

**Andhra Christian College, Guntur**

(Day, Evening and PG)

**NOTICE**

Date: 02-09-2021

This is to inform that there will be a seminar on “**Hydroponic System**” tomorrow, i.e., on 03-09-2021 at 3.00 p.m., to be conducted by the department of Botany. Dr. R. Prasanthi Kumari, Lecturer, Department of Botany (P.G.) of our college will address the seminar.

All the students of Sr. Inter, B. Sc.(CBZ) and Botany (P. G.) are instructed to attend the seminar without fail.



*T. Anil Kumar*

PRINCIPAL

Copy to:

1. The coordinator, IQAC, Andhra Christian College
2. The office manager, Andhra Christian College

# Andhra Christian College::Guntur

## Department of Botany

### Seminar Report on “Hydroponic System”

**Date:** 03-09-2021

**Time:** 3:00 p.m.

**Venue:** Department of Botany, Andhra Christian College, Guntur

**Participants:** Sr. Inter, B.Sc. students, PG Botany students, and faculty

**Guest Speaker:** Dr. R. Prasanthi Kumari, Lecturer, P.G. Botany, A. C. College, Guntur

#### Teaching Staff Present:

- Dr. V. Ezra Vijaya Sekhar, Head of the Department of Botany
- Mrs. G. Nirmala Kumari, Senior Lecturer
- Other faculty members of the Department of Botany

#### Objectives of the Seminar:

1. **Introduction to Hydroponics:** To educate students about the basics of hydroponics and how it differs from traditional soil-based agriculture.
2. **Applications in Agriculture:** To explore the various applications of hydroponics in modern agriculture, including its benefits and challenges.
3. **Practical Knowledge:** To provide insights into the practical aspects of setting up and managing a hydroponic system.
4. **Innovation and Sustainability:** To discuss the role of hydroponics in promoting sustainable agricultural practices and innovation.

#### Seminar Proceedings:

The seminar began with an introduction by Dr. V. Ezra Vijaya Sekhar, Head of the Department of Botany, who welcomed the Resource person, Dr. R. Prasanthi Kumari, and the participants. He highlighted the importance of hydroponics as a modern agricultural technique that has the potential to address various challenges in food production.

#### Key Points from Dr. R. Prasanthi Kumari's Presentation:

1. **Understanding Hydroponics:**  
Definition and history of hydroponics.  
The basic principles of growing plants without soil using nutrient-rich water solutions.
2. **Types of Hydroponic Systems:**  
An overview of different hydroponic systems, including nutrient film technique (NFT), deep water culture (DWC), aeroponics, and drip systems.  
Advantages and disadvantages of each system.

3. **Benefits of Hydroponics:**

Efficient use of water and nutrients.

Faster plant growth and higher yields.

Reduced need for pesticides and herbicides.

Ability to grow plants in areas with poor soil quality or limited space.

4. **Challenges and Solutions:**

Potential issues such as disease management, nutrient imbalances, and system maintenance.

Solutions to overcome these challenges and optimize hydroponic systems.

5. **Applications in Agriculture:**

Case studies of successful hydroponic farms and urban agriculture projects.

The potential of hydroponics in addressing food security and promoting sustainable agriculture.

6. **Practical Demonstration:**

A live demonstration of a small-scale hydroponic setup.

Step-by-step guidance on how to set up and maintain a hydroponic system, including the preparation of nutrient solutions and monitoring of plant health.

**Interactive Session:**

After the presentation, an interactive session was held where students asked questions and engaged in discussions with Dr. Prasanthi Kumari. Topics covered included the cost-effectiveness of hydroponic systems, the types of crops best suited for hydroponics, and future trends in hydroponic technology.

**Outcomes of the Seminar:**

1. **Enhanced Knowledge:** Students gained a comprehensive understanding of hydroponics and its potential applications in agriculture.
2. **Practical Skills:** Participants acquired practical knowledge on setting up and managing hydroponic systems.
3. **Sustainable Practices:** The seminar emphasized the importance of sustainable agricultural practices and encouraged students to explore innovative solutions for food production.
4. **Research and Innovation:** The session inspired students to consider hydroponics as a field of study and research, promoting innovation in agricultural practices.

The seminar concluded with a vote of thanks by Mrs. G. Nirmala Kumari, who expressed gratitude to the Resource person, faculty members, and students for their active participation. The event was followed by an informal interaction session over refreshments, providing an opportunity for further discussion and networking.



## List of Participants

S.No	Name of the Student	Class	Signature
1.	K. Arjun Rao	Jr. Inter	K. Arjun Rao
2.	Se. Adil	Jr. Inter	Se. Adil
3.	K. Akash	Jr. Inter	K. Akash
4.	George mullar	Jr. Inter	George mullar
5.	Ch. Yesubabu	Jr. Inter	Ch. Yesubabu
6.	Z. Gurappaudu	II BSc	Z. Gurappaudu
7.	D. Sudheer	II BSc	D. Sudheer
8.	R. Gopi	I BSc	R. Gopi
9.	M. Subhash	I BSc	M. Subhash
10.	G. Aravind Kumar	I BSc	G. Aravind
11.	T. Vinob	I BSc	T. Vinob
12.	K. Sandeep	I BSc	K. Sandeep
13.	K. Kirupathi Sandeep	II B.Sc	K. Kirupathi Sandeep
14.	K. Ammalu	I BSc	K. Ammalu
15.	N. pravallika	II BSc	N. pravallika
16.	A. Raj Keeshtana	I. BSc	A. Raj Keeshtana
17.	N. Sri Karya	M.Sc. I year	N. Sri Karya
18.	P. Shiny	M.Sc. I year	P. Shiny
19.	V. Zeelaly Pharon	M.Sc. I year	V. Zeelaly Pharon
20.	P. Venkateswarulu	I BSc	P. Venkateswarulu
21.	S. Hosanna	Si. Inter	S. Hosanna
22.	O. Keerthi	I BSc	O. Keerthi
23.	G. Yesubabu	M.Sc. I year	G. Yesubabu