

WORKSHOP-CUM-TRAINING

on

Advanced Biotechnological Knowledge
and Skills for Research
and Innovation

APRIL 4 - 8, 2022

ORGANIZED BY



DBT-NORTH EAST CENTRE FOR AGRICULTURAL
BIOTECHNOLOGY (DBT-NECAB)
ASSAM AGRICULTURAL UNIVERSITY
JORHAT, ASSAM-785013

SPONSORED BY



DEPARTMENT OF BIOTECHNOLOGY
Ministry of Science & Technology
Government of India

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Dr. Dibyajyoti Hazarika, Project Coordinator, AAU
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ABOUT THE WORKSHOP

Problems related to the production of food (both quality and quantity) have arisen as a consequence of the excessive food requirement to feed the growing human population and radical changes in global climate conditions. In the past few decades, promises of crop improvement have been the domain of both molecular breeding and genetic engineering technology. Also, new approaches such as genomic selection and speed breeding have accelerated crop breeding programs. Often plant breeding alone cannot achieve the required traits, but genome editing tools (CRISPR/Cas, TALENS) can help meet the needs for efficient crop research. Similarly, microbial systems are the solution for crop production through a natural approach without affecting soil fertility. This workshop cum training program aimed to provide an opportunity to students, early-career researchers, and young scientists to learn new ways to improve crop production from eminent scientists and improve skills in the area of modern biotechnology

SPEAKERS

Plant Gene Technology

1. **Dr. T. J. V Higgins**, Honorary Fellow, CSIRO, Canberra
2. **Dr. Bidyut Kumar Sarmah**, Director, DBT-NECAB
3. **Dr. Salvinder Singh**, Professor, AAU, Jorhat, Assam

Molecular Breeding

1. **Dr. Manoj Prasad**, Professor, NIPGR, New Delhi
2. **Dr. Sanjay K. Chetia**, Chief Scientist, RARS, Titabar

Microbial Biotechnology

1. **Dr. Syed G. Dastager**, PS, CSIR-NCL Pune, Maharashtra
2. **Dr. Madhumita Barooah**, Professor, AAU, Jorhat, Assam

REGISTRATION FORM

Name

Date of Birth

Department/Institution

Designation

Address for communication.

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Mobile

Email

Educational qualification

Interested in : Lectures Only ☐

Lectures and Hands-on Training ☐

Signature of the candidate

Signature of the competent authority

✂

**Alternatively, participants may also register
online with the link provided:**

<https://forms.gle/YwUtfuSULa5HmBGY7>

Contact us

Website

<https://dbtnecab.aau.ac.in>

Email

dbt.necab@aaau.ac.in

EVENTS

LECTURES BY EMINENT ACADEMICIANS

- Plant Gene technology
- Molecular Breeding
- Microbial Biotechnology

HANDS-ON SESSIONS

Gene Technology

- Plant gene isolation, cloning & expression, vector designing, CRISPR
- Bacterial transformation
- Media preparation and inoculation of explant
- Plant genetic engineering

Molecular Breeding

- Genomic DNA extraction, purification and quantification
- Basic tools in molecular breeding (MAS)
- Gene pyramiding and development of trait specific markers

Microbial Biotechnology

- Morphological, biochemical and molecular characterisation of soil microbes
- Molecular cloning of agriculturally-important genes and PCR-based validation

ELIGIBILITY CRITERIA

PG/PhD students, Early-Career Scientists and Postdoctoral Researchers are eligible



ABOUT THE DBT-NECAB

The DBT-North East Centre for Agricultural Biotechnology (DBT-NECAB) has been established with a vision to preposition Assam Agricultural University and the entire North-Eastern region with the mandate to undertake exploratory research in crop biotechnology. The centre has identified and taken up some futuristic research programmes like attempting gene based solutions to insect pests in grain legumes; soil acidity problem through microbial genomics; targeting drought tolerant genes in rice bio-resources of the region; enhancing organic agriculture through large scale production and generation of modern bio-inputs etc.



IMPORTANT DATES

Last dates of receiving application: **31.03.2022**
Participants will be intimated by: **01.04.2022**

HOW TO APPLY

- Duly filled registration form may be sent via email. Alternatively, candidates may also fill and send the Google form: <https://forms.gle/YwUtfuSULa5HmBGY7>
- Participants will be selected by a Screening Committee constituted by DBT-NECAB
- Free accommodation and fooding