



**Indian Society for Plant Physiology West Zone Seminar  
on**

# **INNOVATIVE APPROACHES FOR SUSTAINABLE AGRICULTURE UNDER CHANGING CLIMATES**

**December 22 – 23, 2022**

**Venue: Central Examination Hall, NAU, Navsari**



**Organized by**  
**Department of Plant Physiology**  
**N. M. College of Agriculture, Navsari**  
**and**  
**Indian Society for Plant Physiology, New Delhi**  
**In association with**  
**Climate Change Department, Government of Gujarat**

## About ISPP

The Indian Society for Plant Physiology (ISPP), established in 1958, is one of the oldest academic society in India. The society has been serving the cause of research and education in the field of Plant Physiology and allied disciplines of agriculture. The society is based at National Agriculture Science Centre of Indian Council of Agricultural Research (ICAR), New Delhi. The society is a member of Global Plant Council, a coalition of plant and crops societies from across the globe. The main focus of the society is to bring plant scientists together to work synergistically towards solving the pressing problems facing mankind and to generate a critical mass to provide a strong platform for deliberations on important issues of agricultural research, education, extension and presenting views of the scientific community as policy inputs to planners and decision makers at national/ international levels. To achieve this, the society organizes and supports national and international conferences, seminars, symposia, workshops and brainstorming sessions on important issues of plant biology and agricultural sciences.

## About Seminar

The 2030 Agenda for Sustainable Development puts forward a broad and ambitious agenda for global action on sustainable development. A growing global population and changing diets are driving up the demand for food and nutritional security which is further aggravated by the changing climate as agriculture is more vulnerable and production and productivity are struggling to keep up as crop yields level off in many parts of the world, including India. The tremor of changing climate is felt in agriculture in terms of reducing crop yields, the nutritional quality of major cereals, and lowering livestock productivity as well as shifting of agro ecosystem boundaries across the globe. So, it is the high time to explore the innovative ideas for another quantum jump in the food production which already has been on plateau in many areas. To address this, well planned strategy synchronizing the research of basic and applied science to fine tune the technologies of yesteryears in the present context is need of the hour. Mitigation of the heat, salinity, flood and drought stress; modifying crop management practices; improving water management; adopting new farm techniques; ensuring balanced plant nutrition; employing denuded lands for increasing the cropping area; etc are potential area to knock to enhance agriculture productivity. Plant physiologists have greater role to play in elucidating various basic processes and functions in crops such as photosynthesis, assimilate partitioning, water use efficiency, nutrient use efficiency, tolerance to environmental stresses, etc and lead the much-needed overall explication. With the availability of biotechnological techniques it is possible to develop genetically modified crops with novel traits to improve crop productivity, quality and tolerance to a biotic and biotic stresses. Plant physiologists in an interdisciplinary association with biotechnologists, agronomists, pathologists, entomologists and breeders may help not only to augment and ensure the food production and nutritional security to the ever-growing population but to mitigate the impact of climate stress on agriculture and allied sectors. In this context, the Zonal Seminar on “Innovative approaches for sustainable agriculture under changing climate” while reviewing the contributions of plant physiology in agriculture, forestry, horticulture, medicine and plant molecular biology will focus on challenges which confront crop scientists in general and physiologists in particular. Therefore, it is expected that plant scientists and academics from various universities as well as research institution across the country would participate and exchange there meaningful research outcomes and share their views on aforesaid theme

## About NAU, Navsari

The Navsari Agricultural University, Navsari campus is located 3 km to the West of Navsari City. The Campus houses various graduate and postgraduate colleges in faculties of Agriculture/Forestry/Horticulture and Agribusiness Management. The NAU has made remarkable progress in Education, Research and Extension Education since its inception. Navsari is a district place in Gujarat and easily approachable by road, rail and air from all major cities of India. It is 38 km away from Surat, a major industrial corridor connected by road and railways. The nearest airport is Surat which is 40 km from Navsari. The 241 miles long Salt March taken up by Mahatma Gandhi in 1930 culminated at Dandi a coastal village 13 km to the West of Navsari where National Salt Satyagraha Memorial located at Dandi.

## Technical themes

- Climate change and crop productivity
- Abiotic and biotic stresses impact and management
- Photosynthesis and productivity
- Plant nutrition and applications
- Plant Growth Regulators and crop yield
- Physiology of flowering and Seed physiology
- Plant metabolism and Biofortification
- Physiology of horticultural, forestry, medicinal and plantation crops
- Post-harvest physiology
- Plant Biotechnology and Tissue culture for crop improvement
- Natural resources, biodiversity, climate change and simulation modelling

## Abstract

The seminar will feature invited talks, oral and poster presentations on above mentioned themes. Participants are requested to send abstract not exceeding 250 words in MS word (single space) with Times New Roman Font size 12 on Email [isppwz2022@gmail.com](mailto:isppwz2022@gmail.com) on or before **December 5, 2022**. It should contain title, name(s) of author(s) followed by their affiliation and e-mail address of corresponding author. The name of author presenting paper must be underline.

## Presentation Guidelines

**Invited lectures:** There will be invited lectures by different scientists from renowned institutions and university.

**Oral presentation:** The oral presentation of contributory papers will be restricted to 7 minutes duration. Participants are requested to follow time limit and prepare their presentations accordingly in MS PowerPoint.

**Poster presentation:** There will be structured and organized poster session to encourage the participants. The best poster in each session will be considered for award. 1.25 m x 1.00 m area and necessary materials for poster display will be provided.



## Registration:

Participants are requested to register **on or before December 12, 2022** by paying the registration fees (non-refundable)

| Category                       | Registration fee |
|--------------------------------|------------------|
| Scientist/Faculty participants | Rs. 4000/-       |
| Research Scholar/Students      | Rs. 2000/-       |
| Private industries             | Rs. 5000/-       |

The fee may be credited by ONLINE transfer into the Bank Account given below:

**Name of Account:** Organising Secretary ISPP West Zone Seminar 2022

**Name of Bank and Branch:** State Bank of India, Navsari Agriculture University campus

**Account Number:** 41410982508

**IFSC Code:** SBIN0003889

**MICR Code:** 396002062

The scanned copy of the duly filled and signed registration form and copy of demand draft/receipt of online payment may be sent by email to [isppwz2022@gmail.com](mailto:isppwz2022@gmail.com). Only the abstracts from the registered participants will be published in the abstract book. The original registration form should be produced at the time of seminar.

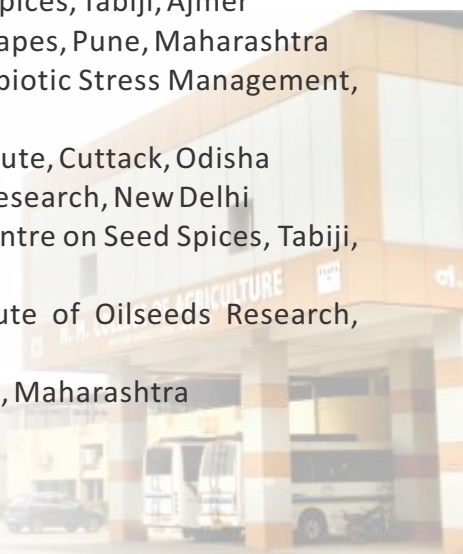
**Registration forms link** <https://forms.gle/goLkAXGey8io6yy56>

Accommodation will be provided to registered delegates on first come first basis in guest house of NAU campus at nominal charges and in nearby hotels on self-payment basis. Request for accommodation may be made by December 5, 2022(email: [isppwz2022@gmail.com](mailto:isppwz2022@gmail.com)).



## Lead Speakers

- ❖ **Dr. Viswanathan Chinnusamy**, Principal Scientist & Head, IARI, New Delhi
- ❖ **Dr. Ashok Mishra**, Professor, Agricultural & Food Engineering Department, IIT, Kharagpur
- ❖ **Dr. Chandranath Chatterjee**, Professor, Agricultural & Food Engineering Department, IIT, Kharagpur
- ❖ **Dr. Shwetal Shah**, Climate Change Department, Government of Gujarat
- ❖ **Dr. N. K. Gupta**, Director Education, SKN Agriculture University Jobner Jaipur Rajasthan
- ❖ **Dr. S. N. Saxena**, Director, ICAR-National Research Centre on Seed Spices, Tabiji, Ajmer
- ❖ **Dr. R. G. Somkuwar**, Director, ICAR-National Research Centre for Grapes, Pune, Maharashtra
- ❖ **Dr. Jagadish Rane**, Principal Scientist, ICAR-National Institute of Abiotic Stress Management, Baramati
- ❖ **Dr. M. J. Baig**, Principal Scientist, ICAR-National Rice Research Institute, Cuttack, Odisha
- ❖ **Dr. Senthil Kumar Muthappa**, National Institute of Plant Genome Research, New Delhi
- ❖ **Dr. M. K. Mahatma**, Principal Scientist, ICAR-National Research Centre on Seed Spices, Tabiji, Ajmer
- ❖ **Dr. Ratna Kumar Pasala**, Principal Scientist, ICAR-Indian Institute of Oilseeds Research, Hyderabad
- ❖ **Dr. Kiran P Bhagat**, ICAR- Directorate of Floricultural Research, Pune, Maharashtra



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