulophia epidendrea</i> (Koen.) Schltr.	Orchidaceae	H	Sporadic	-
152	<i>Euphorbia antiquorum</i> L.	Euphorbiaceae	S	Common	Sadura-kalli
153	<i>Euphorbia hirta</i> L.	Euphorbiaceae	H	Common	Amanpatchaiarisi
154	<i>Euphorbia tirucalli</i> L.	Euphorbiaceae	CL	Common	Thiru- kalli
155	<i>Euphorbia tortilis</i> Rottl.	Euphorbiaceae	S	Sporadic	Thirugukkalli
156	<i>Evolvulus alsinoides</i> L.	Convolvulaceae	H	Sporadic	Vishnukarandi
157	<i>Ficus benghalensis</i> L.	Moraceae	T	Rare	Alamaram
158	<i>Ficus racemosa</i> L.	Moraceae	T	Rare	Atthi
159	<i>Ficus religiosa</i> L.	Moraceae	T	Rare	Arasamaram
160	<i>Fimbristylis cymosa</i> R.Br.	Cyperaceae	H	Common	-
161	<i>Fimbristylis ovata</i> (Burm.) Kern.	Cyperaceae	H	Common	-
162	<i>Garcinia indica</i> (Thouars) Choisy	Clusiaceae	T	Sporadic	-
163	<i>Givotia rottleriformis</i> Griff.	Euphorbiaceae	T	Sporadic	-
164	<i>Glinus oppositifolius</i> (L.) DC.	Molluginaceae	H	Common	-
165	<i>Gloriosa superba</i> L.	Liliaceae	CL	Rare	Sengathal
166	<i>Glossocardia bosvallea</i> (L.f.) DC.	Asteraceae	H	Sporadic	-
167	<i>Gomphrena celosioides</i> Mart.	Amaranthaceae	H	Common	Pacha- Vadamalli
168	<i>Gomphrena globosa</i> L.	Amaranthaceae	H	Sporadic	Vadamalli
169	<i>Grewia heterotricha</i> Mast.	Tiliaceae	CL	Endemic	-
170	<i>Grewia rhamnifolia</i> Heyne	Tiliaceae	S	Sporadic	-
171	<i>Grewia tiliafolia</i> Willd	Tiliaceae	S	Rare	-
172	<i>Gymnema sylvestre</i> (Retz.) R. Br.	Asclepiadaceae	CL	Sporadic	Kannuminnayam kodi
173	<i>Gyrocarpus americanus</i> Jacq.	Hernandiaceae	S	Rare	Tanakku
174	<i>Heliotropium marifolium</i> Retz.	Boraginaceae	H	Sporadic	Thael Kodukkupoodu
175	<i>Heteropogon contortus</i> (L.) P. Beauv.	Poaceae	H	Common	Oosipul
176	<i>Hibiscus ovalifolius</i> (Forsk.) Vahl.	Malvaceae	H	Sporadic	Aruva- mookukerai
177	<i>Hibiscus panduriformis</i> Burm.	Malvaceae	H	Sporadic	-
178	<i>Holoptelea integrifolia</i> (Roxb.) Planch.	Ulmaceae	T	Rare	Avimaram
179	<i>Hybanthus enneaspermus</i> (L.) F.V. Muell.	Violaceae	H	Sporadic	Orilai thamarai
180	<i>Hydrophyllax maritima</i> L.f.	Rubiaceae	H	Common	-
181	<i>Hyptis suaveolens</i> (L.) Poir.	Lamiaceae	H	Sporadic	-
182	<i>Ichnocarpus frutescens</i> (L.) R. Br.	Apocynaceae	CL	Sporadic	-
183	<i>Indigofera linnaei</i> Ali.	Fabaceae	H	Common	Seppunerinji
184	<i>Indigofera nummularifolia</i> (L.) Livera.	Fabaceae	H	Common	-
185	<i>Ipomea pes-trigridis</i> L.	Convolvulaceae	CL	Common	Punnaikkirai
186	<i>Ipomoea indica</i> (Burm.f.) Merr.	Convolvulaceae	CL	Rare	-
187	<i>Ipomoea obscura</i> (L.) Ker-Gawl.	Convolvulaceae	CL	Common	Siruttalai
188	<i>Ipomoea sepiaria</i> Koenig ex Roem.	Convolvulaceae	CL	Rare	Talikkirai
189	<i>Ipomoea staphylina</i> Roem. & Schult.	Convolvulaceae	CL	Sporadic	Oonankodi
190	<i>Ipomoea wightii</i> (Wall) Choisy	Convolvulaceae	CL	Rare	-
191	<i>Jasminum angustifolium</i> (L.) Willd.	Oleaceae	CL	Rare	Kattumalligai
192	<i>Jasminum azoricum</i> L.	Oleaceae	CL	Rare	Ramar banam
193	<i>Jasminum malabaricum</i> Wight.	Oleaceae	CL	Endemic	-
194	<i>Jatropha curcas</i> L.	Euphorbiaceae	S	Common	Kottai chedi
195	<i>Jatropha gossypifolia</i> L.	Euphorbiaceae	S	Sporadic	Aatalai
196	<i>Jatropha villosa</i> Wight	Euphorbiaceae	S	Sporadic	Thanakku
197	<i>Justicia tranquebariensis</i> L. f.	Acanthaceae	H	Sporadic	Sivanarvembu
198	<i>Kalanchoe pinnata</i> (Lam.) Pers.	Crassulaceae	H	Rare	Runakalli
199	<i>Kedrostis foetidissima</i> (Jacq.) Cogn.	Cucurbitaceae	CL	Rare	Appakovai

TABLE 1. Continued.

S. No.	BOTANICAL NAME	Family name	Habit	Status	Vernacular name
200	<i>Lantana camara</i> L. var. <i>aculeata</i> (L.) Moldenke.	Verbenaceae	S	Sporadic	Unichedi
201	<i>Lantana wightiana</i> Wall.	Verbenaceae	H	Sporadic	–
202	<i>Leptadenia reticulata</i> (Retz.) Wight & Arn.	Asclepiadaceae	CL	Sporadic	Paalaikeerai
203	<i>Leucas aspera</i> (Willd.) Link.	Lamiaceae	H	Sporadic	Thumbai
204	<i>Martynia annua</i> L.	Martyniaceae	H	Common	Thelkodukkukai
205	<i>Melia azedarach</i> L.	Meliaceae	T	Rare	Malai vempu
206	<i>Merremia tridentata</i> (L.) Hall.	Convolvulaceae	H	Common	–
207	<i>Mimosa pudica</i> L.	Mimosaceae	H	Rare	Thottal-surungi
208	<i>Morinda coreia</i> Buch.	Rubiaceae	T	Sporadic	Sayamaram
209	<i>Moringa concanensis</i> Nimmo.	Moringaceae	T	Sporadic	Kattumurungai
210	<i>Mukia madraspatana</i> (L.) M. Roem.	Cucurbitaceae	CL	Common	Musumusukkai
211	<i>Nyctanthes arbor-tristis</i> L.	Nyctaginaceae	T	Rare	Pavalamalli
212	<i>Ocimum americanum</i> L.	Lamiaceae	H	Common	–
213	<i>Ocimum basilicum</i> L.	Lamiaceae	H	Sporadic	Karunthulasi
214	<i>Ocimum canum</i> Sims.	Lamiaceae	H	Sporadic	Nai-thulasi
215	<i>Ocimum tenuifolium</i> L.	Lamiaceae	H	Sporadic	Thulsi
216	<i>Oldenlandia corymbosa</i> L.	Rubiaceae	H	Rare	Parpadagam
217	<i>Opuntia stricta</i> (Haw.) Haw.	Cactaceae	S	Sporadic	Sappathikalli
218	<i>Orthosiphon aristatu</i> (Blume) Miq.	Lamiaceae	H	Sporadic	–
219	<i>Oxalis corniculata</i> L.	Oxalidaceae	H	Sporadic	Pulivayilai
220	<i>Panicum curviflorum</i> Hornem.	Poaceae	H	Sporadic	Samai-karunai
221	<i>Panicum maximum</i> Jacq.	Poaceae	H	Common	Ginio pullu
222	<i>Parthinium hysterophorus</i> L.	Asteraceae	H	Common	Vesapoodu
223	<i>Passiflora foetida</i> L.	Passifloraceae	CL	Sporadic	Mupparisavally
224	<i>Pavonia zeylanica</i> (L.) Car.	Malvaceae	H	Sporadic	Sithamuthi
225	<i>Pedaliium murex</i> L.	Pedaliaceae	H	Sporadic	Perunerunji
226	<i>Pennisetum hohenakeri</i> Hochst.	Poaceae	H	Sporadic	Manja pullu
227	<i>Pergularia daemia</i> (Forssk.) Chiov.	Asclepiadaceae	CL	Common	Verlipparuthi
228	<i>Perotis indica</i> (L.) Kuntze.	Poaceae	H	Common	Nari vaal pul
229	<i>Phyllanthus amarus</i> Schum.& Thonn.	Euphorbiaceae	H	Common	Kizhaanelli
230	<i>Phyllanthus maderaspatensis</i> Poir.	Euphorbiaceae	H	Sporadic	Mezhaanelli
231	<i>Phyllanthus reticulatus</i> L.	Euphorbiaceae	S	Sporadic	–
232	<i>Phyllanthus virgatus</i> Forst.	Euphorbiaceae	H	Sporadic	–
233	<i>Physalis minima</i> L.	Solanaceae	H	Rare	Sodakkuthakkaali
234	<i>Pilea microphylla</i> (L.) Liebm.	Urticaceae	H	Rare	–
235	<i>Pithacellobium dulce</i> (Rob.) Benth.	Mimosaceae	T	Rare	Kodukkapuli
236	<i>Plectranthus barbatus</i> Andrews.	Lamiaceae	H	Sporadic	Poolankilangu
237	<i>Pleurostylia opposita</i> (Wallich) Alston	Celestraceae	T	Sporadic	Chirupivari
238	<i>Plumbago zeylanica</i> L.	Plumbaginaceae	H	Common	Chithiramulam
239	<i>Polycarpaea corymbosa</i> (L.) Lam.	Caryophyllaceae	H	Common	–
240	<i>Polygala chinensis</i> L.	Polygalaceae	H	Sporadic	–
241	<i>Polygala rosmarinifolia</i> Wight & Arn.	Polygalaceae	H	Sporadic	–
242	<i>Portulaca pilosa</i> L.	Portulacaceae	H	Sporadic	–
243	<i>Pouzolzia zeylanica</i> (L.) Benn.	Urticaceae	H	Sporadic	Kallurki
244	<i>Premna corymbosa</i> (Burm.f.) Rottl.	Verbenaceae	S	Rare	Nalla pinna
245	<i>Premna tomentosa</i> Willd.	Verbenaceae	T	Sporadic	Malai thaekku
246	<i>Prosopis cineraria</i> (L.) Druce	Mimosaceae	T	Rare	Seemaimul
247	<i>Prosopis juliflora</i> (Sw) DC.	Mimosaceae	T	Common	Mul
248	<i>Psilanthus wightianus</i> (Wight & Arn.) J.	Rubiaceae	S	Sporadic	Vaedan
249	<i>Pterolobium hexapetalum</i> (Roth.) Sant.	Caesalpinaceae	CL	Sporadic	Karuindu
250	<i>Rhynchosia densiflora</i> (Roth) DC.	Fabaceae	CL	Sporadic	–
251	<i>Rhynchosia minima</i> (L.) DC.	Fabaceae	CL	Rare	Chittavarai
252	<i>Ricinus communis</i> L.	Euphorbiaceae	S	Rare	Aamanakku
253	<i>Rivea hypocrateriformis</i> (Desr.) Choisy	Convolvulaceae	CL	Rare	Masuttikodi
254	<i>Rorippa indica</i> (L.) Hiern.	Brassicaceae	H	Sporadic	Kattukadugu
255	<i>Sansevieria roxburghiana</i> Schult. & Schult.	Agavaceae	H	Sporadic	Marul
256	<i>Santalum album</i> L.	Santalaceae	T	Rare	Sandhanam
257	<i>Sarcostemma brunonianum</i> Wight & Arn.	Asclepiadaceae	CL	Sporadic	Kodikkalli
258	<i>Sebastiania chamaelea</i> (L.) Muell.	Euphorbiaceae	H	Sporadic	–
259	<i>Sehima nervosum</i> (Rottl.) Stapfin Prain.	Poaceae	H	Sporadic	Kuraitti

TABLE 1. Continued.

S. No.	BOTANICAL NAME	Family name	Habit	Status	Vernacular name
260	<i>Sesamum laciniatum</i> Klein ex Willd.	Pedaliaceae	H	Endemic	Kattu- ellu
261	<i>Sesamum orientale</i> L.	Pedaliaceae	H	Common	Ellu
262	<i>Setaria intermediata</i> Roem. & Schultes.	Poaceae	H	Common	–
263	<i>Setaria pumila</i> (Poir.) Roem. & Schultes.	Poaceae	H	Common	Korai pullu
264	<i>Setaria verticillata</i> (L.) P.Beauv.	Poaceae	H	Common	–
265	<i>Sida cordata</i> (Burm.f) Borssum	Malvaceae	H	Common	Palampasi
266	<i>Sida cordifolia</i> L.	Malvaceae	H	Common	Nila –thuthi
267	<i>Sida rhombifolia</i> L.	Malvaceae	H	Sporadic	Chitramutti
268	<i>Solanum pubescens</i> Willd.	Solanaceae	H	Sporadic	Kattusundai
269	<i>Solanum trilobatum</i> L.	Solanaceae	CL	Rare	Thooduvalai
270	<i>Spermacoce hispida</i> L.	Rubiaceae	H	Common	–
271	<i>Sporobolus indicus</i> (L.) R. Br. var. <i>flaccidus</i> (Roem. & Schult.) Veldkamp.	Poaceae	H	Rare	–
272	<i>Stachytarpheta jamaicensis</i> (L.) Vahl.	Verbenaceae	H	Rare	Seemai-Nayuruvi
273	<i>Strychnos potatorum</i> L.f.	Loganiaceae	T	Sporadic	Tettan- kottai
274	<i>Tagetes erecta</i> L.	Asteraceae	H	Rare	Kuruvichendu
275	<i>Tamarindus indica</i> L.	Caesalpinaceae	T	Rare	Puli
276	<i>Tarenna asiatica</i> (L.) Kuntze.	Rubiaceae	S	Sporadic	Thaerani
277	<i>Tecoma stans</i> (L.) Kunth.	Bignoniaceae	S	Sporadic	Thangarali
278	<i>Theprosia purpurea</i> (L.) Pers.	Fabaceae	H	Sporadic	Kolinji
279	<i>Thevetia peruviana</i> (Pers.) K.	Apocynaceae	S	Rare	Ponnarali
280	<i>Tinospora cordifolia</i> (Willd.) Miers.	Menispermaceae	CL	Sporadic	Chintil
281	<i>Toddalia asiatica</i> (L.) Lam.	Rutaceae	CL	Sporadic	–
282	<i>Trachys muricata</i> (L.) Pers.	Poaceae	H	Sporadic	Vennai thiraatti pul
283	<i>Tragia involucrata</i> L.	Euphorbiaceae	CL	Rare	Mapatan
284	<i>Tribulus lanuginosus</i> L. var. <i>orientalis</i> (Kerner) Nayar	Zygophyllaceae	H	Common	Nerungi
285	<i>Trichodesma indicum</i> (L.) R. Br.	Boraginaceae	H	Common	Kavizh-thumbai
286	<i>Trichodesma zeylanicum</i> (Burm.f.) R. Br.	Boraginaceae	H	Common	–
287	<i>Tridax procumbens</i> L.	Asteraceae	H	Common	Vettukkaayathalai
288	<i>Tylophora indica</i> (Burm.f.) Merr.	Asclepiadaceae	CL	Sporadic	Nangilaippirattai
289	<i>Urena lobata</i> L.	Malvaceae	H	Sporadic	Ottatti
290	<i>Vanda spathulata</i> Spreng.	Orchidaceae	H	Rare	–
291	<i>Vernonia cinerea</i> (L.) Less.	Asteraceae	H	Common	Mukuthipoodu
292	<i>Vicoa indica</i> (L.) Less.	Asteraceae	H	Sporadic	Jimikipoo
293	<i>Vigna aconitifolia</i> (Jacq.) Mar.	Fabaceae	CL	Common	Thulukka-payir
294	<i>Vigna trilobata</i> (L.) Verd.	Fabaceae	CL	Sporadic	Nari -payaru
295	<i>Viola pilosa</i> Blume.	Violaceae	H	Rare	Nilaisedachi
296	<i>Vitex negundo</i> L.	Verbenaceae	S	Rare	Nochi
297	<i>Waltheria indica</i> L.	Sterculiaceae	H	Sporadic	Shembudu
298	<i>Wrightia tinctoria</i> (Roxb.) R. Br.	Apocynaceae	T	Sporadic	Nilapalai
299	<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	T	Rare	Yellanthai
300	<i>Ziziphus oenoplia</i> (L.) Miller.	Rhamnaceae	T	Sporadic	Kottai-ilanthai
301	<i>Actiniopteris radiata</i> (Sw.) Link	Actiniopteridaceae	H	Sporadic	–
302	<i>Adiantum incisum</i> Forssk.	Adiantaceae	H	Rare	–
303	<i>Cheilanthes swartzii</i> Webb.	Cheilanthaceae	H	Rare	–
304	<i>Marsilea minuta</i> L.	Marsileaceae	H	Rare	–
305	<i>Bryum argenteum</i> P. Beauv.	Bryaceae	H	Rare	–
306	<i>Cyathodium aureonites</i> (Griff.) Mitt.	Targioniaceae	H	Rare	–
307	<i>Riccia crystallina</i> L.	Ricciaceae	H	Rare	–

PLATE 1



A: *Acalypha alnifolia* Klein.



B: *Argyreia pomacea* Choisy



C: *Aristolochia indica* L.



D: *Begonia malabarica* Lam.



E: *Caralluma diffusa* N. E. Br.



F: *Cardiospermum canescens* Wallich.



G: *Crotalaria laburnifolia* L.



H: *Dendrophthoe falcata* Etting

PLATE 2



A: *Grewia rhamnifolia* Heyne



B: *Lantana wightiana* Wallich



C: *Pterolobium hexapetalum* Sant.



D: *Rivea hypocarperiformis* Choisy



E: *Vanda spathulata* Spreng



F: *Wrightia tinctoria* R. Br.



G: *Cheilanthes swartzii* Webb.



H: *Cyathodium aureonites* Mitt.

PLATE 3



Diverse views of Madukkarai Hills.