



Australian Centre
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Agricultural Research

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Conference Program



9th International
Horticulture
Conference & Expo-2025

Horticultural Transformation: Sustainable Food Safety & Security

April 15-17, 2025

Inaugural Ceremony

April 15, 2025 | 09:00 am | University Auditorium

- 09:00 am Registration and Seating of the Participants
- 10:00 am Recitation
- 10:05 am Naat-e-Rasool
- 10:10 am National Anthem
- 10:15 am PSHS Recap
- 10:20 am Welcome Address by Prof. Dr. Muhammad Azam Khan (President PSHS)
- 10:25 am Keynote Talk by Dr. Waqar Ahmad, Sector Advisor / Consultant
- 10:40 am Technical Talk by Dr. Adnan Shahid, Associate Professor, UFL, USA
- 10:55 am Address by the Guest of Honour Ms. Florence Rolle, FAO
- 11:05 am Address by the Guest of Honour Prof. Dr. Mukhtar Ahmad, Chairman HEC
- 11:15 am Address by the Chief Guest Honorable Rana Tanveer Hussain, Federal Minister NFS&R
- 11:30 am Souvenir exchange
- 11:45 am Vote of Thanks by The Vice Chancellor, PMAS-AAUR
- 11:50 am Group Photo
- 11:55 am Inauguration of Flower Show and Expo

**Lunch & Prayer Break
(12:00 pm)**



Organized By
Department of Horticulture, PMAS-AAUR
Pakistan Society for Horticultural Science



Conference Program

Day - 1

April 15, 2025
(Tuesday)



Technical Session-I

April 15, 2025 | 02:00 - 04:00pm | Agriculture Seminar Room

Theme:

Breeding, Genetics & Genomics: Climate Resilient Horticulture

Chair: Dr. Arif Atak
Co-Chair: Dr. Zahoor Hussain
Moderator: Dr. Usman Ali Abbasi

- 1 **Dr. Shoukat Ali**
Genetic Improvement of Vegetable Crops through New Breeding Tools
- 2 **Prof. Dr. Muhamamd Usman**
Germplasm Diversification and Unlocking Genetic Potential of Fruit Crops
- 3 **Dr. Muhammad Shafiq**
Unlocking the Potential of Gene Silencing Based Resistance Bullets Against Chilli Leaf Curl Disease Complex
- 4 **Dr. Xuemei Xiao**
Flavor Evaluation of Chinese Chive Germplasm Resources via HS-SPME/GC-MS and Electronic Nose Technology
- 5 **Mr. Muneeb Munawar**
Utilizing Heat Stress Indices for Selecting Heat-Tolerant Genetic Male Sterile Genotypes In Chilli
- 6 **Dr. Saba Haider**
Recent Advances in Plant Biotechnology for Sustainable and Climate-Resilient Horticulture
- 7 **Dr. Naseem Sharif**
Morphological and Genetic Characterization of Pakistani Jujube Genetic Resources
- 8 **Ms. Arooge Fatima**
Physiological and Biochemical Responses of Irradiated Germplasm in Acid Limes
- 9 **Mr. Muhammad Hammad**
Genome Wide Analysis of Carica Papaya
- 10 **Mr. Ali Raza Jamali**
Performance of Different Gladiolus Varieties on Growth and Flowering Attributes under Agro-ecological Conditions of Tandojam
- 11 **Mr. Mubashir Amin**
Effect of Different Growing Media on Growth and Flowering of Hollyhock (*Althea rosea* L.)
- 12 **Mr. Muhammad Adnan Raza**
Identification and Analysis of Abiotic Stress-Responsive bHLH Gene Family in Brassica oleracea
- 13 **Dr. Tazien Bukhari**
Validation of SSR Markers for Identification of High-Yielding and Phytophthora Capsici Root Rot Resistant Chilli Genotypes

Tea Break

Conference Program

Day - 1

April 15, 2025
(Tuesday)



Technical Session-II

April 15, 2025 | 02:00 - 04:00pm | PKCBC Seminar Room

Theme:

Precision Tech. & Climate-Smart Innovations in Horticulture; Protected Cultivation of Horticultural Crops

Chair: Dr. Liaquat Ali Khan
Co-Chair: Dr. Muhammad Azam Khan
Moderator: Dr. Ismara Naseem

- Dr. Liaquat Ali Khan**
Overview of Green AI
- Prof. Dr. Mobushir Riaz Khan**
Geospatial Intelligence; Transforming Horticulture for a Sustainable Future
- Dr. Naveed Tahir**
Overview of Green Cabin Hydroponic Vegetable Production and Automation
- Dr. Hafiz Nazar Faried**
Potassium Enrichment Enhances Capsicum Productivity through Modification of Ionic Contents, Physiological and Secondary Metabolites Under Partially Controlled Greenhouse
- Dr. Mukhtar Ahmed**
Simulation of Climate Change Impact on Potato Cropping System Under Semi-arid Environment and Designing of Adaptation Strategies
- Dr. Muhammad Sarwar Yaquub**
Effect of Different Growing Media on Seed Germination and Seedling Growth of Tomato, Cucumber and Lettuce
- Mr. Atta Ullah**
Effect of Different Mulching Materials on Tomato Hybrids in Walk-in Tunnel under the Agro-climatic Conditions of Dera Ismail Khan
- Ms. Afifa Talpur**
Effect of Biostimulant on the Growth, Quality and Yield of Tomato (*Lycopersicon esculentum*)
- Dr. Adnan Zahid**
Nanoparticle-Mediated Salinity Stress Alleviation in Tomato Plants: A Green Technology Solution

Tea Break

Poster Session

15th April 2025

Infront of Agriculture Seminar Room

Display Time: 03:00 pm

Display Evaluation: 04:00 - 06:00 pm

Evaluation Committee: Dr. Arif Atak
Dr. Gohar Ayub
Dr. Mehdi Maqbool

Facilitator: Dr. Naveed-ur-Rehman

PSHS Annual General Body Meeting

15th April 2025 (05:00 PM)

Venue: Agriculture Seminar Room

Cultural Night & Dinner

15th April 2025 (07:00 PM)

Venue: Auditorium / Convocation Lawn

Conference Program

Day - 2

April 16, 2025
(Wednesday)



Technical Session-III

April 16, 2025 | 09:00 - 10:30am | Agriculture Seminar Room

Theme:

Post-Harvest Technology and Supply Chain Management

Chair: Prof. Dr. Aman Ullah Malik

Co-Chair: Dr. Munawar Raza Kazmi

Moderator: Dr. Usman Ali Abbasi

- 1 **Prof. Dr. Ahmad Sattar Khan**
Role of Postharvest Horticulture in Food Safety and Security
- 2 **Dr. Rizwan Mehmood**
Beyond the Fruit: A Strategic Lens on Banana Value Chain Gaps and Innovations in Pakistan
- 3 **Dr. Asif Ahmad**
Food Safety Issues in Pakistan: Challenges and Solutions
- 4 **Prof. Dr. Muhammad Nafees**
Recent Advances in Postharvest Management of Fruits and Vegetables at IUB
- 5 **Dr. Raheel Anwar**
Improving Citrus Value Chains in Pakistan through Research and Development with Small-Scale Growers and Industry Stakeholders
- 6 **Dr. Muhammad Amin**
Managing Horticultural Crop Waste for Global Sustainability - An Introduction to Asia-Pacific Postharvest Network
- 7 **Dr. Noosheen Zahid**
Tailoring Cultivar-Specific Strawberry Nursery Practices: Evaluating Runner Health and Yield Potential in Diverse Climates of Poonch District
- 8 **Ms. Tazkia Hussain**
Optimal Production and Postharvest Handling Protocols for China Aster (*Callistephus chinensis* L.)
– A Newly Emerging Specialty Cut Flower
- 9 **Ms. Maha Sohail**
Postharvest Application of Aloe Vera Gel Coating Improves Storage Life and Maintains Quality of Loquat Fruit
- 10 **Ms. Arooba Abbas**
Postharvest Low Temperature Quarantine Treatment Influences Storage Life and Quality of Kinnow Mandarin Fruit
- 11 **Ms. Kainatt Naeem**
Physico-Chemical Characterization of Selected Sweet Orange (*Citrus sinensis*) Cultivars Grown in Taxila-Khanpur Valley

Tea Break

Conference Program

Day - 2

April 16, 2025
(Wednesday)



Technical Session-IV

April 16, 2025 | 09:00 - 10:30am | PKCBC Seminar Room

Theme:

Horticulture Business and Entrepreneurship

Chair: Prof. Dr. Iftikhar Ahmad
Co-Chair: PHDEC representative
Moderator: Dr. Ismara Naseem

- 1 Talk by **Mr. Athar Hussain Khokhar** CEO PHDEC
- 2 **Dr. Siti Zaharah Sakimin**
UPM's Food Security Blueprint: Providing Impact to the Nation
- 3 **Dr. Gohar Ayub**
Current Status and Future Prospects of Certified Fruit Nurseries in KPK
- 4 **Prof. Dr. Zahoor Hussain**
Status of Citrus Industry of Pakistan and Causes of Low Production in the Citrus
- 5 **Dr. Ijaz Hussain**
Ensuring Quality and True to Type Stone Fruit Nursery Production: A Key to Sustainable Horticulture and Fruit Industry Development
- 6 **Ms. Sana Hayyat**
Effect of Trellis System on Wild Black Raspberry Growth, Yield and Fruit Quality
- 7 **Ms. Khadija Ali**
Plant Tissue Culture Industry: Market Analysis, Growth and Potential Business Opportunities
- 8 **Ms. Hoorain Javaid**
Analyzing the Market Trends of Imported Ornamental Plants in Pakistan
- 9 **Dr. Muhammad Riaz Khan**
Morphological and Biochemical Characterization of Apple Varieties from Dhirkot, AJ&K
- 10 **Ms. Sania Sajjad**
Transformation of Horticulture Market with Innovation and New Potential Varieties Through Genetic Modification and Tissue Culture Technique

Tea Break

Conference Program

Day - 2

April 16, 2025
(Wednesday)



Technical Session-V

April 16, 2025 | 11:00am - 12:30pm | Agriculture Seminar Room

Theme:

Nutrient and Water Management; Integrated Pest Management

Chair: Prof. Dr. Muhammad Usman

Co-Chair: Dr. Noshin Ilyas

Moderator: Dr. Usman Ali Abbasi

- 1 **Dr. Yaro Hadiza**
Correlation and Path Coefficient Analysis for Some Growth and Yield-Related Traits in Tomata (*Solanum lycopersicum* L.)
- 2 **Mr. Ismail Iberahim**
Enforcement for Illegal Pesticide for Safety and Food Security
- 3 **Dr. Muhammad Naeem Aslam**
Access to CABI Digital Tools for the Management of Evolving Plant Health Threats to Ensure Food Security and Safety
- 4 **Prof. Dr. Muhammad Sajid**
Integrated Nutrient Management for Sustainable Apple Production and Quality Enhancement at High Altitude Temperate Zone (Swat)
- 5 **Dr. Muhammad Bilal Chattha**
Evaluating the Effects of Various Agricultural Practices on the Growth, Yield, and Quality of Potatoes (*Solanum tuberosum* L.) for the Chipping Industry
- 6 **Dr. Muhammad Azher Nawaz**
Rootstocks Improve the Nutrient Use Efficiency of Vegetable Crops
- 7 **Dr. Muhammad Waseem**
Co-application of Copper Nanoparticles and Metal Tolerant *Bacillus* sp. for Improving Growth of Spinach Plants in Chromium Contaminated Soil
- 8 **Dr. Muhammad Rizwan**
Effect of Green Synthesized Zinc-Oxide Nanoparticles on Growth and Lead Uptake in Food Crops
- 9 **Dr. Ibrar Hussain**
Coping of Climate Change in Annually Twice Crop Producing Brazilian Hybrid Grapes through Exogenous Abscissic Acid Application
- 10 **Ms. Rehana Bibi**
Diversity of Aphid Fauna in District Dera Ghazi Khan
- 11 **Ms. Ahtsham Hussain**
Effect of Supplemental Foliar-Applied Boron on Tree Health, Fruit Quality Development at Harvest and Shelf-Life of Huanglongbing-Affected Mandarin Kinnow
- 12 **Mr. Muhammad Rehman**
Evaluation of Seed Germination and Growth Response of Zinnia (*Zinnia Elegans*) Genotype Salt Stress
- 13 **Mr. Asad Ali**
Potential of Foliar-Applied Gibberellic Acid and Seaweed Extract to Improve Tree Health and Fruit Productivity in Huanglongbing – Affected Mandarin 'Kinnow'

Lunch & Prayer Break (12:30 - 02:00pm)

Conference Program

Day - 2

April 16, 2025
(Wednesday)



Technical Session-VI

April 16, 2025 | 11:00am - 12:30pm | PKCBC Seminar Room

Theme:

Landscape Design and Amenity Horticulture; Regenerative Horticulture

Chair: Dr. Yaro Hadiza
Co-Chair: Dr. Mehdi Maqbool
Moderator: Dr. Ismara Naseem

- 1 **Dr. Sudarshanee Geekiyanage**
Flower Diversity of Butterfly Pea (*Clitoria ternatea*) from Matara District, Sri Lanka, and Breeding Novel Flower Phenotypes
- 2 **Dr. Zia-ur-Rehman Mashwani**
Unleashing *Caralluma tuberculata* Potential: How Light Regime and Selenium Nanoparticles Boost Antioxidants and Hypoglycemic Bioactivities
- 3 **Dr. Maria Naqve**
In Vitro Propagation of Stevia to Increase Leaf and Root Growth Using Murashige and Skoog Culture Media
- 4 **Ms. Tazkia Hussain**
Optimal Production and Postharvest Handling Protocols for China Aster (*Callistephus chinensis* L.) - A Newly Emerging Specialty Cut Flower
- 5 **Ms. Urwa Irshad**
Annual Flowers Seed Pelleting and Coating Enhance Uniform Seedling Growth and Value Addition
- 6 **Ms. Ayesha Jabeen**
Vase Life Optimization of *Matthiola incana* L. through various Harvest and Postharvest Handling Procedures
- 7 **Mr. Muzamil Farooque Jamali**
Epicotyl Grafting: An Efficient Multiplication Technique in Mango (*Mangifera indica* L.)
- 8 **Ms. Faiza Qadir**
Fragrance and Form: Unveiling the Potential of Rosa 'Gruss an Teplitz' Hybrids
- 9 **Mr. Muhammad Abdullah Khan**
Shaping the Future Landscapes in a Water Scarce Environment
- 10 **Mr. Asif Ali Hajano**
Response of Different Nitrogen Doses on Growth and Flowering of Ornamental Sunflower (*Helianthus annuus* L.)

Lunch & Prayer Break (12:30 - 02:00pm)

Conference Program

Day - 2

April 16, 2025
(Wednesday)



9th International Horticulture Conference & Expo-2025
Horticultural Transformation: Sustainable Food Safety & Security

April 15-17, 2025

Technical Session-VII

April 16, 2025 | 02:00 - 03:00pm | University Auditorium

Theme:

**Biodiversity in Horticulture Conservation and Utilization;
Innovative Strategies in Plant Propagation**

Chair: Prof. Dr. Akbar Anjum

Co-Chair: Prof. Dr. Ahmad Sattar Khan

Moderator: Dr. Umer Habib

- 1 **Dr. Arif Atak:** Development of New Superior Quality Grape Varieties with Embryo Rescue Method
- 2 **Dr. Mehdi Maqbool:** From Research to Action: Value Chains for Sustaining Nutrition in a Changing Climate
- 3 **Prof. Dr. Iftikhar Ahmad:** Innovations in Global Floriculture & Prospects for Pakistan
- 4 **Dr. Muhammad Ramzan Anser:** Futuristic Road Map of Olive Sector Development in Pakistan

Panel Discussion

April 16, 2025 | 03:00 - 04:00pm | University Auditorium

Topic:

High Value Horticultural Crops: Future for Farmer Prosperity

Panelists: Dr. Iqrar A. Khan (S.I., H.I.), Professor Emeritus Horticulture, UAF
Dr. Abid Qayyum Suleri (Executive Director, SDPI)
Dr. Yaro Hadiza (Country Manager, East West Seed International, Nigeria)
Mr. Javaid Firoz (CEO, Shahjahan Farms Pvt. Ltd.)
Dr. Waqar Ahmad (Sector Advisor / Consultant)

Moderator: Dr. Umer Habib

Concluding Ceremony

April 16, 2025 | 04:00 - 05:00pm | University Auditorium

- 04:00 pm Qirat with Translation
- 04:05 pm Conference Recommendations by Prof. Dr. Aman Ullah Malik
- 04:15 pm Horticulture Policy Talk by Dr. Iqrar A. Khan, Professor Emeritus
- 04:25 pm Address by the Chief Guest
- 04:35 pm Shields Distribution
- 04:50 pm Concluding Remarks
- 05:00 pm Refreshment