



**SGA GOVT. DEGREE
COLLEGE,
YELLAMANCHILI**

**DEPARTMENT OF
BOTANY**

BEST PRACTICES



S.G.A.GOVERNMENT DEGREE COLLEGE

(Re-accredited by NAAC with 'A' Grade, Affiliated to Andhra University)

YELLAMANCHILI - 531055, ANDHRA PRADESH



Best Practices from Department of Botany

Best practices are an inherent part of a curriculum that exemplifies the connection and relevance identified in educational research. Best practices are applicable to all grade levels and provide the building blocks for instruction. Best practices in Teaching learning process are important which motivate, engage and prompt students to learn and achieve, skills and abilities. Relationships are also built through opportunities for communication and teamwork.

In Teaching learning process, the Dept. of Botany followed more than 5 best practices so as to enable effective learning through illustrations, charts, bio-visual charts, PPTs, real and animated vedios.

I.Title of the best practices:

1. Visual clues
2. Graphic Organizers
3. Self instructional study material
4. Virtual science labs
5. ICT Enabled Learning
6. Video clips
7. Power Points Presentations (PPTs)
8. Field trips
9. Flipped Classroom
10. Science Quiz
11. Build your model
12. Other Methods

II. Objectives of the best practices:

1. To develop independent knowledge and skills.
2. To communicate information, ideas and proposals effectively in oral, visual and written forms.
3. To analyze and interpret the data.
4. Time management skills.
5. To engage in higher order thinking and engage in active learning.
6. To construct hypotheses and make decisions.
7. To work collaboratively with others.
8. To connect real-life work between College and what will take place in the rest of their lives.
9. To address cultural influences and individual learning styles.
10. To empowers students to take ownership of their learning.
11. To develop research skills.
12. Refine and update their advanced technological skills.

III. The Context:

Education is the manifestation of perfection already in men. It helps all round development in persons. Education without Philosophy is blind and Philosophy without education is invalid. Hence education is key to development through which skills for life achieved. Teaching learning is a dynamic and interactive process which includes norms, policies and practices. Science teachers work in class room, labs and work with in a larger, ever expanding and shifting educational system, characterized by ongoing state and federal reform efforts and changing student and teacher population.

There are two challenging issues in present education. Our Following semesters with CBCS pattern of grading system in education. It is a difficult and challenging issue in completion of syllabus in each semester by implementing comprehensive teaching learning methods along with teaching aids with in stipulated time. The conduction of practicals is too become difficult. The syllabus coverage in some cases is being hurried and towards the end of the semester where information is being crammed at once. This sluggish coverage initially and hurried coverage later should be avoided giving enough time to student in comprehending the topics and assimilating the facts.

The teachers find it difficult to keep pace with the techno – savvy student learners. It has become essential for some of the teachers to adopt to the latest pedagogic styles and include ICT in class room teaching. The mismatch between the student learner and the teacher in the use and comfort of handling varieties of tools (Eg. Edmodo) available for teaching learning needs to bridged.

IV. The Practice:

Visual clues:

- a. Using visual clues easily supplements auditory information and students can easily connect better with ideas.
- b. The multi-sensory experiences improve their understanding and memorization. This includes drawings, diagrams, and pictures to assist theory and setting up examples to show its application side.
- c. The sequence of lab procedures can be better taught using pictures with words approach.
- d. Building instructional conversations is a key method to teach science vocabulary. Let them talk in between the lectures about the experience they had with an application related to the topic of discussion.

1. Graphic Organizers:

- a. This teaching approach is helpful for students to interact with science in a more organized and structured way. Teachers can use different types of templates to represent the data according to the topic that is being handled.
- b. A typical format for graphic organizer contains a central point from which different branches are formed and there may be sub-branches in certain cases. Arrows are used to point the direction or sequence of a process.
- c. As biological teacher, we used flow charts, cycles to teach life cycles of plants and biochemical pathways in Botany.

2. Self instructional study material:

- a. The Teacher has prepared material in simple sentences by studying standard books and provided to students.
- b. Every student can easily understand and follow the prepared material which is more useful in facing academic examinations in semester.

3. Virtual science labs:

- a. There are many virtual science labs available online for free and therefore, this approach almost gives hands on experience of learning the subject without much expense.
- b. Detailed diagrams, illustrations or close up pictures allow students to virtually get inside a plant or animal part without actually doing it.
- c. Dissections in biology can be studied thoughtfully with a virtual hands-on sensation without the problem of odour and similarly, experiment a chemical reaction without burns.

4. ICT Enabled Learning:

- a. ICT refers to the use of Information and Communications Technology to teach the scientific ideas that promotes open source learning.
- b. In order to make the accessing, storing, transmitting, and manipulation of information more easy, this approach integrates telecommunications, computers and relevant enterprise software, storage, middleware, and audio-visual systems required to handle the topic.

5. Video clips:

- a. This teaching technique makes use of instructional video clips available online or in libraries to show and teach a new concept.
- b. The evolution of a process can be conveyed better with animation videos. It can also be videos of demonstration of an idea or an application side of a theory or an interview with a scientist, tutorial by a subject expert and more.

6. Power Points Presentations (PPTs):

- a. Instead of the conventional talk and chalk methods, teachers now include power point presentations in their classroom sessions to make it more interesting.
- b. They connect the computers to projectors to address a larger classroom and include interesting slides with diagrams and flow charts to make the teaching more interactive.

7. Field trips:

- a. In the middle of boring classroom sessions, take your students out for field trips to experience science while learning. Go to a nature center, a botanical garden or local agriculture centres.
- b. You can also spend some time with the students in the park or simply go on a nature walk to experience the science around while learning new concepts.

8. Flipped Classroom:

- a. In this innovative teaching technique, students are asked to go through video instructions or tutorials in the initial stage, i.e. digital learning.
- b. The second stage will be in classrooms where they involve in challenging tasks and assignments based on the information gathered through video assets. This flipped learning frees up class time for activities such as hands-on labs, guided practice or online simulations. Eg. Edmodo

9. Science Quiz:

- a. Include a quiz as a part of your classroom sessions when teaching science. This can be done as a whole class activity by splitting the group into 4 or more sets. The questions can include the application of the theory taught in class.
- b. Students can discuss and share ideas to find the solution within the stipulated time frame. This teaching approach helps students to think from different angles and sometimes, to think out of the box.

10. Build your model:

- a. This can be a challenging task given to students as part of science education. Models are the building blocks of science which are used to explain the diverse aspects of real world.
- b. Ask your students to build their own model using the scientific knowledge they have acquired and you can provide supportive guidance.
- c. Students will be creative in making models and designing their own imaginative means of testing them. This is the right approach to find the scientist in them.
- d. The new era teachers and science enthusiasts have come up with many innovative teaching methods in science and the listed ones are just a few among them.
- e. We live in a scientific world and the advanced teaching strategies are helping students to discover and explore science every day.

11. Other Methods:

- a. The teachers looking for advanced techniques can also try group discussion, case studies, laboratory experiments, seminar, outdoor teaching, creative illustrations, crafts and interactive lecture demonstrations to help students to experience the beauty of science.
- b. Informal feedback is obtained from students regarding the content delivery by different teachers. The teaching learning committee members and the class teachers hold frequent informal meetings and cull out the information needed.
- c. Frequent assignments, tests and evaluation are conducted to improve performance in the semester end examinations.

5. Evidence of success:

- a. The teachers have adopted modern pedagogic styles and ICT in their classes.
- b. Some of the notes are scanned and uploaded in the Departmental computer.
- c. Some of the prepared notes shared to students through mail or some advanced ICT tools.
- d. Appropriately paced and timely completion of syllabus
- e. Increased attendance in the classes
- f. Improvement in results.
- g. Increase in the number of students securing high marks.
- h. Increase in the enrolment to higher education institutes from the college.
- i. Increase in the quality of results (number number of first classes, etc.)
- j. Attendance in the classes by these class of students has improved.

The above results indicated that following and usage of methodologies properly in time to time along with traditional methods of teaching. The collaborative mode of teaching enrich the knowledge and increases the comprehension in students.

6. Problems encountered and Resources required:

Problems encountered and resources required: Identify the problems encountered and resources required to implement the practice. (150 words).

- a. Lack of infrastructure so as to equip with all kinds of experimental instruments.
- b. Lack of second experimental laboratory.
- c. Lack of technical lab assistants (Human resources) to keep up the furniture properly in the laboratory and to arrange during conduction of practicals.
- d. Concentrating more on other than the academic activities.

- e. Extracurricular activities are given more important.
- f. Poor attendance of students in very 1st period.
- g. Development of animation based power point presentations in teaching, particularly in science subjects, has been hindered due to the want of technical expertise.
- h. The demand for ICT resources is increasing and paucity of funds has been the biggest impediment which may dampen the spirit of technology adoption by teachers.

7. Notes (Optional):

1. Computer experts and programmers train the traditional teachers in the use of Power Point Presentations, advanced ICT tools, educational apps, browsing the internet for useful resources, uploading content on the college website, use of google docs, sheets for information sharing.


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BEST PRACTICES OF BOTANY DEPARTMENT

- 1. ICT CLASSES**
- 2. GREEN ENVIRONMENT**
- 3. GROWING MEDICINAL
PLANTS**
- 4. MICRO IRRIGATION**
- 5. VRIKSHA BANDHAN**



**SGA GOVT. DEGREE COLLEGE,
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DEPARTMENT OF BOTANY

ICT CLASSES

2017 TO 2022



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DEPARTMENT OF BOTANY

ICT Classes, 2017-22

S.No	Date	Name of the Lecturer	Group	Name of the Topic
1	03-01-2018	Dr. B. Chandramouli	III CBZ	Plant Tissue culture principles
2	08-08-2018	Dr. B. Chandramouli	II CBZ	Enzymes
3	12-12-2018	Dr. B. Chandramouli	II CBZ	IUB System of Nomenclature
4	23-01-2019	Dr. B. Chandramouli	II CBZ	Asorption of Water
5	05-02-2019	Dr. B. Chandramouli	All	Usage o ICT Tools
6	21-08-2019	Smt.J.Lavanya	I CBZ	Mana TV Classes
7	23-01-2019	Dr. B. Chandramouli	II CBZ	Absorption of Water
8	07-01-2020	Dr. B. Chandramouli	II CBZ	Photophosphorylation
9	07-01-2020	Smt.J.Lavanya	I CBZ	Pinus needle T.S
10	15-01-2020	Dr. B. Chandramouli	III CBZ	DNA Replication
11	02-02-2021	Smt.J.Lavanya	III CBZ	Ethnobotanical studies
12	04-02-2021	Smt.J.Lavanya	All	Corona virus awareness
13	12-11-2021	Dr. B. Chandramouli	III CBZ	DNA Repication
14	15-11-2021	Dr. B. Chandramouli	I CBZ	Cycas Root T.S
15	01-12-2021	Dr. V.Padmaja	III CBZ	Sterilization methods
16	07-02-2022	Dr. B. Chandramouli	III CBZ	Alstonia scholaris and Zingiber oficinale
17	08-02-2022	Dr. V.Padmaja	III CBZ	Endosperm culture
18	18-02-2022	Dr. B. Chandramouli	II CBZ	Boerhavia Stem T.S
19	25-3-2022	Dr. B. Chandramouli	III CBZ	Mevalanate and shikimate pathways
20	26-03-2022	Dr. B. Chandramouli	III CBZ	Zingiber oficinale Ethnobotanical uses
21	26-03-2022	Dr. B. Chandramouli	III CBZ	Curcuma longa uses
22	26-03-2022	Dr. V.Padmaja	I CBZ	Puccinia life cycle
23	26-03-2022	Dr. V.Padmaja	III CBZ	Golden rice importance
24	26-06-2022	Dr. B. Chandramouli	II CBZ	Bentham & Hooker Classification
25	15-07-2022	Dr. B. Chandramouli	II CBZ	Enzyme structure and types
26	15-07-2022	Students	II CBZ	Factors controlling enzyme activity
27	30-07-2022	Dr. B. Chandramouli	II CBZ	Asteraceae Family


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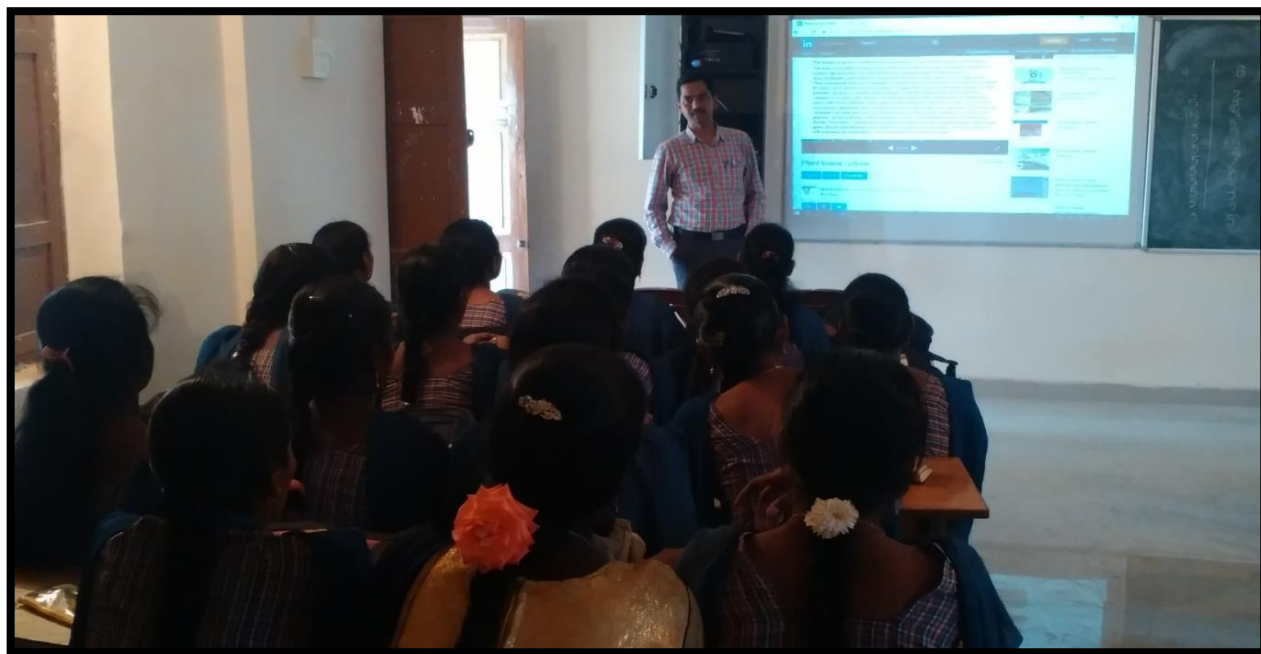
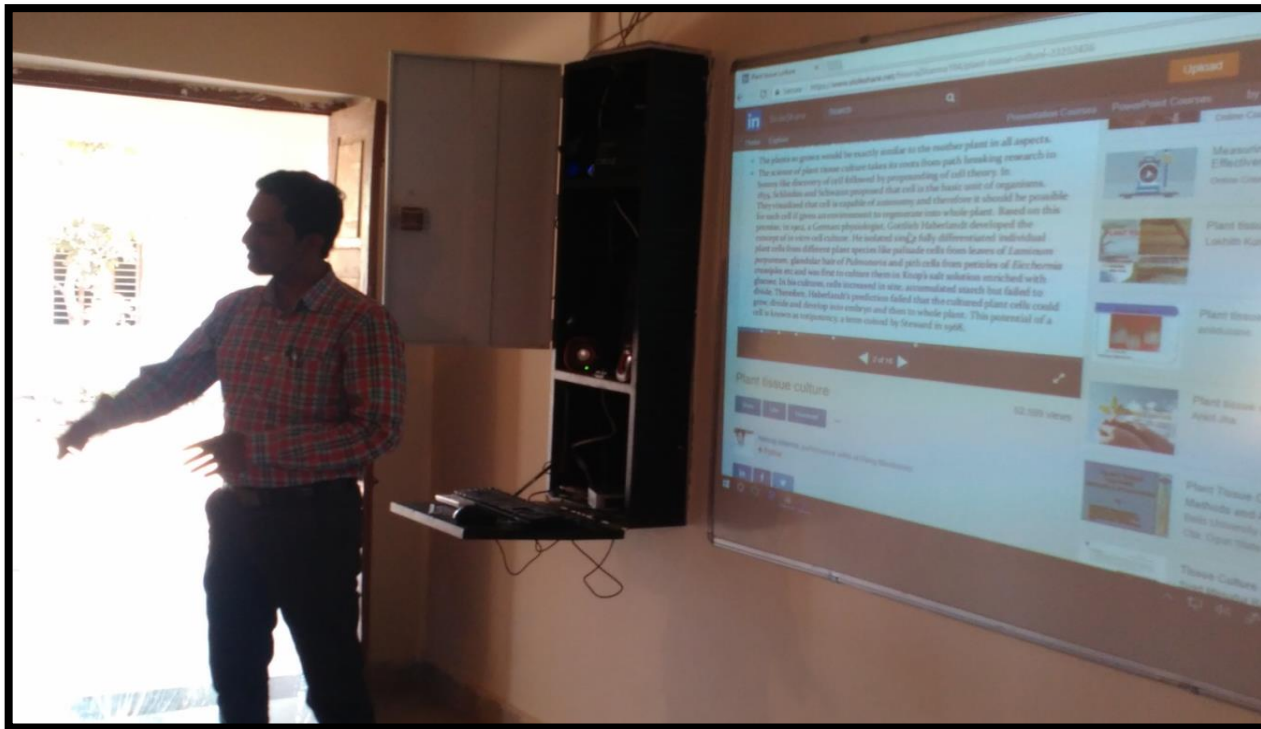
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Activity: Digital Classes to II CBZ, 2017-18

Topic: Plant tissue culture principles Date: 03-01-2018



Name: Dr. B. Chandramouli and III CBZ students



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Activity: Smart Classes, 2018-19

Topic: Enzymes – IUB system of Enzyme Nomenclature Group: II CBZ

Date: 08-08-2018



Name: Dr. B. Chandramouli, Lecturer in Botany and II CBZ students



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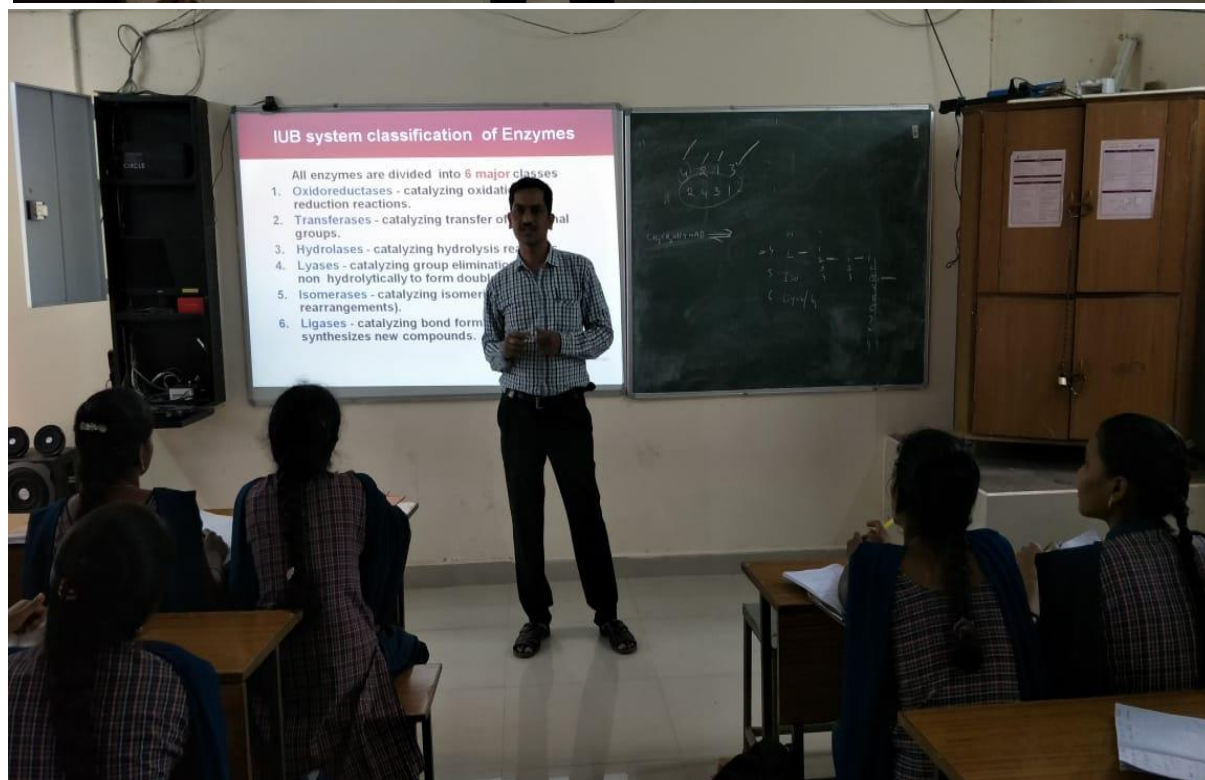
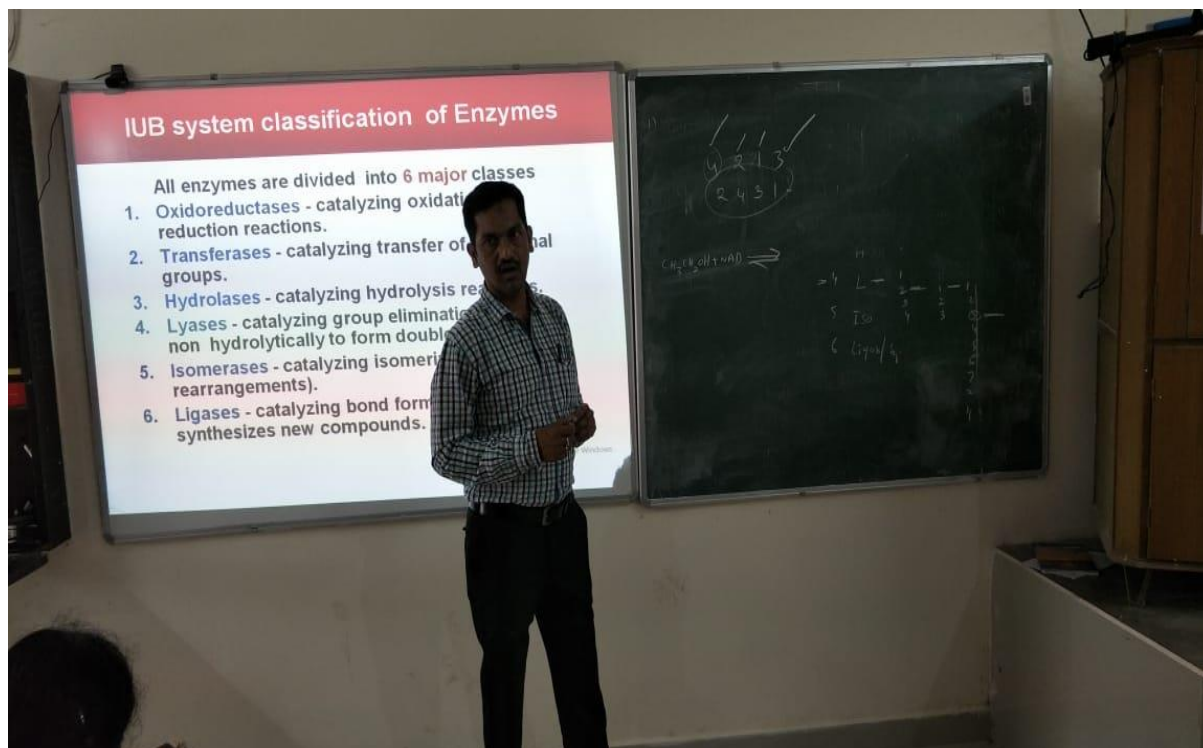


DEPARTMENT OF BOTANY

Activity: Digital Classes to II CBZ, 2017-18

Topic: IUB System of Nomenclature

Date: 12-12-2018



Name: Dr. B. Chandramouli and II CBZ students



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DEPARTMENT OF BOTANY

Activity: Digital Classes to II CBZ, 2018-19

Topic: Absorption of Water

Date: 23-01-2019



Name: Dr. B. Chandramouli and II CBZ Students



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Activity: Usage of ICT Tools, 2018-2019

Date: 05-02-2019



Dr. K. Malyadri, Principal and Teaching staff participated in Training program



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Mana TV Classes, 2019-20



Name: Smt. J. Lavanya

Group: I CBZ

Date: 21-08-2019



Smt J. Lavanya, Lecturer in Botany and I CBZ Students for Mana TV Classes



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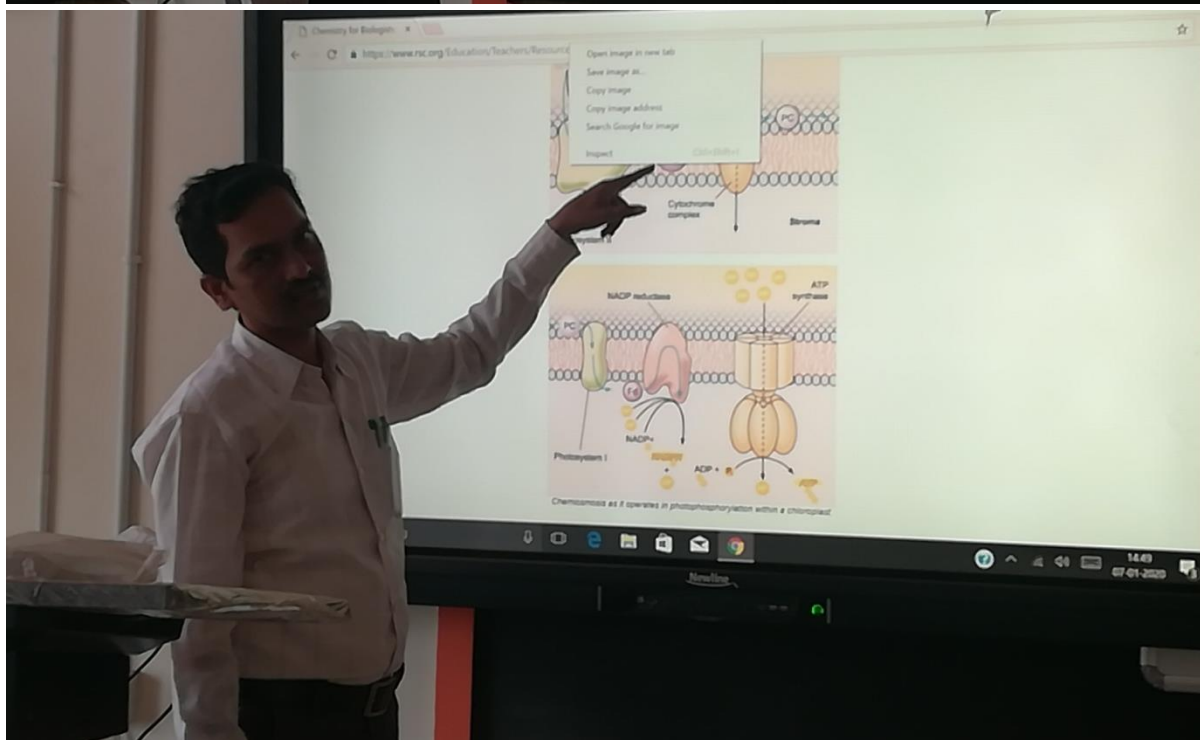
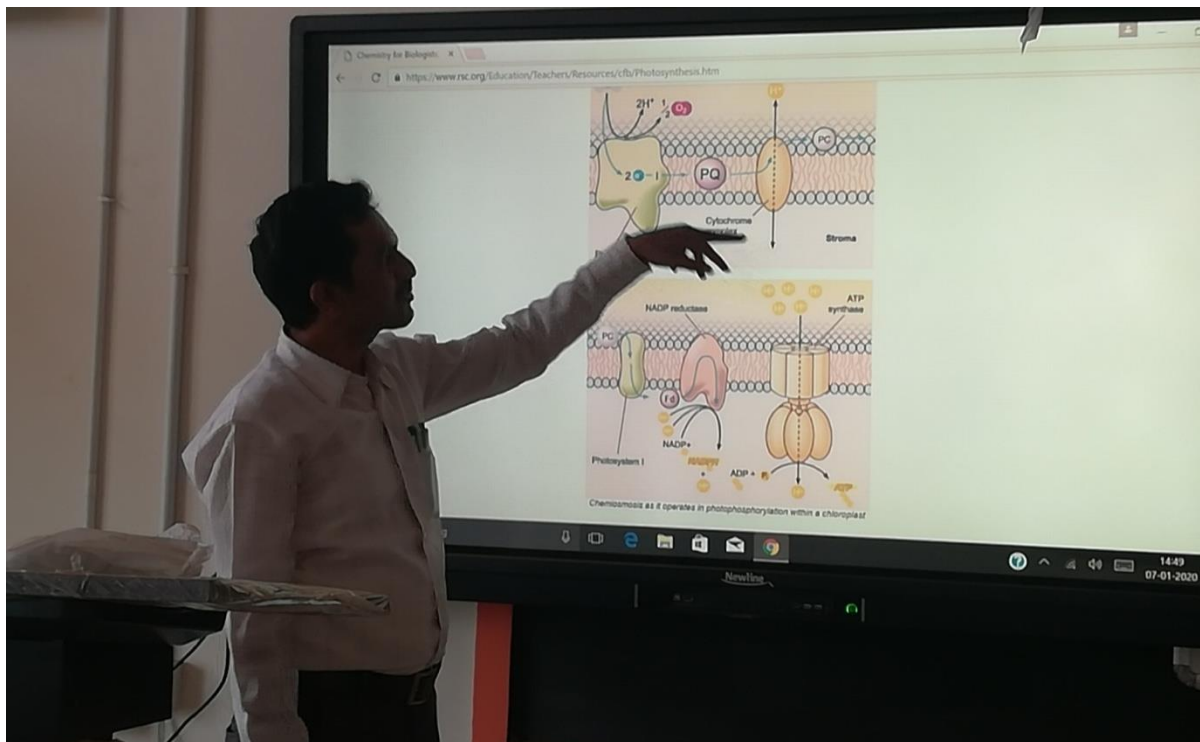
DEPARTMENT OF BOTANY

Activity: Digital Class, 2019-20

Topic: Photophosphorylation

Group: II CBZ

Date: 07-01-2020



Name: Dr. B. Chandramouli, Lecturer in Botany



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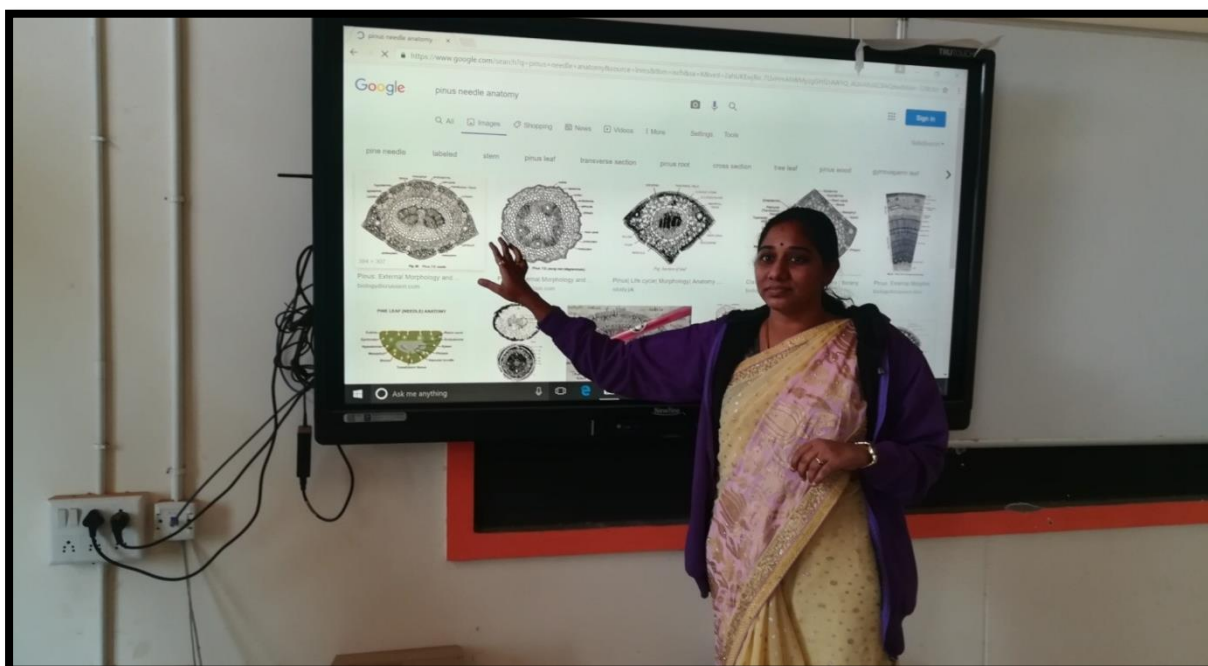
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Activity: Digital Class, 2019-20

Topic: Pinus Needle T.S

Group: I CBZ

Date: 07-01-2020



Name: J. Lavanya, Lecturer in Botany



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DEPARTMENT OF BOTANY

Activity: Digital Class, 2019-20

Topic: DNA Replication

Group: III CBZ

Date: 15-01-2020



Name: Dr. B. Chandramouli, Lecturer in Botany and III CBZ students



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DEPARTMENT OF BOTANY

Activity: Digital Class, 2020-21

Topic: Ethnobotanical studies

Group: III CBZ

Date: 02-02-2021



Name: Smt. J. Lavanya, Lecturer in Botany and III CBZ students



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DEPARTMENT OF BOTANY

Activity: Digital Class, 2020-21

Topic: Corona Virus – Covid Awareness program

Resource persons:

1. Dr. B. Chandramouli, Lecturer in Botany

2. Smt. J. Lavanya , Lecturer in Botany

3. Sri G. Satyanarayana, Lecturer in English

Date: 04-02-2021



Group: All CBZ group students



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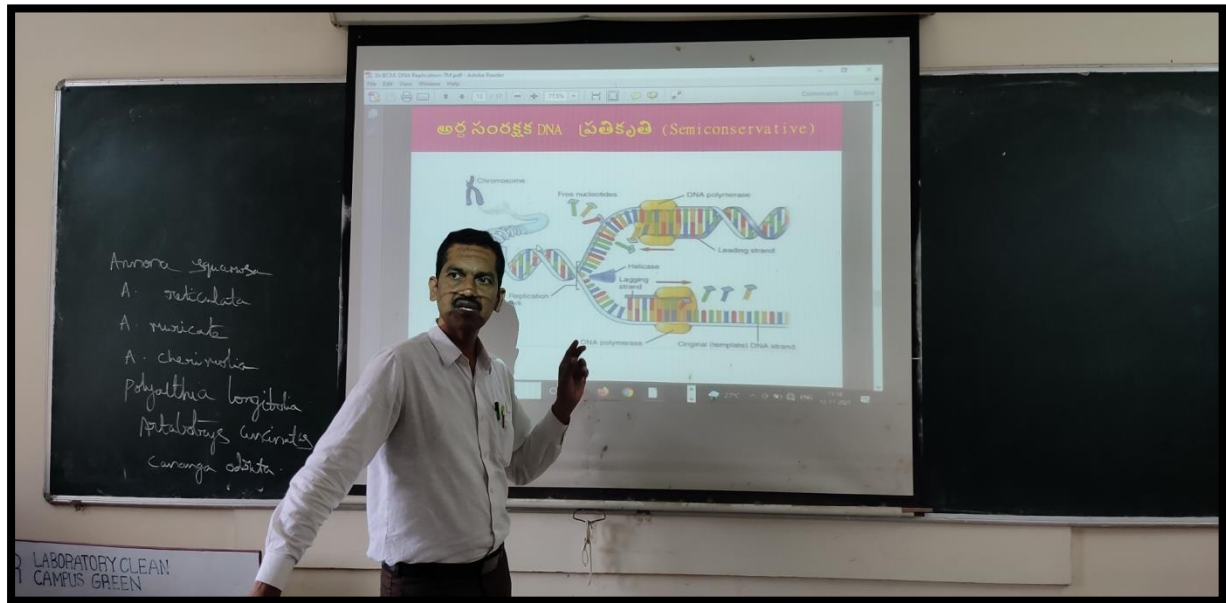
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DEPARTMENT OF BOTANY

Activity: ICT Class for III CBZ Students, 2020-21



Name: Dr. B. Chandramouli

Topic: DNA Replication

Date: 12-11-2021



Name: Dr. B. Chandramouli

Topic: Semi Conservative method of DNA Replication

Date: 12-11-2021



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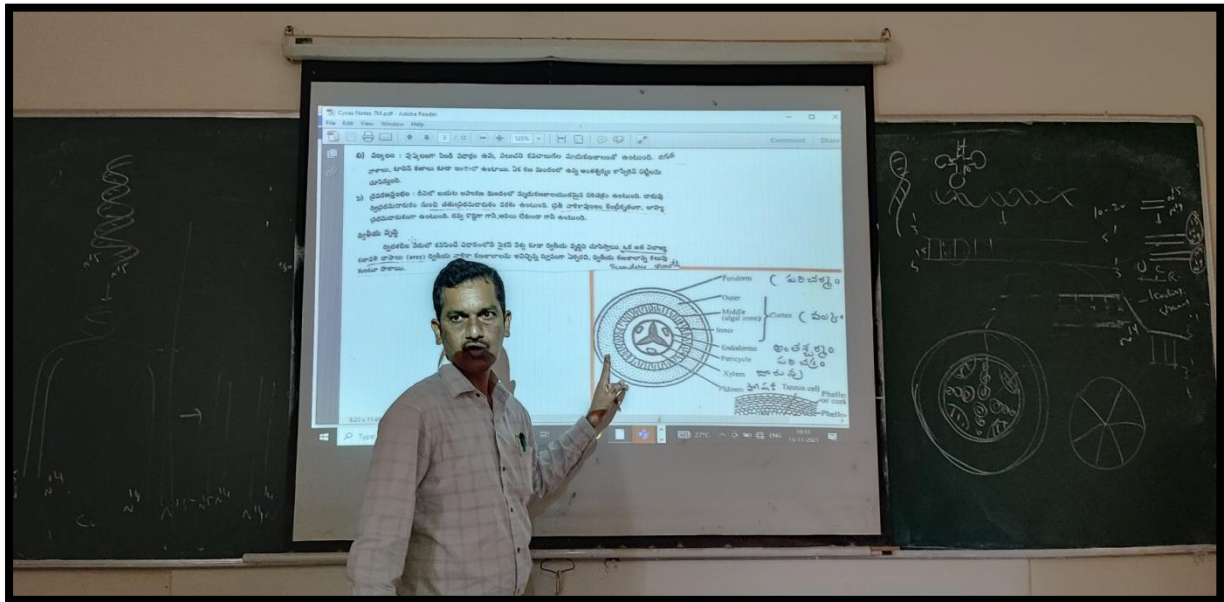
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Activity: ICT Class for I CBZ Students, 2020-21



Name: Dr. B. Chandramouli, Lecturer in Botany Topic: Cycas Root T.S Date: 15-11-2021



Name: Dr. B. Chandramouli, Lecturer in Botany Topic: Cycas Root T.S and secondary growth Date: 15-11-2021



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DEPARTMENT OF BOTANY

Activity: ICT Class, 2020-21

Topic: Sterilization methods

Date: 01-12-2021



Name: Smt. V. Padmaja and III CBZ students



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DEPARTMENT OF BOTANY

Activity: ICT Class for III CBZ, 2021-22



Name: Dr. B. Chandramouli

Topic: *Alstonia scholaris*

Date: 07-02-2022

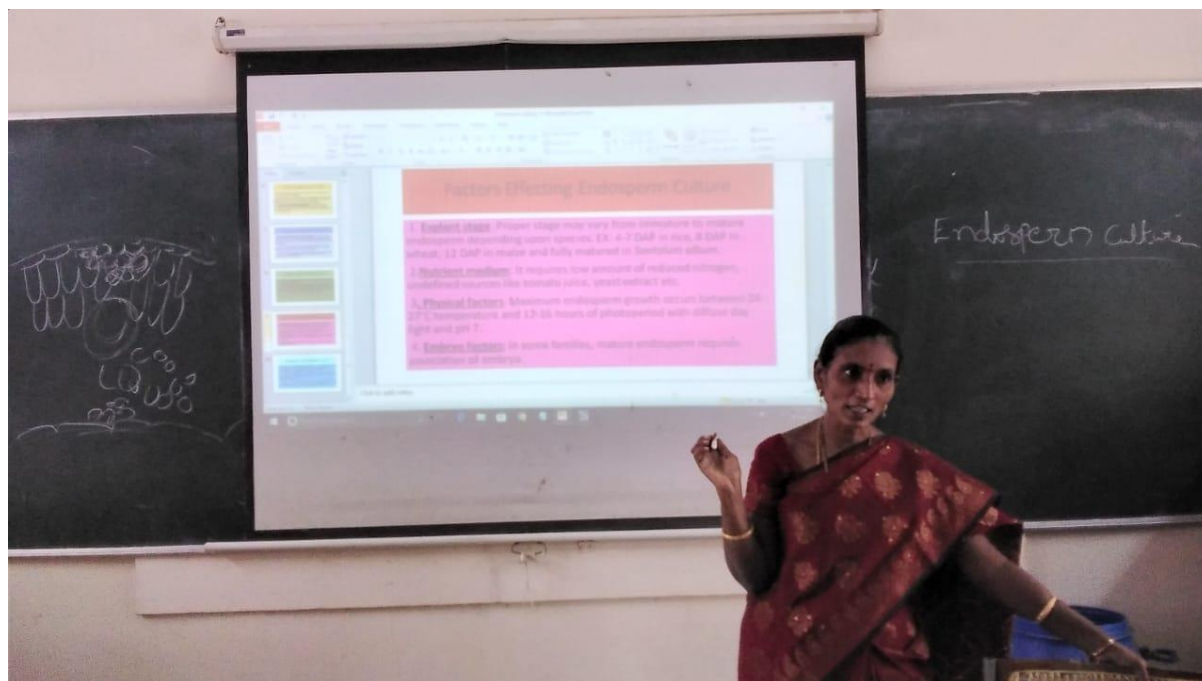


Name: Dr. B. Chandramouli

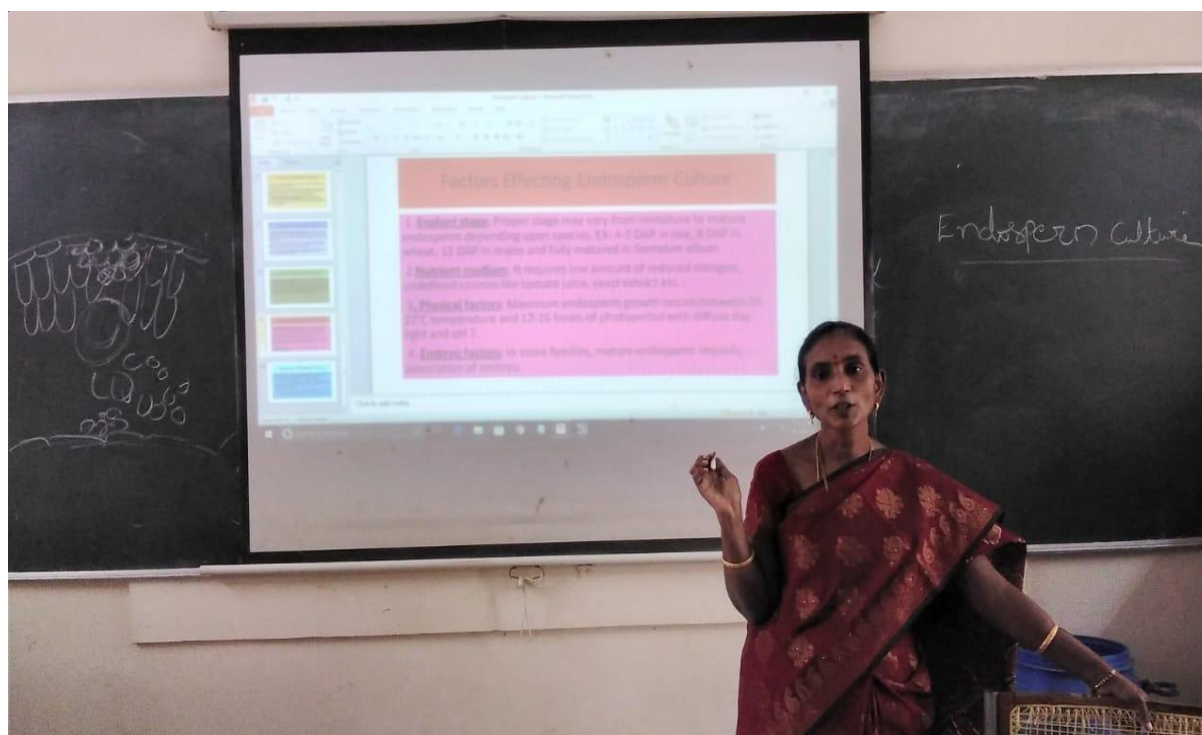
Topic: *Zingiber officinale*

Date: 07-02-2022

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Department of Botany
ICT Classes for 2021-22



Name:Smt.V.Padmaja Topic: Endosperm culture Date:08-02-2022



Smt V. Padmaja, Lecturer in Botany Explaining the culture of Endosperm



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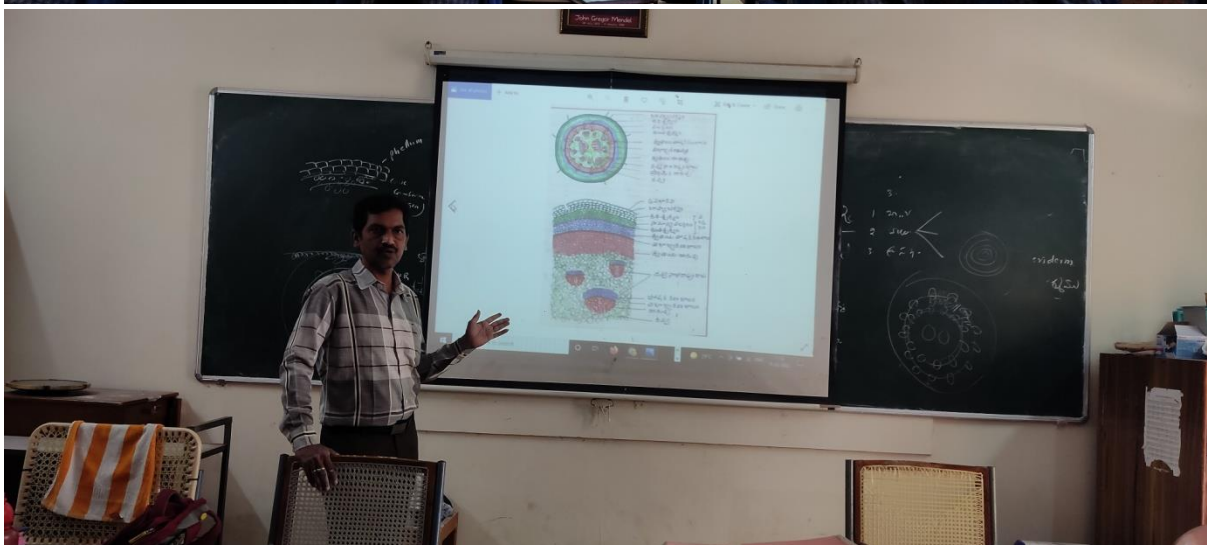
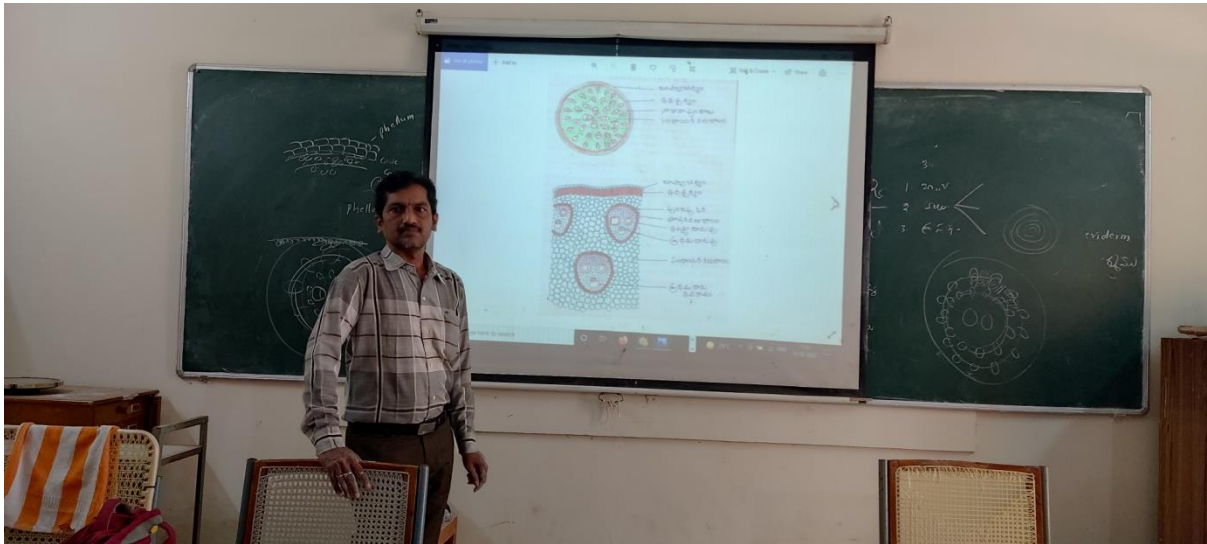
Department of Botany

ICT Class for I CBZ (SEM-II), 2021-22

Topic: Anomalous secondary growth in Boerhavia stem

Resource person: Dr.B. Chandramouli

Date: 18-02-2022



Dr. B. Chandramouli, Lecturer in Botany Explaining the Boerhavia stem T.S



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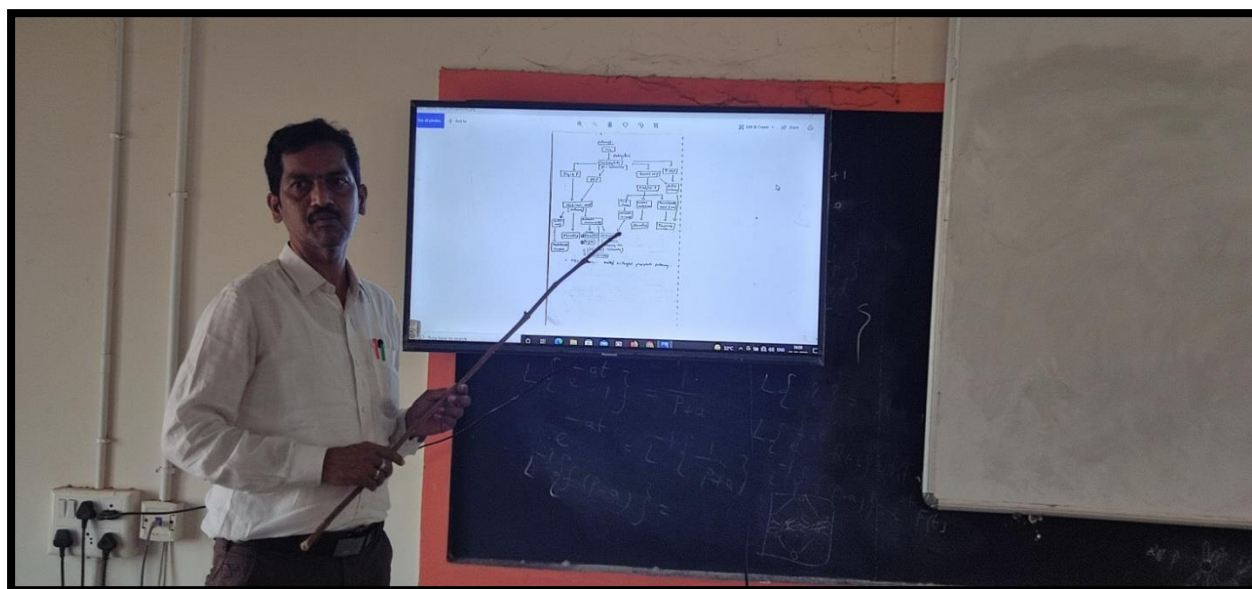
DEPARTMENT OF BOTANY

Activity: ICT Class, 2021-22

Topic: Acetate, Mevalanate and Shikimate pathways

Group: III CBZ

Date: 25-03-2022



Name: Dr. B. Chandramouli, Lecturer in Botany and III CBZ students



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DEPARTMENT OF BOTANY
ICT Class for III CBZ Students, 2021-22



Name: Dr. B. Chandramouli Topic: Zingiber officinale Date: 26-03-2022



Name: Dr. B. Chandramouli Topic: Zingiber officinale Ethnobotanical importance

Date: 26-03-2022



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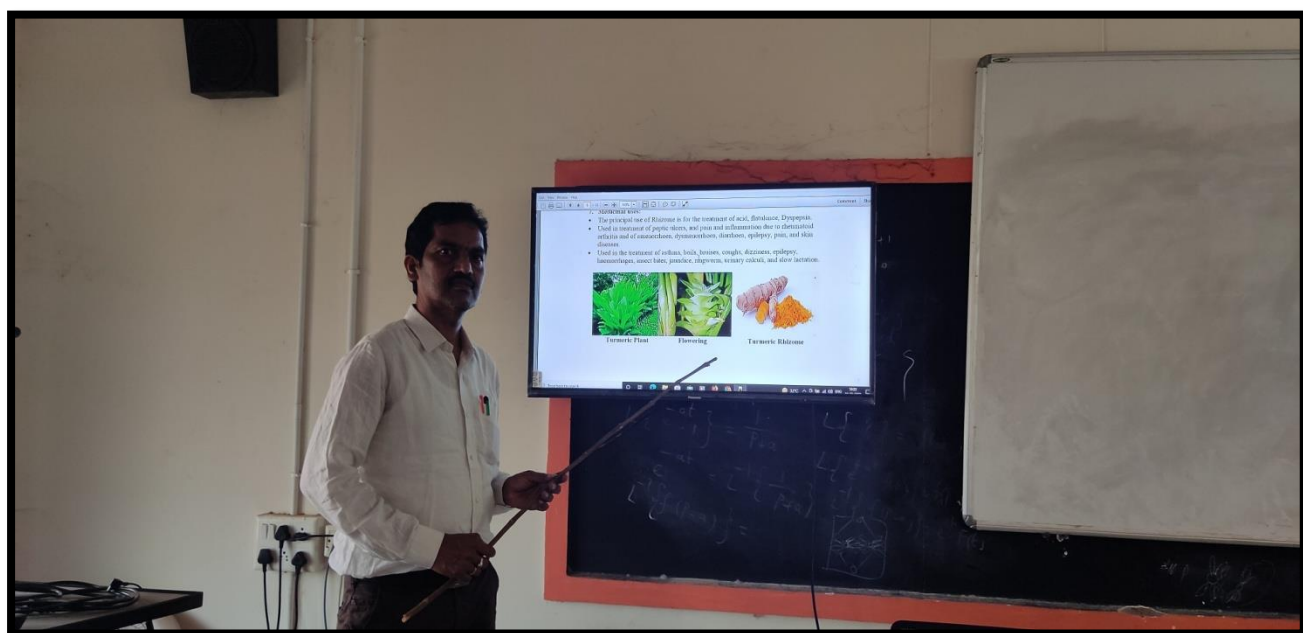
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Activity: ICT Class, 2021-22

Topic: *Curcuma longa*

Group: III CBZ

Date: 26-03-2022



Name: Dr. B. Chandramouli, Lecturer in Botany and III CBZ students



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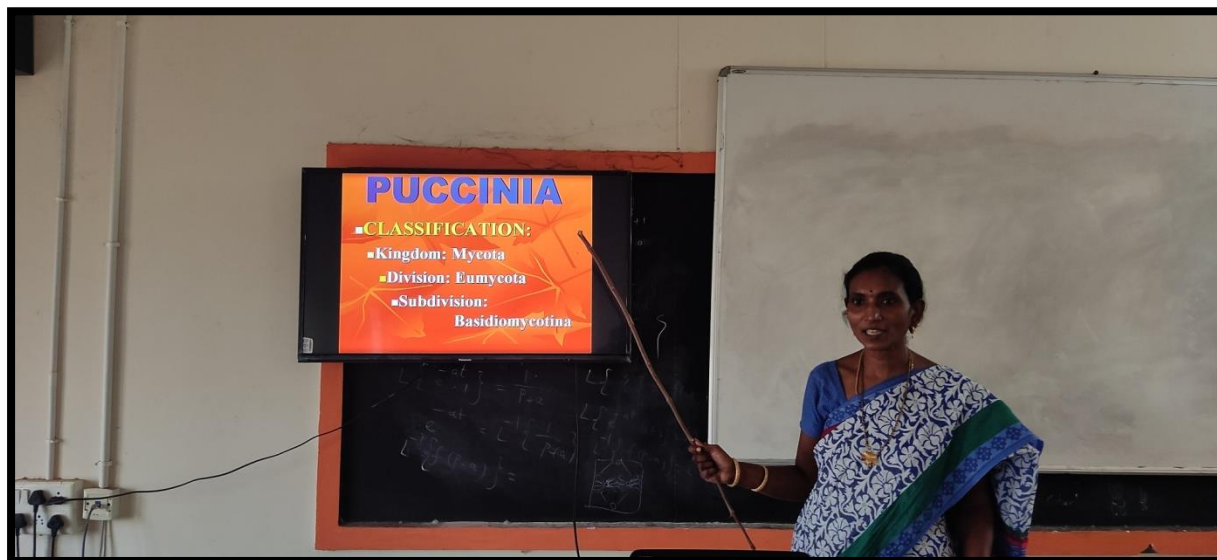
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DEPARTMENT OF BOTANY

Activity: ICT Class for I CBZ Students, 2021-22



Name: Dr. V. Padmaja

Topic: Puccinia life cycle

Date: 26-03-2022



Name: Dr. V. Padmaja

Topic: Puccinia life cycle

Date: 26-03-2022



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Activity: ICT Class for III CBZ Students, 2021-22



Name: Dr. V. Padmaja Topic: Golden rice Date: 26-03-2022



Name: Dr. V. Padmaja Topic: Importance of Golden rice

Date: 26-03-2022



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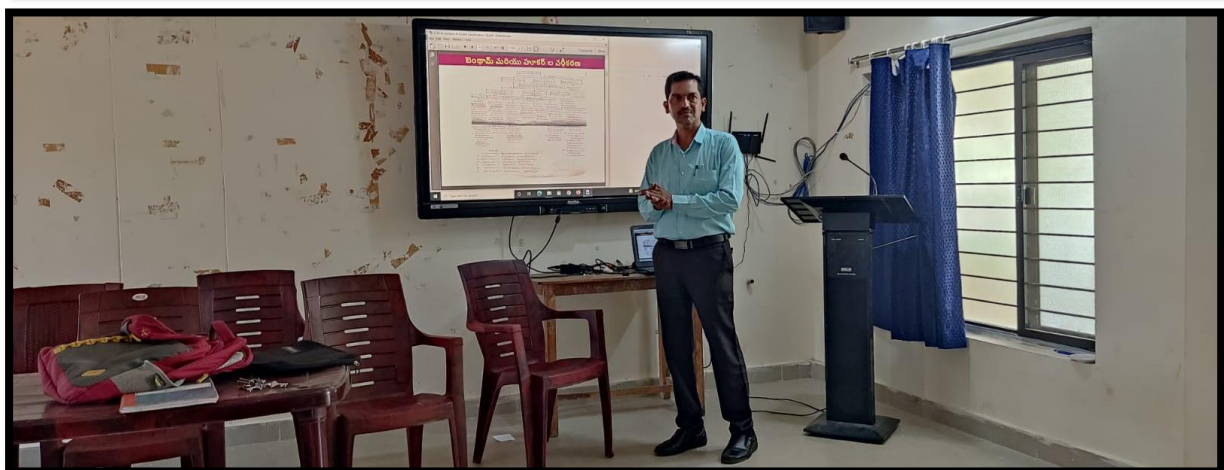
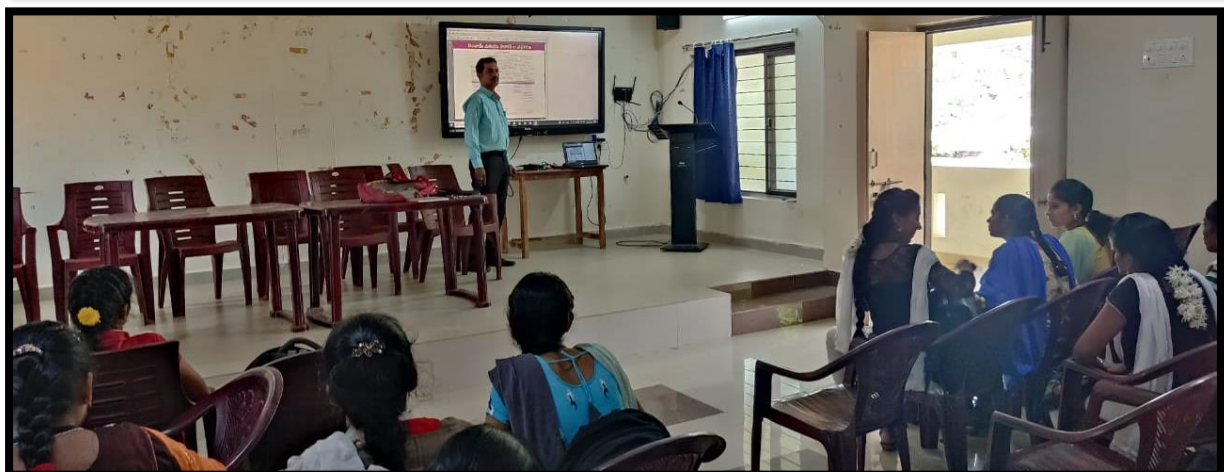
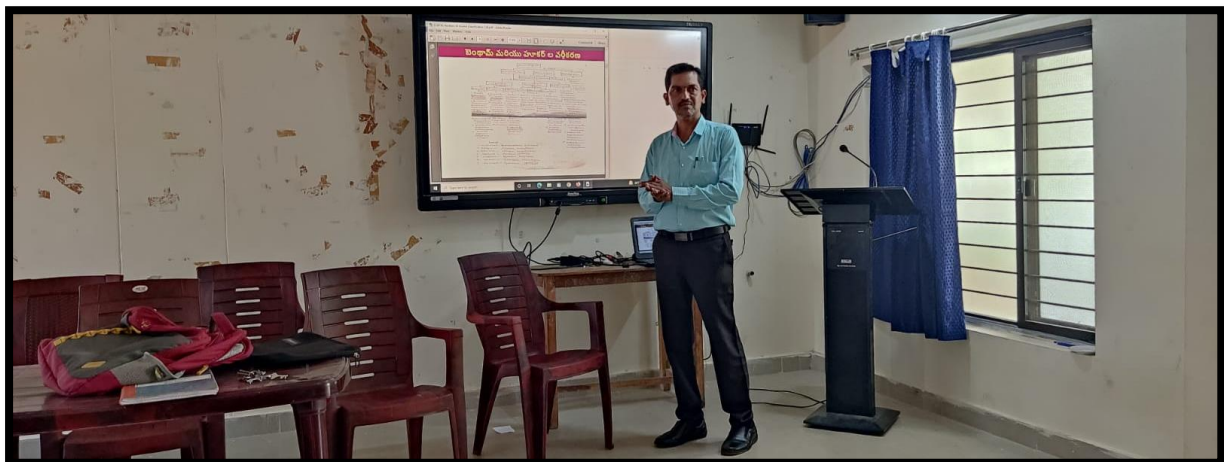
Department of Botany

Activity: Digital Class (ICT)

I CBZ, SEM-II

Topic: Bentham & Hookers Classification

Date: 26-06-2022



Dr. B. Chandramouli, Lecturer in Botany Explained the Bentham and Hooker's Classification on 26-06-2022 through ICT mode.



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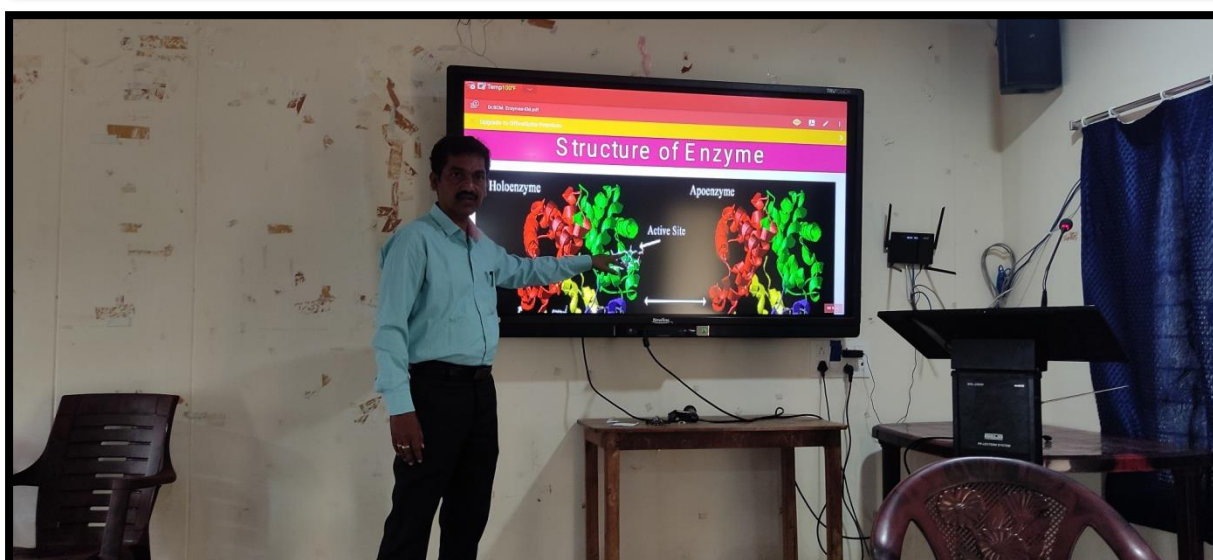


Department of Botany

Activity: Digital Class, 2021-22

Topic: Enzyme structure and types of Enzymes

Date:15-07-2022



Name: Dr. B. Chandramouli

Topic: Enzymes – Properties and Structure

Group: II CBZ

Date: 15-07-2022



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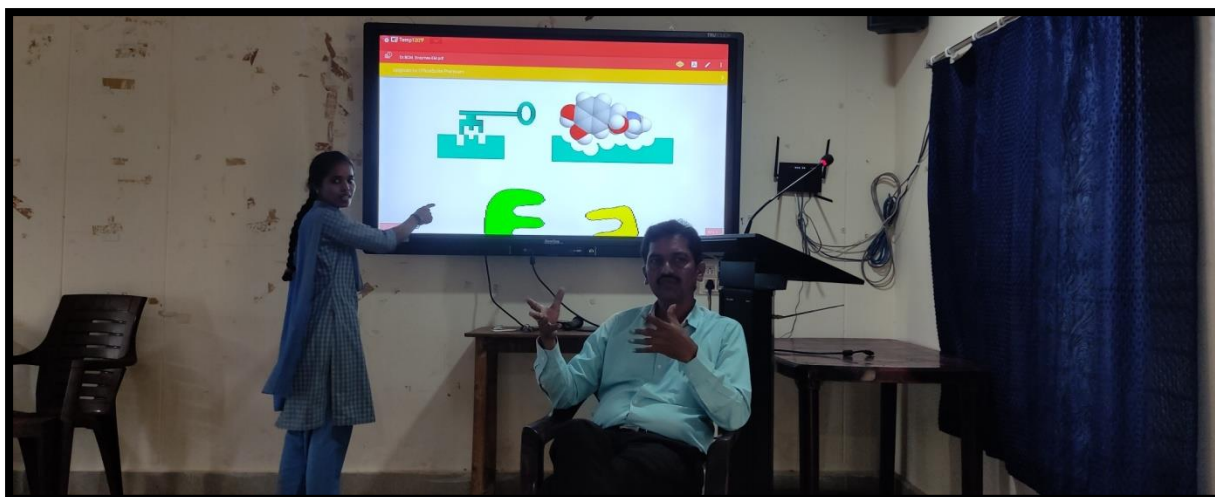
Department of Botany

Activity: Digital Class, 2021-22

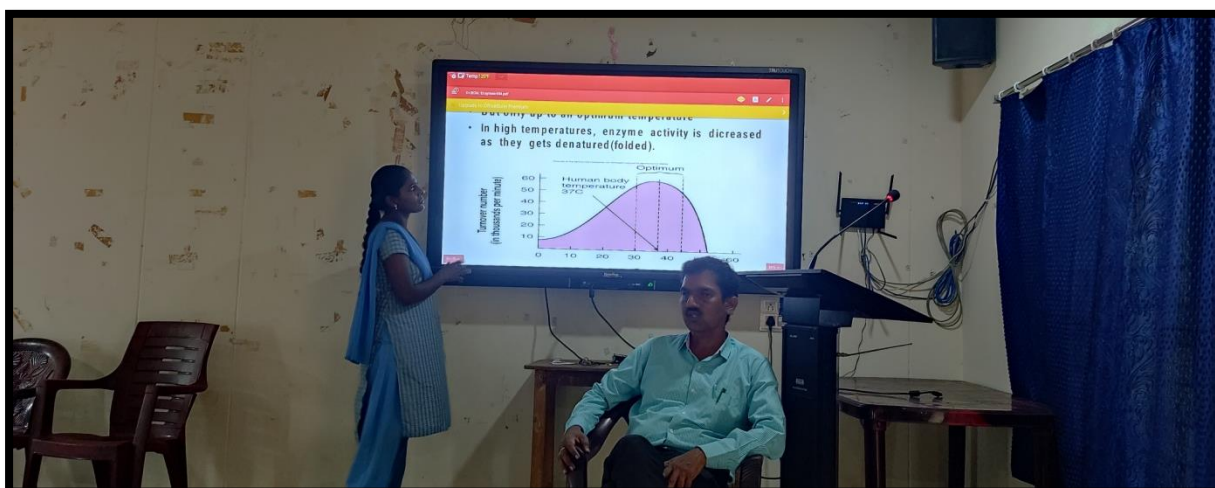
Topic: Enzymes – Mechanism and Factors influencing activity

Group: II CBZ

Date: 15-07-2022



Name of the student: O. Kumari II CBZ



Name of the student: Daiva Madhuri



Name of the student: T.Surya lakshmi



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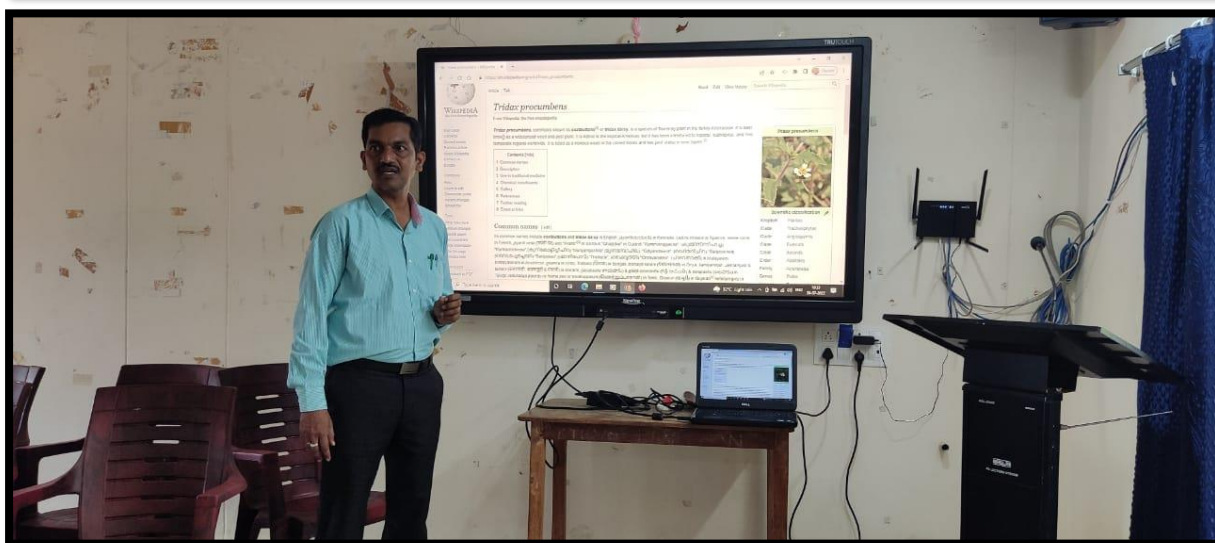
Department of Botany

Activity: Digital Class (ICT)

I CBZ, SEM-II

Topic: Asteraceae Family

Date: 30-07-2022



Dr. B. Chandramouli, Lecturer in Botany Explained the members of Asteraceae on 30-07-2022 through ICT mode.

GREEN ENVIRONMENT





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YELLAMANCHILI - 531055, ANDHRA PRADESH



DEPARTMENT OF BOTANY

Activity: Horticulture in Garden

Date: 27-09-2018





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YELLAMANCHILI - 531055, ANDHRA PRADESH



DEPARTMENT OF BOTANY

Activity: Plantations in Botanical Garden

Program: Vanam-Manam

Date: 02-07-2019





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YELLAMANCHILI - 531055, ANDHRA PRADESH



DEPARTMENT OF BOTANY

Program: Clean and Green

III CBZ Students

Date: 03-07-2019



Dr. B. Chandramouli and III CBZ students participated in the Clean and Green Program



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YELLAMANCHILI - 531055, ANDHRA PRADESH



DEPARTMENT OF BOTANY

Program: Clean and Green

II CBZ Students

Date: 05-07-2019



Dr. B. Chandramouli, lecturer in Botany and III CBZ students participated in the Clean and Green Program



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YELLAMANCHILI - 531055, ANDHRA PRADESH



DEPARTMENT OF BOTANY

Activity: Plantations in Botanical Garden

Program: Vanam-Manam

Date:17-07-2019



Faculty of Botany Department and III CBZ students



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DEPARTMENT OF BOTANY

Program: Clean and Green

III CBZ Students

Date: 23-07-2019





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YELLAMANCHILI - 531055, ANDHRA PRADESH



DEPARTMENT OF BOTANY

Program: Clean and Green

III CBZ Students

Date: 04-12-2020



Faculty of Botany Department and III CBZ students participated in the Clean and Green Program



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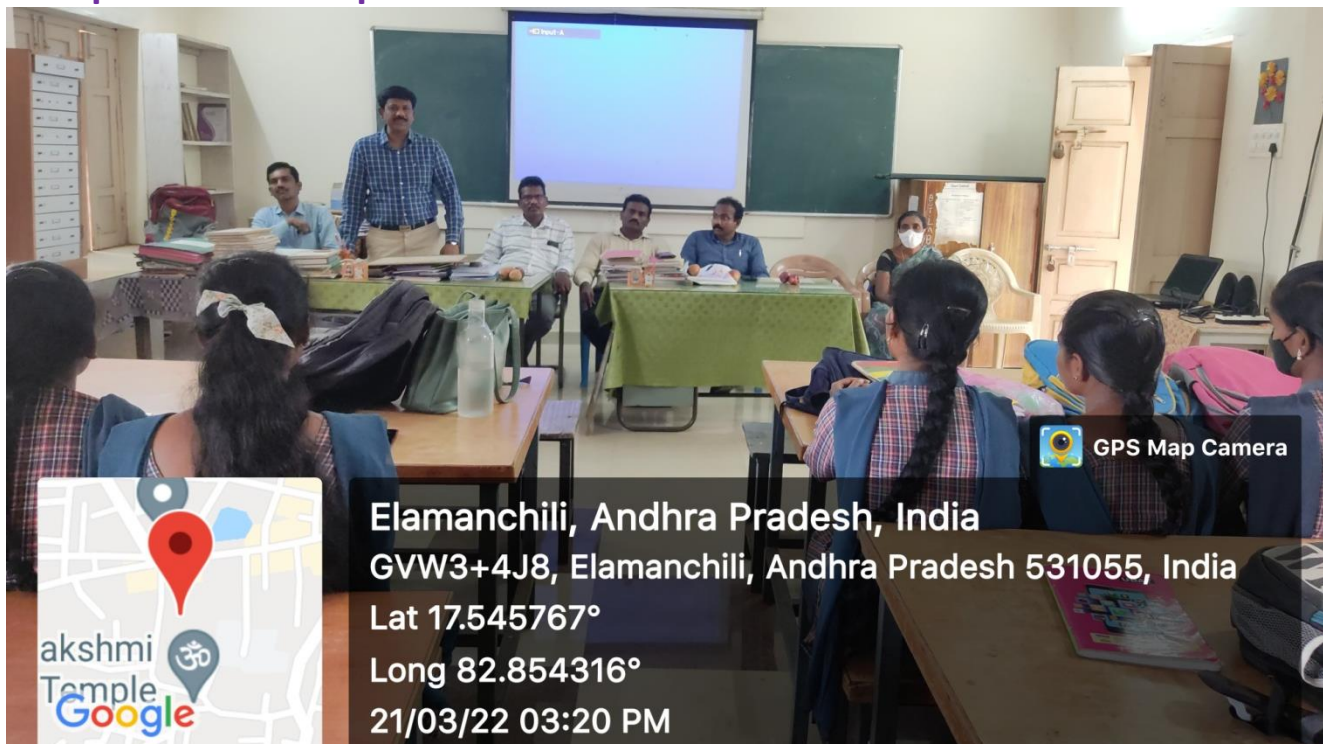


Department of Botany

Activity: World Forest Day

Group: All CBZ Group Students

Date: 21-03-2022



The Department of Botany organised World Forest Day on 21-03-2021.



SRI GURAJADA APPA RAO GOVERNMENT DEGREE COLLEGE



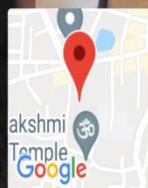
Yellamanchili - 531055, ANDHRA PRADESH

Department of Botany

Activity: World Forest Day

Group: All CBZ Group Students

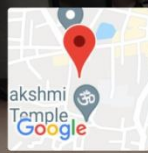
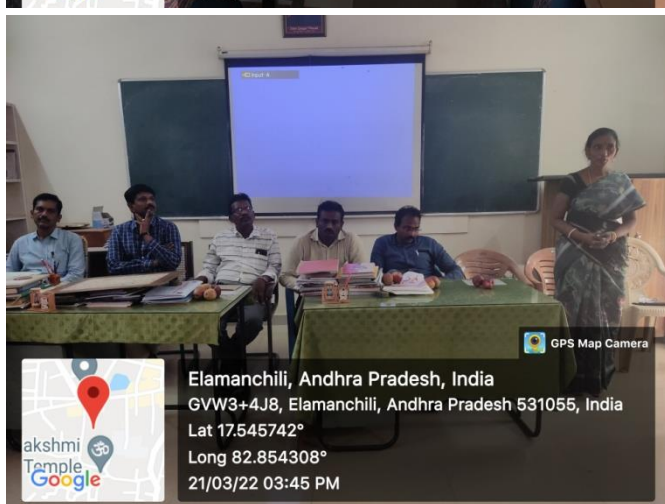
Date: 21-03-2022



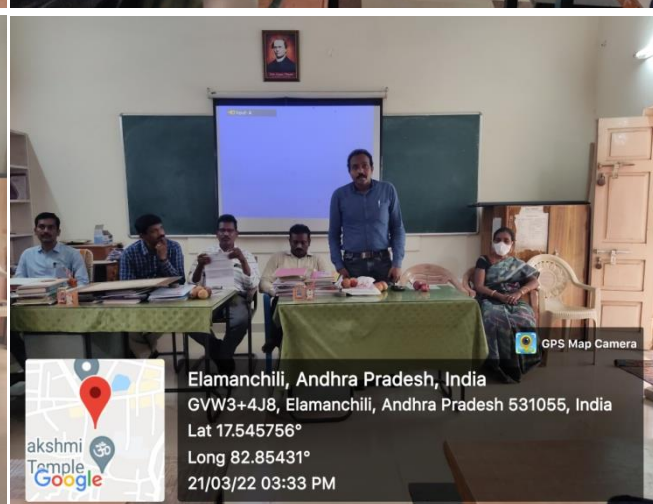
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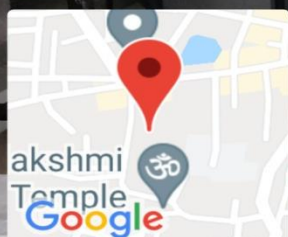
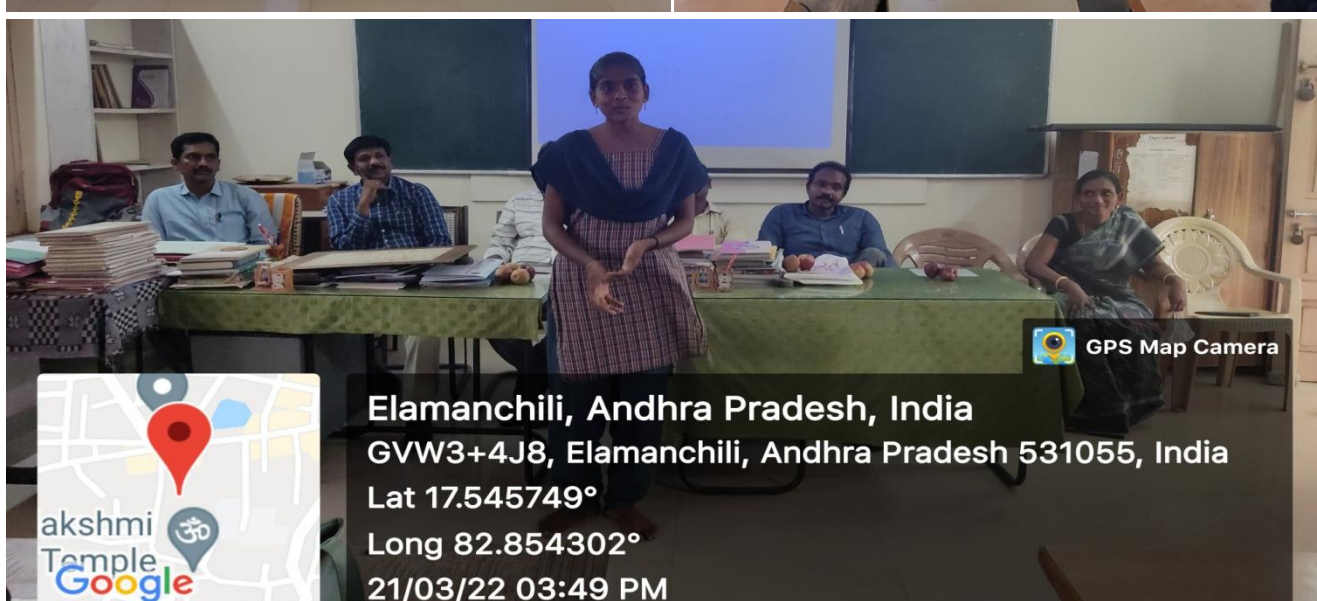
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Elamanchili, Andhra Pradesh, India
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Elamanchili, Andhra Pradesh, India
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Elamanchili, Andhra Pradesh, India
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All faculty participated in World Forest Day on 21-03-2022.



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YELLAMANCHILI - 531055, ANDHRA PRADESH



DEPARTMENT OF BOTANY

Activity: Vanam-Manam (A Plantation Program)

Date: 04-04-2022



The faculty of Botany and Zoology Departments in Vanam-Manam program



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YELLAMANCHILI - 531055, ANDHRA PRADESH



DEPARTMENT OF BOTANY

EVENT DETAILS:

Activity: World Earth Day

Date: 22-04-2022

Organiser: Dr. B. Chandramouli, Lecturer in Botany

Department: Botany

Guests invited: Sri P.S. Jaggarao, Lecturer in Physics

Dr. G. Vijaya Pratap, Lecturer in Zoology

Sri K. Venkanna, Lecturer in Physics

Students Participated: 28 (II CBZ)



The Dept. of Botany Organised World Earth Day on 22-4-2022



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YELLAMANCHILI - 531055, ANDHRA PRADESH



Department of Botany

Activity: World Biodiversity Day

Group: All Group Students

Date: 22-05-2022



The Department of Botany has organised “World Biodiversity Day” on 22-05-2022.



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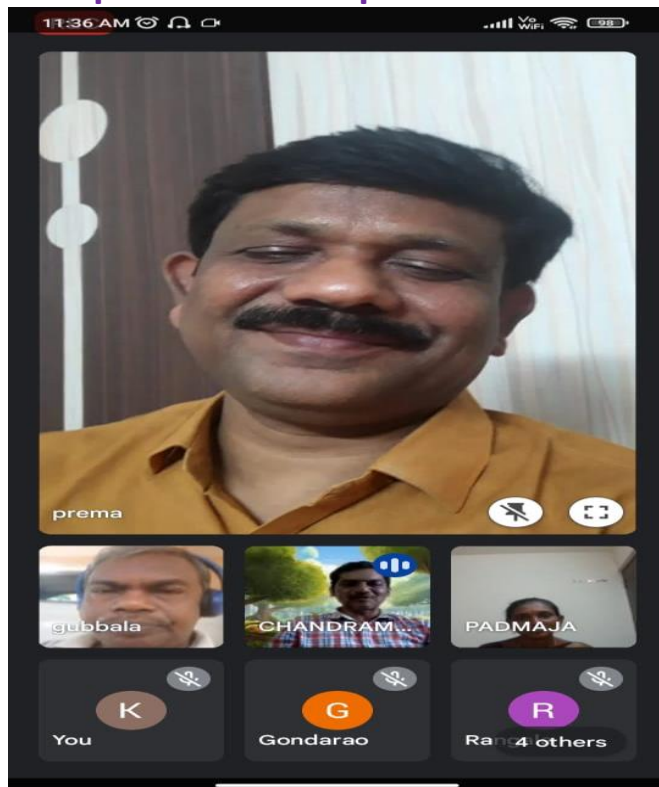


Department of Botany

Activity: World Environment Day (Online)

Group: All CBZ Group Students

Date: 05-06-2022



The Department of Botany has organised "World Environment Day" on 05-06-2022.



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YELLAMANCHILI - 531055, ANDHRA PRADESH



Department of Botany

Activity: World Ocean Day

Group: I CBZ

Date: 08-06-2022



The Department of Botany has organised “World Ocean Day” on 08-06-2022.



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YELLAMANCHILI - 531055, ANDHRA PRADESH



Department of Botany

Activity: Vanam – Manam : plantation program

Group: All CBZ & MPC Group Students

Date: 27-07-2022



**Dr. B. Chandramouli, Lecturer in Botany organised Vanam – Manam a
Plantation program on 27-07-2022.**



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YELLAMANCHILI - 531055, ANDHRA PRADESH



Department of Botany

Activity: World Nature Conservation Day

Group: All CBZ Group Students

Date: 28-07-2022



The Department of Botany organised World Nature Conservation Day on
28-07-2022.



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YELLAMANCHILI - 531055, ANDHRA PRADESH



Department of Botany

Activity: Banana Cultivation in the Garden.

Participant: Dr.B.Chandramouli, Lecturer in Botany cultivating Banana (Edible variety) in the Botanical Garden since 3 Years Date: 07-07-2022



Dr. B. Chandramouli, Lecturer in Botany has been cultivating Banana Edible Variety in the Botanical garden

GROWING MEDICINAL PLANTS IN THE BOTANICAL GARDEN



INSULIN PLANTS



The faculty of Botany department and students involved in the plantations and growing of medicinal plants in the Botanical garden

Cheliocostus speciosus



- Anti-microbial
- Anti-inflammatory
- Antioxidant
- Anti cancerous
- Cures constipation, Diarrhoea, Leprosy
- Cures skin diseases

Aloe vera



- Treats skin injuries
- Cures digestive problems
- Reduces arthritic swellings
- Anti-microbial
- Anti-inflammatory
- Heals Psoriasis Lesions
- Anti cancerous
- Lung congestion

Plectranthus ambonicus



- Anti-microbial
- Anti-inflammatory
- Antioxidant
- Wound healing
- Analgesic
- Antiepileptic
- Cures cardiovascular, respiratory, urinary and skin disorders

Rauvolfia tetraphylla



- Lowers Blood pressure
- Remedy for snake bites
- Anti Diabetic
- Cures Piles, Malaria, Insomnia
- Wound healing
- Skin diseases
- Mental disorders
- Cures cough and fevers

Ocimum sanctum



- Anti-microbial
- Antifungal, Antimalarial
- Anti-inflammatory
- Antioxidant
- Anti cataract
- Chemo preventive
- Hepatoprotective
- Radioprotective

Ocimum basilicum



- Cardiovascular disorders
- Antidiabetic
- Menstrual cramps
- Antimicrobial
- Antioxidant
- Anti cancerous
- Larvicidal

Withania somnifera



- Reduces stress and anxiety
- Enhances cognitive function
- Boosts energy levels
- Regulates blood sugar levels
- Lowers BP
- Improve cardiac health
- Supports immunity

Justicia adhatoda



- Anti-bacterial
- Anti-fungal
- Antiasthmatic
- Anti inflammatory
- Anti ulcer
- Anti Alzheimer
- Hepatoprotective

Catharanthus roseus



- Anti cancerous
- Antidiabetic
- Cures septic wounds, fever
- Cures Menorrhagia
- Cures blood dysentery
- Skin diseases
- Cures sour throat, tooth ache

Datura metal



- Worm infestation
- Anti-inflammatory
- Cures stomach and Intestinal pain
- Cures fever
- skin disorders
- Hallucinogenic
- cures joint pains, Back aches

Cissus quadrangularis



- Antidiabetic
- Antiosteoporosis
- Bone fractures
- Reduces high cholesterol
- Cures menstrual disorders
- Cures Obesity, Asthma, Malaria
- Cures skin diseases, stomach upsets

Murraya koenigii



- Reduce risk of cancer and heart diseases
- Help in management of Diabetes
- Powerful Antioxidant
- stomach ailments
- Analgesic
- Neuroprotective
- Cures Stress

Jatropha curcas



- Antidysentric
- Antimicrobial
- Cures Diarrhoea
- Cures skin diseases
- Anticancerous
- Anti inflammatory
- Antioxidant
- Used as Biodiesel plant

Lavendula angustifolia



- Cures Headache
- Used for Nervous disorders
- Cures skin diseases (Eczema)
- Cures joint and muscle pains
- Treat fungal infections

Piper longum



- Chronic bronchitis
- Antiasthmatic
- Cure chronic malaria
- Cures constipation, Diarrhoea
- Viral Hepatitis
- Stomach ache
- Antitumour
- Cures respiratory diseases

Centella asiatica



- Treat Leprosy
- Cures Viscose Ulcers
- Cures skin diseases (Eczema, Psoriasis)
- Cures fever, Diarrhoea
- Cures female urinogenitry tract diseases
- Relief anxiety
- Improve cognition (Memory)

Andrographis paniculata



- Antioxidant
- Cures Cold and Diarrhoea
- Jaundice and fevers
- Cures cardiovascular diseases
- Antihelminthic
- Antidiabetic

Sauropus androgynous



- Used for weight loss
- Antioxidant
- Multi vitamins and minerals
- As vegetable dish
- Reduce fever
- Good medicine for coughs and soothing lungs

Bacopa moneri



- Memory Booster
- Anti epileptic
- Cures Nervous disorders
- Relief anxiety
- Anti inflammatory
- Used to treat hair loss

The Department of Botany is growing different medicinal plants, Ornamental plants, some rare species and three fruit yielding plants such as Banana, Sapota, Coconut trees.



MICRO IRRIGATION SYSTEM



Setting of Micro Irrigation system in the Botanical Garden

Micro Irrigation is a key to increase water use efficiency in Agriculture. It the system, by which the water is efficiently used (80-90%) to plants without wastage.



VRIKSHA BANDHAN



VRIKSHABANDHAN

Vrikshabandhan is a best practice undertaken by Department of Botany with an aim to bring awareness among students on environmental protection. It is a novel idea of tying rakhis to save trees. we plant several trees on various occasions. But it is more important to protect them and nurture them well. Through this initiative, we hope to create environmental consciousness in our students and nurture them with love for mother nature.



SGA Govt.Degree College, Yellamanchili

Department of Botany

Activity: Tagging of Plants in College campus Date: 23-09-2021



The faculty of Botany Department participated and guiding the students in Tagging of plants in the college campus