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Floral Diversity in the Campus of DAV International School, Ahmedabad, Gujarat India

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Abstract
The aim of this research paper is to study in detail the floral diversity and distribution of angiosperms and gymnosperms which are present in the campus of DAV International School, Ahmedabad. Beginning from the introduction of different floral diversity in this campus. This research paper provides the in-depth information of angiosperms and gymnosperms which are growing in the campus and by doing so this research paper distributes them into certain categories giving detailed information on each of them. By doing so we have classified the entire floral life into a few categories like Tree, Herb, Shrub, Climber, Creeper and Gymnosperm. During our research we found that currently there are 68 species found in the campus.

Keywords: Floral Diversity, Angiosperms, Gymnosperms, DAV International School

Introduction

Today, science has become a continuously evolving field where each branch and sub branch of science has its own importance, scope and study. Similarly, botany is one such division of science which has gained much attention in the new-age scientific advancements. If we go further into botany, floral studies have received much appreciation all over. DAV international school, Ahmedabad is a place that embraces modern approach and is always one of the leading institutes when it comes to contributing in educational research and development. DAV international school believes in the holistic environment resulting into 360-degree development of a child. Not only in teaching and learning but DAV International School also encourages its teachers and students to dive deeper into the field of research and bring out some solid research benefiting society. Appreciating and welcoming this aspect from the authorities of DAV international school, Ahmedabad, teachers and students of Botany department have prepared this research paper representing the study of classification of floral diversity in the campus of DAV international school, Ahmedabad. The project is not only about classifying the floral diversity but also to provide the detailed report and in-depth knowledge of different categories like Herbs, Shrubs, Grass, Tress, climber and gymnosperm which are mentioned in the campus of DAV international school Ahmedabad. Through this research project we aim-

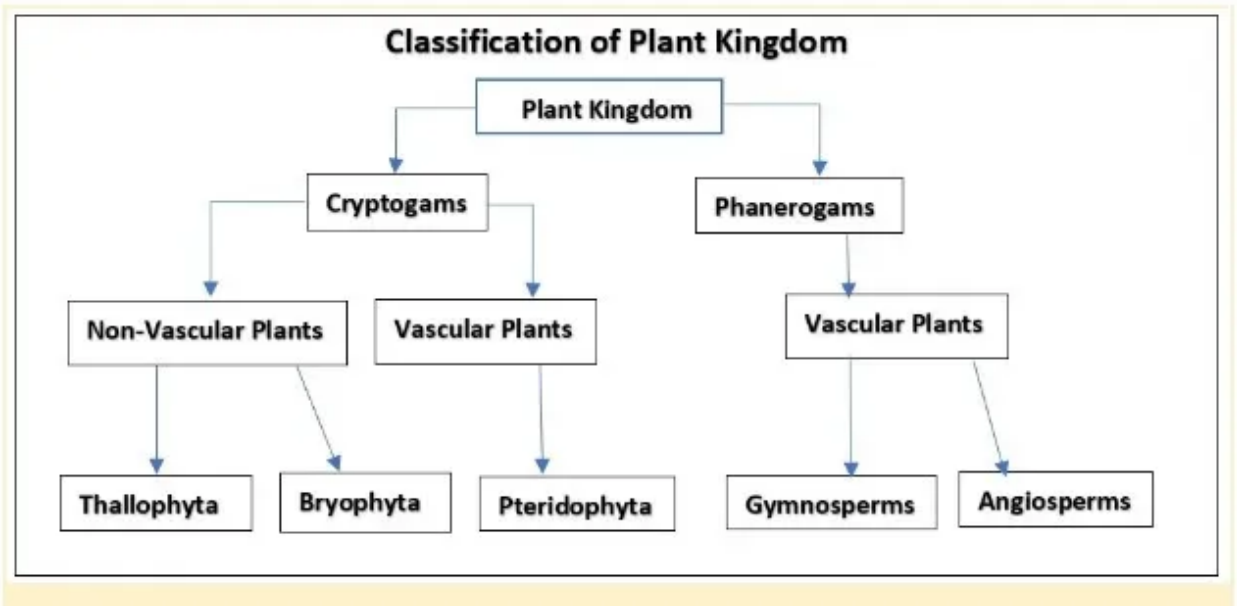
1. To study the floral diversity in the campus of DAV and
2. To classify them into further sub categories mentioned above.

Location: DAV International School, Ahmedabad, Gujarat.
Further stanzas describe the materials and method used by the researchers for this project.

Materials and Methods

For an unbiased and complete study, the students have used the 'Plant Classification'.

Plant Classification is the process of grouping plants into categories based on their relationships. There are sets of rules that standardize the results. Here categories are placed in hierarchy. Here, the plants are classified into major lineages. Below mentioned diagram will clarify it effectively-



[1]

The plants have also been classified on the basis of the zone they were found in. These zones include:

1. Kids play area
2. Ground
3. Hawan area
4. Basketball court
5. Car parking
6. Reception entrance

Study area

DAV International School is located on Off. Prahladagar Corporate Road, Makarba area of Ahmedabad, Gujarat. It is a huge spacious campus spread over 2.746 acres of land making a total built up area [in sq.mtrs.] 4095 sq. meters. The study area for this project is the ground of DAV school which is 7017.66sq. mtrs. There are continuous fluctuations in the weather here, in summer's the highest temperature here goes up to 45-degrees. This school was established in the year of 2007. This school contains academic teachings from Sr Kg to 12th std of English medium in affiliation with the Central Board of India [CBSE].

This school has several amenities like Indoor games, Music Rooms, Library, Playground, Math Lab, Computer Lab, Science Lab, spacious classrooms, assembly hall, conference room, basement and spacious parking for staff and students. The campus is rich with a plethora of greenery in the forms of plants, herbs, shrubs, trees, climbers and grass. To maintain the greenery and awareness regarding this in students there are several meets and campus related activities held at regular intervals. School makes a special effort in introducing the greenery and plants to students so there is an increase in knowledge and awareness.

While studying the campus of DAV the researchers have collected certain data and have classified them into the categories mentioned below pertaining to their characteristics. The pictorial analysis of the data collected during the field survey is mentioned below:

Sr no.	Photos	Common Name	Scientific name	Type	Location
1		Arborvitae	*Thuja*	G	Hawan area
2		Ti	*Cordyline fruticosa*	S	Hawan area
3		golden pothos	*Epipremnum aureum*	CR	Hawan area
4		Bamboo	*Bambusoideae*	H	Hawan area
5		Palm	*Copernicia*	H	Hawan area
6		Madagascar periwinkle	*Catharanthus roseus*	S	Reception entrance
7		rose mallow	*Hibiscus*	S	Reception entrance
8		Marigold	*Tagetes*	H	Reception entrance
9		Weeping fig	*Ficus benjamina*	T	Reception entrance
10		Garden croton	*Codiaeum variegatum*	S	Reception entrance
11		great bougainvillea	*Bougainvillea Spectabilis*	CL	Kids play area

12		African tulip tree	*Spathodeca campanulata*	T	Kids play area
13		Areca palm	*Dypsis lutescens*	T	Kids play area
14		Running pop	*Passifora vesicaria*	CR	Kids play area
15		little ironweed	*Cyanthilium cinereum*	H	Kids play area
16		Bhuiavla	*Phyllanthus amarus Schumach*	S	Kids play area
17		coco-grass	*Cyperus rotundus*	H	Kids play area
18		Indigo	*Indigofera vohemarenesis Baill*	S	Kids play area
19		bold-leaf launaea	*Launaea nudicaulis*	H	Kids play area
20		Chinese ixora	*Ixora chinensis*	S	Kids play area
21		sessile joyweed	*Alternanthera sessilis*	H	Kids play area
22		swollen fingergrass	*Chloris barbata*	H	Kids play area

23		Holy Basil	*Ocimum tenuiflorum*	S	Kids play area
24		Asthma-plant	*Euphorbia hirta*	H	Kids play area
25		marvel grass	*Dicanthium annulatum*	H	Kids play area
26		Birdsville indigo	*Indigofera linneai*	S	Kids play area
27		black pigweed	*Trianthema portulacastrum*	H	Kids play area
28		Night-flowering jasmine	*Nyctanthes arbor-tristis*	T	Kids play area
29		Sticky Blumea	*Pseudoconyza viscosa*	H	Kids play area
30		Indian-almond	*Terminalia catappa*	T	Kids play area
31		chaff-flower	*Achyranthes aspera*	S	Kids play area
32		Pink powder puff	*Caliandra surinamensis Benth.*	S	Kids play area
33		cluster fig	*Ficus racemosa*	S	Kids play area

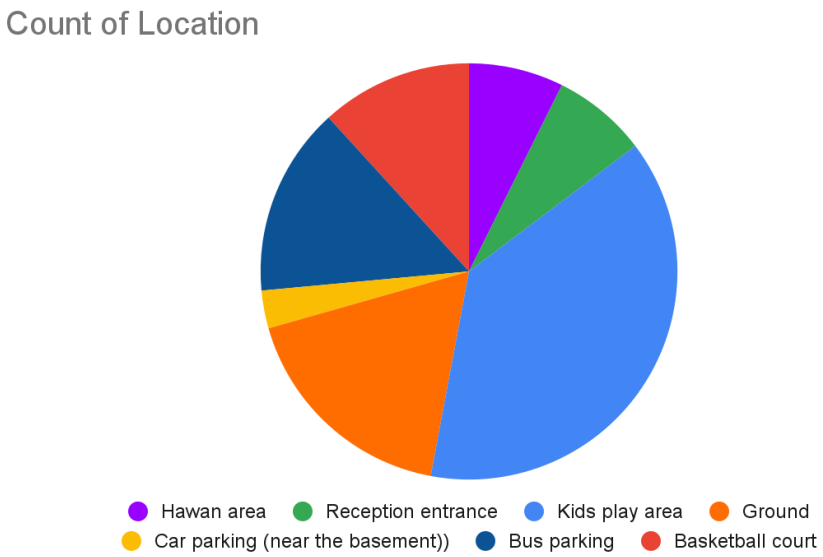
34		Spanish cherry	*Mimusops elengi*	T	Kids play area
35		Cannonball tree	*Couroupita guianensis*	T	Kids play area
36		stinking goosefoot	*Chenopodium vulvaria*	H	Kids play area
37		Areca palm	*Chrysalidocarpus lutescens*	S	Ground
38		Arizona ash	*Fraxinus velutina*	T	Ground
39		spurge-laurel	*Daphne laureola*	S	Ground
40		creeping false holly	*Jaltomata procumbens*	H	Ground
41		oleander	*Nerum*	S	Ground
42		Date palm	*Phoenix dactylifera*	T	Ground
43		Bismarck palm	*Bismarckia nobilis*	T	Ground
44		Cycad	*Cycas angulata*	T	Ground

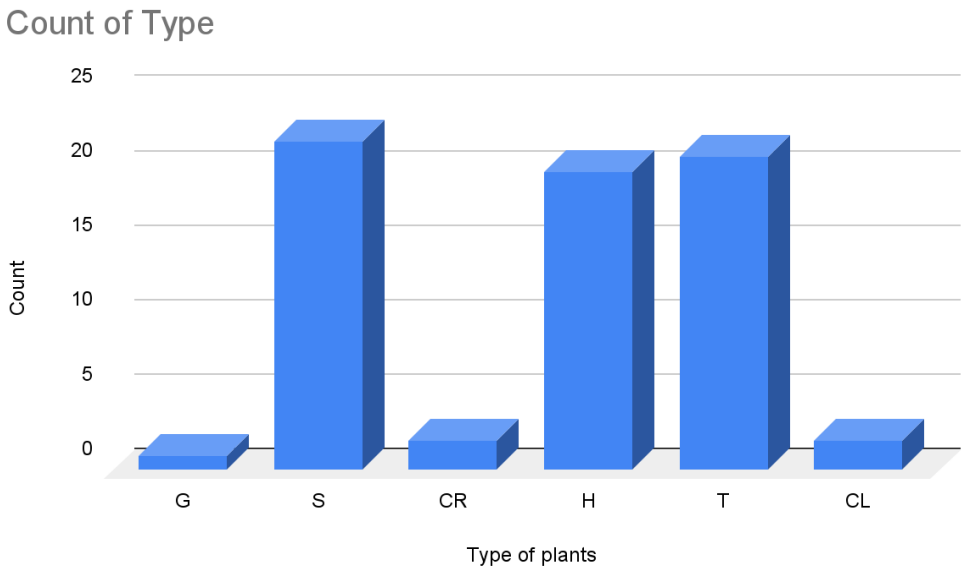
45		Chinese chastetree	*Vitex negundo*	S	Ground
46		Jand	*Prosopis cineraria*	T	Ground
47		Mehndi	*Lawsonia inermis*	H	Ground
48		Yellow elder	*Tecoma stans*	S	Ground
49		False bromeliad	*Callisia fragrans*	H	Car parking (near the basement))
50		Sambac jasmine	*Sambac jasmine*	S	Car parking (near the basement))
51		Ashoka tree	*Saraca asoca*	T	Bus parking
52		Siam gamboge	*Garcinia hanburyi*	T	Bus parking
53		River tamarind	*Leucaena leucocephala*	T	Bus parking
54		Nippon lily	*Rohdea japonica*	H	Bus parking
55		cat's claw creeper	*Dolichandra unguis-cati*	CL	Bus parking

56		Sago palm	*Cycas*	T	Bus parking
57		coatbuttons	*Tridax procumbens*	H	Bus parking
58		Asopalav	*Monoon longifolium*	T	Bus parking
59		Drumstick tree	*Moringa oleifera*	T	Bus parking
60		Myrtle	*Myrtus communis*	S	Bus parking
61		Jungle geranium	*Ixora coccinea*	S	Basketball court
62		mountain ebony	*Bauhinia variegata*	H	Basketball court
63		Neem	*Azadirachta indica*	T	Basketball court
64		Common guava	*Psidium guajava*	S	Basketball court
65		Spider lily	*Crinum asiaticum*	H	Basketball court
66		Emu bush	*Eremophila*	S	Basketball court

67		Pipal	*Ficus religiosa*	T	Basketball court
68		Thorn tree	*Acacia sensu lato*	T	Basketball court

Observations





Geotagging data

Following trends are observed in our research:

- 'Kids play area' is the most biodiverse zone despite being one of smallest.
- Majority of the plants are trees, herbs or shrubs.

Conclusion

The agenda of this research paper was to study and categorize the floral diversity prevailing in the campus of DAV International School, Ahmedabad. As it is mentioned above using the plant classification method, all the major life forms were studied during the field visit, and according to their characteristics they were put in the due category, as mentioned above in the table.

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