

# National Agricultural Higher Education Project (NAHEP) - Center for Advanced Agricultural Science and Technology (CAAST)

Sponsored

Student's Training programme  
on

## ADVANCES IN EXPERIMENTAL DESIGNS AND GENOMICS FOR TAILORING HORTICULTURAL CROPS

DURATION

1<sup>st</sup> December – 12<sup>th</sup> December 2023



ORGANIZED BY

Division of Fruits and Horticultural Technology  
ICAR-Indian Agricultural Research Institute  
New Delhi- 110012

### ABOUT TRAINING

Focused training on advances in experimental designs, molecular breeding tools and techniques in horticultural crops. The training will be organized by Division of Fruits and Horticultural Technology, ICAR-Indian Agricultural Research Institute, New Delhi to train the young research scholars who will be future breeders taking forward the legacy of breeding better crops. The major objective of the training program is to generate awareness among the students on the advances in modern areas of genomics and its application in crop improvement for sustainable development of agriculture and future food security. The training includes lectures, hands-on trainings, laboratory experiences, site visits, and field trips to provide relevant information regarding the various molecular and biotechnological interventions used in crop improvement as well as to impart knowledge, skill and hands-on-training to the students via exposing them to the Next generation molecular tools for molecular biology and biochemical instrumentation techniques.

### WHO CAN PARTICIPATE

Enrolled PhD and PG students of agricultural sciences preferably from streams of Fruit science/Vegetable Science/Floriculture and Landscaping/ Genetics and Plant Breeding/ Seed Science and Technology etc. having strong willingness to get excellence in their scientific research pursuits. A total of Fifty candidates will be selected for this course. The selection of the candidates will be made by a screening Committee of the training program.

### REGISTRATION FEES

No registration fee is to be paid; the programme is fully sponsored by NAHEP-CAAST.

### BOARDING AND LODGING

It will be arranged by the ICAR-IARI, New Delhi. Selected candidates are entitled for TA as per the norms of NAHEP Scheme (Strictly up to the fare of 3 tire AC of shortest distance train ticket). Food, Tea and snacks will be served during the programme and expenditure will be met from the training budget.

### HOW TO APPLY

Complete application form in the prescribed format forwarded by chairperson should reach the Principal investigator, NAHEP-Centre for Advanced Agricultural Science and Technology (CAAST), Division of Plant Physiology, ICAR-IARI, New Delhi on or before 12<sup>th</sup> November 2023 application form can be downloaded from [www.iari.res.in](http://www.iari.res.in)

APPLY NOW



<https://forms.gle/Tr6hobpj9vo9HtdVA>  
[hortnahepcaast@gmail.com](mailto:hortnahepcaast@gmail.com)

Venue:

Division of Fruits and Horticultural Technology,  
ICAR-Indian Agricultural Research Institute,  
Pusa Campus, New Delhi-110012.



The Indian Agricultural Research Institute, New Delhi, invites applications from enrolled PG and PhD students for twelve days Student's Training programme on "Advances in experimental designs and genomics for tailoring horticultural crops" sponsored by NAHEP-Centre for Advanced Agricultural Science and Technology (CAAST), ICAR- Indian Agricultural Research Institute, New Delhi.

**Organizers**

**Chief Patron:**

**Dr AK Singh**  
Director & VC, ICAR-IARI  
New Delhi

**Patron:**

**Dr C Vishwanathan**  
Joint Director (Res.) & PI (NAHEP-CAAST),  
ICAR-IARI, New Delhi

**Dr Anupama Singh**  
Dean & Joint Director (Edu.), ICAR-IARI, New Delhi

**Dr RN Padaria**  
Joint Director (Extn.), ICAR-IARI, New Delhi

**Co-Patron:**

**Dr OP Awasthi**  
Head Division of Fruits and  
Horticultural Technology,  
ICAR-IARI, New Delhi

**ABOUT NAHEP-CAAST**

The Centre for Advanced Agricultural Science and Technology (CAAST) represents a pioneering endeavor within the National Agricultural Higher Education Project (NAHEP), generously supported by the World Bank and entrusted to the Indian Agricultural Research Institute (IARI). Its primary mission is to serve as an educational and research hub, with a strong emphasis on postgraduate and doctoral students. CAAST at IARI is uniquely dedicated to advancing the field of Genomic Assisted Crop Improvement and Management, with a clear goal of nurturing genomics proficiency and expertise among our student body.

**Background**

In the domains of agriculture and horticulture, the relentless pursuit of elevating crop yield, quality, and resilience continues unabated. As we step into the third decade of the 21st century, our world confronts increasingly intricate challenges: a burgeoning global population, shifting climate patterns, and amplified calls for sustainable agricultural practices. Amid this backdrop, the horticultural sector assumes a central role, serving as a vital source of fruits, vegetables, ornamental plants, and medicinal herbs for the world. The horticultural industry's capacity to adapt and innovate has been instrumental in ensuring a consistent supply of fresh, nourishing produce to cater to the needs of our ever-expanding global populace. Nevertheless, conventional breeding techniques have at times proven to be sluggish, resource-intensive, and occasionally insufficient in addressing swiftly evolving challenges. The evolution of genomics and the creation of genomic resources geared toward countering various biotic and abiotic stresses, while enhancing yield and quality in horticultural crops, have ushered in novel pathways for crop enhancement.

**Course Director and Organizer**

**Dr Amit K. Goswami,**  
Sr. Scientist, Division of FHT, ICAR-IARI, New Delhi

**Course Coordinator:**

**Dr N.V. Singh**  
Sr. Scientist, Division of FHT,  
ICAR-IARI, New Delhi

**Dr Shrawan Singh**  
Sr. Scientist, Vegetable science,  
ICAR-IARI, New Delhi

**Dr Namita**  
Sr. Scientist, Division of FLS,  
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**Dr Suneha Goswami**  
Sr. Scientist, Biochemistry,  
ICAR-IARI, New Delhi

**Dr Vinutha T.**  
Sr. Scientist, Biochemistry,  
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**Dr Gograj Singh**  
Scientist, Vegetable science,  
ICAR-IARI, New Delhi

**Dr Chavlesh Kumar**  
Scientist, Division of FHT,  
ICAR-IARI, New Delhi

**Dr Neeraj Kumar**  
Scientist, Division of Genetics,  
ICAR-IARI, New Delhi

**No Objection Certificate**

It is certified that Mr./Ms.....is pursuing M.Sc./Ph.D. in.....subject and doing thesis/project work under the guidance of Dr.....(designation) and he/she may be allowed for attending the said Training programme for twelve days as per guidelines of NAHEP-CAAST. The institute does not have any objection.

Head of the Department/Institute  
(Signature with date & seal)