Aurora's Degree & PG College (ACCREDITED BY NAAC WITH 'B++' GRADE) Chikkadpally, Hyderabad 500020



EVENT / ACTIVITY DETAILED REPORT

NAME OF THE EVENT / ACTIVITY	Workshop on Jaunt on Plant Tissue Culture
TYPE OR TITLE OF EVENT / ACTIVITY	Workshop on Jaunt on Plant Tissue Culture
FACULTY INCHARGE	Dr. V. Nagavani
DEPARTMENT/CELL/COMMITTEE/CLUB	Nutrition Club
DATE	20/10/2022 - 21/10/2022
VENUE	Atlantis Phytotech Research Lab
TARGET AUDIENCE	BSc –BTBIC 2 nd &3 rd YR Students

1. PROGRAM SCHEDULE

- Brief introduction about plants and its growth factors
- Explanation about various techniques of plant tissue culture.
- Experimental demonstration by research scientists
- Practicing and handling the technique by the students

2. LIST OF FACULTY COORDINATORS (DEPARTMENT): Dr. V. Nagavani

3. LIST OF THE STUDENT COORDINATORS (NAME, ROLL NO, CLASS & SECTION) :

S.No	Roll No	Name	Class	Section
1	1051-20-488-041	Vujjini Nikhitha	BtBiC-3	3
2	1051-20-488-016	Bujunuri Renusree	BtBiC-3	3
3	1051-20-488-014	N Sindhuja	BtBiC-3	3
4	1051-20-488-027	Nenavath Akhila	BtBiC-3	3
5	1051-20-488-040	Manchalakatta Niharika	BtBiC-3	3
6	1051-20-488-013	Poladi Sakruthi	BtBiC-3	3
7	1051-20-488-003	G Keerthipriya	BtBiC-3	3

4. LIST OF THE PARTICIPANTS (NAME , ROLL NO, CLASS & SECTION, NO OF GIRLS, BOYS, CASTE)

S.No	Roll No	Name	Class	Section
1	1051-20-488-001	Donga Venkat Karthik	BtBiC-3	3
2	1051-20-488-002	Kappagantula Sri Sai Kamala Saranya	BtBiC-3	3
3	1051-20-488-003	G Keerthipriya	BtBiC-3	3
4	1051-20-488-004	Veera Boyina Sneha	BtBiC-3	3
5	1051-20-488-005	ltikyala Prathyusha	BtBiC-3	3
6	1051-20-488-006	Ganathi Bhavika	BtBiC-3	3
7	1051-20-488-007	Bourisetty Abhishek	BtBiC-3	3
8	1051-20-488-009	Gundu Prem Kumar	BtBiC-3	3
9	1051-20-488-012	Kosli Ramji	BtBiC-3	3
10	1051-20-488-013	Poladi Sakruthi	BtBiC-3	3
11	1051-20-488-014	N Sindhuja	BtBiC-3	3
12	1051-20-488-012	Kosli Ramji	BtBiC-3	3
13	1051-20-488-016	Bujunuri Renusree	BtBiC-3	3
14	1051-20-488-017	Valluri Shravan	BtBiC-3	3
15	1051-20-488-019	Shreya P Joshi	BtBiC-3	3
16	1051-20-488-020	Pudi Anjani Meghana	BtBiC-3	3
17	1051-20-488-021	Saavi Jaiswal	BtBiC-3	3
18	1051-20-488-022	Priyanka Agarwal	BtBiC-3	3
19	1051-20-488-024	Kushal Vishwakarma	BtBiC-3	3
20	1051-20-488-025	Desham Akshith Reddy	BtBiC-3	3
21	1051-20-488-026	Abdul Owais	BtBiC-3	3
22	1051-20-488-027	Nenavath Akhila	BtBiC-3	3
23	1051-20-488-029	Mandula Sharath	BtBiC-3	3
24	1051-20-488-031	Giduturi Surya Venkata Rama Rao	BtBiC-3	3
25	1051-20-488-032	Abdul Wahed	BtBiC-3	3
26	1051-20-488-033	Burra Jeevan	BtBiC-3	3
27	1051-20-488-035	Benni Abhishek Kumar	BtBiC-3	3
28	1051-20-488-036	Yeturi N G N M Sahith Srivathsa	BtBiC-3	3
29	1051-20-488-037	Sathaiahgari Pavan	BtBiC-3	3
30	1051-20-488-039	S Srividhya	BtBiC-3	3
31	1051-20-488-040	Manchalakatta Niharika	BtBiC-3	3
32	1051-20-488-041	Vujjini Nikhitha	BtBiC-3	3
33	1051-20-488-042	Vyakaranapu Jhansi	BtBiC-3	3
34	1051-20-488-043	Pittala Krishna Bharathi	BtBiC-3	3
35	1051-20-488-045	Tandle Vinayak	BtBiC-3	3
36	1051-20-488-046	Ningollu Geethanjali	BtBiC-3	3

37	1051-20-488-048	Peddoji Rohit	BtBiC-3	3
38	1051-20-488-050	Gaade Shravya	BtBiC-3	3
39	1051-21-488-001	K. Rahil	BtBiC-2	2
40	1051-21-488-018	A. Ruchitha Rani	BtBiC-2	2
41	1051-21-488-019	Akshith Reddy	BtBiC-2	2
42	1051-21-488-017	G. Sankeerthana	BtBiC-2	2
43	1051-21-488-020	Ommaheswar Singh	BtBiC-2	2
44	1051-21-488-028	N. Pravali	BtBiC-2	2
45	1051-21-488-029	G. Dinesh Babu	BtBiC-2	2
46	1051-21-488-039	C. Poojitha	BtBiC-2	2
47	1051-21-488-041	K. Likisha Reddy	BtBiC-2	2
48	1051-21-488-043	R. Varanvi	BtBiC-2	2
49	1051-21-488-047	K. Laxmi Prasanna	BtBiC-2	2
50	1051-21-488-049	N Mani Deepak	BtBiC-2	2
51	1051-21-488-051	K. Sai teja	BtBiC-2	2

5. PARAGRAPH ABOUT THE PROCEEDINGS (TILL THE END OF THE EVENT):

Tissue culture (TC) is the cultivation of plant cells, tissues, or organs on specially formulated nutrient media. Under the right conditions, an entire plant can be regenerated from a single cell. Plant tissue culture is a technique that has been around for more than 30 years. Tissue culture is seen as an important technology for developing countries for the production of disease-free, high quality planting material and the rapid production of many uniform plants.

Micropropagation, which is a form of tissue culture, increases the amount of planting material to facilitate distribution and large scale planting. In this way, thousands of copies of a plant can be produced in a short time. Micropropagated plants are observed to establish more quickly, grow more vigorously and are taller, have a shorter and more uniform production cycle, and produce higher yields than conventional propagules.

Plant tissue culture is a straightforward technique and many developing countries have already mastered it. Its application only requires a sterile workplace, nursery, and green house, and trained manpower. Unfortunately, tissue culture is labor intensive, time consuming, and can be costly. Plants important to developing countries that have been grown in tissue culture are oil palm, plantain, pine, banana, date, eggplant, jojoba, pineapple, rubber tree, cassava, yam, sweet potato, and tomato. This application is the most commonly applied form of traditional biotechnology in India.

The Department of Biochemistry has conducted a workshop on training plant tissue culture technique with collaboration of Atlntis Phytotech Research lab, Suchitra, Hyderabad which were organised on 20/10/2022 - 21/10/2022. As a part of the training programme we reached the research lab at 10am in the morning and the programme schedule was over taken by the Atlantis Phyto tech Scientist/ Head Dr.K.B.Rao and visited the entire lab and given a demonstration on various techniques involved in tissue culture and showed all the equipment's and the session was terminated for lunch break and after lunch students were given an training programme about preparation of various cultures and preparation of plant explant and introduction of explant in the culture media this process was continued till 6.00pm in the evening and programme schedule was ended for the day and the following day i.e., on 21^{st} October , we checked the status of the development of the explant and been proceed for the further process , then the student learned the

sub culturing techniques for the growth of explant till baby plant development. After lunch we were taken to the nursery where we learned how the baby plants are grown further procedure and students successfully planted the newly developed tissue culture plants in the nursery with this we ended the training programme of plant tissue culture.

The training programme was successful and students learned the technique practically how to handle and preparation of various culture media, and how to prepare an plant sample, how to inoculate, how to develop an explant and growth of plant in the media and how to plant the newly developed plant in the nursery and how to grow a plant etc. students were enjoyed and learned throughout the training progamme.

6. INCOME AND EXPENDITURE: Nil

7. EVENT PHOTOS (MIN 2 MAX 4)









8. GUEST PROFILE (IF ANY): Nil

Atlantis phytotech is a research driven commercial plant tissue culture unit established during June, 2015. And is eventually recognized by Department of Biotechnology under national certification system for tissue culture raised plants (NCSTCP) and also certified with **ISO 9001:2015**.

Laboratory spreads over 4000 sq.ft. With state of the art clean rooms supports a production of 3 million plants per year. Our main objective is to enhance productivity in Indian agriculture by promoting use of advanced trends in plant biotechnology mainly from micro propagation to produce plants of improved cultivars with major emphasis on high yielding, disease resistant and superior cultivars.

We are forthwith plighted in Research & Development, Production of high yielding and stress resistance indigenously developed cultivars to cater the local market. Our range of products includes tissue culture Banana, Tissue culture Teak, Tissue culture Bamboo, Fig, Strawberry and also few medicinal, aromatic, ornamental plants like Spathiphyllum, PhIlodendron, Dieffenbachia plants etc. We have also standardized protocols for several other crops which will be produced through contract production with prior agreement with buyer.

At ATLANTIS, we counterbalance research and academics by continuous efforts in optimising the needs of industry. We organize work-shops/Internships and training programmes to students to make them industry ready work force. Our expertise team mentored several students to do their research projects for B.Sc, M.Sc, B.Tech, M.Tech, as well as Ph.D in biotechnology and allied subjects.

Atlantis collaborated with several academic and research institutions for research and development of technologies and sharing technological know-how to the end users. We are obliged to have enquiries from research and academic institutions as well as students for collaborative research.

9. FEED BACK IF ANY:

Torep was Acoesome. and fland Alseve culture is part of our Syllebu and we got More Enformation regarding that. when when wind green hause with Small plantlet og Banana & teek. : Pt Rs useful delp. Educational hip)

M. Nihaeika It was very good enperiance and we get to know about it. It was very intrasting and good Inpresionce. Hope ruit time anewaeids me thould to go other intensting visits.

best menorable experience & our college for Firstly it was a good experiente aknowleding about the equipment and their use. Secondly. It isous a gaining a knowledge additionaly getting to know about the subject more and finally war are expecting more field toups Thank you. Bt ·Bi·C - III Feed back :-It was a nice educational trip. I enjoyed a lot and also we gathered a lot of information about the plant fissue culture. the laboratory where where we went is more near and the maturials in it was so good the we experienced a 1st in the laboratacy and also in the nurcery in,

The Visit to Attantis phytotech lab & Norsay was vous good Experience and I have gained knowledge about the -tab and how to sum the small scale Industry. As it was my first Wisit with my classmates and Incharge 3 felt happy and 3 hope for Many Other Visits. But the One thing I don't like is checking the attendance percentige Even for Visit. So 3 missed my frierds in the Nisit.

10. ATTACHMENTS: EVENT/ACTIVITY PROPOSAL

Aurora's Degree & PG College (Accredited by NAAC with 'B++' grade) Chikkadpally, Hyderabad- 500020 Department of Biochemistry



EVENT PROPOSAL

Type of Event: Nutrition club

Event Title: Jaunt on Plant Tissue Culture

Faculty in charge: Dr. V. Nagavani

Date & Venue: 20-10-2022 to 21-10-2022 & Atlantis phytotech research lab

Target audience: B.Sc life science students

Level: College

Budget: Nil

Student volunteer's: Nil

Objective:

- To enlighten students about the various techniques in plant tissue culture.
- To inculcate creative research skills among students.

Proposed activities:

- Educate the students about various techniques in Plant tissue culture.
- > Training on plant tissue culture preparation and innoculum.

Coordinator

IQAC Coordinator

Principal

EVENT / ACTIVITY NOTICE CERTIFICATES (IF ANY)





LETTERS OF COMMUNICATION (IF ANY)