



ICAR Sponsored Short Course

On

Bioprospecting Plant Microbiome - a Novelty to Plant Health Management in Organic Production System



Date: 19th - 28th January, 2022

Organized by

Department of Plant Pathology,

Assam Agricultural University, Jorhat-13, Assam



Background

The emergence of concept exploring plant microbiome has opened the Pandora box for unlimited possibilities of exploring novel microbiome for assured plant health management. The genomic and functional contents of microbiome largely remains unexplored, warranting concerted efforts to understand and explore plant microbiome in support of growing demand for residue free or organic foods from field to fork. In this background, the training is programmed with best available expertise and state of art facilities of AAU to provide with hands on experience on microbe mediated plant health care which would address isolation, identification and multi omic based characterization of novel plant beneficial microbes, development and application of microbial formulations for biotic and abiotic stress management.

About the institute

Assam Agricultural University is the first institution of its kind in the whole of North-Eastern Region of India. The primary mission of the Institute is to explore new frontiers of science and knowledge and develop human resources to provide leadership to the country in technology development and policy guidance. AAU, the recipient of prestigious Sardar Patel Outstanding Award during 2014 has been significantly contributing to agril. education as well as socio-economic frontiers of NE India through development of a wide variety technologies viz., HYVs, Genetically modified crops, bioinputs, etc. to name a few.

Since the establishment of erstwhile Assam Agricultural College (AAC), Govt. of Assam on August 16, 1948, the courses under Plant Pathology were offered under the Department of Agricultural Botany and Plant Pathology. Later, after the establishment of Assam Agricultural University (AAU) on April 01, 1969 under the 'Assam Agricultural University Act, 1968' with AAC as a constituent college, the department of Plant Pathology was bifurcated from the mother department in 1981. Under the able leadership of many dedicated teachers as the Heads of Department, active support from the university and full cooperation from all faculties, the department has developed into one of the best departments in the university at present with modern teaching and research facilities. Being the pioneer in biocontrol research, eleven number of bio formulations have been developed by the Department, most of which have been commercialized, thereby catering the need of quality bioinputs for organic agriculture in NE India.

THEMATIC AREA TO BE ADDRESSED

1. Exploring untapped potential of microbial whirlpool for organic agriculture
 2. Retrofitting good microbiological practices
 3. Isolation, identification, and characterization of rhizospheric and endophytic antagonists
 4. Entomopathogens - Concept to Commerce
 5. Analytic techniques of plant microbiome
 6. Isolation and characterization of secondary metabolites from selected microbes and their *in-vitro* response against plant pathogens/insects/nematodes
1. Unlocking productivity potential of crops through biofertilizers
 2. Developing microbial biofertilizers and biopesticides, hands-on-experience
 3. Plant microbiome-mediated bioremediation of organic pollutants in soil

CLIMATE

The weather during January will be cold with temperature ranges between 20°C to 23°C during day time and 13 to 17° C during night. It is advising to carry heavy warm clothing.

HOW TO REACH AAU, JORHAT

Assam Agricultural University, Jorhat is well connected by road and rail from all the major cities of Assam . The Jorhat airport is 3 Kms away and Railway station is 5 kms away from AAU, Jorhat and Taxi / Auto service is available all the time. Jorhat town is also well connected to different tourist places of North Eastern region viz. Kaziranga national sanctuary, Sivsagar (Capital of Ahom dynasty), Shillong (Meghalaya), Itanagar, Tezu, Tawang, (Arunachal) Dimapur and Kohima (Nagaland), Agartala (Tripura), Imphal (Manipur), Darjeeling and Gangtok etc.

WHO CAN APPLY

Applicant should be postgraduate in any discipline of agriculture, preferably Plant Pathology/ Microbiology/Soil Science/Horticulture/Entomology/Nematology working not below the rank of Assistant Professor/SMS or equivalent from ICAR institute, SAUs, CAUs, KVKs, Agriculture Faculty of AMU, BHU, Vishwa Bharati and Nagaland University

HOW TO APPLY

The participants should submit their application online using CBP portal at the URL: (<https://cbp.icar.gov.in>). After filling up the online application take a printout of application form and get it approved by the competent authority of your organization. Upload the approved form (scan copy) on CBP portal. Only 25 participants will be selected for the short course and all the selected participants have to pay Rs. 50/- as registration fee which can be paid as a demand draft in favour of Comptroller, AAU, Jorhat-13 (A/c name: Comptroller AAU, A/c No: 38509526536).

IMPORTANT DATES

Last date for receipt of applications: **20.12.2021**

Intimation to selected candidates: **25.12.2021**

Confirmation of participation by candidates: **30.12.2021**

ACCOMMODATION AND TRAVELLING ALLOWANCE

The selected participants will be provided free boarding and lodging in the university. Food expenses will be borne by the organizer as per ICAR norms. All participants will be reimbursed to and for travel fare for journey to Jorhat by rail or bus by shortest route. The payment will be made as per the entitled class of travel, but restricted to the maximum AC-II tier or AC-III tier train fare, bus fare (as per actual). Local participants are not eligible for boarding and lodging. However, they will be provided lunch and inter session tea. Participants are requested not to bring family members with them.

ALL CORRESPONDENCES MAY KINDLY BE ADDRESSED TO:

Dr. Popy Bora

Course Director

Department of Plant Pathology

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The circular is also available on university website (<http://www.aau.ac.in>)



Glimpses of Assam Agricultural University, Jorhat-13, Assam