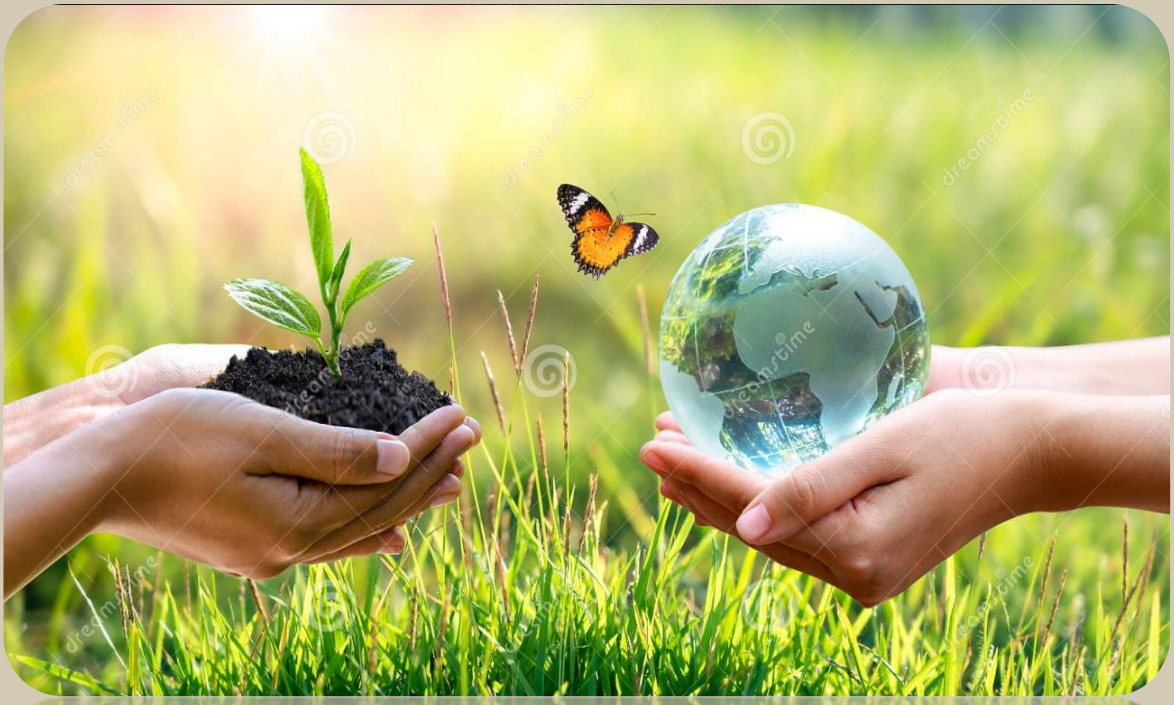
Plant Diversity of College Campus



Department of Botany

Mahatma Gandhi Arts, Science and Late N. P. Commerce College
Armori, Dist. Gadchiroli

Plant Diversity of college Campus

The ever-increasing population and the pace with which urbanization is taking place has led to several environmental and ecological crises. Therefore, it becomes important to adopt green approach in every sphere of human development. Accordingly, the green campus concept can be applied to any educational institute. This will lead to the reduction of Carbon dioxide from the college environment and sustainable development. Actually, the Green Campus concept means to plant as many as plant as possible in the college campus to build a natural carbon sink.

Mahatma Gandhi Arts, Science and Late N. P. Commerce college is within the geo-position between latitude N 20°28' 25.28 and longitude E 79°58'45.82 in Gadchiroli, Maharashtra, India. It covers an area of about 3.55 acres. The area is blessed with a variety of plant species performing a variety of ecological functions. Most of the tree species were planted in different season through various plantation programmes organized by the college authority whic now has become integral part of the college. The tree species of the college have improved the quality of life not only for the stakeholders of the college but also for the people around the college in terms of contributing fresh oxygen to the environment and water conservation. A good and dense patch of plants, particularly trees reduce the adverse effects of the sun, rain and wind. Leaves absorb the sun radiant energy keeping things cool in summer. In addition to better environment to humans, these plants are providing shelter and food to many animals as well. Many monkeys are dependent on these trees mainly for food and shelter. Young leaves are eaten by monkeys and nectar is a favorite of birds and many insects. We often make an emotional connection with these trees and sometime become personally attached to the one that we see every day. A thick belt of large shady trees in front of the college building has found to bring down noise pollution and cut down dust and storms. As the Botany Department of college has expertise in plant identification, it has developed a small herbal botanical garden where common medicinal and rare plant of the

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region are growing and 58 earthen pots arranged in different corner of the college campus.

Since the Department of Botany has expertise in plant identification, it provides consultancy on plant diversity related issue. In this connection, Department of Botany has completed the Tree Census of Armori town in 2018-19. The most common trees were *Annona squamosa, Pongamia pinnata, Syzygiumcumini, Mangifera indica, Leucaena leucocephalla, Hibiscus rosasinensis, Polyathia longifolia, Ziziphus mauritiana, Azadirachta indica, Citrus aurantifolia, Murrayakoenigii, Tabernaemontanadivericata, Carica papaya, Psidium guajava, Tectona grandis, Acacia nilotica* etc. recorded in town. *Roystonea regia, Caryotaurens, Pongamia pinnata* etc were also found in the college campus.

A team of students of this college under the guidance of faculty of the Department of Botany & members of Environment Committee regularly monitor and take care the plant wealth & maintain the greenery in campus. The Department of Botany and Environment committee organized plantation programme for the students to aware them about plant conservation.

Objective :-

1. To study and documentation of floral diversity found in college campus.
2. Documentation and conservation of medicinal and rare plants.

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Arts, Science & late N.P. Commerce College Armori

Table :- Total No. of plant species identified in college campus.

Sr. No.	Scientific Name of Plant	Family	Local Name	No. of Individual
1.	*Abrusprecatorius* L.	Fabaceae	Gunj	01
2.	*Abutilon indicum* (L.) Sweet	Malvaceae	Bala	01
3.	*Acacia concinna* (Willd) DC. Prodr.	Mimosaceae	Shikekhai	01
4.	*Adhatodazeylanica*Medik.	Acanthaceae	Adulsa	02
5.	*Adenantherapavonina* L.	Mimosaceae	Rakatachandan	05
6.	*Alpinia galanga* (L.) Swartz	Zingiberaceae	Veloda	03
7.	*Alstoniascholaris* (L.) R. Br.	Apocynaceae	Saptaparni	03
8.	*Andrographis paniculata* (Burm.f.) Wall. ex Nees	Acanthaceae	Bhuineem	10
9.	*Asparagus racemosus*Willd.	Liliaceae	Shatavari	01
10.	*Baliospermummontanum* (Willd.) Muell-Arg.	Euphorbiaceae	Jamalgota	04
11.	*Bixa orellana* L.	Bixaceae	Shendri	02
12	*Brachystelmagondwanense*Govekar, Kahalkar &Sardesai	Asclepiadaceae	--	01
13	*Buddejela asiatica* Lour.	Buddejaceae	--	01
14.	*Caladium bicolor* (Ait.exDryand) Vent,	Araceae	Ornamental	06
15.	*Calotropis gigantea* (L.) R. Br.	Asclepiadaceae	Rui	03
16.	*Cassia fistula* L.	Caesalpiniaceae	Bahava, Amaltas	01
17.	*Cassia siamea*Lamk.	Caesalpiniaceae	Gulmohar	03
18.	*Caesalpinia pulcherrima* (L.) Swartz.	Caesalpiniaceae	Gulmohar,	02
19.	*Caryotaurens* L.	Arecaceae	Ghorga	13
20.	*Caesalpinia bonduc* (L.) Roxb.	Caesalpiniaceae	Sagargoti	01
21.	*Celastruspaniculatus*Willd. Sp.	Celastraceae	Malkamuni	01
22.	*Chlorophytum arundinaceum* Baker	Liliaceae	Musali	01
23.	*Chlorophytum laxum* R. Br.	Liliaceae	--	02
24.	*Chlorophytum tuberosum* (Roxb.) Baker	Liliaceae	Musali	01
25.	*Citrus aurantifolia* (Christm.)	Rutaceae	Nimbu	01

26.	*Clerodendrumviscosum* Vent.	Verbanaceae	Khanduchak	04
27.	*Clitoriaternatea* L.	Fabaceae	Apajit	01
28.	*Codiaeum variegatum* (L.) Bl.	Euphorbiaceae	Croton	07
29.	*Costusspeciosus* (Koen.) J.E. Smith	Zingiberaceae	Kev-Kanda	01
30.	*Cycas revoluta*	Cycadaceae	Cycas	06
31.	*Cymbopogon citratus* (DC.) Stapf	Poaceae	GavatiChaha	01
32.	*Dalbergia sissoo*Roxb. ex DC. Prodr.	Fabaceae	Shisham	01
33.	*Datura inoxia*Mill.	Solanaceae	Dhotra	01
34.	*Delonix regia* (Boj. ex Hook.) Raf.,	Caesalpiniaceae	Gulmohar	02
35.	*Desmodiumgangeticum* (L.) DC. Prodr.	Fabaceae	--	02
36.	*Dieffenbachia picta* Schott	Araceae	Ornamental	05
37.	*Dracena* sp.	Agavaceae	Ornamental	09
38.	*Drimiacongesta* (Wight) Ansari & Raghavan	Liliaceae	Ran kanda	02
39.	*Durantaerecta* L.	Verbenaceae	Mehandi	33
40.	*Dypsislutescens*	Arecaceae	Palm	37
41.	*Emblica officinalis*Gaertn.	Euphorbiaceae	Awala	01
42.	*Euphorbia milli* Ch.-Des. Moulins	Euphorbiaceae	Ornamental	01
43.	*Ficus elastica*Roxb.	Moraceae	Ruber tree	11
44.	*Geodorumdensiflorum* (Lam.) Schltr.	Orchidaceae	Haryakand	02
45.	*Globbaorixensis*Roxb.	Zingiberaceae	--	01
46.	*Gloriosa superba* L.	Liliaceae	Kar-Kari	03
47.	*Hibiscus rosa-sinensis* L.	Malvaceae	Jaswand	01
48.	*Jasminum sambac* (L.) Ait.	Oleaceae	Mogra	02
49.	*Leea macrophylla*Roxb. ex Hornem.	Leeaceae	Dara cettu	02
50.	*Leucaena latisiliqua* (L.) Guill.	Mimosaceae	Subabhul	01
51.	*Licuala* sp.	Arecaceae	Palm	02
52.	*Mangifera indica* L.	Anacardiaceae	Amba	01
53.	*Manilkara zapota* (L.) P. van Royen	Sapotaceae	Chiku	01
54.	*Mimusopselengi* L.	Sapotaceae	Bakul	01
55.	*Mimosa pudica* L.	Mimosaceae	Lajalu	01
56.	*Morus alba* L.	Moraceae	Tuthi	03

Kalel

57.	*Murrayapaniculata* (L.) Jack.	Rutaceae	Kamini	01
58.	*Nephrolepisexaltata*	Nephrolepidaceae	Fern	01
59.	*Ocimum sanctum* L.	Lamiaceae	Tulsi	02
60.	*Pancratium zeylanicum* L.	Amaryllidaceae	Ran-kanda	02
61.	*Pancratium verecundum*Aiton	Amaryllidaceae	Ran-kanda	02
62.	*Phoenix* sp.	Arecaceae	Shindi	21
63.	*Peltophorumpterocarpum* (DC.) Baker ex K. Heyne,	Caesalpiniaceae	Gulmohar	01
64.	*Plumeria rubra* L.	Apocynaceae	Chapa	01
65.	*Plumbago zeylanica*L.	Plumbaginaceae	Chitarak	01
66.	*Polyalthia longifolia* (Sonner.) Thw.	Annonaceae	Ashoka	01
67.	*Pongamia pinnata* (L.) Pierre.	Fabaceae	Karanj	09
68.	*Psidium guajava* L.	Myrtaceae	Peru	01
69.	*Rauvolfia serpentina* (L.) Benth. ex Kurz.	Apocynaceae	Sarpagandha	02
70.	*Ravenalamadagascariensis* J.F. Gmel.	Strelitziaceae	--	01
71.	*Rosa indica* L.	Rosaceae	Gulab	03
72.	*Roystonea regia* (Kunth) O.F. Cook	Arecaceae	Royal palm	30
73.	*Sanseviria* sp.	Agavaceae	Ornamental	01
74.	*Scadoxusmultiflorus*(Martyn) Raf.	Amaryllidaceae	Ornamental	01
75.	*Simarouba glauca* DC.	Simaroubaceae	Lakshamitaru	01
76.	*Syngonium* sp.	Araceae	Ornamental	03
77.	*Syzygiumcumini* (L.) Skeels	Myrtaceae	Jambhul	01
78.	*Tabernaemontanadivaricata* (L.) R. Br.	Apocynaceae	Swastik	03
79.	*Tecoma stans* (L.) Juss. ex Kunth	Bignoniaceae	--	03
80.	*Thuja* sp.	Cupressaceae	Vidya	01
81.	*Tinospora cordifolia* (Willd.) Miers.	Menispermaceae	Gulvel	01
82.	*Tylophora indica* (Burm.f.) Merr.	Asclepiadaceae	Potmari	01
83.	*Urariapicta* (Jacq.) Desv. ex DC. Prodr.	Fabaceae	Pitwan	01
84.	*Vetiveriazizanioides* (L.) Nash	Poaceae	Khas	01
85.	*Zephyranthescarinata* Herbs.	Amaryllidaceae	Ornamental	01
86.	*Zingiber capitatum*Roxb.	Zingiberaceae	Kali halad	01
87.	*Zingiber roseum*(Roxb.) Roscoe	Zingiberaceae	--	01

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Conclusion:

A total of 87 plant species were found and identified in college campus belonging to 82 genera and 40 families and 58 earthen pots are maintained in the college campus. Endangered plant species *Drimiacongesta* and *Globbaorixensis*, *Pancratium zeylanicum,Pancratium verecundum,Urariapicta*, *Zingiber capitatum*, *Zingiber roseum*etc. are grown and conserved in herbal botanical garden that also enrich thefloral diversity.

Recommendation :

1. Plant waste dumped in dumping pit can be recycled and reused in the form of manure.

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Field Photographs.



Tree Census




Herbal Botanical Garden

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Earthen Pots

Trees

Green Campus

Plant Diversity Audit

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