Government Degree College

Rajampeta

GREEN AUDIT

DEPARTMENT OF BOTANY

2023

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Introduction

The term “Green” means eco-friendly or not damaging the environment. This can acronymically be called as “Global Readiness in Ensuring Ecological Neutrality”(GREEN). Green accounting can be defined as systematic identification quantification,recording,reporting& analysis of components of ecological diversity and expressing the same in financial or social terms. “Green Auditing”, an umbrella term, is known by another name “Environmental Auditing”. There is a provision of green audit in college campus. A committee has been formed to monitor the proper conservation and plantation of the plants in the campus. As per the suggestions made by IQAC, Botany department is given the responsibility to do green audit with cooperation of the environmental experts of the state. A report on green audit has been prepared by department of Botany Govt.Degree College, Rajampeta. This college was established in 1980 and accredited with Grade B by NAAC. Total area of college main campus is 5 acres, of which 31 percent is covered by herbs, shrubs and trees, including valuable medicinal flora. The plants have been systematically identified by the green audit committee. There are more than 439 plant species were audited. The green audit report has been discussed with environmental experts for suggestions to increase greenery in campus. Extra efforts have been taken by the college to create environment consciousness amongst students. One major step in this regard is the extensive plantation program organized by NSS,NCC,garden committee and students of Botany department. Plantation is encouraged by Principal and faculties of all departments to increase greenery and reduce Carbon emission effects. Renovation of the garden at the entrance was done with financial support from special funds of the college . Existing gardens are also maintained by the Department of Botany. Extension programs also organized to create environment awareness and conservation of biodiversity amongst the students and public.

Activities organized to create greenery and its conservation at college campus is as follows

- Plantation of diversified species (Botanical Garden)
- Uses of medicinal plants
- Identification of plant species

Plantation of diversified species: (Botanical Garden)

To create green cover, eco-friendly atmosphere, pure oxygen at the college campus, plantation program organized every year with involving all students, Principal and all departments faculty members. In this session Vana Mahotsav program was organized and about 100 Ornamental,avenue,medicinal plant with rare and exotic beautiful trees was planted in Botanical Garden and other parts of college campus. To keep the greeneries in the campus, we regularly maintain the gardens which are looked after by paid staff under the guidance of garden committee members. Moreover, every year we try to plant new trees. Seasonal flower garden is also a unique feature of this college.

Uses of medicinal plants:

There are many medicinal plants are planted in college Botanical Garden. The plants have medicinal value but students don't have knowledge how to use and they can't identify the particular plants, so therefore faculty members of Botany department help them to identify with scientific name and give information about medicinal uses of the plants.

Identification of Plant species:

There are so many plant species are present at college campus. The faculty member of the botany department audited and identified of various plant species with the help of flora.

LIST OF AUDITED PLANTS IN COLLEGE CAMPUS 2023

S.NO.	PLANT NO	NAME OF THE PLANT	FAMILY	NO.OF SPECIES	USES	Remarks
1	*1,5,6,7,9,10,11,13,15,16,17,19,20,22,23,24,25,26,27,28,30,31,32,36,38,41,42,43,44,45,46,47,49,50,71,93,104,105,106,107,108,109,110,120,132,133,143,148,149,150,151,152,153,154,155,156,157,158,159,160,161,165,166,168,169,170,171,173,174,175,176,177,179,180,181,182,183,184,186,187,188,189,190,195,196,197,198,199,200,201,202,203,204,205,206,208,210,216,217,218,219,220,221,228,229,230,231,232,236,237,238,239,240,241,242,243,244,250,251,252,253,254,255,279,281,289,293,294,301,302,303,304,305,307,308,309,310,311,312,313,314,315,316,317,318,325,326,327,329,330,331,332,333,334,335,336,337,338,339,340,341,342,344,345,346,347,348,350,351,352,356,359,360,366,367,370,371,373,375,377,378,379,381,382,383,388,390,401,405,408,410,411,413,414,416,417,420,422,426,427,434,436*	*Peltophorumpterocarpum(Konda chintha)*	*Fabaceae*	*202*	Avenue,ornamental,fodder	
2	*2*	*Pterocarpus santalinus(Red sandle)*	*Fabaceae*	*01*	*Endamic,anticancer*	
3	*3,35,59,65,69,103,112,114,118,123,130,135,137,138,139,141,144,146,147,162,163,164,212,222,223,224,226,227,234,248,249,256,259,260,263,265,269,270,272,274,275,276,278,280,282,283,284,286,287,288,290,291,292,295,296,300,319,320,321,324,349,362,374,384,385,386,387,389,391,392,393,394,395,396,397,398,400,402,403,404,407,409,412,415,421,423,425,431,433,438*	*Azadirachtaindica(Vepa)*	*Meliaceae*	*90*	Avenue tree,antifungal,antibacterial	

4	*4*	*Aegle marmelos(Maredu)*	*Rutaceae*	*01*	Traditional,anti-inflammatory activity	
5	*8*	*Cocos nucifera(Kobbari)*	*Arecaceae*	*01*	Fruit Edible,carpets,fertilizers	
6	*12,192,225,233,245,246,258,261,297,298,306,418,419,424,428,429,432,437*	*Wrightiatinctoria (Amkuda)*	*Apocynaceae*	*18*	Palaindigoplant,Avenue,Antipsoriatic,cancer,improves wound healing	
7	*14,79 80,81,82,85,87,89,90,91,92,101,131.* *Note: 79 plant is replaced by Azadirachta indiaca.*	*Tectona grandis(Teaku)*	*Lamiaceae*	*13*	Timberyieldingplant,treat typhoid fever	*79-plant uprooted due to heavy rain
8	*18*	*Caryotaurens(Jeeluga)*	*Arecaceae*	*01*	Ornamental,leaf-fishing rod after trimming the branches of the leaf and drying	
9	*21*	*Polyalthialongifolia(Ashoka)*	*Annonaceae*	*01*	Avenue tree,Ornamental	
10	*29,34,40*	*Casuarina equisetifolia(Sarugudu)*	*casuarinaceae*	*03*	Social Forestry,Diarrhea	
11	*33,140,213,214,406*	*Syzygiumcumini(Neredu)*	*Myrtaceae*	*05*	Avenue,Fruit edible,	
12	*37,39,48,73,83,86,88,96,113,116,142,209,399,435* **Note: 37 plant is replaced by same species.**	*Pongamiapinnata(Kanuga)*	*Fabaceae*	*14*	Avenue,Insecticide,Skin	**37 plant is removed for the construction of RO Plant**
13	*51,52,53,54,56,58,61,63,66,68,185* *Note : 53&61 plants replaced by Tectona grandis(Teaku)*	*Roystonearegia (Royal palm)*	*Arecaceae*	*11*	Ornamental,livestockfeed,leaves-thatching,wood-construction	**53&61-Plants are wilted due to root infection.**
14	*55,57,111,215,264,266,273,277,299,323,372,*	*Morindapubescens(Maddi)*	*Rubiaceae*	*11*	Social forestry,antioxidant,hypote	

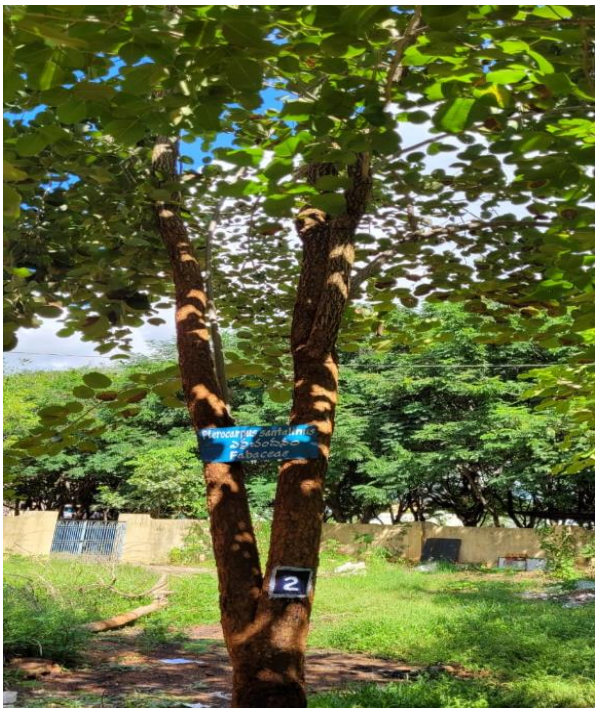
					nsivepotentials,timber yielding	
15	*60,102,117,119,126,167,257,262,328,343,353,354,355,357,358,361,363,364,365,368,369,376,430,439*	*Leucaena leucocephala(Subabul)*	*Fabaceae*	*24*	Social Forestry, Fodder	
16	*62,70,72,74,84,97,98,127,129,145,178,191,194,207,*	*Delonexregia(Peddathurai)*	*Fabaceae*	*14*	Avenuetree,Ornamental	
17	*64,136*	*Holopteleaintegrifolia(Thapasi)*	*Ulmaceae*	*02*	Avenue,rheumatism,oedema,diabetis,leprosy and other skin disorders	
18	*67,75,77,125,128,134*	*Senna siamea(Seema thangedu)*	*Fabaceae*	*06*	Avenue tree,Ornamental	
19	*76,94*	*Ficus bengalensis(Marri)*	*Moraceae*	*02*	Avenue,nervesdisorders,painful skin diseases	
20	*78*	*Soymidafebrifuga(Somi)*	*Meliaceae*	*01*	Avenue,diarrhoea,vaginalinfections,rheumatism swellings	
21	*95,100*	*Termineliacatappa(Badamu)*	*Combretaceae*	*02*	Avenue,dysentery,heppatitis,Fruit edible	
22	*99*	*Ficus religiosa(Ravi)*	*Moraceae*	*01*	Avenue,antiulcer,antibacterial,antidiabetic,gonorrhea and skin diseases.	
23	*115*	*Thespesia populnea(Gangaravi)*	*Malvaceae*	*01*	Ornamental,Skin,dysentry,cholera,haemorrhoids	
24	*121*	*Ficus racemose(Medi)*	*Moraceae*	*01*	Avenue,Medicinalplant,diabetis,liverdiso	

					rders,diarrhea ,hemorrhoids	
25	*122,172,211,235,268,285,*	*Albizia lebbeck(Diresena)*	*Fabaceae*	*06*	Avenue Tree,Timber,Skin,Bronchitis	
26	*124*	*Santalum album(Sri gandham)*	*Santalaceae*	*01*	Avenue,traditional,timber,antipyreticanticeptic	
27	*193,247*	*Zizphusmauritiana(Regu)*	*Rhamnaceae*	*02*	Fruit Edible,Fodder	
28	*267,271*	*Cordiadichotoma (Banka chettu)*	*Boraginaceae*	*02*	Fruit Edible,Stomachaces,coughs and chest complaints,Agroforestry	
29	*322*	*Ficus amplissima*	*Moraceae*	*01*	Avenue,traditional,	
30	*380*	*Millingtoniahartensis(Akasamalli)*	*Bignoniaceae*	*01*	Avenue,Ornamental,asthma,sinusities	
			Total	*439*		

NOTE: Plant No 37 (Pongamia pinnata) was removed for the construction of RO Plant. This plant was replaced by Pongamia pinnata. Plant No79 (Tectona grandis) plant uprooted due to heavy rain. This plant was replaced by Azadirachta indica. Plant No 53&61(*Roystonea regia* Plants were wilted due to root infection. These plants were replaced by Tectona grandis. New plants were planted in their place to protect the biodiversity in the campus.

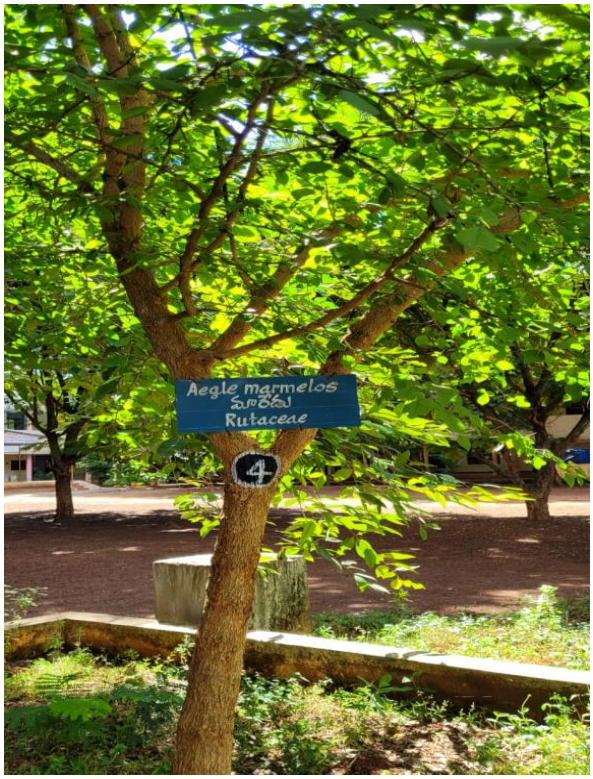
PHOTOS OF AUDITED PLANTS IN COLLEGE CAMPUS

Peltphorum pterocarpum



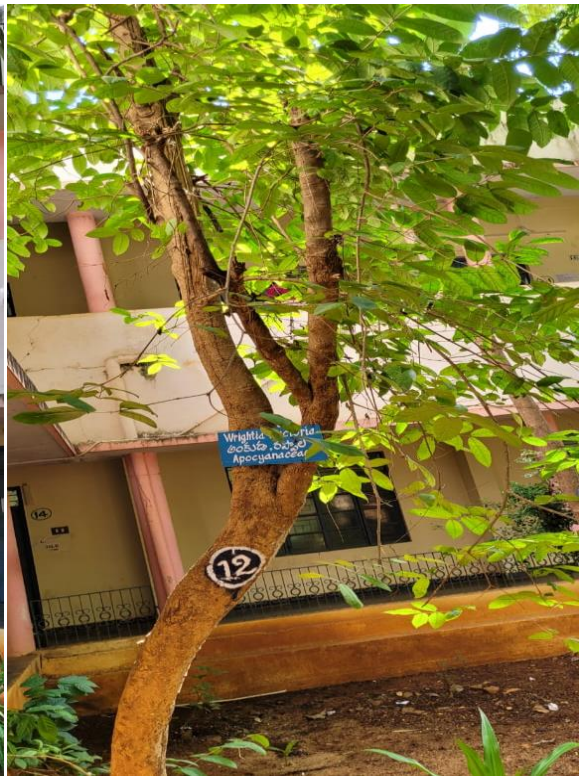
Pterocarpus santalinus

Azadiracta indca



Aegle marmelos

Cocos nucifera

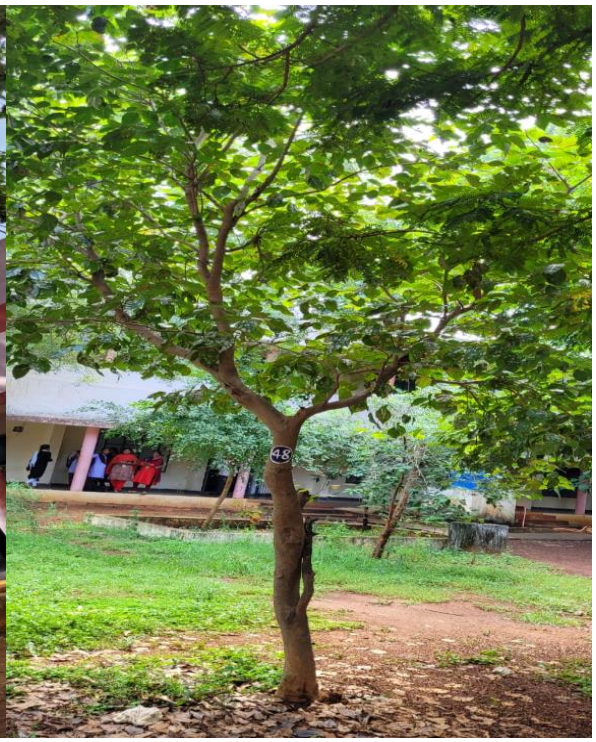


Writia tinctoria

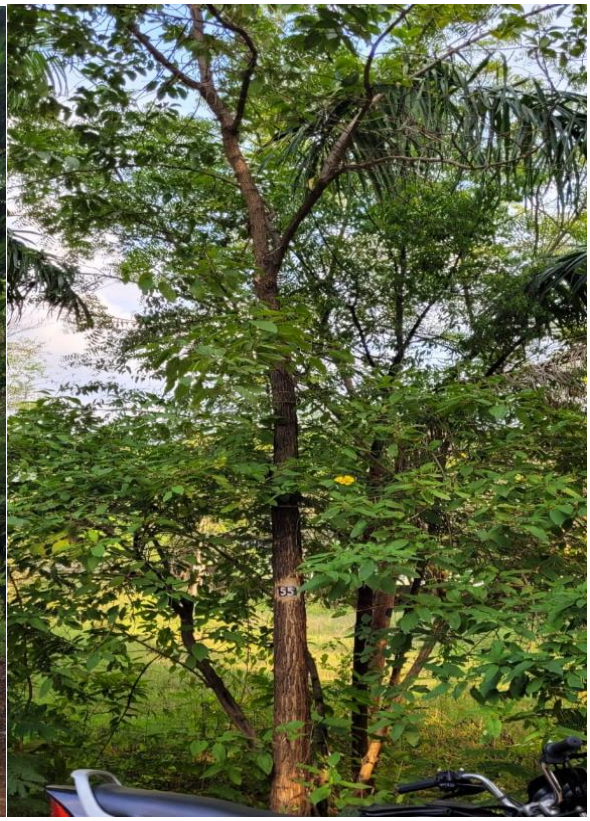
Tectona grandis

Caryota urens

Polyalthiya longifolia ***Casuarina equisetifolia***



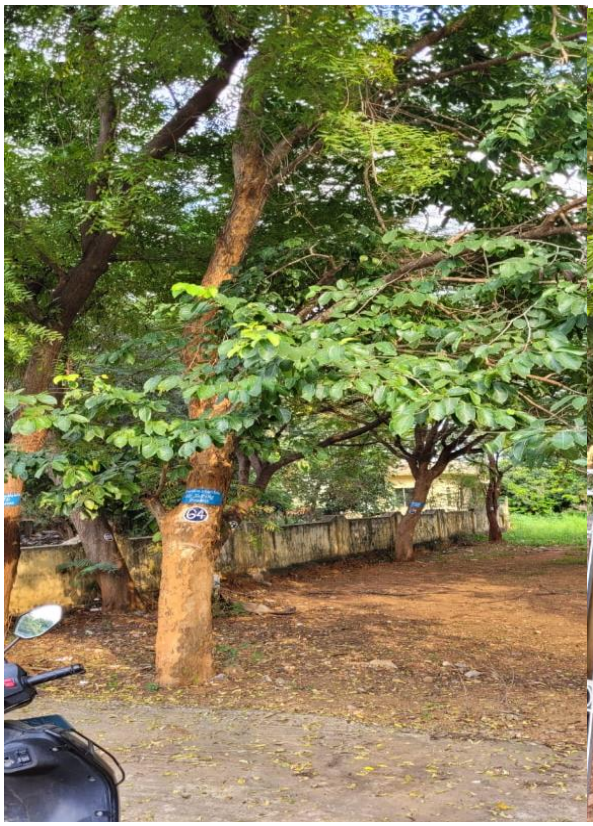
Roystonea regia



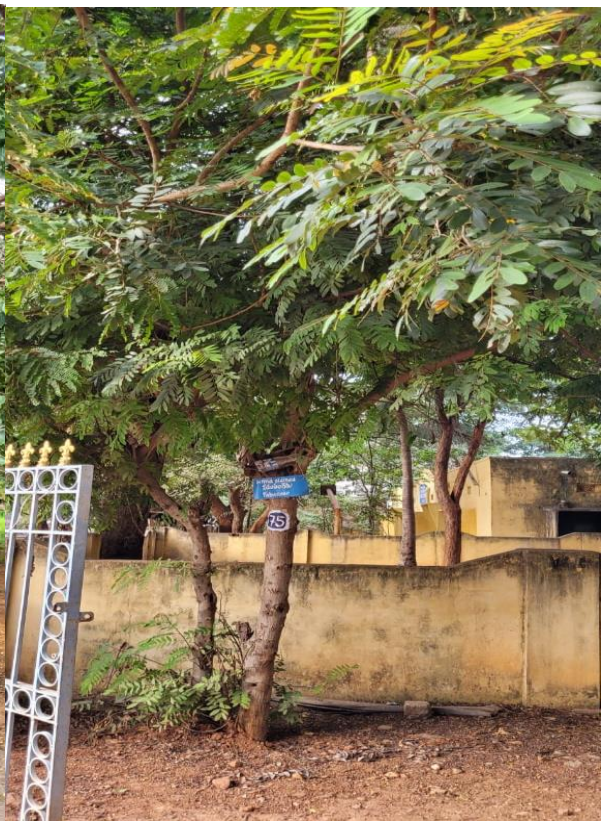
Morinda pubescens

Leucaena leucocephala

Delonex regia



Holoptelea integrifolia



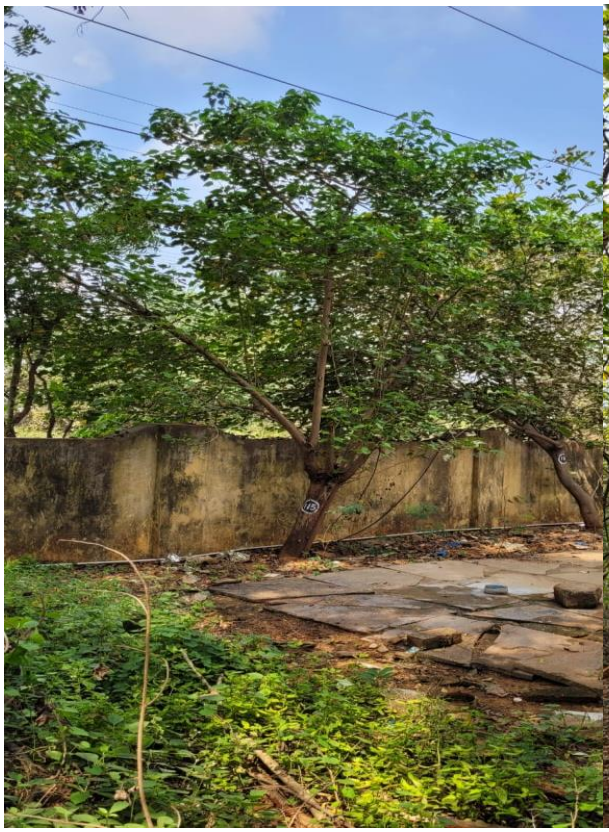
Senna siamea

Ficus bengalensis

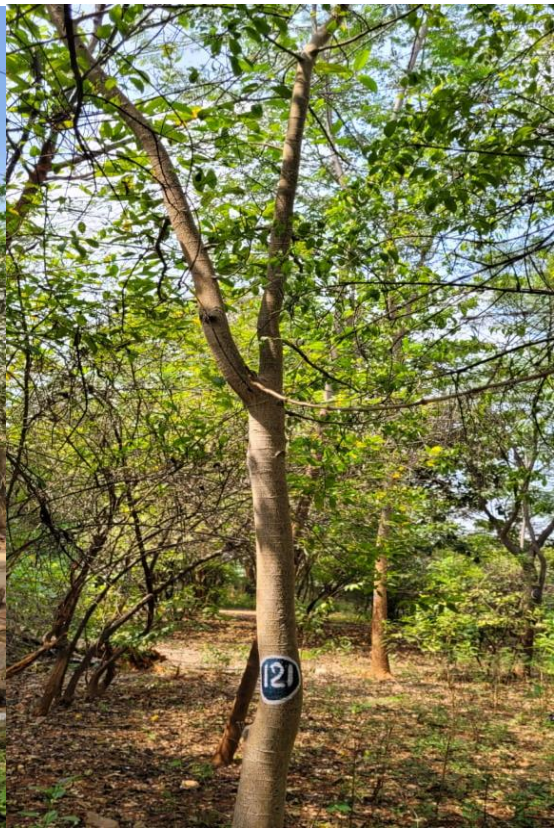
Soymida febrifuga

Terminelia catappa

Ficus religiosa



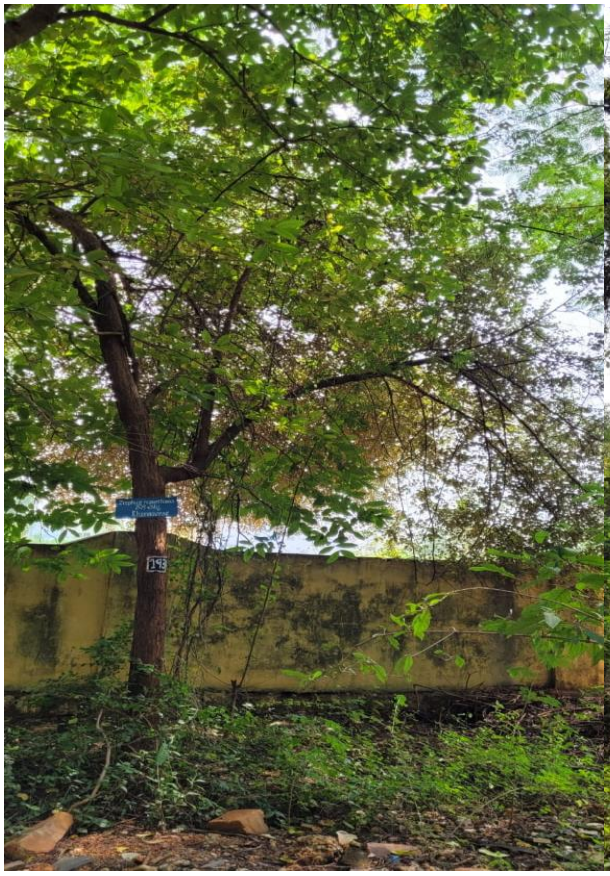
Thespesia populnea



Ficus racemose

Albizia lebbeck

Santalum album



Zizphus mauritiana

Cordia dichotoma

Millingtonia hartensis

NOTE: ***PLANTS WITH NUMBERS 79(Tectona grandis), 37(Pongamia pinnata), 53&61(Roystonea regia) WERE DESTROYED AND UPROOTED DUE TO HEAVY RAIN AND WINDS.***

NEW PLANTS WERE PLANTED IN THEIR PLACE TO PROTECT THE BIODIVERSITY AT THE CAMPUS(Azadirachta indica, Pongamia pinnata,Tectona grandis,Tectona grandis).

OTHER PLANTS IN COLLEGE CAMPUS

S.NO	NAME OF THE PLANT	FAMILY	USES
1	*Pseuderanthemumlaxiflorum*	*Acanthaceae*	*Ornamental purpose*
2	*Crinum asiaticum*	*Amaryllidaceae*	*Ornamental,hernia*
3	*Dracaena reflexa*	*Asparagaceae*	*Ornamental,anti-malaria*
4	*Tredescantiaspathacea*	*Commeliniaceae*	*Ornamental,bronchitis*
5	*Araucaria heterophylla*	*Araucariaceae*	*Ornamental,furniture*
6	*Durantaerecta*	*Verbinaceae*	*Ornamental,antimicribial*
7	*Bryophyllum pinnata*	*Crassulaceae*	*Ornamental,Urinary disorders*
8	*Rhoeo discolor*	*Commeliniaceae*	*Ornamental,anti-cancer*
9	*Pandanus babtisti*	*Pandanaceae*	*Ornamental,nasi lemak*
10	*Licuala grandis*	*Arecaceae*	*Ornamental,thatching*
11	*Codiaeum varriegatum*	*Euphorbiaceae*	*Ornamental,stomach ache*
12	*Euphorbia tithymaloides*	*Euphorbiaceae*	*Ornamental,antitumoral*
13	*Aloe vera*	*Asphodelaceae*	*Ornamental,wound healing*
14	*Dieffenbachia seguine*	*Araceae*	*Ornamental,tumours,warts*
15	*Borassus flabellifer*	*Arecaceae*	*Ornamental,mats,baskets*
16	*Cestrum nacturnam*	*Solanaceae*	*Medicinal,anti-HIV*
17	*Annona squamosa*	*Annonaceae*	*Edible fruit,treattumours*
18	*Pritchardiabeccariana*	*Arecaceae*	*Ornamental,thatchingroofs,hats*
19	*Ravenearivularis*	*Arecaceae*	*Ornamental,fertilizer*
20	*Pandanustectorius*	*Pandanaceae*	*Ornamental,arthritis*
21	*Mangifera indica*	*Anacardiaceae*	*Avenue,antiseptic*
22	*Bismarckia nobilis*	*Arecaceae*	*Ornamental,hypertension*
23	*Phoenix pusilla*	*Arecaceae*	*Ornamental, Edible Fruit*
24	*Plumeria rubra*	*Apocyanaceae*	*Ornamental,back pain*
25	*Hibiscus roja-sinensis*	*Malvacea*	*Ornamental,*
26	*Lawsoniainermis*	*Lythraceae*	*Ornamental,anti-inflamatory*

Dieffenbachia seguine

Aloe vera

Licuala grandis

Codiaeum variegatum

Rhoeo discolor

Euphorbia tithymaloides

Pandanus tectorius

Ravenearivularis

Pandanus babtistii

Duranta erecta

Crinum asiaticum

Dracaena reflexa

Pseuderanthemum laxiflorum

Cestrum nacturnam

Mangifera indica

Plumeria rubra

Phoenix pusilla

Bismarckia nobilis

Hibiscus roja-sinensis

Lawsonia inermis

Pritchardia beccariana

Annona squamosa

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