

Survey of the plants in Queen Mary's College, Chennai, India

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Abstract

Chennai is one of the densely populated cities in the world with large masses throng the beaches in search of fresh air, and while they pass the educational institutions along the beach, they gaze with wonder at the greenery that is becoming a rarity in metropolitan cities. Species diversity is a characteristic feature of tropics, and many educational institutions still maintain a restricted green patch that harbours diverse plant species. This article is aimed at surveying and documenting the plant diversity in Queen Mary's College campus which has good green cover both at canopy level and ground level. Stratification at four levels ground cover (herbs), shrubs, small trees and tall trees with species diversity nurturing insects, beetles, butterflies, birds and small animals is a common sight.

Keywords: QMC; Species diversity; *Guaiacum officinale*; Planting; Student volunteers

1. Introduction

Chennai, a metropolitan city in the tropics with a population of 12.1 million, is the fifth largest urban agglomeration city in India and 30th largest city in the World. Chennai is a densely populated city, with a density of 26,553 people per square kilometers (Chennai population 2024). Marina beach, Chennai is one of the important recreational places for the public and any number of human constructed places cannot substitute for the nature made beach, which also acts as a venue for large scale events like air show (Chennai air show, 2024). People throng the sandy shore of the Marina in search of fresh air and cost free recreation. Universities and educational institutions and other government buildings with gardens attract the sore eyes of the public, one such location is Queen Mary's College.

Queen Mary's College, first women's college in Chennai and the third oldest women's college in India, established in 1914, is a government-run college. The college is located on junction of Kamarajar Salai and Dr. Radhakrishnan Salai facing the Marina beach with GPS coordinates of 41°32'12.696 N and 81°30'43.596 W (<https://www.latlong.net/>). It was founded by the first Principal Dorothy de La Hey with the support of Lord Pentland, Governor of Madras Presidency. The college has 15 buildings amidst trees. The college is ranked 71st among Arts colleges in India by the National Institutional Ranking Framework (NIRF) 2024.

Biodiversity in university and college campuses has the potential to connect directly to the public. Biodiversity in educational campuses influences attractiveness of urban areas to students (Lindemann-Matthies and Brieger, 2016), promotes appreciation of the natural environment of local people (Colding, 2007), and may lead the way to an ecologically responsible future (Uhl and Anderson, 2001). However, we lack a systematic review of global biodiversity patterns on university campuses, despite increasing availability of urban biodiversity data and a growing interest and demand for increasing biodiversity in urban areas. This paper aims to fill this important research gap by summarizing current biodiversity status of the Queen Mary's college campus.

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Over half of the world's population live in cities and rapid urbanization is driving biodiversity decline (McKinney, 2002.). To conserve biodiversity in urban ecosystems, it is critical to maintain urban green spaces (Cox and Gaston, 2018). Such a requirement has stimulated biodiversity research in public parks (Palliwoda et al., 2017), private gardens (Goddard et al., 2010) and university campuses which can provide shelter for a diverse set of plant and animal species (Liu et al., 2017; Soanes and Lentini, 2019).

2. Materials and methods

Plant collection and identification was done periodically throughout the year from 2005 to 2024 by the botany students. The plants were identified based on Gamble. and Fischer, (1956) and preserved in herbarium sheets and tabulated.

3. Results and discussion

The plants observed from Queen Mary's College (Table 1) could be classified to about 60 families, and the predominant families were Malvaceae, Euphorbiaceae, Acanthaceae, Amaranthaceae, Fabaceae, Caesalpiniaceae, Convolvulaceae, Solanaceae, Asteraceae, Moraceae, Cyperaceae and Poaceae. Most of the trees were more than 100 years old, *Samanea saman* with a large canopy has a trunk circumference of 2 to 2.5 m. *Guaiacum officinale* belonging to the family zygothymaceae is one of the valuable tree based on its rarity and for the production of a medicinal dye. Most of the tree species in the campus belongs to Mimosaceae and Moraceae and the climbers belong to Convolvulaceae. Some of the climbers like *Tinospora*, *Antigonon*, *Ipomea* and *Quisqualis* covers the entire canopy of large trees. Though Araceae represents many species all of them are ornamental and few are growing wild in the campus.

Through out the years it has been noted that one or the other herbaceous plant dominated the ground cover for instance in 2002 to 2004 *Sida* dominated the campus. In 2005, it was *Crotalaria juncea*, in 2007 it was *Hyptis suaveolens*, in 2009 it was *Lantana camara*, in 2011-2013 it was *Acalypha indica*, in 2017 it was *Setaria verticillate*, in 2023 it was *Senna occidentalis*. The dispersal of seeds by birds may be an influential factor in the spread of the plants in the campus.

Table 1 List of plants available in Queen Mary's College, Chennai

S.No.	Botanical name	Family	Habit
1	<i>Abutilon indicum</i>	Malvaceae	Herb wild
2	<i>Abutilon pannosum</i>	Malvaceae	Herb wild
3	<i>Acacia auriculiformis</i>	Mimosaceae	Tree
4	<i>Acalypha indica</i>	Euphorbiaceae	Herb wild
5	<i>Achyranthes aspera</i>	Amaranthaceae	Herb wild
6	<i>Adenantha pavonia</i>	Mimosaceae	Tree
7	<i>Adenium obesum</i>	Apocynaceae	Ornamental Bonsai tree
8	<i>Adhathoda vasica</i>	Acanthaceae	Herb wild
9	<i>Aerva lanata</i>	Amaranthaceae	Herb wild
10	<i>Aerva tomentosa</i>	Amaranthaceae	Herb wild
11	<i>Ageratum conyzoides</i>	Asteraceae	Herb wild
12	<i>Aglaonema commutatum</i>	Araceae	Herb ornamental
13	<i>Albizia lebeck</i>	Mimosaceae	Tree
14	<i>Allamanda violacea</i>	Apocynaceae	Herb ornamental
15	<i>Allamanda cathartica</i>	Apocynaceae	Herb ornamental
16	<i>Alocasia cucullate</i>	Araceae	Herb ornamental
17	<i>Alocasia michelitziana</i>	Araceae	Herb ornamental
18	<i>Alocasia regina</i>	Araceae	Herb ornamental

19	<i>Aloe vera</i>	Liliaceae	Herb ornamental
20	<i>Alternanthera pungens</i>	Amaranthaceae	Herb wild
21	<i>Alternanthera sessilis</i>	Amaranthaceae	Herb wild
22	<i>Alysicarpus monilifer</i>	Fabaceae	Herb wild
23	<i>Amaranthus spinosus</i>	Amaranthaceae	Herb wild
24	<i>Amaranthus viridis</i>	Amaranthaceae	Herb wild
25	<i>Andrographis paniculata</i>	Acanthaceae	Herb wild
26	<i>Annona squamosa</i>	Annonaceae	Tree
27	<i>Antigonon leptopus</i>	Polygonaceae	Climber wild
28	<i>Argemone Mexicana</i>	Papaveraceae	Herb wild
29	<i>Artocarpus heterophyllis</i>	Moraceae	Tree
30	<i>Asystasia gangetica</i>	Acanthaceae	Herb wild
31	<i>Azadiracta indica</i>	Meliaceae	Tree
32	<i>Basella alba</i>	Basellaceae	Climber
33	<i>Barleria prionitis</i>	Acanthaceae	Herb wild
34	<i>Bauhinia tomentosa</i>	Caesalpinaceae	Shrub
35	<i>Boerhaavia diffusa</i>	Nyctaginaceae	Herb wild
36	<i>Boerhaavia erecta</i>	Nyctaginaceae	Herb wild
37	<i>Bougainvillea spectabilis</i>	Nyctaginaceae	Herb wild
38	<i>Breynia retusa</i>	Euphorbiaceae	Herb wild
39	<i>Bulbostylis densa</i>	Cyperaceae	Herb wild
40	<i>Caesalpinia bonduc</i>	Caesalpinaceae	Herb ornamental
41	<i>Caesalpinia pulcherrima</i>	Caesalpinaceae	Herb ornamental
42	<i>Callophyllum inophyllum</i>	Clusiaceae	Tree
43	<i>Calotropis gigantea</i>	Apocynaceae	Shrub wild
44	<i>Canna indica</i>	Cannaceae	Herb ornamental
45	<i>Capparis zeylanica</i>	Capparidaceae	Climber wild
46	<i>Cardiospermum helicacabum</i>	Sapindaceae	Climber wild
47	<i>Carica papaya</i>	Caricaceae	Tree small
48	<i>Catharanthus roseus</i>	Apocynaceae	Herb wild
49	<i>Cayratia carmosa</i>	Vitaceae	Climber wild
50	<i>Cenchrus ciliaris</i>	Poaceae	Herb wild
51	<i>Cereus hexagonus</i>	Cactaceae	Shrub wild
52	<i>Cheilocostus speciosus</i>	Costaceae	Herb ornamental
53	<i>Chloris barbata</i>	Poaceae	Herb wild
54	<i>Chlorophytum comosum</i>	Asparagaceae	Herb ornamental
55	<i>Chrysolidocarpus lutescens</i>	Arecaceae	Tree ornamental
56	<i>Chrysopogon zizanioides</i>	Poaceae	Herb ornamental

57	<i>Cissus quadrangularis</i>	Vitaceae	Climber wild
58	<i>Cleome gynandra</i>	Capparidaceae	Herb wild
59	<i>Cleome viscosa</i>	Capparidaceae	Herb wild
60	<i>Cleome rutidosperma</i>	Capparidaceae	Herb wild
61	<i>Clerodendrum inerme</i>	Verbenaceae	Herb wild
62	<i>Clitoria ternatea</i>	Fabaceae	Climber wild
63	<i>Coccinia grandis</i>	Cucurbitaceae	Climber wild
64	<i>Cocus nucifera</i>	Palmaceae	Tree
65	<i>Codiaeum variegatum</i>	Euphorbiaceae	Shrub ornamental
66	<i>Coleus amboinicus</i>	Lamiaceae	Herb ornamental
67	<i>Coleus aromaticus</i>	Lamiaceae	Herb ornamental
68	<i>Coleus blumei</i>	Lamiaceae	Herb ornamental
69	<i>Commelina benghalensis</i>	Commelinaceae	Herb wild
70	<i>Commelina palette</i>	Commelinaceae	Herb wild
71	<i>Commelina purpurea</i>	Commelinaceae	Herb ornamental
72	<i>Corchorus acutangulus</i>	Tiliaceae	Herb wild
73	<i>Cordia obliqua</i>	Boraginaceae	Tree
74	<i>Cordia sebastena</i>	Boraginaceae	Tree
75	<i>Cordyline fruticose</i>	Asparagaceae	Herb ornamental
76	<i>Couropeta guianensis</i>	Lecythidaceae	Tree
77	<i>Cretava religiosa</i>	Capparidaceae	Tree
78	<i>Crinum asiaticum</i>	Amaryllidaceae	Herb ornamental
79	<i>Crinum zeylanicum</i>	Amaryllidaceae	Herb ornamental
80	<i>Crotalaria dura</i>	Fabaceae	Herb wild
81	<i>Crotalaria retisa</i>	Fabaceae	Herb wild
82	<i>Crotalaria verrucosa</i>	Fabaceae	Herb wild
83	<i>Croton sparsiflorus</i>	Euphorbiaceae	Herb wild
84	<i>Cucumis melo</i>	Cucurbitaceae	Climber wild
85	<i>Curcuma longa</i>	Zingiberaceae	Herb ornamental
86	<i>Cuscuta reflexa</i>	Convolvulaceae	Climber wild
87	<i>Cycas revoluta</i>	Cycadaceae	Shrub ornamental
88	<i>Cynodon dactylum</i>	Poaceae	Herb wild
89	<i>Cyperus rotundus</i>	Cyperaceae	Herb wild
90	<i>Cryptococcum trigonum</i>	Poaceae	Herb wild
91	<i>Dactyloctenium aegypticum</i>	Poaceae	Herb wild
92	<i>Datura metal</i>	Solanaceae	Herb wild
93	<i>Delonix regia</i>	Caesalpinaceae	Tree
94	<i>Desmodium triflorum</i>	Fabaceae	Herb wild

95	<i>Dieffenbachia maculata</i>	Araceae	Herb ornamental
96	<i>Dipterpcanthes prostratus</i>	Acanthaceae	Herb wild
97	<i>Dracaena reflexa</i>	Asparagaceae	Herb ornamental
98	<i>Dracaena marginata</i>	Asparagaceae	Herb ornamental
99	<i>Duranta erecta</i>	Verbenaceae	Herb ornamental
100	<i>Ecobolium viride</i>	Acanthaceae	Herb wild
101	<i>Enteropogon dolichostrachyus</i>	Poaceae	Herb wild
102	<i>Epipremnum aureum</i>	Araceae	Herb ornamental
103	<i>Epipremnum pinnatum</i>	Araceae	Herb ornamental
104	<i>Eragrostasis torellia</i>	Poaceae	Herb wild
105	<i>Eucalyptus globulus</i>	Myrtaceae	Tree
106	<i>Euphorbia heterophylla</i>	Euphorbiaceae	Herb wild
107	<i>Euphorbia hirta</i>	Euphorbiaceae	Herb wild
108	<i>Euphorbia lactea</i>	Euphorbiaceae	Herb wild
109	<i>Euphorbia milii</i>	Euphorbiaceae	Herb wild
110	<i>Euphorbia thymifolia</i>	Euphorbiaceae	Herb wild
111	<i>Euphorbia tithymaloides</i>	Euphorbiaceae	Herb ornamental
112	<i>Euphorbia thirucalli</i>	Euphorbiaceae	Herb ornamental
113	<i>Evolvulus ulsinoides</i>	Convolvulaceae	Herb wild
114	<i>Evolvulus mummularis</i>	Convolvulaceae	Herb wild
115	<i>Erythrina indica</i>	Fabaceae	Tree
116	<i>Ficus benghalensis</i>	Moraceae	Tree
117	<i>Ficus elastica</i>	Moraceae	Tree
118	<i>Ficus glomerata</i>	Moraceae	Tree
119	<i>Ficus religiosa</i>	Moraceae	Tree
120	<i>Fimbristylismiliacea</i>	Cyperaceae	Herb wild
121	<i>Fimbristylis littoralis</i>	Cyperaceae	Herb wild
122	<i>Furcaria foetida</i>	Asparagaceae	Herb ornamental
123	<i>Gisekia pharmacecides</i>	Gisekiaceae	Herb wild
124	<i>Gliricidia sepium</i>	Fabaceae	Tree
125	<i>Gmelina aroborea</i>	Verbenaceae	Tree
126	<i>Gomphrena dodumbens</i>	Amaranthaceae	Herb wild
127	<i>Grevillea robusta</i>	Proteaceae	Tree
128	<i>Guaiacum officinale</i>	Zygophyllaceae	Tree
129	<i>Gauzuma tomentosa</i>	Sterculiaceae	Tree
130	<i>Hamelia patens</i>	Rubiaceae	Shrub ornamental
131	<i>Heliotropium indicum</i>	Boraginaceae	Herb wild
132	<i>Hibiscus rosa sinensis</i>	Malvaceae	Shrub ornamental

133	<i>Hibiscus vitifolius</i>	Malvaceae	Shrub wild
134	<i>Hippeastrum reticulatum</i>	Amaryllidaceae	Herb ornamental
135	<i>Hybanthus enneaspermas</i>	Violaceae	Herb wild
136	<i>Hyptis suaveolens</i>	Lamiaceae	Herb wild
137	<i>Indigofera astragalina</i>	Fabaceae	Herb wild
138	<i>Indigofera colutea</i>	Fabaceae	Herb wild
139	<i>Indigofera linnaei</i>	Fabaceae	Herb wild
140	<i>Ipomea coccinea</i>	Convolvulaceae	Climber
141	<i>Ipomea coptica</i>	Convolvulaceae	Climber
142	<i>Ipomea indica</i>	Convolvulaceae	Climber
143	<i>Ipomea palmata</i>	Convolvulaceae	Climber
144	<i>Ipomea sepiaria</i>	Convolvulaceae	Climber
145	<i>Ixora coccinea</i>	Rubiaceae	Herb ornamental
146	<i>Jacquemontia violacea</i>	Convolvulaceae	Climber ornamental
147	<i>Jasminum sambac</i>	Oleaceae	Herb ornamental
148	<i>Jasminum grandiflorum</i>	Oleaceae	Herb ornamental
149	<i>Jasminum auriculatum</i>	Oleaceae	Herb ornamental
150	<i>Jasminum malabaricum</i>	Oleaceae	Herb ornamental
151	<i>Jasminum officinale</i>	Oleaceae	Herb ornamental
152	<i>Jatropha glandiflora</i>	Euphorbiaceae	Herb wild
153	<i>Jatropha gossypifolia</i>	Euphorbiaceae	Herb wild
154	<i>Justicia simplex</i>	Acanthaceae	Herb wild
155	<i>Kalanchoe tubiflora</i>	Crassulaceae	Herb ornamental
156	<i>Kigelia Africana</i>	Bignoniaceae	Tree
157	<i>Lagerstroemia indica</i>	Lythraceae	Tree
158	<i>Lannea ccoromandelica</i>	Anacardiaceae	Tree
159	<i>Lantana camara</i>	Verbenaceae	Herb wild
160	<i>Lantana sellowiana</i>	Verbenaceae	Herb ornamental
161	<i>Lawsonia inermis</i>	Lythraceae	Shrub ornamental
162	<i>Leucaena latisiliqua</i>	Mimosaceae	Tree
163	<i>Leucaena leucocephala</i>	Mimosaceae	Tree
164	<i>Leucas aspera</i>	Lamiaceae	Herb wild
165	<i>Luffa cylindrica</i>	Cucurbitaceae	Climber wild
166	<i>Macroptilium lathyroides</i>	Fabaceae	Herb wild
167	<i>Malvaviscus arboreus</i>	Malvaceae	Herb wild
168	<i>Mangifera indica</i>	Anacardiaceae	Tree
169	<i>Melochia corchorifolia</i>	Malvaceae	Herb wild
170	<i>Merremia emarginata</i>	Convolvulaceae	Herb wild

171	<i>Merremia tridentata</i>	Convolvulaceae	Herb wild
172	<i>Micrococca mercurialis</i>	Euphorbiaceae	Herb wild
173	<i>Millingtonia hortensis</i>	Bignoniaceae	Tree
174	<i>Mimosa pudica</i>	Mimosaceae	Herb wild
175	<i>Mimusops elengi</i>	Sapotaceae	Tree
176	<i>Mirabilis jalapa</i>	Nyctaginaceae	Herb wild
177	<i>Mollugo cerviana</i>	Molluginaceae	Herb wild
178	<i>Mollugo nudicaulis</i>	Molluginaceae	Herb wild
179	<i>Mollugo pentaphylla</i>	Molluginaceae	Herb wild
180	<i>Morinda tinctoria</i>	Rubiaceae	Tree
181	<i>Muckia maderaspatana</i>	Cucurbitaceae	Climber wild
182	<i>Muntingia calabara</i>	Muntingiaceae	Tree
183	<i>Musa paradisiaca</i>	Musaceae	Herb large
184	<i>Nerium indicum</i>	Apocynaceae	Shrub ornamental
185	<i>Nyctanthus arbortristis</i>	Oleaceae	Shrub ornamental
186	<i>Ocimum americanum</i>	Lamiaceae	Herb wild
187	<i>Ocimum basilicum</i>	Lamiaceae	Herb wild
188	<i>Ocimum sanctum</i>	Lamiaceae	Herb wild
189	<i>Oldenlandia umbellate</i>	Rubiaceae	Herb wild
190	<i>Passiflora foetida</i>	Passifloraceae	Climber wild
191	<i>Passiflora zeylanica</i>	Passifloraceae	Climber wild
192	<i>Parthenium hysteropyrus</i>	Asteraceae	Herb wild
193	<i>Pedaliium murex</i>	Pedaliaceae	Herb wild
194	<i>Peltophorum pterocarpum</i>	Caesalpinaceae	Tree
195	<i>Pergularia daemia</i>	Asclepiadaceae	Climber wild
196	<i>Phyllanthus acidus</i>	Euphorbiaceae	Tree cultivated
197	<i>Phyllanthus amarus</i>	Euphorbiaceae	Herb wild
198	<i>Phyllanthus emblica</i>	Euphorbiaceae	Tree cultivated
199	<i>Phyllanthus madaraspatisensis</i>	Euphorbiaceae	Herb wild
200	<i>Phyllanthus debilis</i>	Euphorbiaceae	Herb wild
201	<i>Philodendron gardenia</i>	Araceae	Herb ornamental
202	<i>Philodendron erubescens</i>	Araceae	Herb ornamental
203	<i>Physalis minima</i>	Solanaceae	Herb wild
204	<i>Piper betel</i>	Piperaceae	Herb ornamental
205	<i>Piper longum</i>	Piperaceae	Herb ornamental
206	<i>Pisonia alba</i>	Nyctaginaceae	Tree
207	<i>Pithecelobium dulce</i>	Mimosaceae	Tree
208	<i>Plumera rubra</i>	Apocynaceae	Tree

209	<i>Plumera alba</i>	Apocynaceae	Tree
210	<i>Polyalthia longifolia</i>	Annonaceae	Tree
211	<i>Pongamia pinnata</i>	Fabaceae	Tree
212	<i>Portulaca grandiflora</i>	Portulacaceae	Herb ornamental
213	<i>Portulaca oleracea</i>	Portulacaceae	Herb ornamental
214	<i>Premna corymbosa</i>	Verbenaceae	Tree
215	<i>Pseudaryhria viscida</i>	Fabaceae	Herb wild
216	<i>Psidium guajava</i>	Myrtaceae	Tree
217	<i>Punica granatum</i>	Lythraceae	Shrub
218	<i>Quisqualis indica</i>	Combretaceae	Climber wild
219	<i>Rouwolfia tetraphylla</i>	Apocynaceae	Herb wild
220	<i>Ricinus communis</i>	Euphorbiaceae	Shrub wild
221	<i>Rivinia humilis</i>	Petiveraceae	Herb wild
222	<i>Rosa sp.</i>	Rosaceae	Herb ornamental
223	<i>Ruella tuberosa</i>	Acanthaceae	Herb wild
224	<i>Samanea saman</i>	Mimosaceae	Tree
225	<i>Sansevieria trifasciata</i>	Agavaceae	Herb wild
226	<i>Sansevieria roxburghiana</i>	Agavaceae	Herb wild
227	<i>Sapindus emarginatus</i>	Sapindaceae	Tree
228	<i>Spathodea companulata</i>	Bignoniaceae	Tree
229	<i>Scoparia dulce</i>	Scrophulariaceae	Herb wild
230	<i>Sebastiana chamaelea</i>	Euphorbiaceae	Herb wild
231	<i>Senna tora</i>	Caesalpinaceae	Herb wild
232	<i>Senna occidentalis</i>	Caesalpinaceae	Herb wild
233	<i>Senna auriculata</i>	Caesalpinaceae	Shrub
234	<i>Senna alata</i>	Caesalpinaceae	Herb wild
235	<i>Senna fistula</i>	Caesalpinaceae	Tree
236	<i>Setaria verticillata</i>	Poaceae	Herb wild
237	<i>Sida acuta</i>	Malvaceae	Herb wild
238	<i>Sida cordata</i>	Malvaceae	Herb wild
239	<i>Sida cordifolia</i>	Malvaceae	Herb wild
240	<i>Solanum nigrum</i>	Solanaceae	Herb
241	<i>Solanum trilobatum</i>	Solanaceae	Herb
242	<i>Spermacoce ocymoides</i>	Rubiaceae	Herb
243	<i>Spermacoce hispida</i>	Rubiaceae	Herb
244	<i>Stephanotis volubilis</i>	Apocynaceae	Climber
245	<i>Sterculia foetida</i>	Sterculiaceae	Tall tree
246	<i>Sygonium podophyllum</i>	Araceae	Herb ornamental

247	<i>Synedrella nudiflora</i>	Asteraceae	Herb wild
248	<i>Syzygium cumini</i>	Myrtaceae	Tall tree
249	<i>Tabebuia rosea</i>	Bignoniaceae	Tall tree
250	<i>Tabernaemontana divaricate</i>	Apocynaceae	Shrub Herb Hornamental
251	<i>Talinum triangulare</i>	Portulacaceae	Herb ornamental
252	<i>Tamarindus indica</i>	Caesalpinaceae	Tree
253	<i>Tecoma capensis</i>	Bignoniaceae	Shrub tree
254	<i>Tecoma stans</i>	Bignoniaceae	Small tree
255	<i>Tephrosia purpurea</i>	Fabaceae	Herb wild
256	<i>Terminalia catappa</i>	Combretaceae	Tree
257	<i>Thespesia populnea</i>	Malvaceae	Tree
258	<i>Thevetia peruviana</i>	Apocynaceae	Tree
259	<i>Tinospora cordifolia</i>	Menispermaceae	Climber wild
260	<i>Tradescantia spathacea</i>	Commelinaceae	Herb ornamental
261	<i>Tradescantia zebrina</i>	Commelinaceae	Herb ornamental
262	<i>Trianthema portulacastrum</i>	Aizoaceae	Herb wild
263	<i>Tribulus terrestris</i>	Zygophyllaceae	Herb wild
264	<i>Tridax procumbens</i>	Asteraceae	Herb wild
265	<i>Triumfetta rhomboidia</i>	Malvaceae	Herb wild
266	<i>Turnera ulmifolia</i>	Turneraceae	Herb wild
267	<i>Turnera subulata</i>	Turneraceae	Herb wild
268	<i>Urochloa ramosa</i>	Poaceae	Herb wild
269	<i>Vernonia cinerea</i>	Asteraceae	Herb wild
270	<i>Vigna trilobata</i>	Fabaceae	Herb wild
271	<i>Waltheria indica</i>	Sterculiaceae	Herb wild
272	<i>Wedelia trilobata</i>	Asteraceae	Herb ornamental
273	<i>Zingiber officinale</i>	Zingiberaceae	Herb ornamental
274	<i>Ziziphus jujuba</i>	Rhamnaceae	Small tree
275	<i>Zoysia tenuifolia</i>	Poaceae	Herb ornamental

Thilagavathy (2014) reported 258 species from the college campus, after 10 years the species number has increased to 275. The increase in number is mainly due to the planting of ornamental plants and also dispersal of seeds by birds. Such periodical survey can lead us to the status of the biodiversity level in institutions. Many infrastructural development leads to loss of open area for the survival of the plants. Modern universities were established several decades ago, and most were established in natural sites with dense flora, that persist to this day (Frascaroli and Verschuuren. 2016). Moerman and Estabrook, (2006) reports that counties with a university tended to have higher biodiversity than their neighbouring counties without universities. Possible reasons may be that, most ancient universities were built in rural or wilderness areas rather than in cities, and these regions had more species diversity. Biodiversity dynamics is inversely proportional to the infrastural development. Although university campuses form an important component in urban biodiversity conservation, university campuses also show biodiversity declines, as in the case of Victoria University of Wellington in New Zealand which lost 146 plant species from 1990 to 2015, and Fergusson College campus lost around 120 species of plants from 1958 to 2014 (Forsyth, 2016). Habitat destruction is

one of the main challenges of biodiversity loss on campus flora. Students represent the potential next-generation conservationists and their conservation willingness is strongly influenced by their experiences with nature (Zhang et al., 2014). Biodiversity on educational campuses should be used as a valuable educational resource for students and we have to encourage and motivate them to volunteer for planting of saplings.

4. Conclusions

Our study shows that since 2014 around 20 plant species were added to the college biodiversity count. University/college campuses are important urban green spaces for biodiversity research and educational as well as leisure as they are connected to the life of students. Therefore, biodiversity in the educational campuses provides a unique chance to connect people with nature. This simple work represents useful and long-lasting document, which can contribute to the documentation of the plants and also stimulate the interest of future survey to analyse the loss/addition of plant species to the already existing list. The information provided in this paper is limited and to initiate ethnobotanical study is needed. From this survey, it is noted that phytochemical and pharmacological investigations to be initiated to discover their potentiality as drugs. This survey is important to analyse the biodiversity in future years and is expected to be useful to botanist, ecologist, plant lovers, students. In a final concluding note this college was enriched with different kind of plants in the last decade and furthermore maintenance of green cover by planting and research activities are needed to increase the biodiversity.

Compliance with ethical standards

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Disclosure of conflict of interest

The author declares no conflict of interest financial or otherwise.

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