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## RESEARCH ARTICLES

**OPEN ACCESS** 

# CHECKLIST OF CULTIVATED ANGIOSPERMIC PLANTS FROM ANNASAHEB MAGAR MAHAVIDYALAYA CAMPUS, PUNE, MAHARASHTRA, INDIA

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#### **ABSTRACT**

Survey was conducted on cultivated angiospermic plants of Annasaheb Magar Mahavidyalaya campus. In all total 160 species representing 124 genera and 55 families were reported. From these 45 Dicots and 10 monocot families were reported. Apocynaceae, Euphorbiaceae and Caesalpiniaceae from Dicots; Araceae from monocots were found to be dominant.

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## INTRODUCTION

Annasaheb Magar Mahavidyalaya Hadapsar is one of the renowned educational institutions from Pune District Education Association's. It was established in the year 1971. Present survey was made to attempt checklist of cultivated angiospermic plant of the AMM campus. The survey of the AMM, based on the observations made in the years 2015 to 2018. The area of the premises is 05 acres. The main aim was conservation of the plant diversity. It also aims to enrich the plant diversity, aesthetic values and to popularise the botanical and common names of the plant among the students.

## **MATERIALS AND METHODS**

The present checklist is based on the collection and observation of angiospermic plants during the year 2015 to 2018. The plants were propagated and cultivated by second year students of all faculties of the college.

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Plant specimens were studied and identified in the botany laboratory with the help of standard taxonomic literature. All the families were identified & arranged according to Flora of Maharashtra State. (Singh *et al.* 2000)

## RESULTS AND DISCUSSION

Check list of observed, identified plants and their families was given in Table no. 1. The graph reflects dominant plant families of the campus are Apocynaceae (11 species), Euphorbiaceae (10 species), Caesalpinaceae (07 species) from diocots and Araceae (11 species) from monocots were found to be dominant (Table 1, Fig. 1a and 1b). Survey of the campus represents the total 55 plant families. Among which 45 families belongs to Dicotyledones and 10 from Monocotyledons. 55 families represented by 124 genera and out of which 95 genera belong to Dicotyledones and 29 genera from monocotyledons (Table 2, Fig. 2a). In all College campus enriched with total number of 160 plant species. Among them 122 plant species reported from Dicotyledones and 38 plant species from monocotyledons (Table 2, Fig. 2a).

Table 1. List of Angiosperm Plants from Annasaheb Magar Mahavidyalaya Campus

Sr. No.	Family No.	No. of species in Family	Family	Botanical name of the plant	Common name	Habit	Class
1	1	01	Magnoliaceae	Michelia champaca L.	Pivala chapha., Sonchapha	Tree	Dicot
2	2	02	Annonaceae	Artabotrys hexapetalus (L. f.) Bhandari	Green Champa	Climber - Woody	Dicot
3			Annonaceae	Polyalthia longifolia (Sonner.) Thw, Enum.	Asoka Tree	Tree	Dicot
4	3	01	Nymphaeceae	Nymphaea sp. Peach Glow	Water lily.	Herb	Dicot
5	4	02	Caryophyllaceae	Dianthus chinesis L.	Rainbow pink / China pink	Herb	Dicot
6			Caryophyllaceae	Dianthus plumarius L. Synonyms: Caryophyllus plumarius Moench	Garden pink	Herb	Dicot
7	5	01	Portulacaceae	Portulaca grandiflora Hook	Cupcake Carrot	Herb	Dicot
8	6	03	Malvaceae	Alcea rosea L. Synonym: Althaea rosea Cav	Hollyhock	Herb	Dicot
9			Malvaceae	Hibiscus rosa-sinensis L.	Jaswand	Shrub	Dicot
10			Malvaceae	Malvaviscu penduliflorus DC.	Muki Jaswand	Shrub	Dicot
11	7	01	Bombacaceae	Bombax ceiba L.	Kapok	Tree	Dicot
12	8	01	Muntingiaceae	Muntingia calabura L.	Singapore cherry	Climber	Dicot
13	9	01	Malpighiaceae	Galphimia glauca Cav.	Rain of gold Shower of Gold	Shrub	Dicot
14	10	01	Geraniaceae	Pelargonium vitifolium L. Ait., Hort. Synonym: Geranium vitifolium L	Geranium	Herb	Dicot
15	11	01	Balsaminaceae	Impatiens balsamina L.	Garden Balsam / Terada	Herb	Dicot
16	12	04	Rutaceae	Aegle marmelos (L.) Corr.	Bael	Tree	Dicot
17			Rutaceae	Citrus aurantifolia (Christm. & Panz.) Swing.	Limbu	Tree	Dicot
18			Rutaceae	Citrus limetta Risso.	Mosambi	Tree	Dicot
19			Rutaceae	Murraya koenigii (L.) Spreng.	Kadhi-patta	Shrub	Dicot
20	13	01	Meliaceae	Azadirachta indica A. Juss.	Kadu-Neem	Tree	Dicot
21	14	01	Burseraceae	Commiphora wightii (Arn.) Bhandari Synonyms: Commiphora mukul (Stocks) Hook.	Gugul	Shrub or small tree	Dicot
22	15	01	Vitaceae	Cissus quadrangularis L.	Hadjod	Climber	Dicot
23	16	01	Anacardiaceae	Mangifera indica L.	Amba	Tree	Dicot
24		02	Fabaceace (Papilionaceae)	Abrus precatorius L.	Gunj.	Climber	Dicot
25			Fabaceace (Papilionaceae)	Clitoria ternatea L.	Gokarna	Climber	Dicot
26	17	07	Caesalpinaceae	Saraca asoca (Roxb.)Wild. Synonyms: Saraca indica sensu Bedd. L.	Sitecha Ashok	Tree	Dicot
27			Caesalpinaceae	Cassia siamea Lam.	Kashid	Tree	Dicot
28			Caesalpinaceae	Cassia surattensis Burm. f.) H.S. Irwin & Barneby	Motha Tarvad	Tree	Dicot
29			Caesalpinaceae	Tamarindus indica L.	Chinch	Tree	Dicot
30			Caesalpinaceae	Bauhinia acuminata L.	Safed Kachnar	Shrub/ middle sized tree	Dicot
31			Caesalpinaceae	Delonix regia (Hook.) Raf.	Gulmohar, Flame Tree	Tree	Dicot
32			Caesalpinaceae	Caesalpinia pulcherrima (L) Sw.	Shankhasur	Shrub	Dicot
33	18	04	Mimosaceae	Albizia lebbeck (L.) Willd	Shirish	Tree	Dicot
34			Mimosaceae	Pithecellobium dulce (Roxb.) Benth & Hook. Synonyms: Mimosa dulce (Roxb.)	Vilayati chinch	Tree	Dicot
35			Mimosaceae	Prosopis cineraria (L) Druce	Shami	Tree	Dicot
36			Mimosaceae	Mimosa pudica L.	Touch-Me-Not, Lajalu	Tree	Dicot
37	19	01	Rosaceae	Rosa sp.	Gulab	Herb or small shrub	Dicot
38	20	02	Crassulaceae	Bryophylum pinnatum Oken	Paanphuti	Herb	Dicot
39			Crassulaceae	Graptoveria opalina	Stonecrops	Herb	Dicot
40	21	02	Combretaceae	Quisqualis indica L.	Madhumalti, Rangoon Creeper	Climber	Dicot

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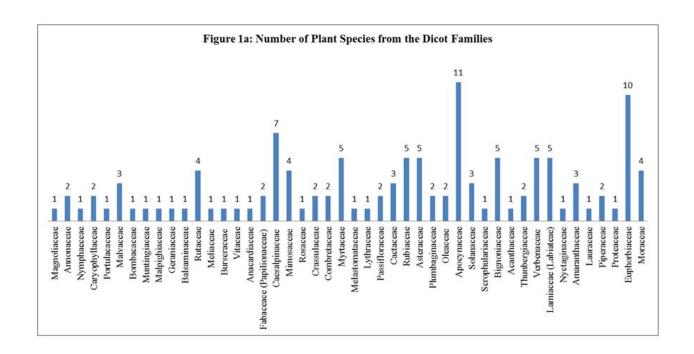
41			Combretaceae	Terminalia catappa L.	Desi Badam	Tree	Dicot
42	22	05	Myrtaceae	Callistemon lanceolatus (Sm.) Sweet	Bottle brush	Tree or shrub	Dicot
43			Myrtaceae	Eucalyptus globulus Labill.	Nilgiri	Tree	Dicot
44			Myrtaceae	Psidium guajava L.	Peru	Tree	Dicot
45			Myrtaceae	Syzygium cumini (L.) Skeels, Synonyms: Eugenia jambolana Lam.	Jambul	Tree	Dicot
46			Myrtaceae	Xanthostemon youngii C.T. White & W. d. Francis	Red penda / crimson penda	Shrub	Dicot
47	23	01	Melastomataceae	Tibouchina urvilleana Cogn.	Glory Bush, Princess Flower	Shrub	Dicot
48	24	01	Lythraceae	Lagerstroemia speciosa (L) Pers.	Pride of India, Taaman	Tree	Dicot
49	25	02	Passifloraceae	Passiflora caerulea L.	Krishnakamal	Climber	Dicot
50			Passifloraceae	Passiflora incarnata L	purple passionflower	Climber	Dicot
51	26	03	Cactaceae	Cereus peruvianus Mill	Apple Cactus	Shrub	Dicot
52			Cactaceae	Echinocactus grusonii Hildm.	Golden ball	Shrub	Dicot
53			Cactaceae	Epiphyllum oxypetalum	Brahma-Kamal	Shrub	Dicot
54	27	05	Rubiaceae	Hamelia patens Jacq.	Fire Bush	Shrub	Dicot
55			Rubiaceae	Ixora coccinea L.	Kuda, Jungle flame	Shrub	Dicot
56			Rubiaceae	Mussaenda erythophylla Schumach & Thonn.	Red flag bush, Buddha's lamp	Shrub	Dicot
57			Rubiaceae	Mussaenda frondosa, L.	Dhobi tree, white flag bush	Shrub	Dicot
58	İ	Ì	Rubiaceae	Pentas lanceolata (Forsk) Deflers	Star Flower, Star Cluster	Herb	Dicot
59	28	05	Asteraceae	Chrysanthemum indicum L.	Shevati	Herb	Dicot
60			Asteraceae	Gaillardia aristata Pursh	Blanket flower	Herb	Dicot
61			Asteraceae	Gaillardia pulchella Foug.	Blanket flower	Herb	Dicot
62			Asteraceae	Spilanthes acmella Murr. Synonyms: S. paniculata, Spilanthes calva DC.	Akarkara	Herb	Dicot
63			Asteraceae	Tagetus erecta L.	Zendu	Herb	Dicot
64	29	02	Plumbaginaceae	Plumbago auriculata Lam.	Blue Chitrak	Herb	Dicot
65			Plumbaginaceae	Plumbago zeylanica L.	Pandhara Chitrak	Herb.	Dicot
66	30	02	Oleaceae	Jasminum samba (L.) Aiton	Mogra	Shrub	Dicot
67			Oleaceae	Nyctanthes arbor-tristis L.	Parijatak	Shrub or small tree	Dicot
68	31	11	Apocynaceae	Adenium obesum Roem. & Schult.	Red Sandalwood, Desert rose	Tree (Bonsai)	Dicot
69			Apocynaceae	Allamanda blanchetii A. DC.	vine red Allamanda	Climer	Dicot
70			Apocynaceae	Allamanda cathartica L.	Yellow Allamanda Golden trumpet	Climer	Dicot
71			Apocynaceae	Alstonia scholaris L. R.Br.	Saptparni	Tree	Dicot
72			Apocynaceae	Cascabella thevetia (L)	Pivali Kanher , Bitti	Shrub or small tree	Dicot
73			Apocynaceae	Catharanthus roseus (L.) G. Don.	Sadaphuli	Herb	Dicot
74			Apocynaceae	Nerium indicum Mill. Gard.	Kaner	Shrub	Dicot
75			Apocynaceae	Plumeri alba L.	White Champka, white frangipani	Tree -Small	Dicot
76			Apocynaceae	Plumeria pudica Jacq.	Golden Arrow	Tree -Small	Dicot
77			Apocynaceae	Plumeria obtuse L.	Singapore graveyard flower	Tree -Small	Dicot
78			Apocynaceae	Plumeria rubra L. Synonyms : Plumeria acutifolia Poir.	Red champka	Tree -Small	Dicot
79	32	03	Solanaceae	Cestrum nocturnum L.	Raat-ni-Rani	Climber	Dicot
80			Solanaceae	Petunia grandiflora	Crimson star	Herb	Dicot
81			Solanaceae	Withania somnifera (L.) Dunal.	Ashwagandha	Shrub	Dicot
82	33	01	Scrophulariaceae	Russelia equisetiformrs Schlt Dl. & Cham. Synonyms Russelia juncea Zucc.	Fountain or Fire Cracker	Shrub	Dicot
83	34	05	Bignoniaceae	Campsis radicans Seem. Journ.	Trumpet Vine	Shrub	Dicot
84			Bignoniaceae	Dolichandra unguis-cati (L.) Miers Synonyms: Bignonia unguis-cati L.	Cat's Claw/ Nakh Vel	Climber	Dicot
85			Bignoniaceae	Jacaranda acutifolia Humb & Bonpl	Nil mohar	Tree	Dicot
86			Bignoniaceae	Pandorea jasminoides (Lindl.) K. Schum. cultivar alba	Bower creeper, bower vine	Climber	Dicot
87			Bignoniaceae	Pyrostegia venusta (Ker Gawl.) Miers Synonyms : Bignonia venusta Ker Gawl.	Flame Vine, Flaming Trumpet	Climber	Dicot
88	35	01	Acanthaceae	Justicia adhatoda L. Synonyms: Adhatoda vasica Nees	Adulsa	Shrub	Dicot
89	36	02	Thunbergiaceae	Thunbergia laevis Nees	Whitelady	Climber	Dicot
90			Thunbergiaceae	Thunbergia grandiflora (Roxb. Ex Rottl.)	Blue Thunbergia, blue skyflower	Climber	Dicot

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91	37	05	Verbenaceae	Clerodendrum wallichii Merr.	Bridal vail	Shrub	Dicot
92			Verbenaceae	Clerodendrum thomsoniae Balf.f.	Bleeding Heart Vine	Climber	Dicot
93			Verbenaceae	Lantana camera L. var. aculeata	Tantani, Ghaneri	Tree	Dicot
94			Verbenaceae	Lantana involucrata L.	Buttonsage	Shrub	Dicot
95			Verbenaceae	Lantana montevidensis (Spreng) Brig	trailing lantana	Shrub.	Dicot
96	38	05	Lamiaceae (Labiateae)	Ocimum tenuiflorum L., Synonym: Ocimum sanctum L.	Krishna Tulsi,	Herb or Under Shrub	Dicot
97			Lamiaceae (Labiateae)	Ocimum americanum L. Synonym: Ocimum canum, Sims.	Ran Tulsi	Herb or Under Shrub	Dicot
98			Lamiaceae (Labiateae)	Ocimum basilicum L.	Sabja	Herb or Under Shrub	Dicot
99			Lamiaceae (Labiateae)	Plectranthus scutellarioides (L.) R. Br. Synonyms: Coleus blumei Benth.	Coleus	Herb	Dicot
100			Lamiaceae (Labiateae)	Plectranthus amboinicus Lour. Synonyms: Coleus amboinicus	Indian Mint, Owa pan	Herb	Dicot
101	39	01	Nyctaginaceae	Bougainvillea spectabilis Willd	Bougainvel	Climber - Woody	Dicot
102	40	03	Amaranthaceae	Celosia argentea L. var. cristata	Cockscomb	Herb	Dicot
103			Amaranthaceae	Celosia spicata L. Sp.	Kurdu	Herb	Dicot
104			Amaranthaceae	Gomphrena globosa L.	Makhmali, Supari	Herb	Dicot
105	41	01	Lauraceae	Cinnamon verum Persl Synonyms: Cinnamon zeylanicum Blume	Dalchini	Tree	Monocot
106	42	02	Piperaceae	Piper betle L.	Nagvel, Nagarvel,	Climber	Dicot
107			Piperaceae	Piper nigrum L.	Black Pepper, Kala Mari	Climber	Dicot
108	43	01	Proteaceae	Grevillea robusta A. Cunn. Ex. R.Br.	Silver Oak	Tree	Dicot
109	44	10	Euphorbiaceae	Acalypha wilkesiana Muell-Arg	Acalypha	Shrub	Dicot
110			Euphorbiaceae	Acalypha hispida Burm.	Acalypha, Copper leaf	Shrub	Dicot
111			Euphorbiaceae	Codiaeum variegatum var. angustifolium	Limbu croton	Shrub	Dicot
112			Euphorbiaceae	Codiaeum variegatum var. Pictum, (L.) Bl., Bijdr.	Amba Croton	Shrub	Dicot
113			Euphorbiaceae	Codiaeum variegatum var. Spirale	Croton	Shrub	Dicot
114			Euphorbiaceae	Euphorbia milli Ch. Des. Moulins	Tawa	Shrub	Dicot
115			Euphorbiaceae	Euphorbia pulcherrima Willd. ex Klotzsch	Lal-patti	Shrub	Dicot
116			Euphorbiaceae	Jatropha gossipifolia L.	bellyache bush	Shrub	Dicot
117			Euphorbiaceae	Jatropha integerrima Jacq. Synonyms: Jatropha pandurifolia Andr. Jatropha hastate Jacq.	Peregrina, Spicy Jatropha,	Shrub	Dicot
118			Euphorbiaceae	Phyllanthus emblica L. Synonyms: Emblica officinalis Gaertn.	Amla	Tree	Dicot
119	45	04	Moraceae	Ficus benghalensis L.	Banyan tree	Tree	Dicot
120			Moraceae	Ficus benjamina L.	Weeping Fig	Tree	Dicot
121			Moraceae	Ficus racemosa Linn Synonyms: Ficus glomerata Roxb.	Umber	Tree	Dicot
122			Moraceae	Ficus religiosa L.	Pimpal	Tree	Dicot
123	46	01	Zingiberaceae	Costus igneus N.E. Br.	Insulin plant	Herb	Monocot
124	47	02	Cannaceae	Canna indica L	Kardali	Herb	Monocot
125			Cannaceae	Canna flaccida Rosc.	Kardal	Herb	Monocot
126	48	01	Strelitziaceae	Strelitzia reginae Banks	Bird of Paradise	Herb	Monocot
127	49	02	Amaryllidaceae	Scadoxus multiflorous (Martyn) Raf.	Blood lily, May flower	Herb	Monocot
128			Amaryllidaceae	Zephyranthes candida (Lindl.) Synonyms: Amaryllis candida Lindl.	Fairy Lily	Herb	Monocot
129	50	05	Agavaceae	Sansevieria trifasciata Prain Synonyms: Dracaena trifasciata Prain	Snake Plant	Herb	Monocot
130			Agavaceae	Polianthes tuberosa L.	Tube Rose, Rajnigandha	Herb	Monocot
131			Agavaceae	Dracaena fragrans (L.) Ker Gawl.	Corn Plant	Shrub	Monocot
132			Agavaceae	Cordyline rubra Otto & A. Dietr	Palm lily	Shrub or small tree	Monocot
133			Agavaceae	Cordyline fruticosa (L.) A. Chev. Synonyms: Dracaena terminalis L.	Ti plant	Shrub or small tree	Monocot
134	51	05	Liliaceae	Aloe vera (L.) Burm	Korphad	Herb under Shrub	Monocot
135			Liliaceae	Asparagus densiflorus (Kunth) Jesso	Asparagus Fern / foxtail fern	Herb	Monocot
136		1	Liliaceae	Asparagus plumosus Baker., J. Linn	Climbing asparagus fern	Climber	Monocot
137			Liliaceae	Asparagus racemosus Willd.	Shatayari	Climber	Monocot
138			Liliaceae	Chlorophytum comosum (Thunb.) Jacques	Spider Plant	Herb	Monocot
139	52	04	Commelinaceae	Rhoeo spathacea (Sw.)	Rhoeo	Herb	Monocot
140	1		Commelinaceae	Tradescantia pallida (Rose) D. R. Hunt	Purple Queen	Herb	Monocot
141			Commelinaceae	Tradescantia zebrina (Schinz) D. R. Hunt	Wandering jew	Herb	Monocot

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142			Commelinaceae	Tradescantia spathacea Sw. Synonyms: Rhoeo discolor (L'Her.) Hance	Rhoeo	Herb	Monocot
143	53	05	Arecaceae (Palmae)	Cocos nucifera L.	Coconut	Tree	Monocot
144			Arecaceae (Palmae)	Roystonea regia (Kunth) O. F. Cook Synonyms: Oreodoxa regia Kunth	Bottle Palm, Royal Palm	Tree	Monocot
145			Arecaceae (Palmae)	Licuala grandis (hort. Ex W. Bull) H. Wendl	Ruffled fan palm, Palas palm	Shrub	Monocot
146			Arecaceae (Palmae)	Livistona rotundifolia (Lamarck) Mart. Synonyms: Saribus rotundifolius (Lamarck) Blume	Fan palm, Table palm	Tree	Monocot
147			Arecaceae (Palmae)	Wodyetia bifurcate A.K. Irvine	Foxtail palm	Tree	Monocot
148		11	Araceae	Acorus calamus L.	Wekhand	Herb	Monocot
149	54		Araceae	Aglaonema commutatum Schott	Philippine evergreen	Herb	Monocot
150			Araceae	Aglaonema Modestum	Chinese evergreen	Herb	Monocot
151			Araceae	Aglaonema widuri	Red Peacock	Herb	Monocot
152			Araceae	Aglaonema nitidum	Silver evergreen	Herb	Monocot
153			Araceae	Dieffenbachia seguine (Jacq.) Schott	Dumb-cane	Herb	Monocot
154			Araceae	Dypsis lutescens (H. Wendl.) Beentje & J. Dransf.	Areca palm	Tree	Monocot
155			Araceae	Epipremum aureum (Linden & André)	Money plant	Climber	Monocot
156			Araceae	Monstera deliciosa Liebm.	Window Leaf,	Herb	Monocot
157			Araceae	Pothos Scandens L.	Money plant	Climber	Monocot
158			Araceae	Spathiphyllum cochlearispathum (Liebm.) Engl.	Peace Lily.	Herb	Monocot
159	55	03	Poaceae (Graminae)	Vitiveria zizanoides (L.)	Wala	Herb	Monocot
160			Poaceae (Graminae)	Cymbopogon citratus (DC.) Stapf.	Lemon grass	Herb	Monocot



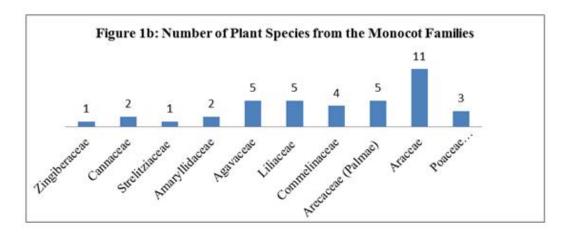
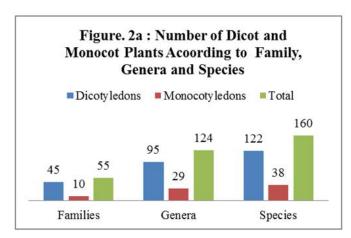


Table 2. Number of Plants in Different Categories

	Families	Genera	Species	Herb	Shrub	Tree	Climber
Dicotyledons	45	95	122	28	36	38	20
Monocotyledons	10	29	38	25	04	05	04
Total	55	124	160	53	40	43	24



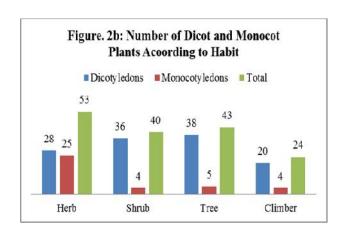
Amongst total species, 53 are herbs wherein 28 dicots and 25 monocots; 40 species are shrubs wherein 36 dicots and 04 monocots; 43 species are trees wherein 38 dicots and 05 monocots; and 24 species are climbers wherein 20 dicots and 04 monocots (Table 2, Fig. 2b).

#### Conclusion

Plant checklist of Annasaheb Magar Mahavidyalaya represents floristic diversity of plant. The aim of the authors was to focus diversity of the campus. College campus enriched with 160 plant species. Apocynaceae, Euphorbiaceae, Caesalpinaceae and Araceae are the most dominant family in the college campus.

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