

# ICAR-Sponsored Short Course on

# Biotechnological and Conventional Tools for Biotic and Abiotic Stress Management

(10th February - 19th February, 2026)

Organised by

School of Agricultural Biotechnology, Punjab Agricultural University, Ludhiana-141004 (Punjab)



NIRF Rank 1st, 2025

(Among State Agricultural Universities)

#### Course Director

Dr. (Mrs.) Yogesh Vikal
Director
School of Agricultural Biotechnology

#### Course Coordinator

Dr. Ajinder Kaur Professor (Biotechnology)

#### Course Co-coordinators

Dr. Satinder Kaur Principal Molecular Geneticist

> Dr. Inderjit Singh Yadav Bioinformatician

# **Punjab Agricultural University**

Punjab Agricultural University, established in 1962, is one of India's leading institutions of agricultural education and research. Punjab Agricultural University has played a pivotal role in the Green Revolution by increasing Punjab's food production and enhancing livestock and poultry productivity. The university continues to lead Indian agriculture through modern genetics and genomics technologies, quality-testing facilities, and cutting-edge crop improvement facilities. PAU is transforming traditional farming practices by modernising farming through AI-driven precision agriculture. The university remains a symbol of progress and motivation, inspiring new generations to innovate and strengthen Indian agriculture.

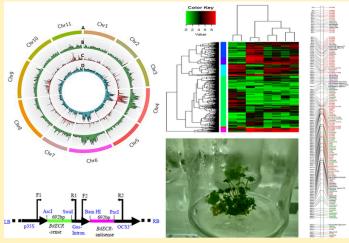
## School of Agricultural Biotechnology

The School of Agricultural Biotechnology (SAB) at PAU was among the pioneering institutes in India, beginning as a small tissue culture laboratory and evolving into a full-fledged academic and research center. Its main research thrust includes i) wide hybridization for transferring genes/traits of economical importance, ii) gene mapping and molecular breeding, iii) genome sequencing and transcriptomics, iv) tissue culture and genetic transformation, and v) RNAi-based gene silencing and genome editing. The school houses state-of-the-art laboratories for genomics research and commercial plant tissue culture.



#### **About Short Course**

The training program will emphasise integrating biotechnological and conventional breeding approaches, with a central focus on genomics-assisted alien gene introgression to enhance climate resilience and biotic stress tolerance in crops. The program will highlight breeding innovations in wheat, rice, maize, sugarcane, citrus, guava, cotton, and other crops through advanced methods of genome editing, molecular breeding, and RNAi technology. Participants will be provided with hands-on training in high-throughput DNA isolation, SSR and KASP marker development and analysis, linkage mapping and QTL analysis, genome editing workflows, qRT-PCR-based gene expression analysis, GBS data handling and remote sensing applications.



## **How to Apply**

The application form is attached with the brochure. Participants must submit the duly completed form, forwarded by the competent authority, to the Director, School of Agricultural Biotechnology, through email at  $\underline{\text{training.biotech.pau@gmail.com}}$ . The application should be accompanied by a demand draft of ₹50 drawn in favour of the Comptroller, Punjab Agricultural University, Ludhiana.

Maximum number of participants: 20

#### **Important Dates**

Last Date of Application : 10<sup>th</sup> January, 2026 Communication to the participants : 16<sup>th</sup> January, 2026 Start of Training Programme : 10<sup>th</sup> February, 2026

# Eligibility

- Master's degree in relevant discipline of Agricultural/ Allied Sciences with atleast two years of teaching/research experience.
- Working in a position not below the rank of Scientist/Assistant Professor/Lecturer/Subject Matter Specialist in the college/research institute/farms/stations recognised by ICAR.

#### **Accommodation & Travelling Allowance**

Selected participants are eligible for TA (up to 2nd AC fare by shortest route as per ICAR norms). Food and Accommodation will be provided by the organizer. No DA is admissible to the participants. The local participants are not eligible for boarding and lodging; however lunch and refreshments will be provided.

#### Climate

Ludhiana climate in February is typically pleasant, offering a transition from deep winter with warmer days and increasing sunshine. The weather is generally mild, though mornings and nights remain cool. Average high temperature is around 21° to 23° celsius, while minimum temperature typically drops to 9° celsius. Participants are advised to carry warm clothing.

# Map



### **Address for Correspondence**

Dr. (Mrs.) Yogesh Vikal,

Director, School of Agricultural Biotechnology, PAU, Ludhiana

Email: training.biotech.pau@gmail.com

Registration: Dr. Satinder Kaur, Ph: +91-9872625702

Accommodation: Dr. Gurupkar Singh Sidhu, Ph: +91-9781503780

# **ICAR-Sponsored Short Course on:**

# Biotechnological and Conventional Tools for Biotic and Abiotic Stress Management (10 February to 19 February 2026)

#### Application format for participation in training

|     | Application for mat for participation in training  |          |  |  |  |  |
|-----|--|----------|--|--|--|--|
| 1.  | Name (in block letters)  | :        |  |  |  |  |
|     |  |          |  |  |  |  |
| 2.  | Designation  | :        |  |  |  |  |
|     |  |          |  |  |  |  |
| 3.  | Present employer and address   | :        |  |  |  |  |
|     | 1 0  |          |  |  |  |  |
|     |  |          |  |  |  |  |
|     |  |          |  |  |  |  |
| 4.  | Address to which reply should  | :        |  |  |  |  |
| ••  | be sent (in block letters)   | •        |  |  |  |  |
|     | be sent (in block letters)   |          |  |  |  |  |
|     |  |          |  |  |  |  |
| 5.  | Permanent address  |          |  |  |  |  |
| э.  | refinament address   | •        |  |  |  |  |
|     |  |          |  |  |  |  |
|     |  |          |  |  |  |  |
| 6   | Date of birth  |          |  |  |  |  |
| 6.  |  | :        |  |  |  |  |
| 7.  | Sex  | <b>:</b> |  |  |  |  |
| 8.  | Marital Status   | <b>:</b> |  |  |  |  |
| 9.  | Telephone No.  | :        |  |  |  |  |
| 10. | E-mail address   | :        |  |  |  |  |
| 11. | Teaching/research/professional experience (mention post held) during last five years and |          |  |  |  |  |
|     | numbers of publications.   |          |  |  |  |  |
|     | _  |          |  |  |  |  |
|     |  |          |  |  |  |  |
|     |  |          |  |  |  |  |
|     |  |          |  |  |  |  |

12. Mention if you have participated in any research seminar, Summer/Winter/Short Course etc. during last five (5) years under I.C.A.R./ Other organizations.

#### 13. Online Payment/Transaction Details (attach copy of payment receipt)

#### 14. Academic Record

| Examination         | Discipline | Year of    | Distinctions | University |
|---------------------|------------|------------|--------------|------------|
|                     |            | graduating |              |            |
| Doctorate degree    |            |            |              |            |
| Master degree       |            |            |              |            |
| Bachelor degree     |            |            |              |            |
| Others Certificate/ |            |            |              |            |
| Diploma, etc        |            |            |              |            |

| Date:   | Signature of the Applicant: |
|---|-----------------------------|
| Place   |                             |
|   |                             |
|   |                             |
| 13. Recommendations of the forwarding authority |                             |
|   | C:                          |
|   | Signature                   |
|   | Designation                 |
|   | Address                     |
|   |                             |

### Certificate

It is certified that the information was furnished by the candidate has been checked from office record and found correct.

Signature and designation of the sponsoring authority