



# GOVERNMENT DEGREE COLLEGE, RAYACHOTY, ANNAMAYYA DISTRICT, A.P.516269



(Accredited with C grade by NAAC)

Dr. P. HARSHALATHA, M.Sc., M.Phil., Ph.D.

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PRINCIPAL

Website: [www.gdcrayachoty.ac.in](http://www.gdcrayachoty.ac.in)

**7.1.3: Quality Audits on environment and energy regularly undertaken by the Institution. The environment and energy initiatives are confirmed through the following.**

## 1. Green audit



GOVERNMENT DEGREE COLLEGE  
RAYACHOTY ANNAMAYYA (DIST

**GREEN AUDIT**



DEPARTMENT OF BOTANY

2023



# Certificate

**HYM International Certifications Pvt. Ltd.**

Certified that the Environmental Management System of

## **GOVERNMENT DEGREE COLLEGE**

Rayachoti, Annamayya District - 516 269, Andhra Pradesh, India

has been assessed and found to be in accordance with the requirements of the Environmental standards

# **ISO 14001 : 2015**

for the following scope of certification

## **IMPLEMENTATION OF GREENERY AND ENVIRONMENTAL PROMOTION ACTIVITIES**

Further information about the scope of this certificate and applicability of ISO 14001 : 2015 requirements may be obtained by consulting the organization.

Issue Date : 27/03/2022

Renewal Date : 26/03/2023



Authorised Signature

Certificate No : **E918641400261**

**HYM International Certifications Pvt. Ltd**

**NOTE: This Certificate is Valid From 27/03/2022 to 26/03/2023**

This is an accredited certificate authorized for issue by Accreditation Service for Certifying Bodies [Europe] Limited who have assessed M/s.HYM International Certifications Pvt. Ltd. against defined criteria and in cognisance of ISO 17021:2015 "Conformity Assessment - Requirements for bodies providing audit and Certification of management Systems".

[www.hymcertifications.com](http://www.hymcertifications.com) on for checking the validation of the Certification

Regd. Office : Plot No. 265/C, Addagutta Society, Opp. JNTU, Kukatpally, Hyderabad - 500 072, Telangana State, India.  
E-mail: [siva@hymcertifications.com](mailto:siva@hymcertifications.com), Website: [www.hymcertifications.com](http://www.hymcertifications.com)

RC.No. 1A/RCT/SPL/2024

Date:- 08.08.2024


### CERTIFICATE CUM APPRECIATION

This is to certify that on the Verification of Government Degree College, Rayachoti, the premises is established with 350 trees that cause pollution reduction, and the above institution has processed the Vermi Compost duly recycling the Biodegradable waste and highly appreciation on the work done by the Institution.

Through the above initiates a clean and green campus is established.


Yours faithfully,

  
Commissioner  
Rayachoti Municipality  
Commissioner  
Rayachoty Municipality

  
9/8/24  
MAE

  
9/8/24

To,  
The Government Degree College,  
Rayachoti,  
Annamayya Dist.

  
WSE



## Members of Green Audit Committee

**Dr. P.HARSHALATHA**  
Principal

**B. KIRAN KUMAR**  
IQAC Coordinator

**Dr.M.MUNYA NAIK**  
Head of the Department of Botany

**BATTU.SHANTHA KUMARI**  
Lecturer in Botany

## ExternalExpert-GreenAuditCommittee

**Dr.A.MadusudhanReddy**  
Professor of  
BotanyYVU  
Kadapa

**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, Rayachoty. This college was established in 1978 and accredited with Grade C by NAAC. Total area of college main campus is 10.01 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 350 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 gardens also a unique feature of this college.

### Uses of medicinal plants:

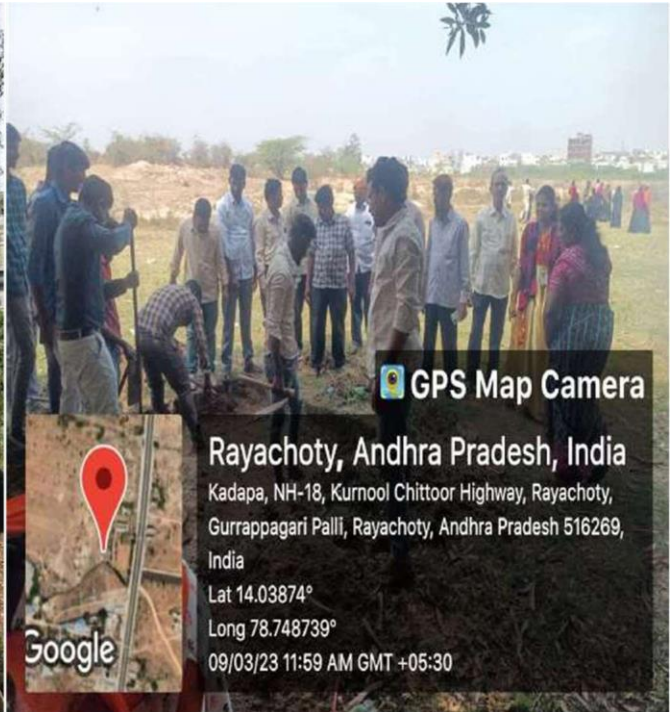
There are many medicinal plants are planted in college Botanical Garden. The plants have medicinal value but students don't have knowledge how to use and they can't identify the particular plants, so therefore faculty members department help them to identify with scientific name and give information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

## Identification of Plant species:

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

PHOTOS OF BOTANICAL GARDEN WORK BY PRINCIPAL, STAFF AND STUDENTS





Gardening work at college front and back side by students and staff.



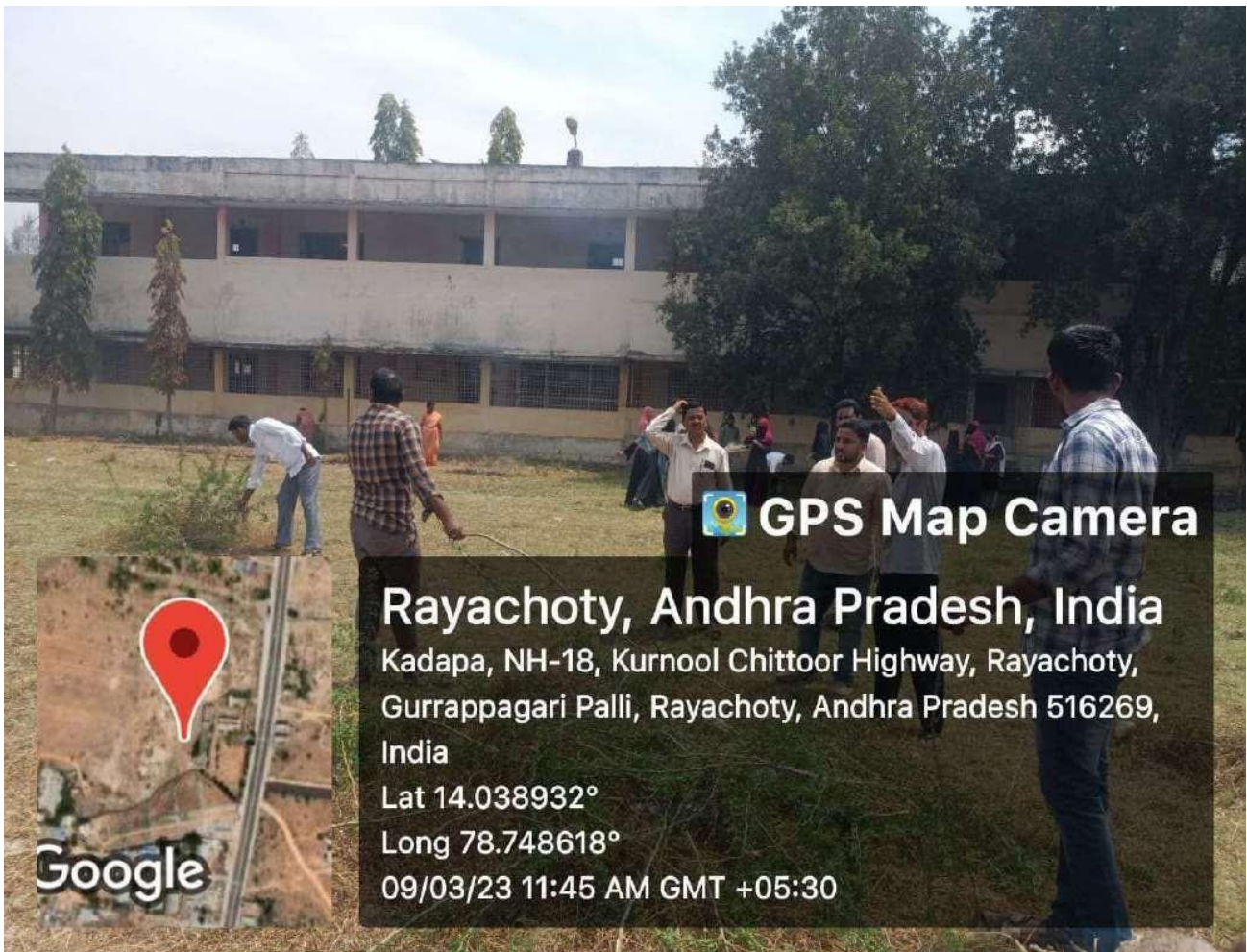


All students are worshipping the holes together



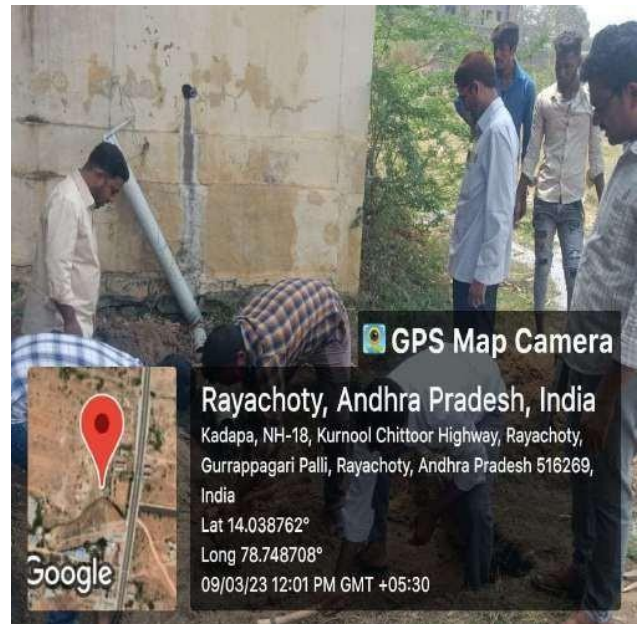


Gardening work by BZC students and NSS Students.





All Groups students are participated in clean .



## LIST OF AUDITED PLANTS IN COLLEGE CAMPUS

SNO	Plant No	Name of the Plant	Family	No. of Species	Uses
1	1,7,25,39,65,66,69,90,91 92,93,94,95,96,97,98,99, 100,101,102,103,104, 105,106,107,108,109, 110,111,112,113	Pongamia pinnata	Fabaceae	31	Medicinal plant, Anti-inflammatory, Fuel, food source For cattle, sheep, poultry.
2	10,30,37,54,67,70,114	Terminalia catappa	Rosaceae	07	Medicinal plant, used in pharmacy (cosmetics and other) Almond oil, edible fruit.
3	2,8,11,16,17,20,40,42,44, 45,46,47,48,49,51,53,56 57,58,59,60,74,77,80,81 83,84,85,86,87,88,89	Saraca indica	Fabaceae	32	Medicinal plant, ornamental, control bleeding in piles, improves Menstrual Health Manages Blood Sugar levels, Treats Asthma, Respiratory issues.
4	15,115,116,117	Emblica officinalis	Phyllanthaceae	04	Medicinal plant, Improve body's immunity system, Anti bacterial And Astringent, Flush out the Toxins from the Body.
5	18,19,22,24,26,27,29,33, 34,35,36,38,72,75,76,79 82.	Conocarpus lancifolius	Combretaceae	17	Ornamental tree, But has become a health and environmental hazard .It is a poisonous plant
6	2,6,9,64	Delonix regia	Fabaceae	04	Medicinal Plant, To Treat in ancient and folk medicine, constipation, Rheumatoid arthritis, Diabetes, Malaria, Fixation of Atmospheric nitrogen.

7	28,31,32	Senna auriculata	Fabaceae	03	Medicinal plant, To reduce High Blood Sugar Levels,Skin and Hair Care advantages, Root is Used inUrinary System and Constipation.
8	41,55,117,118,119,120, 121,122,123,124,125 126,127,128,129,130 131,132,133,134,135 136.	Syzygium cumini	Myrtaceae	22	Medicinal plant, Cough, diabetes, inflammation and Ringworm and it has a long tradition in alternative medicine, Anti bacterial, anti allergic, anti canc
9	03,04,05,11,12,13, 61,63, 73	Albizia lebbeck	Fabaceae	09	Medicinal plant, Environmental, and edible plant, wild plant.
10	14,50,52,62,137,138, 139, 140,141,142,143,144,145, 146,147,148,149	Azadirachta indica	Meliaceae	17	Medicinal and herbal plant, increases immunity, treats wounds, fungal infections, nourishe skin and anti-inflammatory, purifies blood
11	68,71,161,162	Guiana chestnut	Malvaceae	04	Ornamental plant
12	150,151,152,153,154,155, 156,157,158,159,160.	Citrus limon	Rutaceae	11	Medicinal plant
13	163,164	Coccus nucifera	Areaceae	2	Medicinal,Ornamental plant.

## OTHER PLANTS IN COLLEGE CAMPUS

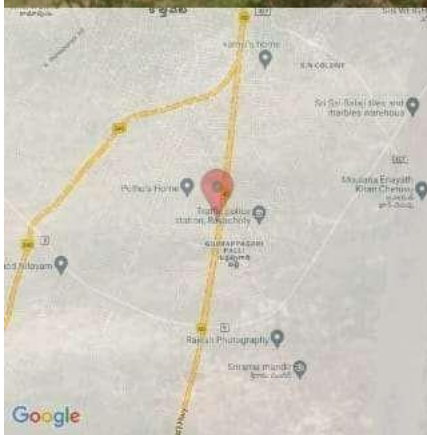
<b>S. N O</b>	<b>NAME OF THE PLANT</b>	<b>FAMILY</b>	<b>USES</b>
1	<i>Psidium guajava</i>	<i>Myrtaceae</i>	<i>Medicinal plant</i>
2	<i>Annona squamosa</i>	<i>Annonaceae</i>	<i>Medicinal plant</i>
3	<i>Ziziphus mauritiana</i>	<i>Rhamnaceae</i>	<i>Medicinal plant</i>
4	<i>Phoenix dactylifera</i>	<i>Arecaceae</i>	<i>Edible plant</i>
5	<i>Calotropis procera</i>	<i>Apocynaceae</i>	<i>Ornamental, Medicinal plant</i>
6	<i>Citrus limon</i>	<i>Rutaceae</i>	<i>Medicinal plant</i>
7	<i>Senna auriculata</i>	<i>Fabaceae</i>	<i>Medicinal plant</i>
8	<i>Coccus nucifera</i>	<i>Arecaceae</i>	<i>Ornamental, Medicinal plant</i>
9	<i>Pterocarpus santalinus</i>	<i>Fabaceae</i>	<i>Timber plant, Medicinal plant</i>
10	<i>Ocimum sanctum</i>	<i>Lamiaceae</i>	<i>Medicinal, Wildsps</i>
11	<i>Nerium oleander</i>	<i>Apocynaceae</i>	<i>Ornamental, Medicinal plant</i>
12	<i>Agave amica</i>	<i>Asparagaceae</i>	<i>Ornamental plant</i>
13	<i>Acrus sapota</i>	<i>Sapindaceae</i>	<i>Edible fruit,</i>
14	<i>Azadirachta indica</i>	<i>Meliaceae</i>	<i>Medicinal, wild plant</i>
15	<i>Syzygiumcumini</i>	<i>Myrtaceae</i>	<i>Edible, Medicinal plant</i>
16	<i>Phyllanthus emblica</i>	<i>Phyllanthaceae</i>	<i>Medicinal plant</i>
17	<i>Punica granatum</i>	<i>Punicaceae</i>	<i>Ornamental and Medicinal plant</i>
18	<i>Eucalyptus globulus</i>	<i>Myrtaceae</i>	<i>Medicinal and Wild sps</i>
19	<i>Coleus anboinicus</i>	<i>Lamiaceae</i>	<i>Medicinal plant</i>
20	<i>Datura stramonium</i>	<i>Solanaceae</i>	<i>Medicinal plant</i>
21	<i>Lawsonia inermis</i>	<i>Lythraceae</i>	<i>Medicinal plant</i>
22	<i>Catharanthus roseus</i>	<i>Apocynaceae</i>	<i>Ornamental, Medicinal plant</i>
23	<i>Thuja occidentalis</i>	<i>Cupessaceae</i>	<i>Ornamental, Medicinal plant</i>
24	<i>Ixora coccinia</i>	<i>Rutaceae</i>	<i>Ornamental plant</i>
25	<i>Carica Popaya</i>	<i>Caricaceae</i>	<i>Medicinal plant</i>
26	<i>Codiaeum variegatum</i>	<i>Rutaceae</i>	<i>Ornamental plant</i>
27	<i>Sida acuta</i>	<i>Malvaceae</i>	<i>Medicinal plant</i>
28	<i>Hymenocallis littoralis</i>	<i>Amaryllidaceae</i>	<i>Ornamental plant</i>
29	<i>Murrayakoenigi</i>	<i>Rutaceae</i>	<i>Medicinal plant</i>
30	<i>Ficus religiosa</i>	<i>Moraceae</i>	<i>Medicinal plant</i>
31	<i>Tamarindus indica</i>	<i>Fabaceae</i>	<i>Medicinal plant</i>
32	<i>Butea monosperma</i>	<i>Fabaceae</i>	<i>Wild and tropical plant</i>

33	<b>Euphorbia hirta</b>	<b>Euphorbiaceae</b>	<i>Tropical plant</i>
34	<b>Red sandal</b>	<b>Fabaceae</b>	<b>Timber, Medicinal</b>
35	<b>Tephrosia purpurea</b>	<b>Fabaceae</b>	<b>Pantropical plant</b>
36	<b>Acasia nilotica</b>	<b>Fabaceae</b>	<b>Medicinal plant</b>
37	<b>Plumeria obtusa</b>	<b>Apocynaceae</b>	<b>Ornamental plant</b>
38	<b>Tinosporacardifolia</b>	<b>Menispermaceae</b>	<b>Medicinal plant</b>
39	<b>Boerhaviadiffusa</b>	<b>Nictaginaceae</b>	<b>Medicinal plant</b>
40	<b>Bryophyllumpinnatum</b>	<b>Crassulaceae</b>	<b>Medicinal plant</b>
41	<b>Pongamiapinneta</b>	<b>Fabaceae</b>	<b>Bio- fuel plant</b>
42	<b>Araucaria columnaries</b>	<b>Araceae</b>	<b>Ornamental plant</b>
43	<b>Terminelliacatappa</b>	<b>Combritaceae</b>	<b>Indian almond tree</b>
44	<b>Tectona grandis</b>	<b>Lamiceae</b>	<b>Timber plant</b>
45	<b>Tridox procumbens</b>	<b>Asteraceae</b>	<b>Medicinal plant</b>
46	<b>Croton banplandianum</b>	<b>Euphorbiaceae</b>	<b>Medicinal plant</b>
47	<b>Abutilon indicum</b>	<b>Malvaceae</b>	<b>Medicinal plant</b>
48	<b>Leucas aspera</b>	<b>Lamiaceae</b>	<b>Medicinal plant</b>

## PHOTOS OF AUDITED PLANTS IN COLLEGE CAMPUS



Phyllanthus emblica



Govt Degree College Baramalekhalu Palli, Road No. 1, Chittoor Hwy, Durrappagan Palli, Rayachoty, Baramalekhalu, Andhra Pradesh 512299, India

Rayachoty  
Andhra Pradesh  
India



33°C  
91°F

2023-02-06(Mon) 10:52(AM)

*Pongamia pinnata*



*Azadirachta indica*



*Terminalia catappa*



Devi Degree College Thyerralvaipalli, Kadapa - Chinnor Hwy, Gurappogan Palle, Rayachoty, Syamala/Anapalle, Andhra Pradesh 516204, India

Rayachoty  
Andhra Pradesh  
India

33°C  
91°F

2023-02-06(Mon) 10:56(AM)



*Senna auriculata*



38: 105-0, Chittoor Rd, Gumpiganti Palle, Syamsivexipalle, Rayachoty, Syamalaupalle, Andhra Pradesh 516172, India

Rayachoty  
Andhra Pradesh  
India



33°C

91°F

2023-02-06(Mon) 10:45(AM)

*Polyalthia longifolia*



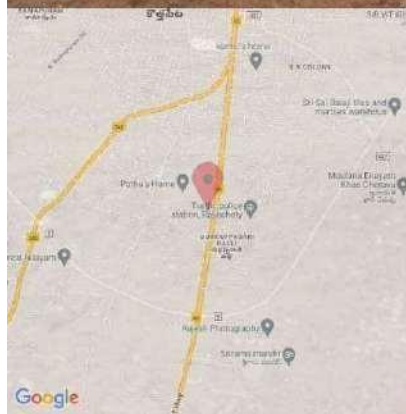
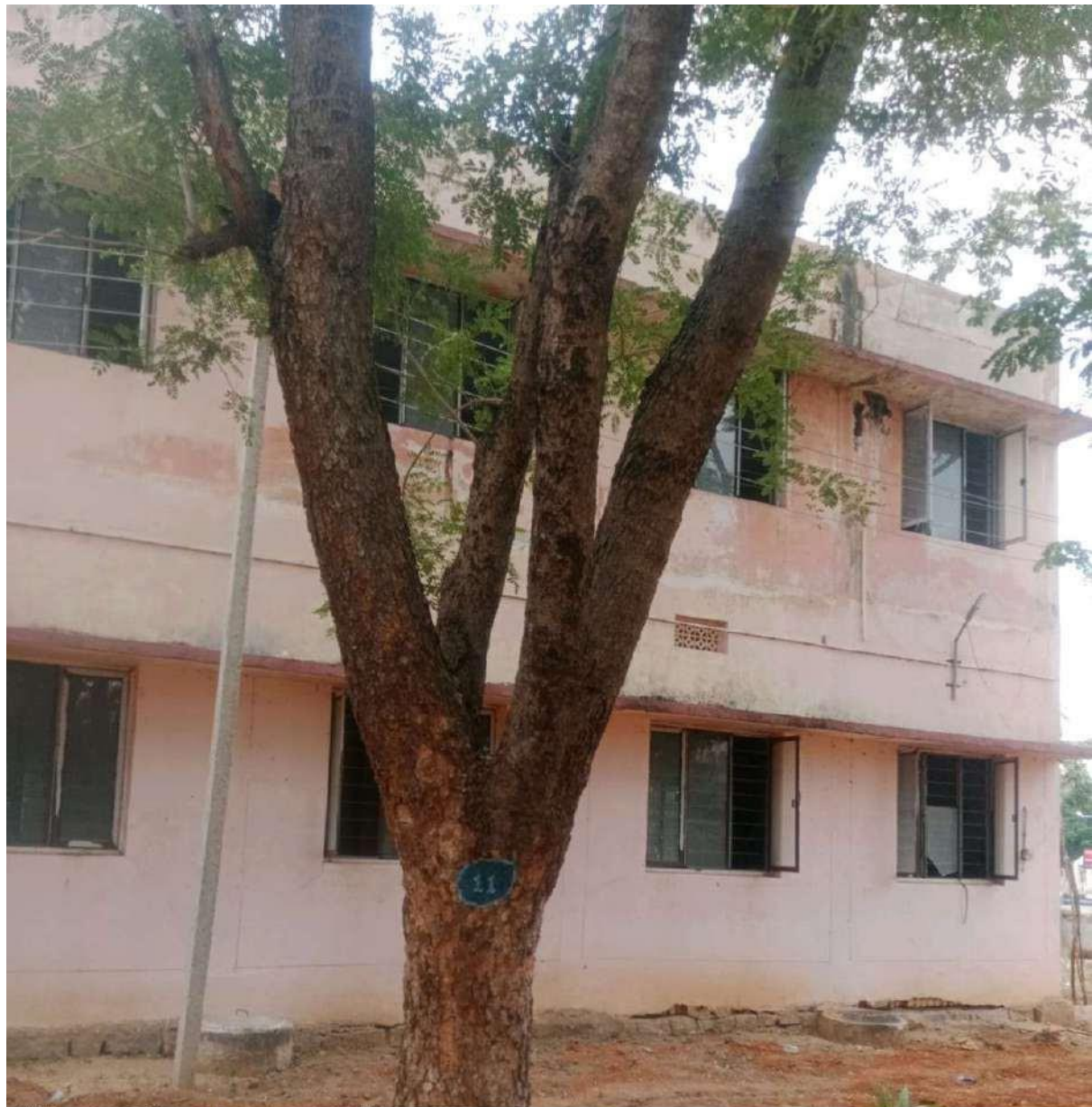
*Tectona grandis*



N0.55-Syzygium cumini



Delonix regia



36,105°N, Chittoor Rd., Rumpungudi Park, Sirmasolempalle, Rayachoty, Sirmasolempalle, Andhra Pradesh 516172, India

Rayachoty  
Andhra Pradesh  
India



33°C  
91°F

2023-02-06(Mon) 10:49(AM)

*Albizia procera*



Source: Google, Google Earth, and other sources. Rayachoty, Srisimhachandrapuram, Andhra Pradesh, India.

Rayachoty  
Andhra Pradesh  
India



33°C  
91°F

2023-02-06(Mon) 10:57(AM)




*Conocarpus lancifolius*

PHOTOS OF GREEN AUDITING WORK BY STAFF AND STUDENTS







 **GPS Map Camera**



Google

**Rayachoty, Andhra Pradesh, India**

Govt Degree College Shyamalavari Palli, Kadapa - Chittoor Hwy, Gurrappagari Palli,


Rayachoty, Syamalavaripalle, Andhra Pradesh 516269, India

Lat 14.038988°

Long 78.748941°

04/02/23 04:09 PM GMT +05:30



 **GPS Map Camera**



Google

**Rayachoty, Andhra Pradesh, India**

Govt Degree College Shyamalavari Palli, Kadapa - Chittoor Hwy, Gurrappagari Palli,

Rayachoty, Syamalavaripalle, Andhra Pradesh 516269, India

Lat 14.038988°

Long 78.748941°

04/02/23 04:07 PM GMT +05:30



**Rayachoty, Andhra Pradesh, India**

Govt Degree College Shyamalavari Palli, Kadapa - Chittoor Hwy, Gurrappagari Palli,  
Rayachoty, Syamalavaripalle, Andhra Pradesh 516269, India

Lat 14.039073°

Long 78.749064°

04/02/23 10:30 AM GMT +05:30



**Rayachoty, Andhra Pradesh, India**

Govt Degree College Shyamalavari Palli, Kadapa - Chittoor Hwy, Gurrappagari Palli,  
Rayachoty, Syamalavaripalle, Andhra Pradesh 516269, India

Lat 14.038988°

Long 78.748941°

04/02/23 11:17 AM GMT +05:30



GPS Map Camera

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Lat 14.038988°

Long 78.748941°

04/02/23 11:32 AM GMT +05:30

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Rayachoty, Andhra Pradesh, India

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Rayachoty, Syamalavaripalle, Andhra Pradesh 516269, India

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Long 78.748941°

04/02/23 10:45 AM GMT +05:30

Google



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Rayachoty  
Andhra Pradesh  
India

32°C  
90°F

2023-02-06(Mon) 11:40(AM)



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Rayachoty  
Andhra Pradesh  
India

32°C  
90°F

2023-02-06(Mon) 11:40(AM)



**Herbarium keeper also painting to the plant**



**Students are searching the new species**



**Students are note down the plant Botanical Name**



**Students are collecting and identified the Medicinal plants.**



## OTHER PLANTS IN COLLEGE CAMPUS

*Livistona chinensis*



*Bryophyllum pinnatum*



*Cassia auriculata*



*Sida acuta*



*Ziziphus mauritiana*




Citrous limon



*Punica granatum*



*Calotropis procera*



Rayachoty  
Andhra Pradesh  
India

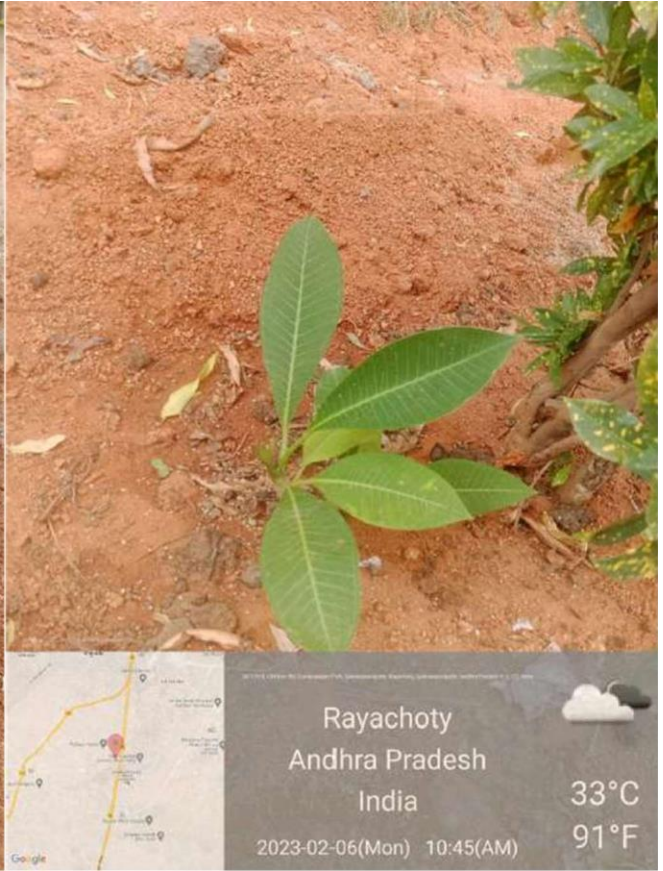
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91°F

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*Syzygiumaquem*



*Plumeria acquitifolia*

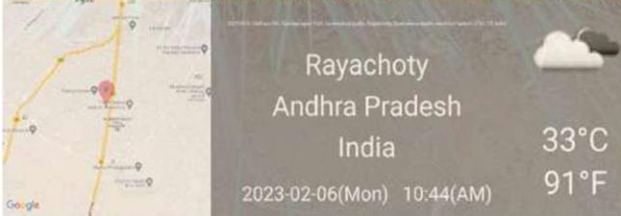


*Codium variegatum*

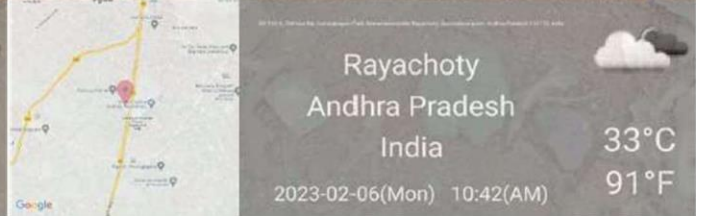


*Acrus sapota*

*Agave amica*



*Pergularia demia*



*Tabernaemontana divaricata*



*Phyllanthus emblica*



*Coccus nucifera*



*Catharanthus roseus*



*Hymenocallis littoralis*



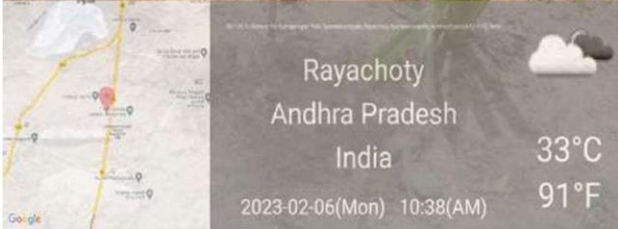
*Tuja accidentalis*



*Nerium oleander*



*Phoenix roebelenii*



*Lawsonia inermis*



*Phoenix dactylifera*



*Araucaria columnaris*



*Ixora coccinea*



*Cactus ssp*



*Acerus sapota*



*Carica papaya*



*Pterocarpus santalinus*



*Annona squamosa*



*Euphorbia hirta*



*Tamaridus indica*



*Acasia nilotica*



*Eucalyptus globulus*



*Tephrosia purpuria*





*Hemanocallis latifolia*



*Psidium guajava*



*Murraya koenigi*



*Ficus religiosa*

## Butea monosperma

