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Dr Omvir Singh, Principal Scientist & PI (Barley Improvement), ICAR-IIWBR, Karnal
Dr Arun Gupta, Principal Scientist, ICAR-IIWBR, Karnal
Dr Chuni Lal, Principal Scientist, ICAR-IIWBR, Karnal
Dr Sindhu Sareen, Principal Scientist, ICAR-IIWBR, Karnal
Dr Dinesh Kumar, Principal Scientist, ICAR-IIWBR, Karnal
Dr S.C. Gill, Principal Scientist & PI (Resource Management), ICAR-IIWBR, Karnal
Dr Raj Kumar, Principal Scientist, ICAR-IIWBR, Karnal
Dr Jogendra Singh, Principal Scientist, ICAR-IIWBR, Karnal
Dr Ajay Verma, Principal Scientist, ICAR-IIWBR, Karnal
Dr Rekha Malik, Principal Scientist, ICAR-IIWBR, Karnal
Dr Rajinder Singh, Principal Scientist, ICAR-IIWBR, Karnal
Dr Suman Lata, Principal Scientist, ICAR-IIWBR, Karnal
Dr Lokendra Kumar, Principal Scientist, ICAR-IIWBR, Karnal
Dr Pradeep Sharma, Principal Scientist & PI (Crop Protection), ICAR-IIWBR, Karnal
Dr Anil Khippal, Principal Scientist, ICAR-IIWBR, Karnal
Dr Sunil Kumar, Principal Scientist & PI (Quality & Basic Science), ICAR-IIWBR, Karnal
Dr Sonia Sheoran, Principal Scientist, ICAR-IIWBR, Karnal
Dr Hanif Khan, Principal Scientist, ICAR-IIWBR, Karnal

Conveners

Dr Satish Kumar, Senior Scientist, ICAR-IIWBR, Karnal
Dr Charan Singh, Senior Scientist, ICAR-IIWBR, Karnal
Dr O.P. Gangwar, Senior Scientist, ICAR-IIWBR, RS, Flowerdale, Shimla
Dr Vikas Gupta, Senior Scientist, ICAR-IIWBR, Karnal
Dr Pramod Prasad, Senior Scientist, ICAR-IIWBR, RS, Flowerdale, Shimla
Dr O.P. Gupta, Senior Scientist, ICAR-IIWBR, Karnal
Dr Ravindra Singh Shekhawat, Senior Scientist, ICAR-IIWBR, Karnal
Dr Santosh Kumar Bishnoi, Senior Scientist, ICAR-IIWBR, Seed Farm, Hisar
Dr Rinki, Senior Scientist, ICAR-IIWBR, Karnal
Dr Anuj Kumar, Senior Scientist, ICAR-IIWBR, Karnal
Dr Vanita Pandey, Senior Scientist, ICAR-IIWBR, Karnal
Dr Rakesh Kumar Bairwa, Scientist, ICAR-IIWBR, Karnal
Dr Neeraj Kumar, Scientist, ICAR-IIWBR, Karnal
Dr Charu Lata Sharma, Scientist, ICAR-IIWBR, Karnal
Dr Jayanth Kallugudi, Scientist, ICAR-IIWBR, RS, Flowerdale, Shimla

Organizing Committee

Chairman

Dr Ratan Tiwari, President SAWBAR & Director, ICAR-IIWBR, Karnal

Co-Chairmen

Dr O.P. Ahlawat, Principal Scientist & PI (Crop Improvement), ICAR-IIWBR, Karnal

Dr R.S. Chhokar, Principal Scientist, ICAR-IIWBR, Karnal

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Map of Conference Venue



Tourist Places Near the Conference Venue

Karnal, Kurukshetra and Amritsar



**Church Tower
Karnal**



**Karan Lake
Karnal**



**Noor Mahal Palace
Karnal**



**Golden Temple
Amritsar**



Kurukshetra



Karnal Haveli



Society for Advancement of Wheat & Barely Research (SAWBAR)

Karnal-132 001, Haryana

<http://sawar.in>

ICAR-Indian Institute of Wheat & Barley Research (IIWBR)

Karnal- 132 001, Haryana

<http://iiwbr.org.in>



National Conference

on

Food Security Challenges and Innovative Mitigation Strategies

February 25 – 27, 2026



Organized by
Society for Advancement of Wheat & Barely Research (SAWBAR)

Karnal-132 001, Haryana

<http://sawar.in>

&

ICAR-Indian Institute of Wheat & Barley Research (IIWBR)

Karnal- 132 001, Haryana

<http://iiwbr.org.in>

VENUE

ICAR-Indian Institute of Wheat & Barley Research (IIWBR)

Karnal- 132 001, Haryana

About the Conference

The Conference aims to provide an interdisciplinary platform to address the multifaceted and interconnected challenges threatening food security. With the national population projected to reach 1.66 billion by 2050, ensuring access to safe, nutritious, and sufficient food has become an urgent national priority. The conference will critically examine the impacts of climate-induced abiotic stresses—rising temperatures, altered precipitation, and extreme weather events—as well as the resurgence of pests and pathogens, and will emphasize strategies for building climate-resilient crop production systems. It will explore cutting-edge advances in genomics, molecular breeding, and multi-omics technologies integrated with high-throughput phenotyping to accelerate trait discovery and varietal development. Next-generation genome editing tools like CRISPR/Cas and synthetic biology approaches will be highlighted for their potential to improve stress tolerance, yield, nutrition, and agroecosystem functionality. The role of artificial intelligence, machine learning, Internet of Things, and big data analytics in driving precision agriculture and real-time decision-making will be discussed, alongside strategies for sustainable management of soil, water, and rhizospheric health. The conference will also rigorously address socio-economic and policy barriers—including poverty, gender inequality, insecure land tenure, and weak market linkages—that marginalize smallholders and impede food system transformation. Emphasis will be placed on inclusive innovation ecosystems, participatory governance, and equitable technology deployment. By bridging advancements in biological sciences, digital agriculture, environmental sustainability, and social science research, the conference aspires to catalyze scientific convergence and build resilient, sustainable, and equitable food systems, thereby paving the way for long-term food and nutritional security in India.

About SAWBAR

SAWBAR, headquartered at ICAR-IIWBR, Karnal, was established in 2007 with the aim of bringing together researchers and stakeholders focused on wheat and barley improvement. Registered under the Haryana & Regulation of Societies Act – 2012, its objectives include promoting high-quality scientific exchange through conferences, publications, training programs, and workshops; facilitating collaborations and consultancy; and recognizing outstanding contributions through annual awards. The Society currently comprises 364 life members and 553 annual and student members, forming a national (and increasingly international) platform for cereal research discourse. SAWBAR also publishes the Journal of Cereal Research (formerly *Wheat & Barley Research*), which disseminates original scientific articles, technical news, and developments in wheat and barley sciences. Through its programs, SAWBAR actively fosters innovation, collaboration, and knowledge dissemination aimed at enhancing productivity, resilience, and sustainability in wheat and barley systems across India and beyond.

About ICAR-IIWBR

ICAR-IIWBR, located in Karnal, Haryana, is the nodal institute in India for wheat and barley research under ICAR, New Delhi. It coordinates national research and development activities on these two staple cereals through the All India Coordinated Research Project (AICRP), playing a central role in varietal development, seed production, and technology dissemination. To date, the institute has contributed to the development and release of 546 wheat and 139 barley varieties, catering to the diverse agro-climatic regions of the country. ICAR-IIWBR operates a decentralized seed production system in collaboration with ICAR-NDRI, Karnal; ICAR-IIFSR; and ICAR-RS-CPRI, Modipuram, producing over 40,000 quintals of quality seed over the past five years. The major research thrusts of ICAR-IIWBR include enhancing crop productivity, stress tolerance, and nutritional quality. With state-of-the-art laboratories and advanced phenotyping and genotyping platforms at its headquarters in Karnal and regional centre in Shimla, the institute conducts cutting-edge research in various aspects of crop improvement, protection, and production. It also maintains one of India's largest and most diverse

collections of wheat and barley germplasm. As part of the IARI teaching hub, the institute offers undergraduate and postgraduate education in agricultural sciences. ICAR-IIWBR is a key centre for capacity building, regularly organizing training programmes, workshops, and farmer outreach activities. It collaborates with national and international institutions such as CIMMYT and ICARDA for germplasm exchange and joint research initiatives. The institute also provides real-time disease surveillance and expert advisories, contributing significantly to national food security. In addition, it actively promotes climate-resilient and sustainable agricultural practices and disseminates scientific knowledge through publications, technical bulletins, and crop production guides.

Thematic Sessions

- 1. Climate Change and Crop Resilience
- 2. Advanced Genomics and Molecular Breeding
- 3. Genome Editing and Synthetic Biology in Food Crops
- 4. Digital Agriculture: AI, IoT, and Big Data Analytics
- 5. Soil-Plant-Water-Climate Interface for Sustainable Agriculture
- 6. Socio-economic and Policy Challenges in Achieving Food Security

Resource Persons



Dr Jagdish Rane
Director
ICAR- CIAH, Bikaner



Prof. N.K. Singh
JC Bose National Fellow
ICAR-NIPB, New Delhi



Dr Chinnusamy Viswanathan
Joint Director (Research)
ICAR-IARI, New Delhi



Dr Pushpendra P. Singh
Project Director, ANNAM.AI
& DST iHub – AwaDH, IIT Ropar



Dr R.K. Yadav
Director
ICAR-CSSRI, Karnal



Dr Pratap Singh Birthal
Director
ICAR-NIAP, New Delhi

Call for Abstracts

Abstracts are invited from individuals engaged in research, development, marketing, finance, export organizations, and industries related to food crops. All submitted abstracts will be evaluated by a panel of eminent professionals for their suitability for oral or poster presentation. Authors are requested to specify the relevant thematic area under which their paper should be considered. All accepted abstracts will be published in the conference proceedings, and selected abstracts will be developed into full-length articles for publication in a special issue of the Journal of Cereal Research (NAAS 2024 rating: 5.05), published by SAWBAR. Abstracts should be typed and must be at least 500 words in length. Each registered participant will be allowed only one oral or poster presentation as the first author, subject to selection by the technical screening committee; however, individuals may be listed as co-authors on abstracts submitted by other registered delegates.

Format for submission of paper

- + Paper should not exceed 8 (eight) A4 Size sheets
- + Font: Times New Roman
- + Margins: Left = 1.5 Inch, Right, Top & Bottom = 1.0 Inch

- + Abstract: 11 Point Italic with single line spacing to be placed after title and other details
- + Key words: should not exceed 6 (six)
- + Text: 12 Point normal justified, Para heading: 12 Point Bold, Spacing = 1.5 lines, Figures to be inserted in jpg Format
- + At least one of the authors is required to register and attend the conference for presenting the paper
- + Maximum number of authors is 4 (Four)
- + E-mail of the corresponding author should be given

Abstract Submission

Abstracts can be submitted only online by uploading the files on the conference website. Further details are available on the official SAWBAR website: <https://sawbar.in>

Awards

Best Poster and Oral presenters of each session will be felicitated with awards. Winners will receive certificates and mementos.

Registration

All participants are required to register as per the schedule and pay the registration fee using the link provided at the official SAWBAR website: <https://sawbar.in>

Registration fees include

- 1. Conference kit
- 2. Conference lunch and refreshments
- 3. Transport facility
- 4. Participation certificate
- 5. Abstract publication in conference proceedings
- 6. Access to keynote sessions

Important Dates	
Abstract submission deadline	Dec. 31, 2025
Abstract acceptance notification	Jan. 9, 2026
Early bird registration deadline	Dec. 31, 2025
Registration final deadline	Jan. 15, 2026
Conference	Feb. 25-27, 2026

Participation Fees (₹)

Category	On/before deadline		After deadline	
	SAWBAR members	Non-SAWBAR members	SAWBAR members	Non- SAWBAR members
Delegate	4000	4500	5000	5500
Research Scholar/SRF	2000	2500	2500	3000
Student	1000	1500	1000	1500
Corporate delegate	8000	10000	10000	12000
Accompanying person	2500		2500	

Sponsorship

We welcome sponsorship for the conference from various organizations, professionals, manufacturers, and suppliers under the following categories. Platinum sponsors will receive complimentary advertising space on banners, posters, and a full-page colour advertisement in the souvenir. Gold sponsors will receive advertising space on banners, posters, and a full-page black-and-white advertisement in the souvenir. Silver sponsors will receive advertising space on banners, posters, and a half-page black-and-white advertisement in the souvenir.

Bronze sponsors will receive a half-page black-and-white advertisement in the souvenir. Additionally, separate sponsorship opportunities are available for sponsoring lunch and dinner during the conference.

Type of sponsorship	Sponsorship Amount (₹)	Delegate number*
Platinum	2,00,000	5
Gold	1,00,000	3
Silver	50,000	2
Bronze	25,000	1

*Free registration for conference

Venue & Weather

The conference is scheduled to take place at ICAR-IIWBR, Karnal, which is located 132 km north of Delhi along National Highway No. 1 (Grand Trunk Road). In February, the average daily temperature typically ranges from a high of 25°C to a low of 9°C.

Accommodation

The registration fee does not include accommodation expenses. Participants may arrange their stay in guest houses, hostels, or hotels of their choice on a first-come, first-served basis. Information about available tariffs can be found on the respective hotel websites.

Hotel	Contact Details
Hotel Noor Mahal (5Star) Sector 32, Karnal The Vivaan Hotel & Resorts, 134 Milestone, NH-1, Karnal	Mob: 9996787889 E-mail: sales@noormahal.in Website: www.noormahal.in Mob: 9896010000 E-mail: reservation@thevivaan.com Website: https://thevivaan.com
Hotel Jewels (4Star) Karnal	Mob: 8572877709 E-mail: hotel_jewels@rediffmail.com Website: www.hoteljewels.in
Hotel Prem Plaza (3Star) Railway Road, Karnal	Mob: 8395900023 Email: info@premplaza.com Website: www.premplaza.com
Hotel Leela Grande (3Star) Kunjipura Road, Karnal	Mob: 9034034121 Email: info@leelagrandehotel.com Website: www.leelagrandehotel.com
Hotel Grace Model Town, Karnal	Mob: 9416012321 E-mail: hotelgracekarnal@gmail.com Website: www.hotelgracekarnal.com
Hotel Anand Regency Mughal Canal, Karnal	Mob: 9671656591 E-mail:anandregency1@gmail.com

Advisory Committee

Chief Patron

Dr Mangi Lal Jat, Secretary, DARE & DG, ICAR, New Delhi

Patron

Dr D.K. Yadav, DDG (Crop Sciences), ICAR, New Delhi

National Organizing Committee (NOC)

Dr R.S. Paroda, Former Secretary, DARE & DG, ICAR, New Delhi

Dr T. Mohapatra, Chairman, PPVFRA, New Delhi

Dr P.L. Gautam, Chancellor, RPCAU, Pusa, Bihar

Dr Joykrushna Jena, DDG (Education), ICAR, New Delhi

Dr S.S. Gosal, Vice-Chancellor, PAU, Ludhiana

Dr B.R. Kamboj, Vice-Chancellor, CCSHAU, Hisar

Dr Ch. Srinivasa Rao, Director, ICAR-IARI, New Delhi