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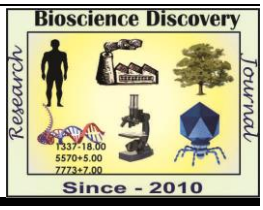

Vascular Plant Diversity of Nesamony Memorial Christian College Campus, Marthandam, Tamilnadu, India

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Abstract

The present study was carried out to document the vascular plant diversity of Nesamony Memorial Christian College campus (NMCC), Marthandam, Tamilnadu, India. Thecampus harbors 533 plant species belonging to 369 genera and 108 families. Among the plant species, 238 are wild/naturalized, 295 are cultivated/ornamental plants. The most diverse families in the campus include Euphorbiaceae (34 species), Fabaceae (29 species), Rubiaceae (26 species), Acanthaceae and Poaceae(25 species each), Asteraceae (21 species), Apocynaceae (19 species), Caesalpinaceae (18 species), Araceae and Malvaceae (16 species each), Amaranthaceae and Verbenaceae (13 species each), Moraceae (12 species), Convolvulaceae (11 species), Mimosaceae, Bignoniaceae and Solanaceae (12 species each), Agavaceae and Cucurbitaceae, (9 species each), Lamiaceae (8 species), Arecaceae, Asclepiadaceae, Capparidaceae, Commenlinaceae, Liliaceae and Nyctaginaceae (7 species each), Myrtaceae (6 species), Amaryllidaceae, Annonaceae, Combretaceae, Menispermaceae, Rutaceae, Scrophulariaceae and Oleaceae (5 species each), whereas 45 families were monospecific.Documentation of plant biodiversity of the colleges is also an essential factor that promotes to evaluate the total biodiversity wealth of any particular place such as town, city, district etc.

INTRODUCTION

Urban green space that includes streets lined with trees, parks and 'green' colleges and schools plays a vital role in the conservation of the local environment (Chow and Roth, 2006). Trees of the concretized urban environment render food to birds and other city-dwelling animals (Fernandez-Zuricic, 2000). They act as noise filters, air purifiers and pollutant traps and sequester carbon (McPherson*et al*., 1997; Beckett *et al*., 2000). Green spaces with lots of trees need to be created in cities as they act as 'lungs' in an otherwise concrete jungle. Documentation of existing green spaces of the urban environments is important to determine existing resources and to set targets for future improvements (Miller, 1996). Marthandam, a fast-growing urban space in the southernmost district of peninsular India, still harbors some patches of tropical dry evergreen forests. It is necessary to document the floristic wealth and also to identify those plant species that are in urgent need of conservation, as Marthandam city is highly disturbed by habitat alteration. Moreover, before implementing any conservation strategy it is of utmost necessity to understand the existing vegetation profile and to select the appropriate

species for urban greening. With this background, the present study was intended to assess the untapped floral resources and prepare a floral inventory of NMCC campus, Marthandam, Tamilnadu, India.

MATERIALS AND METHODS

Study Area

The floristic survey was carried out in about ~32 acres of NMCC, established in the year 1964, and one of the famous institutions of Higher learning in Kanyakumari Diocese of the Church of South India.

Climate and Soil

The climate of Kanyakumari district is warm and humid. Rainfall varies from 103 cm to 310 cm, and elevation from sea level to 1829 m above sea level. Gneissic rocks are predominant in this region. The soil is red, varying in the quantity of ferruginous element.

Campus Biodiversity

The scenic college campus harbours native tropical vegetation, coconut groves and plantations; there are still portions of the campus with native vegetation of tropical dry evergreen forest, tropical dry evergreen scrub, scrub savannah and thorn forests. The campus plant wealth and biodiversity is augmented by the plant wealth in the arboretum. The arboretum is endowed with some of the rare, endemic and endangered plants of the Western Ghats. The medicinal garden has a large number of medicinal plants. The varied topography, moderate rainfall and favourable agro-climatic conditions are responsible for the high species diversity in the campus.

Floristic Survey

The task of inventorying the plant diversity of NMCC campus was undertaken systematically and intensively from July 2012 to April 2013, to cover most species in flowering and fruiting stages and also to cover various seasons. The flora includes all plants growing wild in the natural/semi-natural environmental in the campus and also ornamental plants cultivated in the department gardens, and those introduced in the botanical garden of the Department of Botany. Plant species were identified using regional floras (Gamble, 1921-1935; Mathew, 1991; Nair and Henry,1983; Henry *et al*.,1987; 1989). For all documented species the binomial and author citation were checked thoroughly with IPNI (International Plant Names Index). Well-preserved specimens with voucher numbers were deposited in the Herbarium of the Department of Botany and Research Centre, Nesamony Memorial Christian College, Marthandam, Tamilnadu, India.

RESULTS

A total of 533 plant species which include 524 angiosperms and 9 Gymnosperms were enumerated from the NMCC campus. The 533 plant species (including angiosperms and gymnosperms) belonged to 369 genera and 108 families.

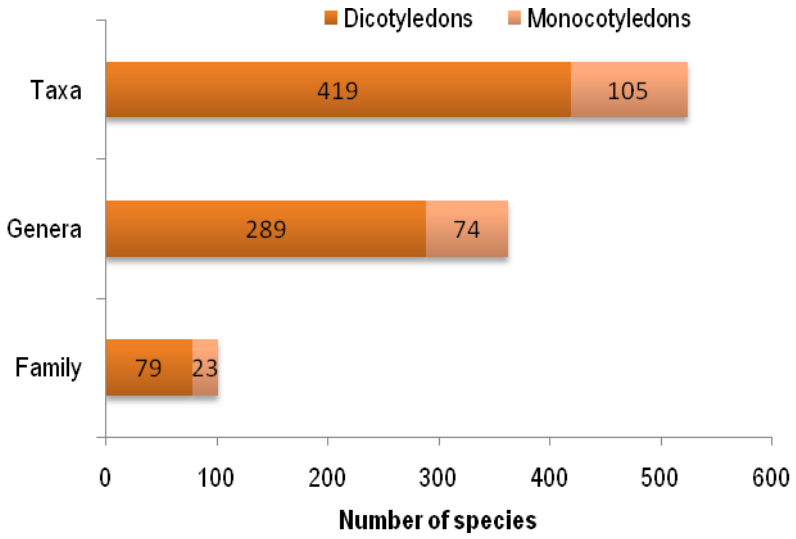

Figure 1.Classification of angiosperm taxa of the study area.

Among the plant species, 238 are wild/naturalized, 295 are cultivated/ornamental plants. Of the 108 families, 102 belonged to angiosperms and 6 were gymnosperms (Araucariaceae, Casuarinaceae, Cupressaceae, Cycadaceae, Pinaceae and Zamiaceae). Of these, angiosperm was the most dominant with 524 taxa belonging to 361 genera and 102 families. Gymnosperms (9 taxa) were represented in the study area. Among angiosperms, dicotyledons were represented by 79 families, 289 genera and 419 species; monocotyledons by 23 families, 74 genera and 105 species (Figure 1); Gymnosperms by 6 families, 8 genera and 9species.

The most diverse families in the campus include Euphorbiaceae (34 species), Fabaceae (29 species), Rubiaceae (26 species), Poaceae (25 species),Acanthaceae (24 species), Asteraceae (21 species), Apocynaceae (19 species), Caesalpinaceae (18 species), Araceae and Malvaceae (16 species each), Amaranthaceae and Verbenaceae (13 species each), Moraceae (12 species), Convolvulaceae (11 species), Mimosaceae, Bignoniaceae and Solanaceae(12 species each), Agavaceaeand Cucurbitaceae, (9 species each), Lamiaceae (8 species), Arecaceae, Asclepiadaceae, Capparidaceae, Commenlinaceae, Liliaceaeand Nyctaginaceae (7 species each), Myrtaceae (6 species), Amaryllidaceae, Annonaceae,Combretaceae, Menispermaceae, Rutaceae, Scrophulariaceae andOleaceae(5 species each), whereas 45 families were monospecific.

For all the enumerated wild and naturalized plant species, information such as botanical name, family and habit are provided. Contribution of herbaceous plants to total diversity is the maximum, i.e. 204 species (38%), followed by shrubby plants-139 species (26%), trees-126species (24%) and climbers including creeping plants- 64 species (12%)(Figure 2).

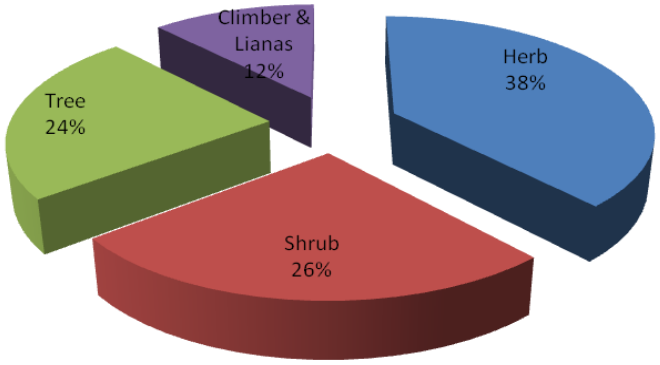

Figure 2.Habitwise distribution of plant species in NMCC campus.

A large number of exotic flora were reported from the campus of NMCC which include *Acacia nilotica,Ageratum conyzoides*, *Annonasquamosa*, *Asparagus racemosus*, *Bauhinia purpurea*, *Cassia occidentalis*, *Chenopodium album*, *Clitoriaternatea*, *Crotolariamedicaginea*, *Croton sparsiflorus*, etc. The campus ofNesamony Memorial Christian Collegehas several artificial ponds and pools which support aquatic plants like *Nympheaalba*, *N. stellata*, *Nelumbo nucifera*, *Limnophila heterophylla*, *Pistiastratiotes*, *Eichornia crassipes*, *Hydrilla verticillata*, *Vallisnaria* spiralis and *Monochoria vaginalis*.

Discussion

Studies of biodiversity have now assumed greater significance as ecologists try desperately to document global biodiversity in the face of unprecedented perturbations, habitat loss and extinction rates. The present study suggests that the campus of NMCCis rich in natural vascular flora, though the floristic composition is dominated by angiosperms. Recent studies on the flora of Pondicherry University Campus (Parthasarathy *et al*., 2012), Scott Christian College Campus (Brintha *et al*., 2012; 2015a; 2015b) and Bharathiar University Campus (Rajendran *et al*., 2014) suggested that the floristic composition is dominated by angiospermic plants. Geographical distribution of the plant species reveals that flora of American origin (exotic species) dominate the exotic floristic composition of NMCC campus. Other studies also suggest the dominance of the

Table 1. Plant Species Recorded in the Study Area.

Sl.No	Botanical Name	Family	Habit	Class
1	*Abelmoschus esculentus* (L.) Moench	Malvaceae	Shrub	Dicot
2	*Abrus fruticulosus* Sensu Bret.	Fabaceae	Climber	Dicot
3	*Abrus precatorius* L.	Fabaceae	Climber	Dicot
4	*Abutilon indicum* (L.) Sweet	Malvaceae	Shrub	Dicot
5	*Acacia auriculiformis* A.Cunn.ex. Benth	Mimosaceae	Tree	Dicot
6	*Acacia latronum* (L.f.) Willd.	Mimosaceae	Tree	Dicot
7	*Acacia mangium* Willd.	Mimosaceae	Tree	Dicot
8	*Acalypha chamaedrifolia* (Lam.) Mull. Arg.	Euphorbiaceae	Herb	Dicot
9	*Acalypha hispida* Burm.f	Euphorbiaceae	Shrub	Dicot
10	*Acalypha indica* L.	Euphorbiaceae	Shrub	Dicot
11	*Acalypha wilkesiana* Mull. Arg.	Euphorbiaceae	Shrub	Dicot
12	*Acanthocereus tetragonus* (L.) Hum	Cactaceae	Shrub	Monocot
13	*Acanthus ilicifolius* L.	Acanthaceae	Shrub	Dicot
14	*Achyranthes aspera* L.	Amaranthaceae	Herb	Dicot
15	*Adenanthera pavonina* L.	Mimosaceae	Tree	Dicot
16	*Adenium obesum* (Forssk.) Roem. & Schult.	Apocyanaceae	Shrub	Dicot
17	*Aegle marmelos* (L.) Correa.	Rutaceae	Tree	Dicot
18	*Aerva lanata* (L.) Juss.	Amaranthaceae	Herb	Dicot
19	*Aeschynomene indica* L.	Fabaceae	Herb	Dicot
20	*Agathis giganaria* L.	Araucariaceae	Tree	Gymnosperm
21	*Ageratina adenophora* (Spreng.) R.M. King & H. Rob.	Asteraceae	Herb	Dicot
22	*Ageratum conyzoides* (L.) L.	Asteraceae	Herb	Dicot
23	*Aglaonema commutatum* Schott.	Araceae	Herb	Monocot
24	*Aglaonema crispum* (Pitcher & R. F. Manda) Nicolson	Araceae	Herb	Monocot
25	*Ailanthes excelsa* Roxb.	Simaroubaceae	Tree	Dicot
26	*Ailanthes triphysa* (Desst.) Alston.	Simaroubaceae	Tree	Dicot
27	*Albizia lebbeck* (L.) Willd.	Mimosaceae	Tree	Dicot
28	*Allamanda blanchetii* A. DC.	Apocyanaceae	Shrub	Dicot
29	*Allamanda cathartica* L.	Apocyanaceae	Shrub	Dicot
30	*Allium cepa* L.	Liliaceae	Herb	Monocot
31	*Allmania nodiflora* (L.) R.Br. ex. Wight	Amaranthaceae	Herb	Dicot
32	*Alocasia calodora* (H. W. Schott) G. Don.	Araceae	Herb	Monocot
33	*Alocasia micholitziana* Sander	Araceae	Herb	Monocot
34	*Alocasia sanderiana* (Schott) G. Don	Araceae	Herb	Monocot
35	*Aloe americana* L.	Liliaceae	Herb	Monocot
36	*Alpinia galanga* L.	Zingiberaceae	Herb	Monocot
37	*Alpinia pupurata* Schum.	Zingiberaceae	Herb	Monocot
38	*Alstonia scholaris* (L.) R. Br.	Apocyanaceae	Tree	Dicot
39	*Alternanthera brasiliana* (L.) Kuntze	Amaranthaceae	Herb	Dicot
40	*Alternanthera pungens* Kunth	Amaranthaceae	Herb	Dicot
41	*Alysicarpus monilifer* (L.) DC	Fabaceae	Herb	Dicot

42	*Alysicarpus vaginalis* (L.). DC	Fabaceae	Herb	Dicot
43	*Amaranthus spinosus* L.	Amaranthaceae	Herb	Dicot
44	*Amaranthus tricolor* L.	Amaranthaceae	Herb	Dicot
45	*Amaranthus viridis* L.	Amaranthaceae	Herb	Dicot
46	*Amaryllis reticulata* L. Her.	Amaryllidaceae	Herb	Monocot
47	*Amischocphacelus axillaris* (L.)Rao & Kam	Commelinaceae	Herb	Monocot
48	*Ammania vaccifera* L.	Lythraceae	Herb	Dicot
49	*Amorphophallus companulatus* Decne.	Araceae	Shrub	Monocot
50	*Anacardium occidentale* L.	Anacardiaceae	Tree	Dicot
51	*Anamirta cocculus* L.	Menispermaceae	Climber	Dicot
52	*Ananas comosus* (L.) Merr.	Bromiliaceae	Herb	Monocot
53	*Andrographis echioides* (L.) Nees	Acanthaceae	Herb	Dicot
54	*Andrographis paniculata* (Burm.f) Nees	Acanthaceae	Herb	Dicot
55	*Annona reticulata* L.	Annonaceae	Tree	Dicot
56	*Annona squamosa* L.	Annonaceae	Tree	Dicot
57	*Anthurium andreanum* CV.	Araceae	Herb	Monocot
58	*Anthurium clarinervianum* Matuda	Araceae	Herb	Monocot
59	*Antigonan leptopus* HK. Arn	Polygonaceae	Herb	Dicot
60	*Apluda mutica* L.	Poaceae	Herb	Monocot
61	*Arathraxon castratus* (Griff.) V. Naray	Poaceae	Herb	Monocot
62	*Araucaria columnaris* (Forster) Hook.f	Araucariaceae	Tree	Gymnosperm
63	*Areca catechu* L.	Arecaceae	Tree	Monocot
64	*Aristida hystrix* L.f	Poaceae	Herb	Monocot
65	*Aristida setaceae* Thrin.	Poaceae	Herb	Monocot
66	*Aristolochia indica* L.	Aristolochiaceae	Climber	Dicot
67	*Artabotrys hexapetalus* (L.f.) Bhandari	Annonaceae	Liana	Dicot
68	*Artabotrys honkongensis* Hance	Annonaceae	Liana	Dicot
69	*Artocarpus communis* Forst.	Moraceae	Tree	Dicot
70	*Artocarpus heterophyllus* Lam.	Moraceae	Tree	Dicot
71	*Artocarpus hirsutus* Lam.	Moraceae	Tree	Dicot
72	*Asparagus densiflorus* (Kunth.) Jessop	Liliaceae	Climber	Monocot
73	*Asparagus racemosus* Willd.	Liliaceae	Climber	Monocot
74	*Asystasia gangetica* (L.) T. Anderson	Acanthaceae	Herb	Dicot
75	*Averrhoa carambola* L.	Averrhoaceae	Tree	Dicot
76	*Axonopus compressus* (Sw.) P. Beauv.	Poaceae	Herb	Monocot
77	*Azadirachta indica* A. Juss.	Meliaceae	Tree	Dicot
78	*Baccoba moneri* L.	Scrophulariaceae	Herb	Dicot
79	*Bambusa arundinaceae* (Retz.) Roxb.	Bambusaceae	Tree	Monocot
80	*Bambusa vulgaris* Schrader ex J.C Wendland	Bambusaceae	Tree	Monocot
81	*Bambusha heterostachya* (Munro) Hottum	Bambusaceae	Tree	Monocot
82	*Barleria buxifolia* L.	Acanthaceae	Herb	Dicot
83	*Barleria cuspidata* F. Heyne ex Nees	Acanthaceae	Shrub	Dicot
84	*Basella alba* L.	Basellaceae	Climber	Dicot
85	*Bauhinia biloba* L.	Caesalpiniaceae	Shrub	Dicot
86	*Bauhinia purpurea* L.	Caesalpiniaceae	Shrub	Dicot
87	*Bauhinia tomentosa* L.	Caesalpiniaceae	Shrub	Dicot

88	*Begonia grandis* Dryand.	Begoniaceae	Herb	Dicot
89	*Benkara malabaria* Lam.	Rubiaceae	Shrub	Dicot
90	*Biophytum reinwardfii* (Zuee.) Klotzoh.	Oxalidaceae	Herb	Dicot
91	*Blepharis maderaspatensis* (L.) Heyne ex Roth	Acanthaceae	Herb	Dicot
92	*Boerhavia diffusa* L.	Nyctaginaceae	Herb	Dicot
93	*Boerhavia erecta* L.	Nyctaginaceae	Herb	Dicot
94	*Bombax ceiba* L.	Bombaceae	Tree	Dicot
95	*Borassus flabellifer* L.	Arecaceae	Tree	Monocot
96	*Bougainvillea spectabilis* Willd	Nyctaginaceae	Shrub	Dicot
97	*Brachiaria distachya* (L.) Stapf.	Poaceae	Herb	Monocot
98	*Brachiaria ramosa* (L.) Stapf.	Poaceae	Herb	Monocot
99	*Brachiaria setigera* (Retz.) C.E.Hubb.	Poaceae	Herb	Monocot
100	*Breynia retusa* (Dennst.) Alston	Euphorbiaceae	Shrub	Dicot
101	*Bryophyllum pinnatum* (Lam.) Oken	Crassulaceae	Herb	Dicot
102	*Butea monosperma* (Lam). Taub.	Fabaceae	Tree	Dicot
103	*Caesalpinia pulcherrima* (L.) Sw.	Caesalpiniaceae	Shrub	Dicot
104	*Caesalpinia sappan* L.	Caesalpiniaceae	Tree	Dicot
105	*Caladium bicolor*	Araceae	Herb	Monocot
106	*Calliandra surinamensis* Benth	Mimosaceae	Shrub	Dicot
107	*Callistemon lanceolatus* (Sm.) Sweet	Mimosaceae	Shrub	Dicot
108	*Calophyllum inophyllum* L.	Clusiaceae	Tree	Dicot
109	*Calotropis gigantea* (L.) Dryand.	Asclepiadaceae	Shrub	Dicot
110	*Canavalia ensiformis* Sensu Baker.	Fabaceae	Climber	Dicot
111	*Canna indica* L.	Cannaceae	Herb	Monocot
112	*Canthium coromandelicum* (Brum.f) Alston	Rubiaceae	Shrub	Dicot
113	*Canthium dicoccum* (Gaertn.) Teijsm & Binn	Rubiaceae	Tree	Dicot
114	*Canthium parviforum* Lam.	Rubiaceae	Shrub	Dicot
115	*Capparis brevispina* DC.	Capparaceae	Shrub	Dicot
116	*Capparis zeylanica* L.	Capparaceae	Climber	Dicot
117	*Capsicum annum* L.	Solanaceae	Herb	Dicot
118	*Cardiospermum helicacabum* L.	Sapindaceae	Climber	Dicot
119	*Carica papaya* L.	Caricaceae	Tree	Dicot
120	*Carissa carandas* L.	Apocynaceae	Shrub	Dicot
121	*Carissa spinarum* L.	Apocynaceae	Shrub	Dicot
122	*Caryota urens* L.	Arecaceae	Tree	Monocot
123	*Cascabela thevetia* (L.) Lippold	Apocynaceae	Shrub	Dicot
124	*Cassia fistula* L.	Caesalpiniaceae	Tree	Dicot
125	*Cassia roxburghii* DC.	Caesalpiniaceae	Shrub	Dicot
126	*Casuarina equisetifolia* Forst. & Forst	Casurinaceae	Tree	Gymnosperm
127	*Catharanthus roseus* (L.) G. Don.	Apocynaceae	Herb	Dicot
128	*Ceiba pentandra* (L.) Gaertn.	Malvaceae	Tree	Dicot
129	*Celastrus paniculatus* Willd.	Celastraceae	Shrub	Dicot
130	*Celosia argentea* L.	Amaranthaceae	Herb	Dicot
131	*Centella asiatica* (L.) Urban	Apiaceae	Herb	Monocot
132	*Centratherum punctatum Cass.*	Asteraceae	Shrub	Dicot
133	*Centrosema pubescens* Benth.	Fabaceae	Climber	Dicot

134	*Ceropegia candelabrum* L.	Asclepiadaceae	Climber	Dicot
135	*Ceropegia juncea* (Roxb.)	Asclepiadaceae	Climber	Dicot
136	*Chloris barbata* SW.	Poaceae	Herb	Monocot
137	*Chloris wightiana* Nees ex Steud.	Poaceae	Herb	Monocot
138	*Chrysalidocarpus lutesens* H. Wendl.	Arecaceae	Tree	Monocot
139	*Chrysanthemum indicum* L.	Asteraceae	Herb	Dicot
140	*Chrysothemis pulchella* (Donn ex Sims) Dcne.	Gesneriaceae	Herb	Dicot
141	*Cinnamomum verum* J.S Perst. Rostl	Lauraceae	Tree	Dicot
142	*Cipadessa baccifera* Roth	Meliaceae	Tree	Dicot
143	*Cissampelos pareira* L.	Menispermaceae	Climber	Dicot
144	*Cissus quadrangularis* L.	Vitaceae	Climber	Monocot
145	*Cissus vitiginea* L.	Vitaceae	Climber	Monocot
146	*Citrullus colocynthis* (L.) Schrad.	Cucurbitaceae	Climber	Dicot
147	*Citrullus lanatus* (Thunb.) Matsum. & Nakai	Cucurbitaceae	Climber	Dicot
148	*Citrus aurantifolia* (Christon. & Panr.) Swingle	Rutaceae	Herb	Dicot
149	*Cleome aspera* J. Koenig ex DC.	Capparidaceae	Shrub	Dicot
150	*Cleome gynandra* L.	Capparidaceae	Herb	Dicot
151	*Cleome rutidosperma* DC.	Capparidaceae	Herb	Dicot
152	*Cleome viscosa* L.	Capparidaceae	Herb	Dicot
153	*Clerodendrum infortunatum* Lour.	Verbenaceae	Shrub	Dicot
154	*Clerodendrum japonicum* Van Geert C. Morren.	Verbenaceae	Shrub	Dicot
155	*Clerodendrum thomsoniae* Balf.	Verbenaceae	Shrub	Dicot
156	*Clitoria ternatea* L.	Fabaceae	Climber	Dicot
157	*Coccinia grandis* (L.) Voigt	Cucurbitaceae	Climber	Dicot
158	*Cocos nucifera* L.	Arecaceae	Tree	Monocot
159	*Codariocalyx motorius*	Fabaceae	Shrub	Dicot
160	*Codiaeum variegatum* (L.) A.Juss	Euphorbiaceae	Shrub	Dicot
161	*Coffea canephora* Pierre ex A. Froehner	Rubiaceae	Shrub	Dicot
162	*Colocasia esculenta* (L.) Schott	Araceae	Herb	Monocot
163	*Combretum indicum* (L.)DeFilipps	Combretaceae	Climber	Dicot
164	*Commelina benghalensis* L.	Commelinaceae	Herb	Monocot
165	*Commelina clavatta* C.B. Clarke	Commelinaceae	Herb	Monocot
166	*Commelina paleata* Hassk.	Commelinaceae	Herb	Monocot
167	*Corallocarpus epigaeus* Roettl.	Cucurbitaceae	Climber	Dicot
168	*Corchorus aestuans* L.	Malvaceae	Herb	Dicot
169	*Cordia sebestena* L.	Boraginaceae	Tree	Dicot
170	*Cordyline fruticosa* (L.) A. Chevalier	Agavaceae	Shrub	Monocot
171	*Cordyline terminalis* L.	Agavaceae	Shrub	Monocot
172	*Coreopsis auriculata* L.	Asteraceae	Herb	Dicot
173	*Corypha umbrallifera* L.	Nyctaginaceae	Tree	Dicot
174	*Cosmos bipinnatus* Cav.	Asteraceae	Shrub	Dicot
175	*Cosmos sulphureus* Cav.	Asteraceae	Shrub	Dicot
176	*Costus pictus* D.Don ex Lindl	Zingiberaceae	Shrub	Monocot
177	*Costus speciosus* Koen.	Zingiberaceae	Shrub	Monocot
178	*Couropita gaianensis* Aubl.	Lecythidaceae	Tree	Dicot
179	*Crataeva magna* (Lour.) DC.	Capparaceae	Shrub	Dicot

180	*Crinum asiaticum* L.	Amaryllidaceae	Herb	Monocot
181	*Crinum latiflolium* L.	Amaryllidaceae	Herb	Monocot
182	*Crossandra infundibuliformis* (L.) Nees	Acanthaceae	Herb	Dicot
183	*Crossandra nilotica* Oliv.	Acanthaceae	Herb	Dicot
184	*Crotalaria juncea* L.	Fabaceae	Herb	Dicot
185	*Crotalaria retusa* L.	Fabaceae	Herb	Dicot
186	*Crotalria verrucosa* L.	Fabaceae	Herb	Dicot
187	*Croton bonplandianus* Baill.	Euphorbiaceae	Herb	Dicot
188	*Croton hirtus* L. Her.	Euphorbiaceae	Herb	Dicot
189	*Cryptostegia grandiflora* Roxb. ex R. Br.	Apocynaceae	Shrub	Dicot
190	*Cucumis sativus* L.	Cucurbitaceae	Climber	Dicot
191	*Cucurbita maxima* Duchesne	Cucurbitaceae	Climber	Dicot
192	*Cupressus sempervirens* L.	Cupressaceae	Tree	Gymnosperm
193	*Curculigo orchioides* Gaertn	Amaryllidaceae	Herb	Monocot
194	*Cuscuta reflexa* Roxb.	Convolvulaceae	Herb	Dicot
195	*Cyanotis cristata* (L.) D.Don.	Commelinaceae	Herb	Monocot
196	*Cyanthillium cinereum* (L.) H. Rob.	Asteraceae	Herb	Dicot
197	*Cycas circinalis* L.	Cycadaceae	Tree	Gymnosperm
198	*Cycas revoluta* Thunb	Cycadaceae	Tree	Gymnosperm
199	*Cyclea peltata* Lam.	Menispermaceae	Climber	Dicot
200	*Cymbopogon citratus* (DC.ex Nees) Stapf.	Poaceae	Herb	Monocot
201	*Cymbopogon flexuosus* (Nees.ex.Steud.) Will.Watson	Poaceae	Herb	Monocot
202	*Cynodon dactylon* (L.) Pers	Poaceae	Herb	Monocot
203	*Cyperus rotundus* L.	Cyperaceae	Herb	Monocot
204	*Dactyloctenium aegyptium* (L.) P. Beauv.	Poaceae	Herb	Monocot
205	*Dalbergia latifolia* Roxb.	Fabaceae	Tree	Dicot
206	*Datura discolor*Bernth.	Solanaceae	Shrub	Dicot
207	*Datura inoxia* Mill.	Solanaceae	Herb	Dicot
208	*Datura metel* L.	Solanaceae	Shrub	Dicot
209	*Delonix regia* (Hook.) Raf.	Caesalpiniaceae	Tree	Dicot
210	*Dendrophthoe falcata* (L.f)Ettingsh	Loranthaceae	Climber	Monocot
211	*Desmodium gangeticum* DC.	Fabaceae	Herb	Dicot
212	*Desmodium triforum* (L.) DC.	Fabaceae	Herb	Dicot
213	*Dicliptera paniculata* (Forssk.) I. Darbysh.	Acanthaceae	Herb	Dicot
214	*Dieffenbachia amoena* cv. Bull	Araceae	Herb	Monocot
215	*Digera muricata* (L.) Mart.	Amaranthaceae	Herb	Dicot
216	*Dioscorea oppositifolia* L.	Dioscoraceae	Climber	Monocot
217	*Diospyros buxifolia* (Blume) Hiern	Ebenaceae	Climber	Dicot
218	*Dodonea viscosa* (L.) Jacq	Sapindaceae	Shrub	Dicot
219	*Dracaena deremensis* Janet Craig	Agavaceae	Shrub	Monocot
220	*Dracaena marginata* Lam.	Agavaceae	Shrub	Monocot
221	*Dracaena reflexa* Lam.	Agavaceae	Shrub	Monocot
222	*Dracaena sonderiana*	Agavaceae	Shrub	Monocot
223	*Dregea volubilis* (L.f.) Benth. ex Hook.f.	Asclepiadaceae	Climber	Dicot
224	*Duranta erecta* Jacq.	Verbenaceae	Shrub	Dicot

225	*Dypsis lutescens* (H. Wendl.) Beentje& Dransf.	Arecaceae	Tree	Monocot
226	*Ecbolium ligustrinum* (Vahl) Vollesen	Acanthaceae	Herb	Dicot
227	*Eclipta prostrata* (L.) L.	Asteraceae	Herb	Dicot
228	*Ehretia microphylla* Lam.	Boraginaceae	Shrub	Dicot
229	*Eipermnum pinnatum* L.	Araceae	Climber	Monocot
230	*Elephantopus scaber* L.	Asteraceae	Herb	Dicot
231	*Eleusine indica* (L.) Gaertn.	Poaceae	Herb	Monocot
232	*Emilia sonchifolia* (L.) DC. ex DC	Asteraceae	Herb	Dicot
233	*Entada scandens* Benth.	Leguminosae	Climber	Dicot
234	*Epidendrum rodicans*	Menispermaceae	Shrub	Dicot
235	*Epipremnum aureum* L.	Araceae	Climber	Monocot
236	*Episcia cupreata*	Gesneriaceae	Herb	Dicot
237	*Eragrostiella tenella* (L.) P. Beaur. Ex Rome Schultes var.*tenella*	Poaceae	Herb	Monocot
238	*Erythrina variegata* L.	Fabaceae	Tree	Dicot
239	*Eucalyptus tereticornis* Labill.	Myrtaceae	Tree	Dicot
240	*Eugenia carriyophyllatum* L.	Myrtaceae	Tree	Dicot
241	*Eugenia jambolana* Lamk	Myrtaceae	Tree	Dicot
242	*Euphorbia cyathophora* Murray	Euphorbiaceae	Shrub	Dicot
243	*Euphorbia heterophylla* L.	Euphorbiaceae	Herb	Dicot
244	*Euphorbia hirta* L.	Euphorbiaceae	Herb	Dicot
245	*Euphorbia lactea* Haw.	Euphorbiaceae	Shrub	Dicot
246	*Euphorbia milii* Des Moul.	Euphorbiaceae	Herb	Dicot
247	*Euphorbia milii* var. *splendens* (Bojer ex Hook.) Ursch & Leandri	Euphorbiaceae	Herb	Dicot
248	*Euphorbia thymifolia* L.	Euphorbiaceae	Herb	Dicot
249	*Euphorbia tirucalli* L.	Euphorbiaceae	Shrub	Dicot
250	*Euphorbia tithymaloides* L.	Euphorbiaceae	Shrub	Dicot
251	*Evolvulus alsinoides* (L.) L.	Convolvulaceae	Herb	Dicot
252	*Evolvulus nummularius* (L.) L.	Convolvulaceae	Herb	Dicot
253	*Feronia elephantum* Corr.	Rutaceae	Tree	Dicot
254	*Ficus pumila* L.	Moraceae	Climber	Dicot
255	*Ficus benghalensis* L.	Moraceae	Tree	Dicot
256	*Ficus benjamina* L. Mant.	Moraceae	Tree	Dicot
257	*Ficus hispida* L.	Moraceae	Tree	Dicot
258	*Ficus ilicina* (Sond.) Miq.	Moraceae	Tree	Dicot
259	*Ficus microcarpa* L.f	Moraceae	Tree	Dicot
260	*Ficus religiosa* L.	Moraceae	Tree	Dicot
261	*Flacourtia indica* (Burm f.) Merr.	Flacourtiaceae	Shrub	Dicot
262	*Garcinia gummi-gutta* (L) Roxb.	Clusiaceae	Tree	Dicot
263	*Gardenia angusta* (L.) Merr	Rubiaceae	Shrub	Dicot
264	*Gardenia jasminoides* Ell.	Rubiaceae	Shrub	Dicot
265	*Gliricida sepium* (Jacq.) Kunth ex Walp	Fabaceae	Tree	Dicot
266	*Gloriosa superba* L.	Liliaceae	Climber	Monocot
267	*Gmelina asiatica* L.	Verbenaceae	Shrub	Dicot
268	*Gomphrena celosioides* Mart.	Amaranthaceae	Herb	Dicot
269	*Gomphrena globosa* L.	Amaranthaceae	Herb	Dicot

270	*Grevillea robusta* A. Cunn ex. R.Br	Proteaceae	Tree	Dicot
271	*Gyrocarpus americanus* Jacquin N.J	Hernandiaceae	Tree	Dicot
272	*Handroanthus chrysanthus* subsp. m*eridionalis* (A.H. Gentry) Grose	Bignoniaceae	Shrub	Dicot
273	*Hedyotis corymbosa* (L.) Link.	Rubiaceae	Herb	Dicot
274	*Hedyotis puberula* (G. Don) Arn. Pugil.	Rubiaceae	Herb	Dicot
275	*Heliconia psittacorum* L.f	Musaceae	Herb	Monocot
276	*Heliconia rostrata* Ruiz & Pavon	Musaceae	Herb	Monocot
277	*Helicteres isora* L.	Sterculiaceae	Shrub	Dicot
278	*Heliotropium indicum* L.	Boraginaceae	Herb	Dicot
279	*Hemidesmus indicus* (L.) R. Br. Ex Schult.	Asclepiadaceae	Climber	Dicot
280	*Hemilia patens* Jacq.	Rubiaceae	Shrub	Dicot
281	*Heteropogon contortus* (L.) P. Beauv. Ex Roem & Schult	Poaceae	Herb	Monocot
282	*Hevea brasiliensis* (Willd. ex. A. Juss.) Mull. Arg.	Euphorbiaceae	Tree	Dicot
283	*Hibiscus mutabilis* f. plenus. Hu	Malvaceae	Shrub	Dicot
284	*Hibiscus rosasinensis* L.	Malvaceae	Shrub	Dicot
285	*Hibiscus sabdariffa* L.	Malvaceae	Shrub	Dicot
286	*Hibiscus surattensis* L.	Malvaceae	Shrub	Dicot
287	*Hibiscus vitifolius* L.	Malvaceae	Shrub	Dicot
288	*Homalocladium pelatycladum* L.	Polygonaceae	Shrub	Monocot
289	*Hydnocarpus wightianus*	Flacourtiaceae	Tree	Dicot
290	*Hydrilla verticellata* (L.f.) Royle	Hydrocharitaceae	Herb	Monocot
291	*Hyptis suaveolens* (L.) poit.	Lamiaceae	Shrub	Dicot
292	*Ichnocarpus frutescens* (L.) W.T. Aiton	Apocynaceae	Climber	Dicot
293	*Impatiens balsamina* L.	Balsaminaceae	Herb	Dicot
294	*Indigofera linnaei*	Fabaceae	Herb	Dicot
295	*Indigofera tinctoria* L.	Fabaceae	Shrub	Dicot
296	*Ionidium suffraticosum* (L.) Roem & Schlt	Violaceae	Herb	Dicot
297	*Ipomoea alba* L.	Convolvulaceae	Climber	Dicot
298	*Ipomoea hederifolia* L.	Convolvulaceae	Climber	Dicot
299	*Ipomoea indica* (Burm.) Merr.	Convolvulaceae	Climber	Dicot
300	*Ipomoea obscura* (L.) Ker Gawl.	Convolvulaceae	Herb	Dicot
301	*Ipomoea pes-tigridis* L.	Convolvulaceae	Climber	Dicot
302	*Ipomoea quamoclit* L.	Convolvulaceae	Climber	Dicot
303	*Ipomoea tricolor* L.	Convolvulaceae	Climber	Dicot
304	*Iris domestica* Willd.	Iridaceae	Shrub	Dicot
305	*Isachne kunthiana* (Weight et Arn) Neees ex Steud	Poaceae	Herb	Monocot
306	*Ixora coccinea* L.	Rubiaceae	Shrub	Dicot
307	*Ixora finalysoniana* Wallex. G. Don. Gen.	Rubiaceae	Shrub	Dicot
308	*Ixora singaporensis* L.	Rubiaceae	Shrub	Dicot
309	*Jacaranda mimosifolia* D. Don.	Bignoniaceae	Tree	Dicot
310	*Jasminum angustifolium* (L.) Willd.	Oleaceae	Climber	Dicot
311	*Jasminum grandiflorum* L.	Oleaceae	Shrub	Dicot
312	*Jasminum sambac* (L.) Ail.	Oleaceae	Climber	Dicot
313	*Jatropha curcas* L.	Euphorbiaceae	Shrub	Dicot

314	*Jatropha glandulifera* Roxb.	Euphorbiaceae	Shrub	Dicot
315	*Jatropha maheshwarii* Subram. & Nayar	Euphorbiaceae	Shrub	Dicot
316	*Jatropha villosa* Wight	Euphorbiaceae	Shrub	Dicot
317	*Juscia repens* L.	onagraceae	Shrub	Dicot
318	*Justicia adhatoda* L.	Acanthaceae	Shrub	Dicot
319	*Justicia gendarussa* Burm.f	Acanthaceae	Shrub	Dicot
320	*Justicia glauca* Rottler	Acanthaceae	Herb	Dicot
321	*Justicia simplex* D.Don	Acanthaceae	Herb	Dicot
322	*Justicia tranquebariensis* L.f	Acanthaceae	Herb	Dicot
323	*Kaempferia galanga* L.	Zingiberaceae	Herb	Monocot
324	*Kalanchoe blossfeldiana* Poellnitz	Crassulaceae	Herb	Monocot
325	*Kigelia africana* (Lam.) Benth.	Bignoniaceae	Tree	Dicot
326	*Kirganelia reticulata* (Poiret) Baillon.	Euphorbiaceae	Shrub	Dicot
327	*Lagerstroemia indica* L.	Lythraceae	Tree	Dicot
328	*Lagerstroemia reginae* Roxb.	Lythraceae	Tree	Dicot
329	*Lannea coromandelica* (Houtt.) Merr.	Anacardiaceae	Tree	Dicot
330	*Lantana camara* L.	Verbenaceae	Shrub	Dicot
331	*Lawsonia inermis* L.	Lythraceae	Shrub	Dicot
332	*Leucas aspera* L.	Lamiaceae	Herb	Dicot
333	*Leucas biflora* (Vahi) R. Br.	Lamiaceae	Herb	Dicot
334	*Limnonia acidissima* L.	Rutaceae	Tree	Dicot
335	*Lindernia crustacea* (L.) F. Muell.	Scrophulariaceae	Herb	Dicot
336	*Litsta glabrata* (Wall ex Ness) Hook.f	Lauraceae	Tree	Dicot
337	*Madhuca longifolia* (Koen.) Macbr.	Sapotaceae	Tree	Dicot
338	*Malvastrum coromandelianum* (L.) Gapcke	Malvaceae	Shrub	Dicot
339	*Mangifera indica* L.	Anacardiaceae	Tree	Dicot
340	*Manikara sapota* (L.) P. Royen	Sapotaceae	Tree	Dicot
341	*Markhamia lutea* (Benth.) K.Schum.	Bignoniaceae	Shrub	Dicot
342	*Melampodium divaricatum* (Rich. ex Rich.) DC	Asteraceae	Herb	Dicot
343	*Melia azedarach* L.	Meliaceae	Tree	Dicot
344	*Melinis repens* (Willd.) Zizka	Poaceae	Herb	Monocot
345	*Merremia tridentata* (L.) Hall.f.	Convolvulaceae	Herb	Dicot
346	*Michelia champaca* L.	Magnoliaceae	Tree	Dicot
347	*Micrococca mercurialis* (L.) Benth.	Euphorbiaceae	Herb	Dicot
348	*Microstachys chamaelea*	Euphorbiaceae	Shrub	Dicot
349	*Millingtonia hortensis* L.f.	Bignoniaceae	Tree	Dicot
350	*Mimosa pudica* L.	Mimosaceae	Herb	Dicot
351	*Mimusops elengi* L.	Sapotaceae	Tree	Dicot
352	*Mirabilis jalapa* L.	Nyctaginaceae	Herb	Dicot
353	*Mirtragyna parvifolia* (Roxb.) Korth	Rubiaceae	Tree	Dicot
354	*Mollugo nudicaulis* Lam.	Aizoaceae	Herb	Dicot
355	*Mollugo pentaphylla* L.	Aizoaceae	Herb	Dicot
356	*Momordica charantia* L.	Cucurbitaceae	Climber	Dicot
357	*Monstera deliciosa* Liebm.	Araceae	Climber	Monocot
358	*Morinda pubescens* J.E. Smith	Rubiaceae	Tree	Dicot
359	*Moringa olifera* Lam.	Moringaceae	Tree	Dicot

360	*Morus alba* L.	Moraceae	Shrub	Dicot
361	*Mukia maderaspatana* (L.) M. Roem.	Cucurbitaceae	Climber	Dicot
362	*Muntingia calabura* L.	Elaeocarpaceae	Tree	Dicot
363	*Murraya koenigii* (L.) Sperng	Rutaceae	Shrub	Dicot
364	*Murraya paniculata* (L.) Jack	Rutaceae	Shrub	Dicot
365	*Musa paradisiaca* L.	Musaceae	Herb	Monocot
366	*Mussaenda bellila* Willd.	Rubiaceae	Shrub	Dicot
367	*Mussaenda philippica*	Rubiaceae	Shrub	Dicot
368	*Myxopyrum seratulum* Hill.	Oleaceae	Climber	Dicot
369	*Nerium odorum* Aiton	Apocynaceae	Shrub	Dicot
370	*Nyctanthes arobor-tristis* L.	Oleaceae	Shrub	Dicot
371	*Nymphea capensis* Thunberg	Nymphaeceae	Herb	Monocot
372	*Ochna obtusata* DC.	Ochnaceae	Shrub	Dicot
373	*Ocimum americanum*	Lamiaceae	Herb	Dicot
374	*Ocimum basilicum* L.	Lamiaceae	Herb	Dicot
375	*Ocimum tenuiflorum*	Lamiaceae	Herb	Dicot
376	*Oldenlandia umbellata* L.	Rubiaceae	Herb	Dicot
377	*Opuntia cochennillifera* (L.) Miller. Gard.	Cactaceae	Shrub	Monocot
378	*Opuntia delinii* Ker.	Cactaceae	Shrub	Monocot
379	*Opuntia royali*	Cactaceae	Shrub	Monocot
380	*Oralis corniculata* L.	Oxalidaceae	Herb	Dicot
381	*Otacanthus caeruleus* Lindl.	Scrophulariaceae	Herb	Dicot
382	*Pachystachys spicata* (Ruiz & Pav.) Wassh.	Acanthaceae	Shrub	Dicot
383	*Parthenium hysterophorus* L.	Asteraceae	Herb	Dicot
384	*Paspalidium flavidum* (Retz) A. Camus	Poaceae	Herb	Monocot
385	*Passiflora edulis* Sims	Passifloraceae	Climber	Dicot
386	*Passiflora foetida* L.	Passifloraceae	Climber	Dicot
387	*Pavetta indica* L.	Rubiaceae	Shrub	Dicot
388	*Pavonia zeylanica* (L.) Cav.	Malvaceae	Shrub	Dicot
389	*Peltophorum pterocarpum* (DC) K. Heyne	Caesalpiniaceae	Tree	Dicot
390	*Pennisetum ploystachion* (L.) Schult	Poaceae	Herb	Monocot
391	*Pentalinon luteum* (L.) B.F.Hansen & Wunderlin	Apocynaceae	Climber	Dicot
392	*Pentas lanceolata* (Forssk.) Defiers, Voy. Yemen.	Rubiaceae	Herb	Dicot
393	*Pepperomia pelucida* L.	Piperaceae	Herb	Dicot
394	*Pergularia daemia* (Forssk.) Chiov	Asclepiadaceae	Climber	Dicot
395	*Perotis indica* (L.) O. Kuntze.	Poaceae	Herb	Monocot
396	*Petiveria alliaceae* L.	Phytolocaceae	Herb	Dicot
397	*Phoenix pusilla* FI. Cochinch.	Arecaceae	Tree	Monocot
398	*Phyla nodiflora* (L.) Greene	Verbenaceae	Herb	Dicot
399	*Phyllanthus acidus* (L.) Skeels.	Euphorbiaceae	Tree	Dicot
400	*Phyllanthus debilis* Klein ex Willd.	Euphorbiaceae	Herb	Dicot
401	*Phyllanthus emblica* L.	Euphorbiaceae	Tree	Dicot
402	*Phyllanthus maderaspatensis* L.	Euphorbiaceae	Herb	Dicot
403	*Phyllanthus myrtiflolius* (Wight.) Muller	Euphorbiaceae	Shrub	Dicot
404	*Phyllanthus niruri* L.	Euphorbiaceae	Herb	Dicot

405	*Phyllanthus virgatus* G. Forster.	Euphorbiaceae	Herb	Dicot
406	*Physalis minima* L.	Solanaceae	Herb	Dicot
407	*Pilea micropilla* L.	Urticaceae	Herb	Dicot
408	*Pimenta diocia* (L.) Merr.	Myristaceae	Tree	Dicot
409	*Pinus roxburghii* Sarg	Pinaceae	Tree	Gymnosperm
410	*Piper betle* L.	Piperaceae	Climber	Dicot
411	*Piper longum* L.	Piperaceae	Climber	Dicot
412	*piper nigrum* L.	Piperaceae	Climber	Dicot
413	*Pisonia alba* Span.	Nyctaginaceae	Tree	Dicot
414	*Pisonia grandis* R. Br.	Nyctaginaceae	Tree	Dicot
415	*Pithecellobium dulce* (Roxb.) Benth.	Mimosaceae	Tree	Dicot
416	*Plectranthus amboinicus* L.	Lamiaceae	Herb	Dicot
417	*Plectranthus scutellarioides* L.	Lamiaceae	Herb	Dicot
418	*Plumbago zeylanica* L.	Plumbaginaceae	Herb	Dicot
419	*Plumeria aceti* L.	Apocynaceae	Tree	Dicot
420	*Plumeria roseus* L.	Apocynaceae	Tree	Dicot
421	*Plumeria rubra* L.	Apocynaceae	Tree	Dicot
422	*Plumeria rubra* L.var. *alba*	Apocynaceae	Tree	Dicot
423	*Polyalthia longifolia* (Sonn.) Thwaites	Annonaceae	Tree	Dicot
424	*Polycarpaea corymbosa* (L.) Lam.	Caryophyllaceae	Herb	Dicot
425	*Polygala arvensis* Willd.	Polygonaceae	Herb	Dicot
426	*Polygala javana* L.	Polygonaceae	Herb	Dicot
427	*Pongamia pinnata* (L.) Pieree.	Fabaceae	Tree	Dicot
428	*Portulaca gradiflora* Hook.	Portulacaceae	Herb	Dicot
429	*Portulaca oleraceae* L.	Portulacaceae	Herb	Dicot
430	*Prosopis cineraria* (L.) Druce	Mimosaceae	Tree	Dicot
431	*Pseudarthira viscida* (L) Wight & Arn.	Fabaceae	Herb	Dicot
432	*Pseuderanthemum laxiflorum* (A. Gray) F.T. Hubb. ex L.H. Bailey	Acanthaceae	Herb	Dicot
433	*Psidium guajava* L.	Myristaceae	Tree	Dicot
434	*Pterocarpus marsupium* Roxb.	Fabaceae	Tree	Dicot
435	*Pterocarpus santalinus* L.f.	Fabaceae	Tree	Dicot
436	*Quassia amara* L.	Simaroubaceae	Shrub	Dicot
437	*Revenala madagascariensis* Sonner. Voy.	Musaceae	Tree	Monocot
438	*Rhizophora mucronata* Poir.	Rhizophoraceae	Tree	Dicot
439	*Rhynchosia minima* (L.) DC	Fabaceae	Herb	Dicot
440	*Ricinus communis* L.	Euphorbiaceae	Shrub	Dicot
441	*Rondeltia odorata* L.	Rubiaceae	Shrub	Dicot
442	*Rosa indica* L.	Rosaceae	Shrub	Dicot
443	*Roystonea regia* (Kunth) O.F. Cook	Arecaceae	Tree	Monocot
444	*Ruellia patula* Jacq.	Acanthaceae	Herb	Dicot
445	*Ruellia prostrata* Poir.	Acanthaceae	Herb	Dicot
446	*Ruellia tuberosa* L.	Acanthaceae	Herb	Dicot
447	*Ruellia tweediana* Griseb.	Acanthaceae	Shrub	Dicot
448	*Russelia equisetiformis* Schletch & cham.	Scrophulariaceae	Shrub	Dicot
449	*Saccharum officinarum* L.	Poaceae	Herb	Monocot

450	*Sanseveria roxburghii* L.	Liliaceae	Herb	Monocot
451	*Sanseveria tricolor* L.	Liliaceae	Herb	Monocot
452	*Sansevieria grandis* Hook. F	Liliaceae	Herb	Monocot
453	*Sansevieria trifasciata* Prain	Liliaceae	Herb	Monocot
454	*Santalum album* L.	Santalaceae	Tree	Dicot
455	*Saraca asoca* (Roxb.) Wilde	Fabaceae	Tree	Dicot
456	*Scadoxus multiflorus* (Martyn) Raf.	Amaryllidaceae	Herb	Dicot
457	*Schleichera oleosa* (Lour.) Oken. Allg.	Sapindaceae	Tree	Dicot
458	*Scoparia dulcis* L.	Scrophulariaceae	Shrub	Dicot
459	*Senna alata* (L.) Roxb.	Caesalpiniaceae	Shrub	Dicot
460	*Senna auriculata* (L.) Roxb.	Caesalpiniaceae	Shrub	Dicot
461	*Senna didymobotrya* (Fresn.) H.S.Irwin & Barneby	Caesalpiniaceae	Tree	Dicot
462	*Senna occidentalis* (L.) Link	Caesalpiniaceae	Shrub	Dicot
463	*Senna siamea* (Lam.) H.S. Irwin & Barneby	Caesalpiniaceae	Shrub	Dicot
464	*Senna tora* (L.) Roxb.	Caesalpiniaceae	Shrub	Dicot
465	*Setaria palmifolia* (Burm. F) Borss. Walk.	Malvaceae	Herb	Dicot
466	*Setaria palmifolia* (Koenig) Stapf. J. L.	Poaceae	Herb	Monocot
467	*Sida acuta* Burm. f.	Malvaceae	Herb	Dicot
468	*Sida cordifolia* L.	Malvaceae	Herb	Dicot
469	*Solanum anguivi* Lam	Solanaceae	Herb	Dicot
470	*Solanum nigrum* L.	Solanaceae	Shrub	Dicot
471	*Solanum surattense* Burm. F	Solanaceae	Shrub	Dicot
472	*Solanum torvum* Sur.	Solanaceae	Shrub	Dicot
473	*Solanum trilobatum* L.	Solanaceae	Shrub	Dicot
474	*Spathodea campanulata* P. Beauv.	Bignoniaceae	Tree	Dicot
475	*Spathoglottis plicata* L.	Orchidaceae	Herb	Monocot
476	*Spermacoce artifcularis* L.f.	Rubiaceae	Herb	Dicot
477	*Spermacoce hispida* L.	Rubiaceae	Shrub	Dicot
478	*Spermacoce osimodies* Burm.f.	Rubiaceae	Shrub	Dicot
479	*Sphagneticola trilobata* (L.) Pruski	Asteraceae	Herb	Dicot
480	*Stachytarpheta jamaicensis* (L.) Vahl.	Verbenaceae	Tree	Dicot
481	*Stachytarpheta mutabilis* (Jacq.) Vahl.	Verbenaceae	Tree	Dicot
482	*Sterculia foetida* L.	Sterculiaceae	Herb	Dicot
483	*Strychonos nux- vomica* L.	Loganiaceae	Tree	Dicot
484	*Stylosanthes fruitcosa* (Retz.) Alston	Fabaceae	Herb	Dicot
485	*Swietenia mahagoni* (L.) Jacq. Enum	Meliaceae	Tree	Dicot
486	*Synedrella nodiflora* (L.) Gaertn.	Asteraceae	Herb	Dicot
487	*Syzygium aromantiam* (L.) Merrill. & Perry.	Myrtaceae	Tree	Dicot
488	*Syzygium cumini* (L.) Skeels	Myrtaceae	Tree	Dicot
489	*Tabebuia rosea* (Bertol.) Bertero ex A.DC.	Bignoniaceae	Shrub	Dicot
490	*Tabernaemontana alternifolia* L.	Apocynaceae	Shrub	Dicot
491	*Tabernaemontana divaricata* (L.) R.Br. ex Roem. & Schult.	Apocynaceae	Shrub	Dicot
492	*Tagetes erecta* L.	Asteraceae	Shrub	Dicot
493	*Talinum paniculatum* (Jacq.) Gaertn.	Asteraceae	Herb	Dicot
494	*Tamarindus indica* L.	Caesalpiniaceae	Tree	Dicot

495	*Tarlmounia elliptica* (DC.) "H. Rob., S.C. Keeley, Skvarla & R. Chan"	Asteraceae	Climber	Dicot
496	*Tecoma capensis* (Thunb.) Lindl.	Bignoniaceae	Shrub	Dicot
497	*Tecoma stans* (L.) Juss. Ex Kunth	Bignoniaceae	Shrub	Dicot
498	*Tectona grandis* L.	Verbenaceae	Tree	Dicot
499	*Tephrosia purpurea* L.	Malvaceae	Tree	Dicot
500	*Terminalia arjuna* (Roxb. ex. DC.) Wight & Arn.	Combretaceae	Tree	Dicot
501	*Terminalia bellirica* (Gaertn.) Roxb.	Combretaceae	Tree	Dicot
502	*Terminalia catappa* L.	Combretaceae	Tree	Dicot
503	*Terminalia chebula* Retz.	Combretaceae	Tree	Dicot
504	*Themeda cymbaria* Hack.	Poaceae	Herb	Monocot
505	*Thespesia populanea* (L.) Sol. ex Correa	Fabaceae	Herb	Dicot
506	*Thuja orientalis* L.	Cupressaceae	Tree	Gymnosperm
507	*Thunbergia erecta* (Benth.) T. Anderson	Acanthaceae	Shrub	Dicot
508	*Thunbergia fragrans* Roxb.	Acanthaceae	Shrub	Dicot
509	*Thunbergia grandiflora* (Roxb.ex Rottl.) Roxb.	Acanthaceae	Climber	Dicot
510	*Tinsopora cordifolia* DC.	Menispermaceae	Climber	Dicot
511	*Tithonia rotundifolia* (Mill.) S.F. Blake	Asteraceae	Shrub	Dicot
512	*Tradescantia pallida* (Rose) D.R. Hunt.	Commelinaceae	Herb	Monocot
513	*Tradescantia spathacea* Swartz.	Commelinaceae	Herb	Monocot
514	*Tragia involucrata* L.	Euphorbiaceae	Climber	Dicot
515	*Tribulus terrestris* L.	Zygophyllaceae	Herb	Dicot
516	*Trichodesma indicum* (L.) Lehm.	Boraginaceae	Herb	Dicot
517	*Trichosanthes cucumerina* L.	Cucurbitaceae	Herb	Dicot
518	*Tridax procumbens* (L.) L.	Asteraceae	Herb	Dicot
519	*Triumfetta rhomboidea* Jacq.	Tiliaceae	Herb	Dicot
520	*Tylophora indica* (Burm.) Merr.	Asclepiadaceae	Climber	Dicot
521	*Urena sinuata* L.	Malvaceae	Shrub	Dicot
522	*Uvaria narum* A. DC.	Annonaceae	Climber	Dicot
523	*Verbena bonariensis* L.	Verbenaceae	Herb	Dicot
524	*Vitex negundo* L.	Verbenaceae	Shrub	Dicot
525	*Waltheria indica* L.	Sterculiaceae	Shrub	Dicot
526	*Wrightia tinctoria* R. Br.	Apocynaceae	Tree	Dicot
527	*Yucca aloifolia* L.	Agavaceae	Tree	Monocot
528	*Zamia furfuracea* L.	Zamiaceae	Tree	Gymnosperm
529	*Zea mays* L.	Poaceae	Herb	Monocot
530	*Zephyranthes rosea* L.	Liliaceae	Herb	Monocot
531	*Ziziphus jujuba* (L.) Gaertn.	Rhamnaceae	Shrub	Dicot
532	*Ziziphus oenopalia* (L.) Mill.	Rhamnaceae	Climber	Dicot
533	*Zornia diphylla* (L.) Pers.	Fabaceae	Herb	Dicot

flora of American origin in exotic floristic composition of India (Nagar *et al*., 2004; Tomar*et al*., 2008; Singh, 2011). A higher proportion of the exotic flora of the college campus is represented by ornamental plants, which include *Allamanda cathartica, Agave neriifolia*, *Aloe vera, Asparagus racemosus, Bauhinia purpurea*, *Bougainvillea spectabilis*, *Calendula officinalis*, *Callistemon lanceolatus, Canna indica*, *Catharanthus roseus*, *Coleusblumei*, *Delonix regia*, *Euphorbia pulcherrima*, *Hibiscus rosa- sinensis*, *Jatropha gossypifolia*,*Kalanche pinnata*, *Lantana camara*, *Lawsonia inermis*, *Millingtonia hortensis*, *Mirabilis jalapa*, *Mussaenda luteola*, *Polyanthes tuberosa*, *Plumeria rubra*, *Quisqualis indica*, *Ravenalamada gascariensis*, *Rhoeo discolor*, *Samanea saman*, *Tagetes erecta*, *T. patula*, *Tecoma stans* and *Thevetia peruviana*. These plant species had been planted for the ornamentation of residential and departmental compounds of the college campus.

Several of the exotics are edible fruit-producing plants of the college campus. These are represented by *Annona squamosa*, *Artocarpus communis*, *Carica papaya*, *Manilkara zapota*, *Morus alba*, *Passiflora edulis*, *Psidium guajava*, *Punica granatum*, *Vitis vinifera* and *Ziziphus mauritiana*. A large number of exotics are represented by vegetable crops which are chiefly cultivated in kitchen gardens of residential compounds to meet the needs of fresh vegetables. These include *Abelmoschus esculentus*, *Capsicum annuum*, *Colocasia antiquorum*, *Dolichos lablab*, *Lactuca sativa*, *Lycopersicon esculentum*, *Phaseolus vulgaris* and *Vigna sinensis*.

Of the total plant species reported from the campus of NMCC, *Parthenium hysterophorus* was observed tobe harmful to native flora. This American flora has spread very fast in the last couple of decadesin the campus; Exotics are referred toas biological pollutants due to their destructive effects on natural and man-managed ecosystems (Westbrooks, 1991). Serious ecological effects of the fast-spreading introduced flora have been reported (Di Castri *et al*., 1990; D' Antonio and Vitousek, 1992; Hobbs and Huenneke, 1992; Punalekar *et al*., 2010) and non-indigenous plant species are considered a major threat to biodiversity (Mooney, 1988; Lodge, 1993; Huston, 1994; McGeoch *et al*., 2006).

Conclusion

The campus of NMCC harbors a diversity of vegetation types which include tropical dry evergreen forest, tropical dry evergreen scruband tropical scrub savannah and thorn forest. It has a varied topography with plains and gently elevated areas. For conservation of campus plant diversity, rare, endangered and threatened (RET) species can be particularly targeted by protecting their habitats in the western and southern parts of the campus and by cultivating them additionally as enrichment planting in the nursery and Botanical Garden.

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