



## Inventory and analysis of the floristic composition of Government Jawaharlal Nehru P.G. College Campus, Agar-Malwa (M.P.), India

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### Abstract

The present study deals with the enumeration and analysis of flowering plants found within the campus of Government Jawaharlal Nehru Postgraduate College, Agar-Malwa, Madhya Pradesh. A total of 231 plant species belonging to 69 families were recorded. The dominant families include Fabaceae (30 species), Poaceae (16 species), Euphorbiaceae (14 species), Asteraceae and Apocynaceae (13 species each), Malvaceae (12 species), Solanaceae (9 species), Amaranthaceae (8 species), Moraceae (6 species), Rutaceae, Lamiaceae, and Commelinaceae (5 species each), Asparagaceae, Phyllanthaceae, Arecaceae, Combretaceae, Convolvulaceae, Verbenaceae, and Myrtaceae (3 species each). Additionally, Acanthaceae, Nyctaginaceae, Rubiaceae, and Oleaceae were represented by 3 species each, while 9 families had 2 species each and 37 families were monospecific.

The study was conducted across all parts of the campus to identify and document the floristic diversity. Several field visits were made during the year 2024–2025 for the collection and identification of plant species. The collected specimens were processed following standard herbarium techniques, dried, mounted on herbarium sheets, and properly labeled for herbarium preparation and future reference.

**Keywords:** Floristic diversity, herbarium, investigation, monospecific

### Introduction

Phyto-diversity refers to the total variety of plants on Earth. It encompasses the diversity of genes, species, and ecosystems within a region (FES, 2010) [4]. To understand and assess the richness of phyto-diversity, a detailed taxonomic study of flora and forests is essential. Floristic surveys and the preparation of inventories are the primary means by which this objective can be achieved.

Floristic studies of any area are considered the backbone for assessing phyto-diversity, facilitating conservation management, and ensuring sustainable utilization of plant resources (Jayanthi and Rajendran, 2013) [5]. It is well established that floristic composition is influenced by environmental factors (Ayyappan and Parthasarathy, 1999) [1]; however, this composition also affects biodiversity patterns at regional scales and reflects both anthropogenic and natural disturbances (Ward, 1998) [14].

Floristic inventories provide valuable insights into changing vegetation patterns, new species invasions, and the current status of flora within a phytogeographical region. Numerous studies have been undertaken to examine the floristic composition of various habitats in India and abroad (Brandes, 1995; Krigas *et al.*, 1999; Ocak and Ture, 2001; Ture and Bocuk, 2001; Turgut, 1996) [2, 6, 9, 11, 12]. The campus of Government Jawaharlal Nehru P.G. College, Agar-Malwa (Madhya Pradesh), harbors rich and diverse ecological communities that perform a variety of ecological functions. Over time, the diversity of this area has been modified by environmental and human influences, yet it continues to sustain itself under changing conditions. However, a major limitation is the lack of proper documentation and detailed records of the natural components present within the campus.

Understanding the existing phyto-diversity is essential to recognize the ecological value of the area, the benefits it provides to students and the community, and its relevance for future conservation and educational purposes.

The present study is an attempt to prepare a comprehensive inventory of the plant diversity within the campus of Government Jawaharlal Nehru P.G. College, Agar-Malwa, which covers more than five hectares, including open areas, lawns, gardens, Vidya Van, teaching and administrative blocks, and residential zones. This research aims to assess the overall plant resources and develop a detailed floristic inventory of the campus to contribute to future conservation and management efforts.

### Materials and Methods

The western part of the district is characterized by the Agar Plateau, which occupies a major portion of the Agar Malwa District in Madhya Pradesh, India. A hilly tract lies to the west of Badod town, consisting of scattered hillocks aligned in a north–south direction. The central hills have significantly influenced the local drainage pattern. The elevation of this region ranges between 500 m (1,640 ft) and 545 m (1,788 ft) above mean sea level, with a general slope towards the north. The Dudhaliya and Kachhol streams originate from this hilly tract and drain westward, while the Chhoti Kali Sindh River, the principal perennial watercourse of the area, flows northward along the western boundary of the district.

The study site is geographically located at 23°71'03.48" N latitude and 76°01'01.78" E longitude, at an altitude of 505 m above mean sea level. Forests cover approximately 1.75% of the total geographical area of the district. Based on the classification of Champion and Seth (1968) [3], the predominant forest types of Agar-Malwa are tropical dry deciduous forest and dry deciduous scrub forest. The climate of the region is monsoon-driven, characterized by cool, dry winters and warm, humid summers. The mean maximum temperature varies from 25.2°C in January to 40°C in May, while the mean minimum temperature ranges from 11°C in January to 27.3°C in May. The mean annual rainfall is approximately 927 mm. The soil in the study area

is primarily sandy loam with a brick-red coloration. The total area of the study site is approximately 7 hectares.

The floristic survey was conducted during the year 2024–2025. Plant species were collected in different seasons and at various phenological stages vegetative, flowering, and fruiting to ensure accurate identification. Photographs of each species were taken at multiple life stages for documentation. All specimens were processed in the laboratory for herbarium preparation and subsequently identified using standard floristic references, including Flora of Madhya Pradesh (Verma *et al.*, 1993; Mudgal *et al.*, 1997; Singh *et al.*, 2001) [7, 10, 13] and Trees of India (Mukherjee, 2008).

## Result and Discussion

The present investigation was undertaken to assess the floristic diversity within the campus of Government Jawaharlal Nehru Post Graduate College, Agar-Malwa

District, Madhya Pradesh. To identify, collect, and document the floristic elements, systematic field surveys were conducted during the year 2024–2025, encompassing all major seasons to capture seasonal variations in vegetation. The campus exhibits considerable biodiversity, supporting a wide range of naturally growing trees, shrubs, and herbs. In addition, several exotic ornamental plant species have been introduced for aesthetic and shade purposes. However, the introduction of such exotic species has resulted in partial alteration of the natural floristic composition of the area. Therefore, appropriate measures are recommended to promote ecological restoration and to ensure the conservation of native plant species within the campus. All recorded taxa have been systematically enumerated in Table 1, with details including their botanical names (arranged alphabetically), family names, common names, habits, and life spans.

**Table 1:** Checklist of plant species recorded in the campus of Government Jawaharlal Nehru Post Graduate College, Agar-Malwa (Madhya Pradesh)

S.no.	Botanical Name	Family	Common Name	Habit	Life Span
1	<i>Abutilon indicum</i>	Malvaceae	Indian mallow	Shrub	Perennial
2	<i>Acacia arabica</i>	Fabaceae	Babul	Tree	Perennial
3	<i>Acacia leucophloea</i>	Fabaceae	Reonjha	Tree	Perennial
4	<i>Acalypha indica</i>	Euphorbiaceae	Indian Acalypha	Herb	Annual
5	<i>Acalypha wilkesiana</i>	Euphorbiaceae	Copperleaf	Shrub	Perennial
6	<i>Acanthospermum hispidum</i>	Asteraceae	Hispid starbur	Herb	Annual
7	<i>Achyranthes aspera</i>	Amaranthaceae	Chaff-flower	Herb	Perennial
8	<i>Adenium obesum</i>	Apocynaceae	Desert rose	Shrub	Perennial
9	<i>Adhatoda vasica</i>	Acanthaceae	Vasaka	Shrub	Perennial
10	<i>Aegle marmelos</i>	Rutaceae	Bael	Tree	Perennial
11	<i>Agave americana</i>	Asparagaceae	Century plant	Succulent	Perennial
12	<i>Ageratum conyzoides</i>	Asteraceae	Billygoat-weed	Herb	Annual
13	<i>Ailanthus excelsa</i>	Simaroubaceae	Tree of heaven	Tree	Perennial
14	<i>Albizia procera</i>	Fabaceae	White Siris	Tree	Perennial
15	<i>Allamanda cathartica</i>	Apocynaceae	Golden trumpet	Shrub	Perennial
16	<i>Aloe vera</i>	Asphodelaceae	Aloe	Succulent	Perennial
17	<i>Alstonia scholaris</i>	Apocynaceae	Saptaparni	Tree	Perennial
18	<i>Alternanthera sessilis</i>	Amaranthaceae	Joyweed	Herb	Perennial
19	<i>Alternanthera ficoidea</i>	Amaranthaceae	Joseph's coat	Herb	Perennial
20	<i>Alysicarpus vaginalis</i>	Fabaceae	Moneywort	Herb	Perennial
21	<i>Amaranthus pamori</i>	Amaranthaceae	Amaranth	Herb	Annual
22	<i>Amaranthus spinosus</i>	Amaranthaceae	Spiny amaranth	Herb	Annual
23	<i>Amaranthus tricolor</i>	Amaranthaceae	Edible amaranth	Herb	Annual
24	<i>Annona squamosa</i>	Annonaceae	Custard apple	Shrub	Perennial
25	<i>Antigonon leptopus</i>	Polygonaceae	Queen's wreath	Climber	Perennial
26	<i>Apluda mutica</i>	Poaceae	Apluda grass	Grass	Perennial
27	<i>Argemone mexicana</i>	Papaveraceae	Prickly poppy	Herb	Annual
28	<i>Aristolochia bracteolata</i>	Aristolochiaceae	Dutchman's pipe	Climber	Perennial
29	<i>Aristolochia rotunda</i>	Aristolochiaceae	Birthwort	Herb	Perennial
30	<i>Artocarpus integrifolia</i>	Moraceae	Jackfruit	Tree	Perennial
31	<i>Azadirachta indica</i>	Meliaceae	Neem	Tree	Perennial
32	<i>Bauhinia purpuria</i>	Fabaceae	Purple Bauhinia	Tree	Perennial
33	<i>Berberis vulgaris</i>	Berberidaceae	Barberry	Shrub	Perennial
34	<i>Bixa orellana</i>	Bixaceae	Sindoor	Tree	Perennial
35	<i>Boerhavia diffusa</i>	Nyctaginaceae	Punarnava	Herb	Perennial
36	<i>Bombax ceiba</i>	Malvaceae	Silk cotton tree	Tree	Perennial
37	<i>Bougainvillea spectabilis</i>	Nyctaginaceae	Bougainvillea	Shrub	Perennial
38	<i>Bridelia retusa</i>	Phyllanthaceae	Indian birch	Shrub	Perennial
39	<i>Butea monosperma</i>	Fabaceae	Palash	Tree	Perennial

40	<i>Calophyllum antillanum</i>	Calophyllaceae	Calophyllum	Tree	Perennial
41	<i>Calotropis procera</i>	Apocynaceae	Aak	Shrub	Perennial
42	<i>Canna indica</i>	Cannaceae	Canna lily	Herb	Perennial
43	<i>Carduus crispus</i>	Asteraceae	Wetted thistle	Herb	Biennial
44	<i>Carica papaya</i>	Caricaceae	Papaya	Herb	Perennial
45	<i>Carissa carandas</i>	Apocynaceae	Karonda	Shrub	Perennial
46	<i>Cassia siamea</i>	Fabaceae	Siamese cassia	Tree	Perennial
47	<i>Cassia tora</i>	Fabaceae	Sickle senna	Herb	Annual
48	<i>Catharanthus roseus</i>	Apocynaceae	Sadabahar	Herb	Perennial
49	<i>Caynodon dactylon</i>	Poaceae	Doob grass	Grass	Perennial
50	<i>Ceiba pentandra</i>	Malvaceae	Kapok tree	Tree	Perennial
51	<i>Celosia argentea</i>	Amaranthaceae	Cockscomb	Herb	Annual
52	<i>Cestrum nocturnum</i>	Solanaceae	Rat ki rani	Shrub	Perennial
53	<i>Cestrum diurnum</i>	Solanaceae	Din ka raja	Shrub	Perennial
54	<i>Chloris truncata</i>	Poaceae	Fingergrass	Grass	Perennial
55	<i>Chloris virgata</i>	Poaceae	Feather grass	Grass	Perennial
56	<i>Corchorus aestuans</i>	Tiliaceae	Wild jute	Herb	Annual
57	<i>Corchorus olitorius</i>	Tiliaceae	Jute mallow	Herb	Annual
58	<i>Chrysanthemum indicum</i>	Asteraceae	Guldaudi	Herb	Perennial
59	<i>Cinnamomum tamala</i>	Lauraceae	Tejpat	Tree	Perennial
60	<i>Citrus aurantifolia</i>	Rutaceae	Kagzi nimbu	Tree	Perennial
61	<i>Cleome viscosa</i>	Cleomaceae	Sticky cleome	Herb	Annual
62	<i>Clinopodium vulgare</i>	Lamiaceae	Wild basil	Herb	Perennial
63	<i>Clitoria ternatea</i>	Fabaceae	Butterfly pea	Climber	Perennial
64	<i>Coccinia grandis</i>	Cucurbitaceae	Ivy gourd	Climber	Perennial
65	<i>Cocos nucifera</i>	Arecaceae	Coconut	Tree	Perennial
66	<i>Codiaeum variegatum</i>	Euphorbiaceae	Croton	Shrub	Perennial
67	<i>Coleus blumei</i>	Lamiaceae	Coleus	Herb	Perennial
68	<i>Combretum indicum</i>	Combretaceae	Rangoon creeper	Climber	Perennial
69	<i>Commelina benghalensis</i>	Commelinaceae	Dayflower	Herb	Perennial
70	<i>Commelina diffusa</i>	Commelinaceae	S Dayflower	Herb	Perennial
71	<i>Commiphora wightii</i>	Burseraceae	Guggul	Shrub	Perennial
72	<i>Convolvulus arvensis</i>	Convolvulaceae	Field bindweed	Climber	Perennial
73	<i>Conyza bonariensis</i>	Asteraceae	Flaxleaf fleabane	Herb	Annual
74	<i>Cordyline fruticosa</i>	Asparagaceae	Ti plant	Shrub	Perennial
75	<i>Crepis foetida</i>	Asteraceae	Hawksbeard	Herb	Annual
76	<i>Cucumis melo agrestis</i>	Cucurbitaceae	Wild melon	Climber	Annual
77	<i>Cupressus sempervirens</i>	Cupressaceae	Cypress	Tree	Perennial
78	<i>Cymbidium aloifolium</i>	Orchidaceae	cymbidium	Epiphyte	Perennial
79	<i>Cynotis fasciculata</i>	Commelinaceae	Cynotis	Herb	Annual
80	<i>Cyperus esculentus</i>	Cyperaceae	Tiger nut sedge	Grass	Perennial
81	<i>Dactyloctenium aegyptium</i>	Poaceae	Crowfoot grass	Grass	Annual
82	<i>Dalbergia sissoo</i>	Fabaceae	Sissoo	Tree	Perennial
83	<i>Datura innoxia</i>	Solanaceae	Dhatura	Herb	Annual
84	<i>Datura metel</i>	Solanaceae	Devil's trumpet	Shrub	Perennial
85	<i>Desmodium heterophyllum</i>	Fabaceae	Tick trefoil	Climber	Perennial
86	<i>Desmodium triflorum</i>	Fabaceae	Beggarweed	Herb	Perennial
87	<i>Delonix regia</i>	Fabaceae	Gulmohar	Tree	Perennial
88	<i>Dichanthium annulatum</i>	Poaceae	Dichanthium	Grass	Perennial
89	<i>Digera muricata</i>	Amaranthaceae	Green amaranth	Herb	Annual
90	<i>Digitaria ciliaris</i>	Poaceae	Crabgrass	Grass	Perennial
91	<i>Digitaria setigera</i>	Poaceae	Sedge crabgrass	Grass	Perennial
92	<i>Dioscorea bulbifera</i>	Dioscoreaceae	Air potato	Climber	Perennial
93	<i>Dracaena trifasciata</i>	Asparagaceae	Snake plant	Succulent	Perennial
94	<i>Duranta erecta</i>	Verbenaceae	Golden dewdrop	Shrub	Perennial
95	<i>Echinoclova colona</i>	Poaceae	Arthraxon	Grass	Annual
96	<i>Echinops echinatus</i>	Asteraceae	Globe thistle	Herb	Perennial
97	<i>Eclipta prostrata</i>	Asteraceae	Bhringraj	Herb	Annual
98	<i>Emblica officinalis</i>	Phyllanthaceae	Amla	Tree	Perennial

99	<i>Emilia sonchifolia</i>	Asteraceae	Lilac tasselflower	Herb	Annual
100	<i>Eragrostis barrelieri</i>	Poaceae	Eragrostis (grass)	Grass	Perennial
101	<i>Eragrostis gumiflua</i>	Poaceae	Eragrostis species	Grass	Perennial
102	<i>Eragrostis spectabilis</i>	Poaceae	Purple lovegrass	Grass	Perennial
103	<i>Erythrina suberosa</i>	Fabaceae	Coral tree	Tree	Perennial
104	<i>Eucalyptus paniculata</i>	Myrtaceae	Safeda	Tree	Perennial
105	<i>Euphorbia grantii</i>	Euphorbiaceae	Blanket tree	Shrub	Perennial
106	<i>Euphorbia heterophylla</i>	Euphorbiaceae	Dudhi	Herb	Annual
107	<i>Euphorbia hirta</i>	Euphorbiaceae	Asthma plant	Herb	Annual
108	<i>Euphorbia microphylla</i>	Euphorbiaceae	Small euphorbia	Shrub	Perennial
109	<i>Euphorbia nerifolia</i>	Euphorbiaceae	Oleander spurge	Shrub	Perennial
110	<i>Euphorbia tithymaloides</i>	Euphorbiaceae	Devil's backbon	Shrub	Perennial
111	<i>Euphorbia trigona</i>	Euphorbiaceae	African milk tree	Shrub	Perennial
112	<i>Ficus benghalensis</i>	Moraceae	Banyan tree	Tree	Perennial
113	<i>Ficus benjamina</i>	Moraceae	Weeping fig	Tree	Perennial
114	<i>Ficus carica</i>	Moraceae	Common fig	Tree	Perennial
115	<i>Ficus glomerata</i>	Moraceae	Gular	Tree	Perennial
116	<i>Ficus religiosa</i>	Moraceae	Peepal	Tree	Perennial
117	<i>Gardenia jasminoides</i>	Rubiaceae	Gardenia	Shrub	Perennial
118	<i>Gmelina arborea</i>	Verbenaceae	Gmelina	Tree	Perennial
119	<i>Gossypium herbaceum</i>	Malvaceae	Cotton	Shrub	Perennial
120	<i>Hemidesmus indicus</i>	Apocynaceae	Anantamul	Climber	Perennial
121	<i>Hibiscus lobatus</i>	Malvaceae	Lobed Hibiscus	Herb	Perennial
122	<i>Hibiscus rosa-sinensis</i>	Malvaceae	China rose	Shrub	Perennial
123	<i>Holoptelia integrifolia</i>	Ulmaceae	Chirol	Tree	Perennial
124	<i>Hygroryza aristata</i>	Poaceae	Floating rice grass	Grass	Perennial
125	<i>Hypericum inodorum</i>	Hypericaceae	St. John's wort	Shrub	Perennial
126	<i>Impatiens balsamina</i>	Balsaminaceae	Garden balsam	Herb	Annual
127	<i>Indigofera cordifolia</i>	Fabaceae	Neel	Shrub	Perennial
128	<i>Indigofera tinctoria</i>	Fabaceae	True indigo	Shrub	Perennial
129	<i>Ipomoea carnea</i>	Convolvulaceae	Besharam	Shrub	Perennial
130	<i>Ipomoea obtusata</i>	Convolvulaceae	Morning glory	Climber	Perennial
131	<i>Ixora chinensis</i>	Rubiaceae	Ixora	Shrub	Perennial
132	<i>Jasminum grandiflorum</i>	Oleaceae	Chameli	Shrub	Perennial
133	<i>Jasminum sambac</i>	Oleaceae	Mogra	Shrub	Perennial
134	<i>Jatropha curcas</i>	Euphorbiaceae	Ratanjot	Shrub	Perennial
135	<i>Jatropha gossypifolia</i>	Euphorbiaceae	Bellyache bush	Shrub	Perennial
136	<i>Jatropha integerrima</i>	Euphorbiaceae	Spicy jatropa	Shrub	Perennial
137	<i>Jatropha nana</i>	Euphorbiaceae	Dwarf jatropa	Shrub	Perennial
138	<i>Justicia procumbens</i>	Acanthaceae	Trailing justicia	Herb	Perennial
139	<i>Kalanchoe diagamontiana</i>	Crassulaceae	Kalanchoe	Succulent	Perennial
140	<i>Lantana camara</i>	Verbenaceae	Lantana	Shrub	Perennial
141	<i>Leucaena leucocephala</i>	Fabaceae	Subabool	Tree	Perennial
142	<i>Limonia acidissima</i>	Rutaceae	Wood apple	Tree	Perennial
143	<i>Ludwigia palustris</i>	Onagraceae	Water primrose	Herb	Perennial
144	<i>Macrotyloma uniflorum</i>	Fabaceae	Horse gram	Herb	Annual
145	<i>Malva verticillata</i>	Malvaceae	Cluster mallow	Herb	Annual
146	<i>Malvastrum tricuspidatum</i>	Malvaceae	False mallow	Herb	Perennial
147	<i>Mangifera indica</i>	Anacardiaceae	Mango	Tree	Perennial
148	<i>Manilkara zapota</i>	Sapotaceae	Chikoo	Tree	Perennial
149	<i>Martynia annua</i>	Martyniaceae	Cat's claw	Herb	Annual
150	<i>Merremia emarginata</i>	Convolvulaceae	Bindweed	Climber	Perennial
151	<i>Mesosphaerum suaveolens</i>	Lamiaceae	Patchouli	Herb	Perennial
152	<i>Mimosa pudica</i>	Fabaceae	Touch-me-not	Herb	Perennial
153	<i>Mirabilis jalapa</i>	Nyctaginaceae	Four o'clock	Herb	Perennial
154	<i>Mitragyna parvifolia</i>	Rubiaceae	Kaim	Tree	Perennial
155	<i>Moringa oleifera</i>	Moringaceae	Drumstick tree	Tree	Perennial
156	<i>Murraya koenigii</i>	Rutaceae	Curry leaf	Shrub	Perennial
157	<i>Murraya peniculata</i>	Rutaceae	Orange jessamine	Shrub	Perennial

158	<i>Musa paradisiaca</i>	Musaceae	Plantain/Banana	Tree	Perennial
159	<i>Nerium indicum</i>	Apocynaceae	Oleander	Shrub	Perennial
160	<i>Nyctanthes arbor-tristis</i>	Oleaceae	Parijat	Shrub	Perennial
161	<i>Ocimum basilicum</i>	Lamiaceae	Sweet basil	Herb	Annual
162	<i>Ocimum sanctum</i>	Lamiaceae	Holy basil (Tulsi)	Herb	Perennial
163	<i>Oenothera fruticosa</i>	Onagraceae	Evening primrose	Herb	Perennial
164	<i>Ophiopogon undulatifolius</i>	Asparagaceae	Mondo grass	Grass	Perennial
165	<i>Oxalis corniculata</i>	Oxalidaceae	Wood sorrel	Herb	Perennial
166	<i>Paspalum distichum</i>	Poaceae	Knotgrass	Grass	Perennial
167	<i>Parthenium hysterophorus</i>	Asteraceae	Congress grass	Herb	Annual
168	<i>Passiflora edulis</i>	Passifloraceae	Passion fruit	Climber	Perennial
169	<i>Peltophorum pterocarpum</i>	Fabaceae	Copperpod	Tree	Perennial
170	<i>Petunia hybrida</i>	Solanaceae	Petunia	Herb	Annual
171	<i>Phoenix dactylifera</i>	Arecaceae	Date palm	Tree	Perennial
172	<i>Phyllanthus niruri</i>	Phyllanthaceae	Stonebreaker	Herb	Perennial
173	<i>Phyllanthus urinaria</i>	Phyllanthaceae	Stonebreaker	Herb	Annual
174	<i>Physalis angulata</i>	Solanaceae	Groundcherry	Herb	Annual
175	<i>Physalis peruviana</i>	Solanaceae	Cape gooseberry	Herb	Perennial
176	<i>Pimenta dioica</i>	Myrtaceae	Allspice	Tree	Perennial
177	<i>Pithecellobium dulce</i>	Fabaceae	Manila tamarind	Tree	Perennial
178	<i>Plumeria alba</i>	Apocynaceae	White frangipani	Tree	Perennial
179	<i>Plumeria pudica</i>	Apocynaceae	Pudica frangipani	Shrub	Perennial
180	<i>Polyalthia longifolia</i>	Annonaceae	False Ashoka	Tree	Perennial
181	<i>Pongamia pinnata</i>	Fabaceae	Karanj	Tree	Perennial
182	<i>Portulaca oleracea</i>	Portulacaceae	Purslane	Herb	Annual
183	<i>Prosopis cineraria</i>	Fabaceae	Khejri	Tree	Perennial
184	<i>Prosopis juliflora</i>	Fabaceae	Mesquite	Shrub	Perennial
185	<i>Psidium guajava</i>	Myrtaceae	Guava	Tree	Perennial
186	<i>Punica granatum</i>	Lythraceae	Pomegranate	Shrub	Perennial
187	<i>Rosa indica</i>	Rosaceae	Rose	Shrub	Perennial
188	<i>Roystonea regia</i>	Arecaceae	Royal palm	Tree	Perennial
189	<i>Ruellia tuberosa</i>	Acanthaceae	Minnieroot	Herb	Perennial
190	<i>Santalum album</i>	Santalaceae	Sandalwood	Tree	Perennial
191	<i>Sarcopetalum harveyanum</i>	Menispermaceae	Sarcopetalum	Climber	Perennial
192	<i>Senna obtusifolia</i>	Fabaceae	Sicklepod	Herb	Annual
193	<i>Sesbania bispinosa</i>	Fabaceae	Prickly sesban	Shrub	Perennial
194	<i>Setaria verticillata</i>	Poaceae	Hook grass	Grass	Annual
195	<i>Sida acuta</i>	Malvaceae	Wireweed	Shrub	Perennial
196	<i>Sida cordifolia</i>	Malvaceae	Country mallow	Shrub	Perennial
197	<i>Solanum nigrum</i>	Solanaceae	Black nightshade	Herb	Annual
198	<i>Solanum virginianum</i>	Solanaceae	Kantakari	Shrub	Perennial
199	<i>Sonchus arvensis</i>	Asteraceae	Field sow-thistle	Herb	Perennial
200	<i>Syngonium podophyllum</i>	Araceae	Arrowhead vine	Climber	Perennial
201	<i>Syzygium cumini</i>	Myrtaceae	Jamun	Tree	Perennial
202	<i>Tabernaemontana divaricata</i>	Apocynaceae	Crape jasmine	Shrub	Perennial
203	<i>Tamarindus indica</i>	Fabaceae	Tamarind	Tree	Perennial
204	<i>Tecoma stans</i>	Bignoniaceae	Yellow trumpet	Shrub	Perennial
205	<i>Tectona grandis</i>	Verbenaceae	Teak	Tree	Perennial
206	<i>Tephrosia purpurea</i>	Fabaceae	Fish-poison bean	Herb	Perennial
207	<i>Terminalia arjuna</i>	Combretaceae	Arjuna	Tree	Perennial
208	<i>Terminalia bellirica</i>	Combretaceae	Baheda	Tree	Perennial
209	<i>Terminalia catappa</i>	Combretaceae	Indian almond	Tree	Perennial
210	<i>Themeda quadrivalvis</i>	Poaceae	Grader grass	Grass	Annual
211	<i>Thespesia populnea</i>	Malvaceae	Paras peepal	Tree	Perennial
212	<i>Thevetia nerifolia</i>	Apocynaceae	Yellow oleander	Shrub	Perennial
213	<i>Thrinax radiata</i>	Arecaceae	Thatch palm	Tree	Perennial
214	<i>Thuja occidentalis</i>	Cupressaceae	Thuja	Tree	Perennial
215	<i>Tradescantia spathacea</i>	Commelinaceae	Boat lily	Herb	Perennial
216	<i>Tradescantia zebrina</i>	Commelinaceae	Wandering Jew	Herb	Perennial

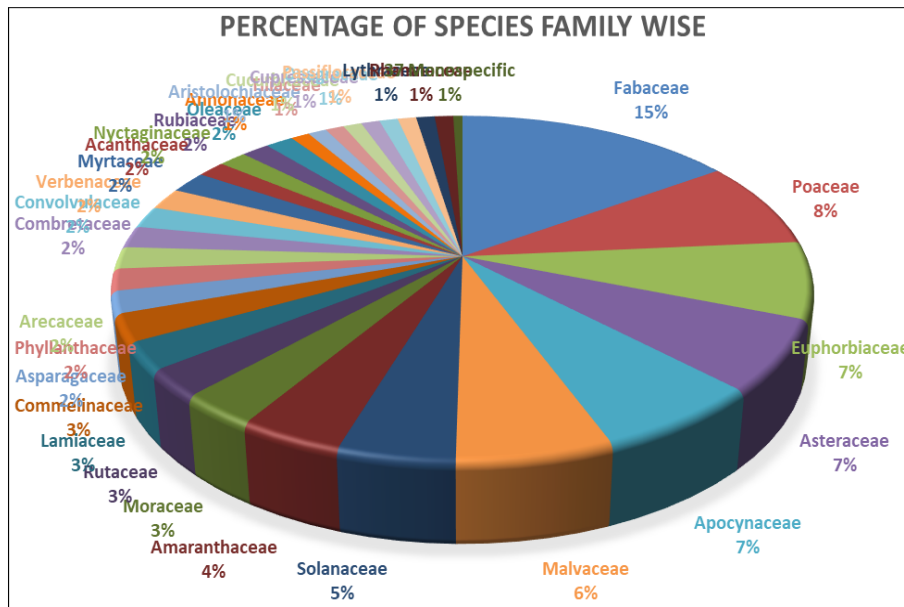
217	<i>Trianthema portulacastrum</i>	Aizoaceae	Horseherb	Herb	Annual
218	<i>Tribulus terrestris</i>	Zygophyllaceae	Gokhru	Herb	Annual
219	<i>Tridax procumbens</i>	Asteraceae	Coatbuttons	Herb	Perennial
220	<i>Triumfetta pentandra</i>	Malvaceae	Burweed	Shrub	Perennial
221	<i>Turnera diffusa</i>	Passifloraceae	Damiana	Shrub	Perennial
222	<i>Tylophora indica</i>	Apocynaceae	Indian ipecac	Climber	Perennial
223	<i>Verbascum densiflorum</i>	Scrophulariaceae	Mullein	Herb	Perennial
224	<i>Veronica agrestis</i>	Plantaginaceae	Blue pimpernel	Herb	Annual
225	<i>Vigna unguiculata</i>	Fabaceae	Cowpea	Herb	Annual
226	<i>Vigna trilobata</i>	Fabaceae	Three-lobed bean	Herb	Annual
227	<i>Woodfordia fruticosa</i>	Lythraceae	Fire flame bush	Shrub	Perennial
228	<i>Xanthium strumarium</i>	Asteraceae	Cocklebur	Herb	Annual
229	<i>Zephyranthes citrina</i>	Amaryllidaceae	Rain lily	Herb	Perennial
230	<i>Ziziphus nummularia</i>	Rhamnaceae	Ber	Shrub	Perennial
231	<i>Ziziphus jujuba</i>	Rhamnaceae	Jujube	Tree	Perennial

In the present study, a total of 231 plant species belonging to 69 families were recorded. The dominant families include Fabaceae (30 species), Poaceae (16 species), Euphorbiaceae (14 species), Asteraceae and Apocynaceae (13 species each), Malvaceae (12 species), Solanaceae (9 species), Amaranthaceae (8 species), Moraceae (6 species), and Rutaceae, Lamiaceae, and Commelinaceae (5 species each).

Additionally, Asparagaceae, Phyllanthaceae, Arecaceae, Combretaceae, Convolvulaceae, Verbenaceae, and Myrtaceae are represented by 4 species each, while Acanthaceae, Nyctaginaceae, Rubiaceae, and Oleaceae include 3 species each. Nine families are represented by 2 species each, and 37 families are monospecific (Table 2, Fig. 1).

**Table 2:** Number of Species recorded family wise

S. No	Family	Number of Species recorded
1	Fabaceae	30
2	Poaceae	16
3	Euphorbiaceae	14
4	Asteraceae	13
5	Apocynaceae	13
6	Malvaceae	12
7	Solanaceae	9
8	Amaranthaceae	8
9	Moraceae	6
10	Rutaceae	5
11	Lamiaceae	5
12	Commelinaceae	5
13	Asparagaceae	4
14	Phyllanthaceae	4
15	Arecaceae	4
16	Combretaceae	4
17	Convolvulaceae	4
18	Verbenaceae	4
19	Myrtaceae	4
20	Acanthaceae	3
21	Nyctaginaceae	3
22	Rubiaceae	3
23	Oleaceae	3
24	Annonaceae	2
25	Aristolochiaceae	2
26	Tiliaceae	2
27	Cucurbitaceae	2
28	Cupressaceae	2
29	Onagraceae	2
30	Passifloraceae	2
31	Lythraceae	2
32	Rhamnaceae	2
33	37 Monospecific	1

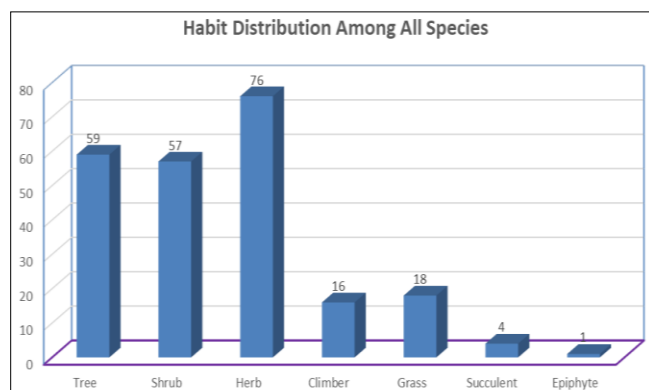


**Fig 1:** Showing family wise species percentage in the college campus

The analysis of plant habit distribution among the recorded species revealed considerable variation. Herbaceous species were the most abundant, accounting for 23% of the total flora, followed closely by large trees, which represented 21%. Shrubs contributed 19%, while medium-sized and small trees comprised 16% and 10%, respectively. Grasses and climbers were comparatively less common, constituting 7% and 4% of the species. These findings, summarized in Table 3 and illustrated in Figure 2, indicate a predominance of herbaceous and woody plant forms within the campus, reflecting the diverse structural composition of the local vegetation.

**Table 3:** Habit distribution of plant species in campus

S.N.	Type of Habit	Number of species
1	Tree	59
2	Shrub	57
3	Herb	76
4	Climber	16
5	Grass	18
6	Succulent	04
7	Epiphyte	01



**Fig 2:** Analysis of habit distribution of plant species in campus

**Conclusion**

The observed data indicate that the floristic diversity of the college campus is currently good. However, there is a need

to introduce a wider variety of plant species to further enhance the overall plant diversity, which will contribute to a healthier and more sustainable environment. In particular, increasing the number of tree species is essential, as this will expand the canopy cover, creating a favorable microenvironment that supports the growth of understory and ground-level vegetation. Such an improvement in vegetation structure will enhance the greenery of the campus and promote ecological balance.

Moreover, maintaining a detailed inventory of the campus flora serves as a valuable resource for faculty members as well as undergraduate and postgraduate students. It facilitates accurate identification, study, and monitoring of various aspects of plant communities, including their distribution, growth patterns, and ecological interactions. This comprehensive understanding not only supports academic research but also informs effective planning for campus greening and biodiversity conservation initiatives.

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