

**Shri Shivaji Education Society Amravati's  
Science College, Congress Nagar, Nagpur**

**Department of Microbiology**

**Session 2023-2024**

**Organizes**

**Organizes Workshop on Plant Tissue  
Culture**

**Date- 9/02/2024**



**On the Occasion of Dr. Panjabrao alias Bhausaheb Deshmukh's  
125<sup>th</sup> Birth Anniversary Year,  
R.T.M. Nagpur University Centenary Year**

**Dept. of Botany in Collaboration with Dept. of Microbiology,  
Science College, Congress Nagar, Nagpur**

*Organizes*

**workshop**

*on*

**Plant Tissue Culture Technique**

**Workshop Objective:** Plant Tissue culture is an important tool for both basic and applied aspects of plant biotechnology as well as its commercial applications. All techniques are skill based and upon systematic learning, can equip a person to effectively utilize the techniques in various areas like basic research, environmental issues and commercial applications. It is a valuable tool for research on crop improvement by biotechnology. Plant Tissue Culture is a practice used to propagate plants under sterile conditions, often used to produce clones of a plant. Different techniques in Plant Tissue culture offer advantages over traditional methods of propagation which includes the production of multiple clones of plants in the absence of seeds or pollinators necessary to produce seeds and mature plants. This workshop offers a comprehensive hands-on training for learning the basics with an insight to laboratory.



**Venue: Botany Research Lab.  
Date: 9<sup>th</sup> February 2024  
Time: 10:00 AM onwards**



**Prof. Atul Bobdey**  
*Coordinator  
Dept. of Biotechnology*

**Prof. Mahendra Dhore**  
*Chairman & Principal  
Science College, Nagpur*

**Prof. Rajendra Deshmukh**  
*Head  
Dept of Botany*

*Coordinators*

**Dr. Pranita Gulhane**

**Prof. Punita Tiwari**

*Organizers*

**Ms. Shruti Agrawal  
Ms. Mayri Bhad**

**Ms. Aishwarya Zure  
Ms. Nupur Deshmukh**

On February 9, 2024, the Department of Biotechnology, in collaboration with the Department of Botany at S.S.E.S.A's Science College, Nagpur, organized a Plant Tissue Culture workshop. The event was chaired by Hon'ble Principal Prof. Mahendra Dhore, with coordination provided by Prof. Atul Bobdey and Prof. Rajendra Deshmukh, Head of the Department of Botany, alongside Convener Dr. Pranita Gulhane and Prof. Punita Tiwari. 21 students from UG Botany and UG Biotechnology participated in the workshop, showcasing their creativity and enthusiasm. The hands-on training took place in a laboratory equipped with laminar flow hoods, autoclaves, incubators, and other essential equipment, and included both theoretical and practical components.

### **Theoretical Session:**

- **Introduction to Plant Tissue Culture:** Basics and significance.
- **Aseptic Techniques:** Principles of sterility, methods of sterilization, and contamination prevention.
- **Culture Initiation:** Explant selection, surface sterilization, and culture establishment.
- **Applications:** Micropropagation and synthetic seed production.

### **Practical Demonstration:**

- **Preparation of Nutrient Media:** Weighing and mixing components, adjusting pH, and sterilization.
- **Sterilization Techniques:** Surface sterilization of explants using chemicals (e.g., ethanol) and heat (e.g., autoclaving).

The workshop provided students with invaluable hands-on experience in plant tissue culture, focusing on media preparation, inoculation, and surface sterilization. The practical exercises emphasized the importance of contaminant elimination to establish pure cultures, enhancing the students' technical skills and understanding of plant tissue culture techniques.

### **Action Taken:**

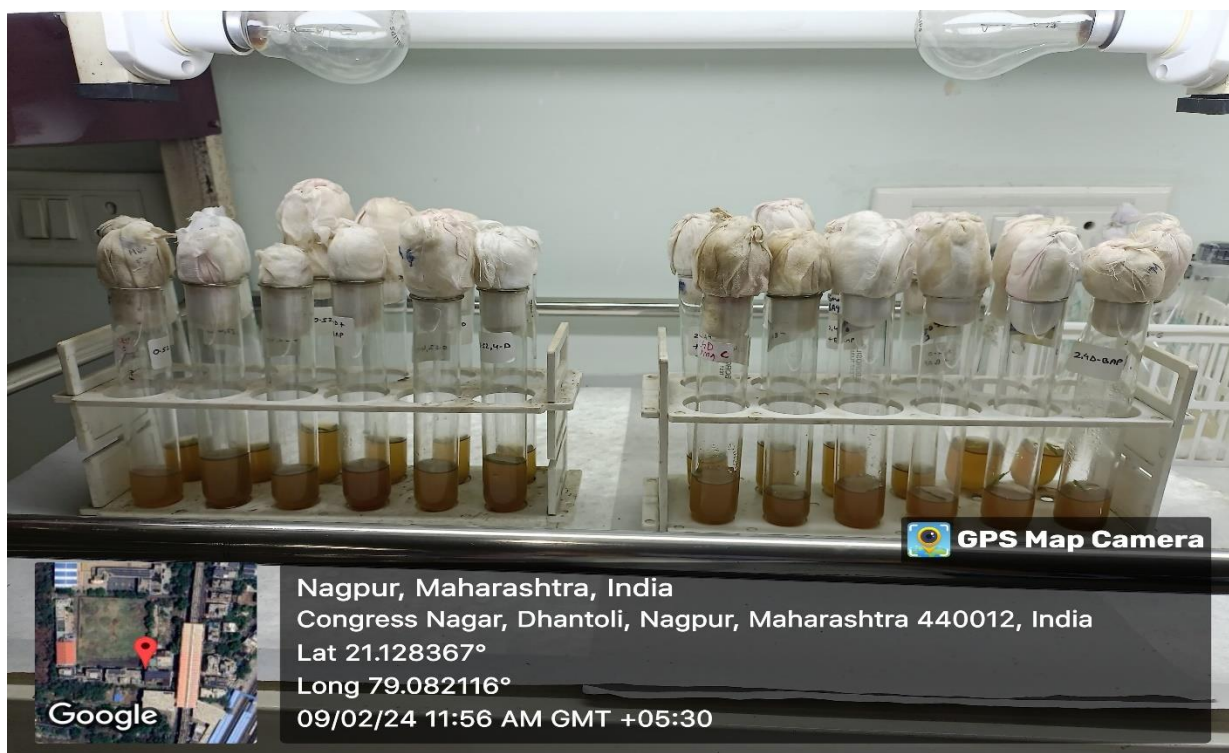
A total of 21 students participated in the workshop, where they were introduced to key concepts such as aseptic techniques, pH adjustments, and sterilization methods. The hands-on training offered practical skills in plant tissue culture, including media preparation and explant sterilization. Through detailed demonstrations and interactive sessions, students gained valuable experience in establishing and maintaining sterile cultures. The workshop not only enhanced their technical expertise but also deepened their understanding of the critical aspects of plant tissue culture.



**Plant Tissue Culture Workshop organized by Microbiology Department (9/02/24)**







**Plant Tissue Culture Workshop organized by Microbiology Department (9/02/24)**



Dept. of Microbiology

In Association With

Dept. of Botany

DATE: / /  
S.S.E.S.A's Science College Nagpur

PAGE No: \_\_\_\_\_

DT: 09/02/2024

WORKSHOP on "PLANT TISSUE CULTURE TECHNIQUE"

NAME OF STUDENTS	SIGNATURE
1. Astha. A. Sakherwade.	
2. Akanksha. R. Bisen	
3. Akanksha. V. Tekode	
4. Anisha A. Shende	
5. Anuradha purushottam Khope	
6. Arshiya Shaikh mushtaque	
7. Arya. S. walode	
8. Bhivani Mahesh Dhurve	
9. Ishita. Y. padgil	
10. Ishwari. N. Cawande	
11. Leena. N. Meher	
12. Manisha. G. Jithare	Absent
13. Manisha. R. Roy.	
14. Namrata. O. Nagose	
15. Ujaswini. Bhagat	Absent
16. Rujuta. R. Ranteke	
17. Shamim. Kaurshar	
18. Snehal. Sahare	
19. Vaishnavi. Ingle	
20. Vani masaram	
21. Jashoda. Ravindra wade	



Dr. Poojita Gullae

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**FEEDBACK FORM**

Q.1) How will you rate this Workshop?

- a) Excellent
- b) Good
- c) Satisfied

Q.2) How satisfied are you with this Workshop?

- a) Excellent
- b) Good
- c) Satisfied

Q.3) In your opinion, did the workshop meet its objective?

- a) Yes
- b) No

Q.4) Did the event meet your expectations?

- a) Yes
- b) No

Q.5) Would you attend another event like this in future?

- a) Yes
- b) No

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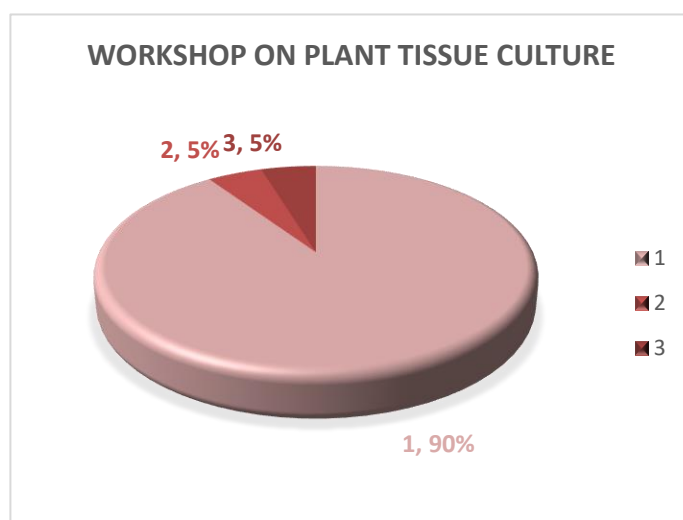
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**FEEDBACK RESPONSE**

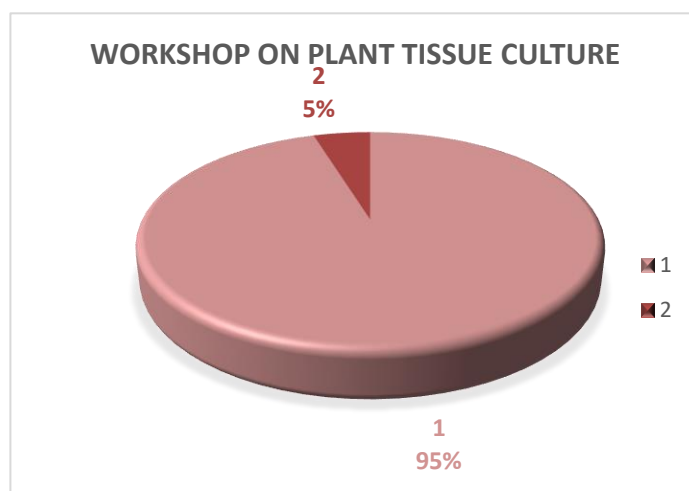
Q.1) How will you rate this Workshop?

Rating	No. of Students	Percentage
Excellent	19	90%
Good	1	5%
Satisfactory	1	5%
Total	21	100%



Q.2) How satisfied are you with this Workshop?

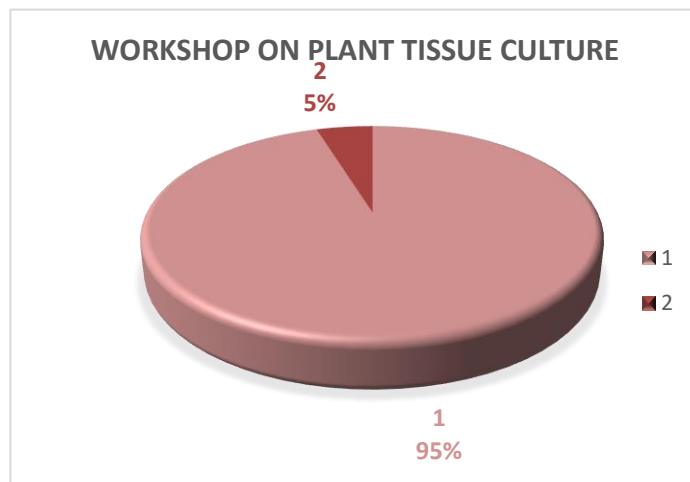
Rating	No. of Students	Percentage
Satisfied	20	95%
Partially Satisfied	1	5%
Total	21	100%





Q.3) In your opinion, did the workshop meet its objective?

Rating	No. of Students	Percentage
Yes	20	95%
No	1	5%
Total	21	100%



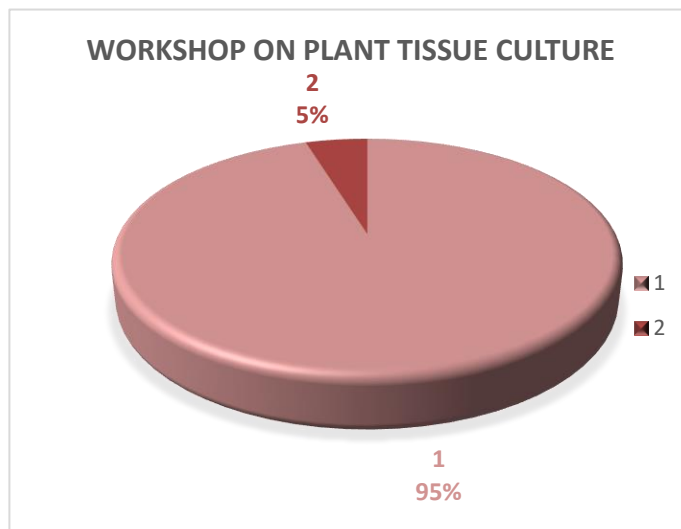
Q.4) Did the event meet your expectations?

Rating	No. of Students	Percentage
Yes	18	98%
No	3	2%
Total	21	100%



Q.5) Would you attend another event like this in future?

Rating	No. of Students	Percentage
Yes	20	95%
No	1	5%
Total	21	100%



Dr. Pranita Gulhane