NATIONAL CONFERENCE ON ARID HORTICULTURE

Shaping Sustainability for the Future through Biodiversity and Climate Resilience

18–20 February, 2026

Organized by

First Circular

ICAR–Central Institute for Arid Horticulture, Bikaner, Rajasthan

In collaboration with:

Indian Society for Arid Horticulture (ISAH), Bikaner

Email: ***ncah2026@gmail.com***

PREAMBLE

Arid and semi-arid regions, characterized by scarce rainfall, extreme temperatures, and fragile ecosystems, present unique challenges to agricultural and horticultural development. Yet, these landscapes also hold immense potential—rich in native biodiversity, adaptive crop species, and traditional knowledge systems that can guide sustainable resource use. In the face of accelerating climate change, the need to harness this potential through innovative, resilient, and ecologically sound horticultural practices has never been greater. The National Conference on Arid Horticulture aims to bring together researchers, policymakers, farmers, entrepreneurs, and other stakeholders to share insights, scientific advancements, and success stories that strengthen the horticultural base of arid regions. By emphasizing biodiversity conservation, climate-smart technologies, and sustainable production systems, the conference seeks to chart a course toward food, nutritional, and livelihood security in these challenging environments. Through collaborative dialogue and knowledge exchange, this event aspires to shape a sustainable future, where arid horticulture not only survives but thrives—building resilience, enhancing productivity, and fostering harmony between people and nature.

OBJECTIVES

- To promote climate-resilient horticultural practices that enhance productivity in arid and semi-arid regions.
- To strengthen biodiversity-based approaches for sustainable horticulture and ecological stability.
- To foster collaboration among researchers, policymakers, and stakeholders for developing future-ready arid horticulture strategies.

ICAR–CIAH, BIKANER

The ICAR–Central Institute for Arid Horticulture (CIAH), Bikaner, has been at the forefront of research, development, and dissemination of technologies for harnessing the potential of arid horticultural crops. Through scientific innovation, conservation of indigenous germplasm, and promotion of climate-resilient production systems, the institute continues to play a pivotal role in transforming the arid landscapes of India into hubs of sustainable horticultural growth. In this context, the National Conference on Arid Horticulture "Shaping Sustainability for the Future through Biodiversity and Climate Resilience" serves as a platform to bring together researchers, policymakers, entrepreneurs, and farmers to deliberate on current challenges, emerging opportunities, and innovative strategies for the holistic development of arid horticulture. The conference aims to foster collaborative efforts toward ensuring food and nutritional security, livelihood enhancement, and environmental sustainability in the arid zones of the country.

INDIAN SOCIETY FOR ARID HORTICULTURE

The Indian Society for Arid Horticulture (ISAH), established in 2004 and registered under the society's registration act (Reg. No. 128/B/03-04), operates from ICAR-Central Institute for Arid Horticulture, Bikaner, Rajasthan. The society aims to promote the development of arid and semi-arid horticulture by fostering collaborations, organizing seminars, publishing scientific literature, and conducting training and consultancy services.

CONFERENCE THEMES

It also facilitates the recognition of distinguished contributions of scientists and stakeholders in the field of arid and semi-arid horticulture.

1. **Genetic Resources, Field Gene Banks, and Genomics for Improvement of Indigenous and Underutilized Arid and Semi-Arid Horticultural Crops**
   This theme focuses on biodiversity and conservation of threatened germplasm, identifying stress- tolerant genetic resources and strengthening the breeding pipeline for arid and semi- arid crops. It highlights the biotechnological application, genomic and multi-omics tools to pinpoint key genes for resilience and quality traits, while promoting improved rootstocks, advanced breeding lines, resilient hybrids, and the use of underutilized crops for diversification and nutritional security
2. **Scaling-Up of Quality Planting Material and Seeds**
   This theme focuses on expanding reliable planting material systems through tissue-culture-based micropropagation, improved propagation techniques for native crops, and strengthened commercial seed multiplication. It highlights entrepreneurship and rural employment, supported by industry partnerships, PPP models, and FPO-led value-chain development.
3. **Integrating Climate-Resilient Arid and Semi-Arid Crops into the Agri-Food System**
   This theme focuses on developing horticulture-based cropping systems tailored to arid ecologies, introducing soilless cultivation for safe and residue-free produce, and strengthening traceability and post-harvest frameworks to ensure food safety and quality assurance across the agri-food chain.
4. **Health, Nutrition, and Product Diversification**
   This theme emphasizes identifying bioactive compounds from desert crops, advancing bioprospecting and nutraceutical-led product development, and enhancing the role of women and tribal communities in processing and value chains. It also highlights ecosystem-level evaluations to understand the socio-economic and environmental impacts of emerging technologies.
5. **Inclusion and Impact Analysis**
   This theme promotes gender and social inclusion by empowering women and tribal groups across production and marketing activities. It also supports rigorous impact assessments to gauge the adoption, effectiveness, and sustainability of technologies, while encouraging circular economy models within arid agri-food systems.

6. **Plant Architecture and Canopy Management**
   This theme focuses on optimizing training and pruning systems to develop compact, mechanization-friendly canopies and modifying crop phenology to improve productivity, fruit quality, and harvest efficiency under arid conditions.
7. **Horticulture-Based Cropping Models and Input Management**
   This theme emphasizes integrated cropping modules built around indigenous crops, cereals, pulses, millets, livestock, and emerging enterprises to enhance resilience and income diversification. It also highlights improved PoPs, mechanization in horticulture crops, strategic use of PGRs, optimized input management, carbon credit and innovative pollination and fruit-protection techniques.
8. **Conventional and AI-Driven Precision in Horticulture**
   This theme promotes sensor-based smart mechanization, AI-driven decision-support tools for economic and environmental sustainability, and the development of agri-horti voltaic systems that integrate renewable energy with horticultural production.
9. **Pre- and Post-Harvest Innovations**
   This theme focuses on biosensor-enabled detection of spoilage and quality changes, innovative packaging solutions that enhance shelf life and consumer appeal, and targeted bioprospecting of arid flora for value addition and product development.
10. **Integrated Plant Health Management in Arid and Semi-Arid Horticulture**
    This theme focuses on climate-resilient pest and disease management through early detection, integrated pest management, biocontrol-based solutions, and safe pesticide practices. It also highlights surveillance, forecasting, and digital diagnostic tools to address emerging threats and ensure healthy, productive arid horticultural systems.

Abstract Submission

The abstract should be prepared in MS word, 12-point font not exceeding 300 words. It must contain a clear title, name and affiliation of the author(s). The name of the presenting author should be underlined and e-mail should be given at the end. There should not be any sub- headings, figures, tables or references in the abstract. The detailed specifications for preparing the poster paper size would be mailed to corresponding authors whose abstracts are accepted for presentation. All keynote, invited, lead lectures, and abstracts will be accepted only through the ICAR–CIAH, Bikaner website starting from 16.12.2025. In case of any technical difficulty, submissions may be emailed to: ncah2026@gmail.com

Important Dates

- Abstract submission deadline: 15 January 2026
- Acceptance notifications: 20 January 2026

Presentation guidelines

Presentations

Presentation in both oral (Power Point) and poster modes will be organized to accommodate maximum number of contributions. The fonts selected for Power Point format should be legible from a distance of 10-12 m on a 2 m x 3 m screen. Overcrowding of data should be avoided for the sake of clarity. Posters should preferably be on a 60 cm x 90 cm space and readable from 2 m distance. Each poster should contain the title, author(s) name and affiliation(s) followed by brief introduction, objectives, methodology, results and conclusion. Technical session wise best oral/ poster presentation will be awarded.

Success Stories

Formatting requirements: Title of the success story, name, address and telephone number of the farmer / farmer organization/ farmer group. One photograph and length of the case study should be limited to 800 words. Times New Roman and font size 12. Author(s) name (s) bold and affiliation(s) normal font.

Full length paper

Full length paper should be submitted for considering its publication in the forthcoming issue of' Indian Journal of Arid Horticulture through the link only. The link for full length paper submission is: https://epubs.icar.org.in/index.php/IJAH/user/register

Registration details

Category	Till 31 Jan 2026	After 31 Jan 2026
ISAH Members	₹5000	₹6000
Non-members (Academicians/Scientists)	₹6000	₹7000
Students/Research Fellows	₹1200	₹1500
Industry/ Private Sector/FPOs/NGOs etc.	₹7000	₹8000
Farmers/	₹500	₹600
Foreign Delegates	USD 100	USD 110
Accompanying Person	₹1500	—

Accommodation

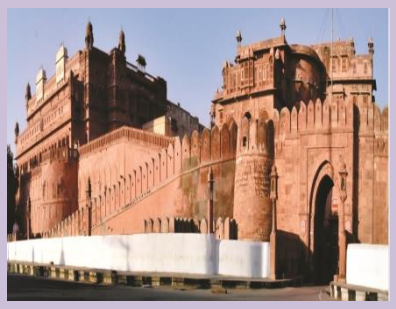
There are sufficient accommodations available with guest houses of ICAR Institutes, SAUs. Many hotels and private guest houses are also available in Bikaner. Request for hotel boarding and approximate tariff for hotel accommodation has to be sent with registration form/mail. The allotment of rooms will be on a “first-come, first-serve” basis. Single & Double bed accommodations are available in hotels in the range of Rs 2000-8000.

How to reach Bikaner

Nal Airport, Bikaner away 17 kilometers from conference venue and flights connect to Jaipur International Airport and Delhi airport. Bikaner and Lalgarh Junction are well connected to Delhi, Jaipur, Kolkata, Mumbai, Jodhpur, and Ahmedabad. Conference venue is 12 km from the Bikaner junction and 8 Km from Lalgarh junction.Bikaner is well connected via NH 62 (Jodhpur–Ganganagar) and NH 11 (Jaipur–Bikaner). Conference venue is located 8 km from the Bus Stand on the Ganganagar Highway

WEEKEND DESTINATION

Karni Mata Temple



Junagarh Fort

Sam Sand Dune

Sam Sand dunes: A breathtaking expanse of rolling golden dunes, offering sweeping desert vistas, vibrant cultural performances, and the quintessential Thar experience that captures the spirit and timeless beauty of Rajasthan's arid landscapes.

Junagarh Fort: A magnificent fort complex showcasing grand palaces, ornate courtyards, and exquisite artwork that narrates the opulent history of Bikaner's rulers.

Lalgarh Palace: A striking red-sandstone palace built in Indo-Saracenic style, known for its royal charm, landscaped gardens, and the on-site museum.

National Research Centre on Camels: A one-of-a-kind institute where visitors can enjoy camel rides, explore the camel museum, and learn about the region's camel-breeding heritage.

Karni Mata Temple (Deshnok): Famous for its revered rats, this unique temple offers a deeply cultural experience and is a major spiritual landmark of Rajasthan.

Ganga Singh Museum: A treasure trove of ancient artifacts, weapons, paintings, and manuscripts that reflect the artistic and historical richness of Rajasthan.

Bhandasar Jain Temple: Renowned for its vibrant frescoes, intricate carvings, and colorful interiors, this temple is a masterpiece of Jain architecture.

Rampuria Havelis: A stunning cluster of historic mansions known for their elaborate facades and traditional craftsmanship perfect for heritage walks and photography.

Souvenir and Book of Abstracts

A souvenir will be released out at the seminar, highlighting the themes, keynote lectures, messages and advertisements. The book of abstract will be a compilation of the abstract of the research findings of the registered participants only.

Sponsorship & Advertisement

Gold Sponsorship

Rs 2,00,000/-
Sponsors will get a 10-15 minute speaking slot, full-page advertisement, souvenir acknowledgements, and promotional material inclusion, 1 free stall, and free registration for 2 members.

Silver Sponsorship

Rs 1,50,000/-
Sponsors will get a 05-10 minute speaking slot, half-page advertisement, souvenir acknowledgements, promotional material inclusion, 1 free stall, and free registration for 1 members.

Bronze Sponsorship

Rs 1,00,000/-
Sponsors will get a half-page advertisement, souvenir acknowledgements, and 1 free stall, and free registration for 1 member.

Souvenir Advertisements

Back cover (Colour): ₹50,000
Inside Back cover (Colour) ₹25,000
Full page (Colour): ₹10,000
Half page (Colour): ₹5,000
Exhibition stall: ₹10,000

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