

DEPARTMENT OF BOTANY



DEVA MATHA COLLEGE, KURAVILANGAD
Affiliated to Mahatma Gandhi University, Kottayam

Report on
ADD-ON
COURSE
in Plant Tissue
Culture

Conducted for II DC Students

Assessment Year: 2023-24



*Deva Matha College,
Kuravilangad
Kottayam, Kerala 686633*

BROCHURE



**DEVA MATHA COLLEGE,
KURAVILANGAD**

**DEPARTMENT OF
BOTANY**

**OFFERS
ADD ON COURSE
ON**

**PLANT TISSUE
CULTURE**

2023-24

**For II DC Botany
students**



ADD ON COURSE in

DMCK/BOT/AD 01/2023: Plant Tissue Culture

Academic year	:	2023-2024
Title	:	DMCK/BOT/AD 01/2023: Plant Tissue Culture
Instructional Hours	:	30 Hours
Duration	:	2 Months
Mode of Instruction	:	Offline
Intake Capacity	:	30
Eligibility	:	Plus Two or Equivalent
Beneficiaries	:	II DC Botany Students of Deva Matha College
Date(s) on which program was conducted	:	February 2024- March 2024
Collaborating agency inside/outside the institute	:	NA
Organizing Dept	:	Dept. of Botany
Name of the Coordinator	:	Ms. Varsha Maria Babu
Number of students participated in the programme	:	09
Number of students completed the programme	:	09



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Varsha Maria Babu
Course Co ordinator
Department of Botany



A BRIEF REPORT

The Botany Department of Deva Matha College Kuravilangad has organized an Add-on Course in **Plant Tissue culture** for the II DC Botany students of the college.

9 students registered and successfully completed the course. The course was conducted during the months of February and March of 2024. Resource Persons who engaged the classes were renowned in the respective area. The course is of 30 hours duration. The course is planned and executed as both theory and practical sessions. A tissue culture laboratory is also made familiar to the students. Evaluation process included attendance, test papers and spot tests.

OBJECTIVES

1. To enable students to be familiar with the process of Tissue Culture
2. To exercise creation of tissue cultured plantlets.
3. To familiarize a tissue culture laboratory



SYLLABUS

1. **Brief history of tissue culture** 1 Hour
 - a. Cellular totipotency
 - b. Concept of dedifferentiation, redifferentiation and organogenesis
2. **Tissue culture media** 3 Hours
 - Media composition
 - Selection of media
 - Media preparation
3. **Micropropagation** 6 Hours
 - a. Selection of suitable material
 - b. Stock plant selection
 - c. Parts of plant
 - d. Size of explants
 - e. Avoid diseased tissue
4. **Types of plant tissue culture** 3 Hours
 - Meristem culture
 - Callus culture
 - Anther culture
 - Embryo culture
 - Ovary culture
 - Ovule culture
 - Pollen culture
5. **Benefits of plant tissue culture** 4
 - Hours Rapid multiplication of clones
 - Genetic uniformity
 - Aseptic condition
 - Controlled environment
6. **Outline of procedure and technique – Slide show** 1 Hours
7. **Practical** 12 Hours



ASSESSMENT PROCEDURES

Written examination – 60%

Practical involvement – 40%

COURSE OUTCOMES

- Understand the basic concepts in plant tissue culture
- Discuss the process involved in micropropagation
- Analyse the practical use of tissue culture in life

RESOURCE PERSONS

1. Ms. Varsha Maria Babu

Assistant Professor
Department of Botany
Deva Matha College, Kuravilangad

2. Dr. Varghese M.C.

Assistant Professor & HOD
Department of Botany
Deva Matha College, Kuravilangad



LIST OF STUDENTS

Sl. No.	Class no.	Name of the student
1.	22UG 655	AFIYA NAUSHAD
2.	22UG 656	ALAN VINS
3.	22UG 651	ATHIRA T.P
4.	22UG 653	FATHIMA SUHANA K.A
5.	22UG 657	GOPIN SURESH
6.	22UG 658	NANDANA SURESH
7.	22UG 659	NASRIN P.N
8.	22UG 660	PARVATHY B PAI
9.	22UG 662	SONA REJI

ATTENDANCE SHEET

DEVA MATHA COLLEGE				KURAVILANGAD																								
				U.G. STUDENTS																								
Year & Month..... 2022-23				ATTENDANCE REGISTER (TISSUE CULTURE)																								
CLASS No	Sl. No.	Name		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	
22UG 651	1.	Athira T.P	a.m.	A	A	A	A	A	A	A	A	A	A															
22UG 653	2.	Fathima Suhana k.A	a.m.	A	A	A	A	A	A	A	A	A	A															
22UG 655	3.	Afiya Naushad	a.m.	A	A	A	A	A	A	A	A	A	A															
22UG 656	4.	Alan Vins	a.m.	A	A	A	A	A	A	A	A	A	A															
22UG 657	5.	Gopin Suresh	a.m.	A	A	A	A	A	A	A	A	A	A															
22UG 658	6.	Nandana Suresh	a.m.	A	A	A	A	A	A	A	A	A	A															
22UG 659	7.	Nasrin P.N.	a.m.	A	A	A	A	A	A	A	A	A	A															
22UG 660	8.	Parvathy B Pai	a.m.	A	A	A	A	A	A	A	A	A	A															
22UG 662	9.	Sona Reji	a.m.	A	A	A	A	A	A	A	A	A	A															
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Dr. Varghese M.C.
 Head of the Department of Botany
 Deva Matha College
 Kuravilangad PO - 686633



PHOTOS OF SESSIONS





*Deva Matha College,
Kuravilangad
Kottayam, Kerala 686633*



MARKLIST OF THE EXAMINATION

Sl. No.	Class no.	Name of the student	Marks (Out of 25)
1.	22UG 655	AFIYA NAUSHAD	25
2.	22UG 656	ALAN VINS	20
3.	22UG 651	ATHIRA T.P	23
4.	22UG 653	FATHIMA SUHANA K.A	20
5.	22UG 657	GOPIN SURESH	20
6.	22UG 658	NANDANA SURESH	20
7.	22UG 659	NASRIN P.N	20
8.	22UG 660	PARVATHY B PAI	25
9.	22UG 662	SONA REJI	25



STUDENT'S FEEDBACK

MODEL CERTIFICATE

DEVA MATHA COLLEGE KURAVILANGAD
Re-Accredited with 'A++' Grade (CGPA 3.67) by NAAC in 2023
Affiliated to Mahatma Gandhi University, Kottayam
Website: www.devamatha.ac.in, E-Mail: principaldmck@gmail.com

Certificate

This is to certify that *Afiya Naushad* has successfully completed the Add-on Programme titled *Plant Tissue Culture (DMCK/BOT/AD 01/2023)* conducted by the Department of Botany, Deva Matha College Kuravilangad during the academic year 2023-24 with 'A' grade.

Certificate No: 01

Kuravilangad
30-03-2024

Ms. Varsha Maria Babu
Programme Co-ordinator

Dr. Brincy Mathew
General Co-ordinator

Dr. Sunil C. Mathew
Principal



CONCLUSION

The Add-on Course in **Plant Tissue culture** was provided by the Botany Department of Deva Matha College Kuravilangad for the II DC Botany students of the college. 9 students registered and successfully completed the course. The course was conducted during the months of February and March of 2024. Evaluation process included attendance, test papers and spot tests. Feedbacks were collected through Google forms. Certificates are distributed to the participants eligible as per the mode of evaluation including attendance, examination and spot tests.