





SPARC-MoE Sponsored International Training cum Workshop

Understanding Environmental Influences on Moringa Growth, Seed Quality, Antioxidant and Tannin Properties

25th November- 08th December, 2025

Organized By:

Department of Biochemistry
College of Basic Sciences & Humanities (COBS&H)
CCS Haryana Agricultural University, Hisar-125004
Haryana, India

- Scan to Register
- For UG/PG Students
- Limit to 40 Participants
- Registration Deadline: 04th Nov. 2025



Click Here to Register



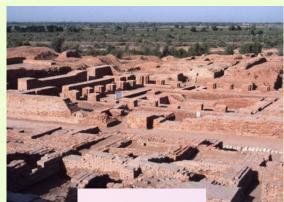




About the University

Chaudhary Charan Singh Haryana Agricultural University located at Hisar in the Indian state of Haryana, named after India's seventh Prime Minister Chaudhary Charan Singh, is one of the biggest agricultural universities of Asia that has made a special niche at global level. The University is a leader in agricultural research, in developing new technologies like conservation agriculture, direct seeded rice, herbicide resistance management for overall improvement in the crop productivity of the state. With the evolution of 305 varieties of various crops including cereals, pulses, oilseeds, fiber and sugar crops, vegetables & fruit crops

CCSHAU has been constantly upgrading itself by embracing new technologies and entering partnerships with premier national and international institutions. MoUs/agreements have been signed for collaboration with international institutes in USA, UK, Australia, Czech Republic, Poland, New Zealand, Philippines, Kazakhstan and Tanzania to pave the way for scientific and academic excellence. The University is contributing significantly towards achieving nutritional security, sustainability, wellness and is open for new partnerships in research, teaching and extension.





About the City





Once known as Hisar-e-Firoza by its founder ruler Firoz Shah Tughlaq in the year 1354 AD with several historical buildings such as fort, palaces, tombs, mosques, gates and gardens. Some of the monuments are still in good state of preservation. It is situated 180 km west to the National Capital Delhi at NH 09 in the state of Haryana and it is well connected by rail/road with all the nearby major cities. The nearest airport is Indira Gandhi International Airport, New Delhi. Several educational institutions including reputed universities like CCS Haryana Agricultural University, Guru Jambheshwar University of Science & Technology and Lala Lajpat Rai University of Veterinary & Animal Sciences are established in Hisar apart from ICAR institutes like CIRB, NRC Equines and Northern Region Farm Machinery Training & Testing Institute. Around the Hisar city, ancient site of Rakhigarhi, one of the five known biggest townships of Harappan civilization on Indian sub-continent, and ancient site of Agroha, traditionally believed to be the Capital of the legendry king Maharaja Agrasena can be visited. The industrial policy of the government has attracted large number of entrepreneurs and presently it is also known as the Steel City of Haryana.

Climate

The climate of Hisar owes to its continental location on the outer margins of the south-west (SW) monsoon region. It has tropical monsoonal climate and is characterized as arid type of climate. The weather at Hisar (Haryana) in November-December month remains cool. The maximum temperature ranges from 21 to 25°C and minimum temperature from 6 to 8°C. Light fog may appear in morning and evening time during first fortnight of December. Therefore, light winter clothes are required.

Workshop Highlights

- Duration: 14 days (25th November to 8th December 2025)
- Organizers: Departments of Biochemistry and Seed Science Technology, CCS HAU, Hisar
- Sponsored: SPARC-MHRD, GOI
- Theme: Understanding
 Environmental Influences on
 Moringa Growth, Seed Quality,
 Antioxidant and Tannin Properties

Key Learning Modules

- Introduction to Moringa oleifera cultivation and its multifaceted uses.
- Seed quality analysis— purity, germination, vigour, viability.
- Understanding tannin properties and antioxidant potential in Moringa.
- Environmental stress effects (cold, salinity, drought) on plant physiology.
- Correlation of environmental data with biochemical and seed quality parameters.

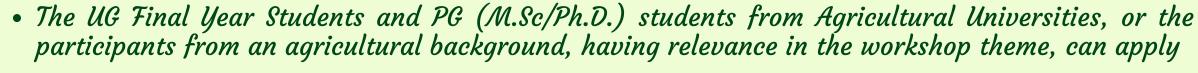
Hands-on Practical Sessions

- Seed quality evaluation and germination testing.
- Quantification of total phenolic and flavonoid content.
- Enzyme assays
- Determination of ascorbate, glutathione, carotenoids.
- Use of advanced instruments: FTIR, HPLC, AAS, Microwave Digestion System, ELISA, PSA, Electrophoresis.



Who Can Apply





• The students who wish to apply have to submit a consent form duly signed by the head of the



- respective department (attached with the brochure) during the online registration.
- For online registration, click here or scan the QR code and fill in the details.

CLICK HERE

• The selected participants will be informed via WhatsApp or registered email By 7th November 2025

Registation Fee & Accomodation

Convener

Dr. Rajbir Garg

Director of Research

- There is no Registration Fee for participation in the workshop.
- Accommodations will be provided to the participants on request in Hostels at the university campus

Important Dates

• Last Date to Apply : 04/11/2025

• Selection announcement: 07/11/2025

• Event Date: 25/11/2025 to 08/12/2025

ORGANIZING COMMITTEE

Chief Patron



Prof. B. R. Kamboj **Hon'ble Vice-Chancellor CCS Haryana Agricultural University, Hisar**

Convener



Dr. Rajesh Gera Dean, College of Basic Sciences & Humanities **CCS Haryana Agricultural University, Hisar**

CCS Haryana Agricultural University, Hisar

SPARC Project Investigators & Course Directors



Dr. Jayanti Tokas **Course Director cum PI** CCS HAU, Hisar, India



Dr. Axay Bhuker **Course Co-Director cum Co-PI** CCS HAU, Hisar, India

Advisory Committee



Dr. Keshavulu Kunusoth (Advisor) **ISTA President and Director of Telangana State Seed & Organic Certification Authority**



Dr. Rabibrata Mukherjee (Advisor) **National Coordinator, SPARC and Dean, Sophisticated Research Facilities IIT Kharagpur**



Dr. Craig McGill **Course Director cum Pl** Massey University, New Zealand



Dr. Penny Back Course Co-Director cum Co-PI Massey University, New Zealand

Organizing Team

Dr. Sushil Nagar Dr. Neeraj Kharor

Dr. Babita Rani Dr. Punesh Sangwan Dr. Ajay Pal

Dr. Nisha Kumari

Dr. Shiwani Mandhania

CONTACT US





+91-8708100238 +91-7535850005



sushilnagar@hau.ac.in hodbiochem@hau.ac.in



SPARC-MoE Sponsored International Training cum Workshop

Understanding Environmental Influences on Moringa Growth, Seed Quality, Antioxidant and Tannin Properties

25th November- 08th December, 2025

Student Consent Form

| Name of the Student: | - |
|--|----------------------------|
| Contact Number: | _Email: |
| Admission number: | _ Degree Programme |
| Department: | _University |
| | |
| | |
| | (Signature of the Student) |
| Certificate from the Department | |
| Ms./Mr is hereby nominated for participation in the 14 days SPARC | |
| Sponsored International Training cum Workshop entitled "Understanding Environmental Influences on | |
| Moringa Growth, Seed Quality, Antioxidant and Tannin Properties" from November 25^{th} to December 08^{th} , | |
| 2025 being organized by Department of Biochemistry, COBS&H, CCS Haryana Agricultural University, Hisar | |
| Haryana-125004. If, he/she is selected for the training, the Department will allow to attend training. | |
| | |
| | |
| | |
| (Major Advisor) | (Head of the Department) |
| | |