

## **ICAR-NBAIM**



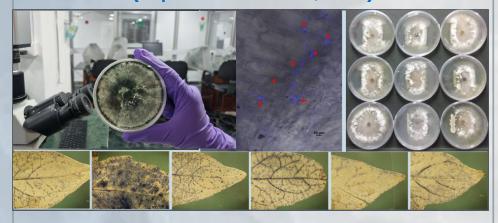
Understanding and conserving our national heritage of agriculturally important microorganisms

### **National Training Programme**

on

# Prospects of Microbial Inoculant Application in Agriculture with Special Focus on North Eastern Region (NER)

(September 03 to 09, 2025)



# Course Director Dr. Alok K. Srivastava, Director ICAR-NBAIM

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#### **About NBAIM**

ICAR-National Bureau of Agriculturally Important Microorganisms (NBAIM) is one of the premier institutes of Indian Council of Agricultural Research (ICAR) leading research and development programs in the field of Agricultural Microbiology in India. The Bureau aims at collection, maintenance and conservation of agriculturally important microorganisms at National Agriculturally Important Microbial Culture Collection (NAIMCC) and their genomic resources for future needs. The Bureau is engaged in the cutting-edge research in Agricultural Microbiology, Microbial Biotechnology, Plant Pathology and Bioinformatics for the benefit of Indian agriculture and farmers. Human resource development is one of the important mandates of the bureau. The Bureau has organized several national training programs on molecular microbial identification and characterization, molecular taxonomy, microbial diversity, biocontrol, plant-microbe interactions and the applications of bioinformatics in gene mining for the benefit of different stakeholders.



#### **Background**

This training program is especially designed for the North Eastern Hilly (NEH) region of India. The North Eastern Region (NER) of India, characterized by diverse agro-climatic conditions and rich biodiversity, offers immense potential for sustainable agriculture. However, the region faces several challenges, including low soil fertility, erratic rainfall, and limited access to modern agro-technologies. Indigenous farming systems, although rich in traditional knowledge, often lack integration with cutting-edge microbial innovations. Microbial inoculants comprising biofertilizers, biopesticides, and plant growth-promoting microorganisms have emerged as eco-friendly tools to enhance soil health, nutrient use efficiency, and crop productivity, particularly under low-input conditions.

Their role is even more relevant in the NEH context, where organic and sustainable farming practices are widely encouraged. Recognizing this potential and the urgent need to build technical capacity, this training program is conceptualized to provide hands-on exposure and knowledge on the development, application, and field-level benefits of microbial inoculants. The program also aims to bridge the gap between microbial research and its field-level adoption, thereby contributing to the vision of climate-resilient, resource-efficient agriculture in the NEH region.

This initiative aligns with national priorities like Mission Organic Value Chain Development for North Eastern Region (MOVCDNER) and Viksit Bharat@2047, aiming to empower regional stakeholders through microbial biotechnology

#### Objectives:

- 1. To appraise students/researchers about advanced tools and techniques for characterization of bacterial / Fungal isolates
- 2. To provide hands on research experience and training on application of bacterial/fungal isolates for sustainable crop production.

#### Thematic areas

- Isolation and preservation of bacteria, actinomycetes and fungi
- 2. Biochemical characterization for plant growth promotion/ nutrient fortification /biotic &/ abiotic stress tolerance
- 3. Molecular characterization and identification of bacteria, actinomycetes and fungi
- 4. Induced systemic resistance and induced systemic tolerance in plants under biotic and abiotic stresses
- 5. Introduction to the OMICS approaches to decipher plantmicrobe interaction

The training programme will include both lectures and practical sessions on the above thematic areas. Resource experts from the Bureau and other reputed institutes will address the participants.

#### Expected benefits to the participants

- The participants will get hands on experience in isolation of agriculturally important microorganisms, their molecular and biochemical characterization for plant growth promotion, nutrient fortification, biological control and abiotic stress alleviation. Participants will also get a detailed exposure of new tools and techniques in plant microbe interaction studies.
- The participants will get structured training on practical and applied aspects on agriculturally important microorganisms along with newly arising concepts, which enable them to initiate independent research in this area.

#### **Eligible participants**

 M.Sc./Ph.D. Students and Research Scholars, Post-Doctoral Students, Technical Officers, Scientists/Assistant Professors or above, from any university/institute/organization working in the area of Life sciences who are residents from North East Region (Arunachal Pradesh, Assam, Manipur, Meghalaya, Mizoram, Nagaland, Sikkim, and Tripura) of India.

**Transport allowances:** The ICAR-NBAIM will provide 3<sup>rd</sup> AC travel (to and fro) to all the selected participants

**Boarding and Lodging:** Boarding and Lodging Will be provided by the ICAR-NBAIM, participant need not to pay for it.

**No. of participants:** Limited to 25, the candidates will be shortlisted based on the objective and relevance of the training.

#### Fees for the training

- Trainees will not be charged any fee for this training program
- Last date for application: August 12<sup>th</sup>, 2025. Shortlisted candidates will be notified after last date.

#### How to apply?

- Eligible participants should send the dully filled application form forwarded by the HoD/Head of the institution to the Director, ICAR-NBAIM to the email ids: <a href="mailto:nbaimicar@gmail.com">nbaimicar@gmail.com</a> and endophyte.training@gmail.com
- The selected candidates will be notified by email
- For any queries please contact: 7054707822 (Dr. Pramod); 9582943705 (Dr. Deepak), 9810910799 (Dr. Shobit)



# भा.कृ.अनु.प.- राष्ट्रीय कृषि उपयोगी सूक्ष्मजीव ब्यूरो



## ICAR-National Bureau of Agriculturally Important Microorganisms (भारतीय कृषि अनुसंधान परिषद्)

(Indian council of Agricultural Research)

(An Autonomous body of DARE, Ministry of Agriculture, Govt. of India)

National Training Programme on "Prospects of microbial inoculant application in Agriculture with special focus on North Eastern Region (NER)" from September 03-09, 2025

## **Application form**

Name:	
Gender: Date of Birth	
Designation/occupation:	
Email:	
Mobile No.:	
Whatsapp number:	
Address:	Passport size photograph
Degree (M.Sc./Ph.D./any other):	
Subject Specialization:	
College/Department:	
University/ Institute:	
Signature of the applicant	
Forwarding from Advisor/HOD/ Head of the institution	
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