



ICAR Sponsored 21-Days Summer/Winter School on "Innovative Approaches for the Biotic Stress Management in Vegetable Crops"

For Faculty/Teachers/Scientists or persons serving at equivalent positions in the field of Plant Protection, Agril. Entomology, Plant Pathology and Nematology

18.02.2025-10.03.2025



Sponsored by:

Agricultural Education Division Indian Council of Agricultural Research Krishi Anusandhan Bhawan-II, Pusa, New Delhi-110012

Organized by:

ICAR – Indian Institute of Vegetable Research Post Bag No.01, P.O- Jakhini (Shahanshahpur) Varanasi-221305, UP

About the Training

Vegetable crops are comparatively more susceptible to various biotic stress responsible for huge loss. Diseases and insect-pests are the most important limiting factors for the low production and productivity of vegetable crops. Among different kind of biotic stress, diseases, insect-pests, vector-borne viruses, nematodes, rodents are major group and most difficult to manage because of very complex microflora/ microfauna association, ubiquitous nature, prolonged survival period and rapid multiplication cycle. The off-season vegetable production promotes the survival period of the pathogen. Intensive and monoculturing of vegetable crops also favour the biotic stress. Farmers mostly depend on chemical pesticides to control these diseases and insect-pests in vegetable crops. Periodical harvest at short interval of vegetables like okra, cowpea, brinjal, chilli French bean increases the chance of pesticides residue in their fruits. Beneficial and harmful pathogenic microbes both are present in soil hence use of fungicides and toxic chemical cannot be recommended for the management of soil-borne pathogen. Same time the pesticides pollutes soil, gourd water as well as surface water system of river, ponds, reservoirs and water harvesting tank etc. In the above context, the training program will help to exploit bio-intensive innovative technologies for the management of various biotic stress of vegetable crops.

The training will cover the following key areas:

- Eco-friendly management of important insect-pests of vegetable crops.
- Bio-intensive, integrated disease management in vegetable crops.
- Biological management of plant parasitic nematodes in vegetable crops.
- Emerging insect-pests and diseases in vegetable crops.
- Exploitation of microbes and multiplication of *Trichoderma* for biotic stress management.
- Pesticide residue management in vegetable crops and harvested vegetable produce.
- Grafting technology for biotic stress management in vegetable crops.
- Role of bio-enhancer and biopesticides for safer vegetable production.



Objectives of the Training

- This winter school will fulfil a gap on various issues regarding plant health management in vegetable crops.
- The training program will also provide a path to teachers/ researchers/ extension personnel associated with plant protection in vegetable production.

Who Can Apply

- Researchers and Academicians (Permanent faculty, Assistant Professors and above) working in Agricultural Universities, ICAR Institutes, and R&D organizations.
- Extension Officers and plant protection professionals working with horticultural crops.
- Preference will be given to professionals with a focus on vegetable crops.

About ICAR – IIVR, Varanasi

ICAR-IIVR, Varanasi is a field unit of Indian Council of Agricultural Research under the aegis of the Department of Agricultural Research and Education, Ministry of Agriculture and Farmers Welfare, Government of India.

In view of the importance of vegetables, Indian Council of Agricultural Research (ICAR) established All India Coordinated Research Project on Vegetable Crops (AICRP-VC) in the year 1971 at the Indian Agricultural Research Institute (IARI), New Delhi to plan, coordinate and monitor the research activities on vegetable crops. To give a fillip to vegetable research and to meet the emerging challenges, the status of AICRP-VC was elevated to the Project Directorate of Vegetable Research (PDVR) in 1986. North eastern plain being the major vegetable producing area, headquarter of PDVR was shifted to Varanasi in 1992. To further boost systematic vegetable research in the country, a full-fledged Indian Institute of Vegetable Research (IIVR) was established in 1999 at Varanasi. AICRP-VC was also continued with its headquarter at IIVR and a chain of AICRP centres located in different agro-climatic regions of the country.

How to Apply

Interested candidates can apply online through the ICAR Capacity Building Portal (CBP) at <u>http://cbp.icar.gov.in/</u> and communicate same to course director Dr. Arvind Nath Singh, Head, Division of Crop Protection, ICAR-IIVR, Varanasi at <u>headcpi.iivr@icar.gov.in/ arvind.singh@icar.gov.in</u>

Applications must be duly forwarded by the respective competent authorities. **Deadline for applications**: 10th January, 2025 **Maximum number of participants**: 25

Weather at Varanasi during the Training Period

During January and February, Varanasi experiences a cool and dry winter climate, with daytime temperatures ranging from 15°C to 25°C and chilly nights dropping to 10°C to 15°C. The weather is generally dry and making it ideal for outdoor activities and training programs. However, participants should be prepared for colder temperatures in the mornings and evenings, so warm clothing is recommended for comfort.

Registration Fee

Participants are required to make payment of registration fee of INR 50/- via Demand Draft in favor of ICAR-IIVR, Varanasi.

Bank Details:

- Account Name: ICAR Unit IIVR, Varanasi
- Account Number: CA-30156620659
- > IFSC Code: SBIN0014905
- Bank Name: State Bank of India, Indian Institute of Vegetable Research, Varanasi
- Branch Name: IIVR Varanasi

Institute Address

- > ICAR-Indian Institute of Vegetable Research Varanasi-221305, UP, India
- Phone: 0542-2975111
- Website: https://iivr.icar.gov.in

Available Training Facilities

The training will be held at the ICAR-IIVR, which is equipped with state-ofthe-art facilities including:

- Research Farm and Technology Park
- Biological Control Laboratory
- Pesticide Residue Laboratory
- Beekeeping Center
- Biotechnology & Molecular Biology Laboratory
- Seed Technology and Vegetable processing unit
- Conference and Training Halls
- Guest House and Trainees Hostel Accommodation

Travelling, Boarding and Lodging Facilities

- Boarding & Lodging: Participants will be accommodated at the Institute's guest house and trainee hostels.
- Travel: AC-II (two tier) train fare will be reimbursed for selected participants (Air travel not allowed).

Academic Short Trip Visit to BHU, Varanasi.



For Further Information, Contact Course Director Dr. Arvind Nath Singh Email: headcpi.iivr@icar.gov.in arvind.singh@icar.gov.in

Important dates

Last date for receipt of applications 10th January, 2025

> Intimation for Selection 15th January, 2025

Confirmation by Participants 20th January, 2025