



Biofertilizer
Biotechnology Tissue Culture
FACULTY DEVELOPMENT PROGRAMME

Resource Person

Dr. G. Pushpalatha

Associate Professor, Dept. of Plant Biotechnology

MSSSoA, CUTM

No. of Students and/or Faculty Participated: 195

Date: 3rd July 2020

About the session:

The consists of air conditioners, laminar airflow, a Shaking incubator, a Hybridization blot, then the procedure of tissue culture in banana; first explant is selected then the banana explant is soaked in 0.5% Bavistin till the buds are taken to the laminar airflow, a suitable culture media is prepared. The media is then poured into bottles and then autoclaved. The session is then going on with biofertilizers, Biofertilizers are living microbes that enhance plant nutrition by either mobilizing or increasing nutrient availability in soils. Various microbial taxa including beneficial bacteria and fungi are currently used as biofertilizers, as they successfully colonize the rhizosphere, rhizoplane, or root interior.

Objective:

- To promote professional skills, entrepreneurship knowledge and marketing skill, and hands-on experience through projects
- To build confidence through an end-to-end approach in product development

Outcome:

At the end of the class, the students get an idea of the production procedure of biofertilizers such as Azotobacter, Azospirillum, Rhizobium, Phosphorus solubilizing bacteria, and Phosphorus mobilizing bacteria.

Preparation and sterilization of culture media:

A suitable culture media was prepared with special attention towards the objectives of culture and type of explant. Prepared culture medium was transferred into sterilized tissue cultured bottles and then sterilized in autoclave.

Media preparation Pouring media into tissue culture bottles Autoclaving of media bottles

Procedure

- Collection of soil sample from crop specific areas
- ↓
- Serial dilution of fresh soil sample
- ↓
- Isolation of bacterial strain on specific recommended media
- ↓
- Morphological and biochemical characterization
- ↓
- Sub culturing to maintain strain viability
- ↓
- Incubation at 28.5°C for 4-5 days
- ↓
- Scaling up of production to 25lit
- ↓
- Mixing of broth culture with the carrier (charcoal)



WEBINAR ON

Biofertilizer Biotechnology Tissue Culture

Organized by :

Centurion University of Technology and Management

Resource Person

Dr. G. Puspalatha

Associate Professor

MSSSoA

Date: 03-07-2020



centurion university of technology and management
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Faculty List

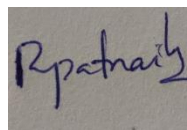
S.NO.	FACULTY	DESIGNATION
1	Dr. Pushpalatha G.	Professor
2	Dr. Koustava Kumar Panda	Associate Professor
3	Ms. Preetha Bhadra	Assistant Professor
4	Dr. Satyabrata Nanda	Assistant Professor
5	Mr. Chitrasena Padhy	Assistant Professor
6	Dr. Atanu Deb	Associate Professor
7	Dr. Satarupa Modak	Assistant Professor
8	Dr. Akkamahadevi Naik	Assistant Professor
9	Dr. Ashok Kumar	Assistant Professor
10	Dr. Rahul Adhikary	Associate Professor
11	Dr. Arunabha Pal	Associate Professor
12	Dr. Saurav Barman	Associate Professor

13	Dr. Pedda Ghouse Peera S.K.	Assistant Professor
14	Dr. Shiv Kumar Udayana	Assistant Professor
15	Dr. Merugu Chandra Surya Rao	Assistant Professor
16	Dr. Nilanjana Datta	Assistant Professor
17	Ms. Basubadatta Sahu	Assistant Professor
18	Dr. Samapika Dalai	Assistant Professor
19	Dr. Anindita Roy	Assistant Professor
20	Ms. Barsha Tripathy	Assistant Professor
21	Dr. Smaranika Mohanta	Assistant Professor
22	Dr. Anant Tamang	Assistant Professor
23	Ms. Sonia Panigrahi	Assistant Professor
24	Ms. Chinmayee Patra	Assistant Professor
25	Dr. Soumik Ray	Assistant Professor
26	Dr. Raghu Gogada	Professor
27	Dr. Udit Nandan Mishra	Assistant Professor
28	Dr. Gaikward D.J.	Assistant Professor
29	Dr. Praveen Boddna	Professor
30	Dr. Ria Mukhopadhyay	Assistant Professor
31	Dr. Gagan Kumar	Assistant Professor
32	Ms. Abhinandita Sahoo	Assistant Professor
33	Dr. Praveen Kumar	Assistant Professor
34	Prof.(Dr) V. Narsimha Reddy	Professor
35	Dr. Kalidindi Krishnam Raju	Associate Professor
36	Dr. Hari Ram Kumar Bandi	Assistant Professor
37	Mr. Durgadatta Mehera	Assistant Professor
38	Dr. Niranjan Kumar Chaurasia	Assistant Professor
39	Dr. Sudhanshu Bala Nayak	Assistant Professor
40	Mr. Ajit Kumar Sahu	Assistant Professor
41	Ms. Lipsa Dash	Assistant Professor
42	Mr. Manisankar Bera	Assistant Professor
43	Mr. Chandrasekhar Sahu	Assistant Professor
44	Prof.(Dr) K. Satya Krishna Prasad	Professor cum Dean
45	Dr. Devanand T. N.	Assistant Professor
46	Dr. Sambid Swain	Assistant Professor
47	Dr. Amrutha Gopan	Assistant Professor
48	Mr. Biswajit Mohanty	Assistant Professor
49	Mr. Avijit Biswas	Assistant Professor
50	Ms. Hauzoukim	Assistant Professor
51	Dr. Anita Patra	Professor
52	Dr. Subhendu Kumar Mishra	Associate Professor
53	Dr. Durga Prasad Padhi	Associate Professor
54	Dr. Parle Kalyan Chakravarty	Assistant Professor
55	Dr. S. Kameswar Rao	Assistant Professor

56	Mr. Kalee Prasanna Patnaik	Assistant Professor
57	Dr. Debi Prasad Satapathy	Assistant Professor
58	Mr. Amit Kumar	Assistant Professor
59	Dr. Prajna Pani	Professor
60	Dr. Susanta Kumar Patnaik	Assistant Professor
61	Dr. Girish Prasad Rath	Assistant Professor
62	Dr. Amir Prasad Behera	Assistant Professor
63	Nandakishore Ray	Asst. Professor
64	Smita Jana	Asst. Professor
65	Jagannath Padhy	Assistant Professor
66	Tofan Kumar Nahak	Assistant Professor
67	Dr. Satya Prakash Nanda	Professor
68	Dr. Narayan Gouda	Assistant Professor
69	Dr. Rosy Mallik	Assistant Professor
70	Dr. Santosh Kumar Nanda	Assistant Professor
71	Dr. Sivala Kumar	Professor
72	Dr. Kakani Grihalakshmi	Associate Professor
73	Dr. Gitanjali Behera	Assistant Professor
74	Dr. Rajashree Jena	Assistant Professor
75	Ms. Sharmistha Sahu	Assistant Professor
76	Dr. Vivek Kumar	Assistant Professor
77	Mr. Shekhar Kumar Sahu	Assistant Professor
78	Dr. Santosh D.T.	Assistant Professor
79	Ms. Soma Majhi	Assistant Professor
80	Mr. Bhisma Narayan Ratha	Assistant Professor
81	Dr. Prasanta Kumar Choudhury	Assistant Professor
82	Dr. Ashish Ranjan Dash	Associate Professor
83	Ms. N. Jeebaratnam	Assistant Professor
84	Mr. Sandipan Pine	Associate Professor
85	Mr. Satyanarayan Padhy	Assistant Professor
86	Mr. Rajesh Kumar Mishra	Assistant Professor
87	Mr. Prabhat Kumar Patnaik	Assistant Professor
88	Dr. Prafulla Kumar Panda	Assistant Professor
89	Dr. Rajib Kumar Majhi	Assistant Professor
90	Mr. Vishal Kumar Singh	Assistant Professor
91	Dr. P. Srinivasa Rao	Professor
92	Mr. Mir Sadat Ali	Associate Professor
93	Dr. Vijay. Miditana	Associate Professor
94	Dr. N. B. Karthik Babu	Assistant Professor
95	Dr. Nagesh Kolagani	Professor
96	Ms. A. Abhilasha	Assistant Professor
97	Mr. Debendra Maharana	Assistant Professor
98	Mr. Md. Sameen Chishti	Assistant Professor
99	Mr. Abinash Panda	Assistant Professor
100	Mr. Sambheet Patro	Assistant Professor
101	Prof.(Dr) M. Devender Reddy	Professor cum Dean Acad
102	Dr. Sagar Maitra	Professor
103	Prof.(Dr) Gouranga Ch. Mishra	Professor
104	Dr. Tanmoy Shankar	Associate Professor
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113	Dr. Ashish Kumar Sahoo	Asst. Professor
114	Dr. Arun Kumar Pradhan	Asst. Professor
115	Dr. Sarita Garnayak	Asst. Professor
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132	Prof. Aruna Kumari Mishra	Professor
133	Dr. G C Nanda	Professor
134	Dr. Ananta Bandhu Das	Professor
135	Dr. Sagarika Parida	Associate Professor
136	Dr. Gyanaranjan Mahalik	Asst. Professor
137	Dr. Rukmini Mishra	Asst. Professor
138	Mr. B. Chakrapani	Asst. Professor
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141	Mr. Chandrasekhar Sahu	Asst. Professor
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145	Anath Bandhu Das	Professor
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157	Dr. Subanini Pattnaik	Professor

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164	Dr. V. Parvati Sai Arun	Asst. Professor
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168	Narayan Chandra Biswal	Professor
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182	Saban Kumar Maharana	Asst. Professor
183	Gyana Ranjan Panigrahi	Asst. Professor
184	Varsha Singh	Asst. Professor
185	Shruti Rajwar	Asst. Professor
186	Sanjeev S. Koni	Asst. Professor
187	Dr. Gurudutta Pattnaik	Professor
188	Dr. Amulya Ratna Behera	Professor
189	Dr. Priyanka Dash	Asst. Professor
190	Chinmaya Chidananda Behera	Asst. Professor
191	Himansu Bhusan Samal	Asst. Professor
192	Suman Kumar Mekap	Asst. Professor
193	Prachirani Sahu	Asst. Professor
194	Dr Nityanada Sahoo	Assistant Professor
195	Omprakash Panda	Assistant Professor



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