ICAR Sponsored 21 Days Winter School

Fruit Breeding for Enhanced Bioactive Compounds and Stress Resilience

JANUARY 19 TO FEBRUARY 8, 2026

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Organized by

Division of Fruits & Horticultural Technology

ICAR-Indian Agricultural Research Institute, New Delhi

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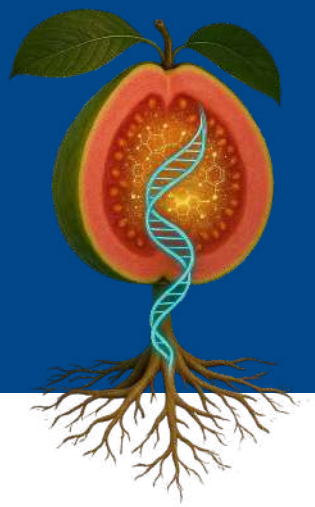

About the Training Programme

This Winter School focuses on advancing the knowledge and skills of scientists working in perennial fruit crop breeding. With agriculture shifting toward sustainability, climate resilience and enhanced nutritional quality, modern breeding demands expertise in innovative tools and techniques. The programme introduces participants to contemporary breeding strategies aimed at developing varieties with improved bioactive compounds, tolerance to biotic and abiotic stresses, and suitability for future-ready agronomic practices.

Through lectures, practicals, field demonstrations, and interactions with experts, participants will gain hands-on exposure to speed breeding, genome-assisted breeding, gene editing, QTL mapping, bioinformatics, high-throughput phenotyping, and fruit-specific hybridization. The course ultimately equips scientists to integrate advanced breeding concepts into research, teaching, and field applications for the long-term sustainability of Horticultural crops.

Eligibility

Open to scientists from ICAR institutes, SAUs, CAUs and agricultural colleges working in Horticulture, preferably Fruit Science. A maximum of 25 participants will be selected as per ICAR guidelines. The selection committee's decision will be final.

Location

The programme will be conducted at ICAR–Indian Agricultural Research Institute (IARI), New Delhi, India's premier institution in agricultural research and education. The Division of Fruits & Horticultural Technology is a pioneering centre in perennial fruit breeding, with notable contributions in mango, citrus, grape, guava, and papaya improvement. Delhi weather during the training period is expected to be cold (5–15°C).

Course Outline

The course strengthens participants' understanding of strategic breeding in perennial fruit crops. Key themes include:

- Speed breeding to reduce breeding cycles
- Breeding strategies for Amrit Kaal
- Development of climate-smart, nutrient-rich varieties
- Understanding fruit biochemical traits such as vitamins, minerals, polyphenols, anthocyanins, and flavonoids
- Advanced tools including genome-assisted breeding, gene editing, QTL mapping, bioinformatics analysis, and high-throughput phenotyping

Venue

Division of Fruits & Horticultural Technology, ICAR-IARI, New Delhi

Travel, Boarding & Lodging

Boarding and lodging of selected participants will be supported under ICAR norms. Travel allowance is admissible as per rules, limited to II AC train fare, and to be borne by the sponsoring institute. Shared accommodation will be arranged at NBPGR or other guest houses within the Pusa Campus, New Delhi.

How to Apply

Applications must be submitted in the prescribed format and forwarded by the competent authority of the sponsoring ICAR/SAU/CAU institute. Candidates may send an advance copy; however, final selection requires the formally forwarded application, submitted no later than one week after the closing date.

Last date for applications: 30.12.2025

Intimation of selection: 02.01.2026

No registration fee is applicable. Selected candidates must confirm participation immediately; last-minute cancellations will be treated seriously.

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Applicant Format for Participation

WINTER SCHOOL TRAINING PROGRAMME ON "FRUIT BREEDING FOR ENHANCED BIOACTIVE COMPOUNDS AND STRESS RESILIENCE" FROM JANUARY 19 TO FEBRUARY 8, 2026
APPLICANT FORMAT FOR PARTICIPATION IN WINTER SCHOOL

1. Name (in block letters): .....
2. Designation:.....
3. Mobile no. and Email: .....
4. Present employer address: .....
5. Address to which reply should be sent (in block letters):.....
6. Permanent address:.....
7. Date of birth: .....
8. Sex: .....
9. Marital status.....
10. Teaching / research / professional experience (mention post held) during last 5 years
11. Present area of research and number of publications.....
12. Relevance of training to present academic and research activities.....

Signature of applicant
Place :
Date:

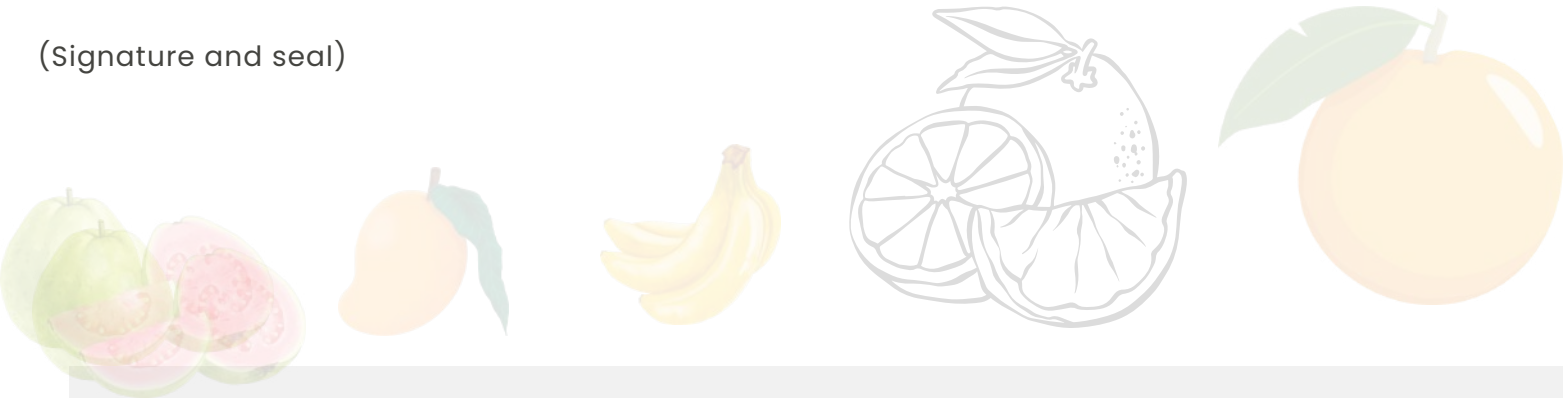
Recommendations of forwarding Institute

Signature:
Designation:
Address:
Date:

Certificate

It is certified that the information furnished by the office was found correct.

(Signature and seal)



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Important

Please send an advance copy of the application, followed by the formal approval order, to wsiari2025@gmail.com by 30.12.2025.

Correspondence should be directed to

Dr R. M. Sharma
Course Director (WS), Division of Fruits & Horticultural Technology, ICAR-Indian Agricultural Research Institute, New Delhi-110012
Mob. 7840008856

For more information contact

Co-Course Director

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Principal Scientist (FHT)
Mob. 9968183777

Course Coordinator

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Sr. Scientist (FHT)
Mob. 8826234756

Dr Chavlesh Kumar,
Scientist (FHT)
Mob. 7987644688