



Information Brochure

ICAR SPONSORED WINTER SCHOOL

ON



MASS PRODUCTION OF MICROBIAL FORMULATIONS FOR SUSTAINABLE AGRI-PRODUCTIVITY, SOIL HEALTH AND PLANT DISEASE MANAGEMENT

6th February to 26th February, 2025



Organized by

Department of Soil Science & Agricultural Chemistry,
College of Agriculture,
Acharya Narendra Deva University of
Agricultural & Technology,
Kumarganj, Ayodhya-224229 (UP)
<https://www.nduat.org>

Sponsored by

Education Division,
Indian Council of Agricultural Research,
New Delhi-110012, India
<https://www.icar.gov.in>

Background

In past 50 years history, the chemical pesticides and fertilizers have played crucial role in boosting agricultural production. Their immediate action and low cost managed to bring them rapidly into the center of attention. Increasing use of chemical fertilizers & Pesticides along with intensive Agricultural production practices have led to slow but gradual depletion of organic matter of soil. To overcome the adverse effect of chemicals in agriculture and to keep pace with the ever growing population, new strategies must be developed to ensure further growth in agricultural output. The reduced use of chemical fertilizers with increased application of organic fertilizers is considered a compulsory route to alleviate the pressure on environment derived from agricultural practices. The indiscriminate use of chemical pesticides has contributed in loss of soil productivity along with addition of salts to the soil. Also, the increased use of chemical pesticides is not being proved to be very effective on the plant protection front due to development of resistance in insects against common pesticides. Their toxic effects on environment, plants, animals and human life has diverted the focus on eco-friendly approaches for improving soil health and plant protection. Several organic fertilizers have been introduced in the recent years, which are also acting as natural stimulators of plant growth and development. Adopting a strategy of integrated nutrient supply by using a combination of Chemical fertilizers, Organic manures, biofertilizers and biopesticides can help in replenishing soil health to meet the nutrient demands vis-à-vis controlling pests & plant diseases in an integrated manner thereby contributing towards enhanced agri-productivity in a sustainable manner. Development of cost-effective Biofertilizer and Biopesticide formulations is very much required for sustainable agriculture in Eastern U.P. region and training farmers for efficient utilization of bioinoculants for improvement in agri-productivity. Hence this winter school is being organized to sensitize and update the knowledge of Agricultural Scientists and SAU Faculty members about the techniques on mass culturing of Plant beneficial microbial inoculants and about the various interventions and strategies that could be adopted for long term sustainability of optimal agriproductivity vis' a vis' maintaining soil and plant health.

Objectives

- To develop skills to undertake research on microbial formulations for sustainable management of nutrient and pest management, and rural livelihood security
- To acquaint trainees about various technical, production and management aspects of "soil nutrients use" and "pest control strategies" for sustainable agriculture production to act as an expert for teaching, research and training
- To expose the trainees on the recent developments in microbial formulations preparation.

The major themes of the training program

- Concepts, scopes, constraints and prospects of microbial formulations
- Importance of soil health and present day concerns
- Biofertilizers and nutrient management
- Biopesticides and crop disease management
- Molecular techniques in identification and characterization of biofertilizer and biopesticide inoculants.
- Prospects of biofertilizer and biopesticides Utilization and Integration with organic farming
- Host Plant resistance for disease management
- Certification, quality and marketing of biofertilizers and biopesticides
- Utility of Biobased formulations in developing Climate resilient and environmental friendly Technologies for Agriculture.
- Linkages & extension approaches for promotion of biofertilizers and biopesticides
- Livelihood security, economics and policy issues

The training course outline will proceed with theme wise delivery of information with practical exposures.

Eligibility

This Winter School is meant for active researchers / teachers / scientists in ICAR / Central Govt. Institutes / SAUs / Agricultural Colleges in the rank of Scientists/Asst. Prof. or above in the field of Soil Science, Agricultural Microbiology, Plant Protection, Agronomy, Horticulture, Agroforestry, Plant/Crop Physiology, Environmental Science, or any other related disciplines.

How to Apply

Interested candidates are requested to visit ICAR CBP portal "https://cbp.icar.gov.in" for filling up online application. The printed copy of successfully submitted online form duly forwarded by competent authority should be uploaded in the CBP portal along with details of Demand Draft or Indian Postal Order of value Rs. 50/- (non-refundable), drawn in favour of "Comptroller, ANDUAT, Kumarganj, Ayodhya", latest by 15th January 2025. The selected candidates must bring the hard copy of the duly forwarded application and their DD/ IPO of Rs. 50/- along with them and submit it in person to the Course Director during the winter school.

A maximum of 25 participants will be selected for the course by the screening committee as per the ICAR guidelines. The selection of the participants will be conveyed to the applicants through e-mail. In case of any query, please contact Course Director or Course Coordinators. The selected candidates will have to confirm their participation latest by 20th January, 2025.

Important dates

- Last date for receipt of duly forwarded application: **15.01.2025**
- Intimation of selection: **18.01.2025**
- Confirmation of participation by candidates: **20.01.2025**

Duration of training

The training shall be organized for 21 days from 06-02-2025 to 26-02-2025 (both days are inclusive). The participants are expected to arrive latest by evening of 05-02-2025 and can leave after 5.00 pm on 26.02.2025.

Travel, boarding and lodging

Participants will be paid travel (to and fro) fare by rail (restricted to AC-III tier subject to the availability of funds) or by bus as per their entitlement. Actual TA for the shortest route will be paid on production of the tickets. Participants are requested not to bring their spouse or any family member as there is no extra scope for their accommodation. Free shared accommodation in the International Guest House and free boarding (food) will be provided to the selected candidates during the training programme. The local candidates are not eligible for boarding and lodging, however, they will be provided local hospitality like working lunch, tea, snacks, etc.

Weather

Weather in Kumarganj, Ayodhya during February remains very pleasant. The average temperature lies in the range of 13°C to 27°C.

About the host organization

On January 15, 1974 the foundation stone of Narendra Dev University of Agriculture & Technology was laid by the then Hon'ble Prime Minister of India late Smt. Indira Gandhi at Mashodha near Faizabad (Now Ayodhya). Shri Laxmi Narain Rai, a PCS officer of Agriculture Department, Government of UP, was deputed as officer on special duty. After a few months, he was succeeded by Dr. A.S. Srivastava who took over in October, 1974. Thereafter on 21, 1975, UP Government decided that the main campus of the university would be established at Kumarganj, Faizabad instead of Mashodha. Shri A.D. Pandey, IAS (retired) was appointed the first Vice-Chancellor of the university on 10th October, 1975. The University has eight constituent colleges, including five colleges on main campus of the University namely Colleges of Agriculture; Horticulture & Forestry; Veterinary Science & Animal Husbandry; Community Science and Fisheries.

The three off campus colleges include two College of Agriculture campuses at Azamgarh; and Gonda; and Mahamaya College of Agricultural Engineering and Technology, Ambedkar Nagar. Through its 27 constituent Krishi Vigyan Kendras, 6 Crop Research stations and the different colleges, this University meets out the education of agriculture and allied sectors in 26 districts of Eastern U.P., belonging to seven revenue divisions viz; Faizabad (Now Ayodhya), Basti, Devipatan, Gorakhpur, Varanasi, Azamgarh and Vindhychal Dham of under three agro-climatic zones i.e., North Eastern Plain Zone (NEPZ), Eastern Plain Zone (EPZ) and Vindhyan Zone (VZ). The College of Agriculture at the main campus, one of the oldest colleges in the University, was started in February 1977 under the leadership of Dr. Kirti Singh as the first Dean of Agriculture. The first meeting of the Academic Council was held on February 12th, 1977. The College of Agriculture has 13 constituent Departments. The University is known for its potential varieties of Aonla and Bael. University has released 184 varieties of different crops and has also developed multiple Technologies. University has a well equipped biofertilizer and biopesticides production unit with state-of-art Instruments under the aegis of Department of Soil Science and Agricultural Chemistry.

About the city

Ayodhya is situated on the banks of Sarayu river in the state of Uttar Pradesh. It was the capital city of the Suryavanshi Rajput clan which established The Solar Dynasty to which Lord Ram belonged. It is the administrative headquarters of the Ayodhya district as well as the Ayodhya division of Uttar Pradesh, India. Ayodhya became the top tourist destination of UP with 110 million visitors in the first half of 2024.

Attractions of Ayodhya



How to reach ANDUA&T, Kumarganj, Ayodhya

The Acharya Narendra Deva University of Agriculture and Technology is situated about 100 kms from State Capital Lucknow and 45 kms from Ayodhya head quarter. The nearest railway station is Ayodhya Cantt (AYC), Ayodhya Dham (AY) and Maharaja Bijli Pasi (MBPL). The regular train, bus and taxi facilities are available from Lucknow and Ayodhya. The nearest airport is Ayodhya and Lucknow.

Chairman

Dr. Bijendra Singh

Vice-Chancellor, ANDUA&T,
Kumarganj, Ayodhya

Co-chairpersons

Dr. A. K. Gangwar, Director Research

Dr. R.R. Singh, Prof., Soil Science &
Addl. Director Extension

Dr. Pratibha Singh, HOD, Soil Science &
Dean, Agriculture

Convenors

Dr. Sita Ram Mishra, Assoc. Dean, COA

Dr. Sushil Kumar Singh, HOD, Plant Pathology

Dr. Neeraj Kumar, Prof. & Incharge, Soil Science

Co-convenors

Dr. Suresh Kumar, Prof. Soil Science

Dr. Sushil Kumar Yadav, Assoc. Prof. Soil Science

Address for Correspondence

Course Director

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Course Co-coordinators

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