



INTERNATIONAL YEAR OF  
FRUITS AND VEGETABLES  
2021



# Indian HortiCulture Congress - 2021

*Horticulture for Health, Livelihoods  
and Economy*

## Programme

Chandra Shekhar Azad University of  
Agriculture and Technology  
Kanpur, Uttar Pradesh

November 18-21, 2021

Organized by



# 9<sup>th</sup> Indian Horticulture Congress-2021

## Programme Summary

**Inaugural Session (10.00-11.30 hrs.)**

**IAHS Foundation Day Lecture (12.00-13.00 hrs.)**

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### Day 1, November 18, 2021

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**Session I : Thematic Session on International Year of Fruits and Vegetables with focus on Nutrition and Health (14.00-15.45 hrs.)**

**Session II : Management of Biotic and Abiotic Stresses (15.45-17.30 hrs.)**

**Annual General Body Meeting of IAHS (18.00-19.00 hrs.)**

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### Day 2, November 19, 2021

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**Session III : Unexploited/ Underexploited Crops (09.30-11.15 hrs.)**

**Session IV : Wasteland Utilization through Horticulture (09.30-10.30 hrs.) (Hall B)**

**Session V(a) : Genetic Enhancement and Next Generation Breeding Strategies (11.15-13.00 hrs.)**

**Session V(b) : Genetic Enhancement and Next Generation Breeding Strategies (11.15-13.15 hrs.) (Hall B)**

**Session VI : Crops for Round the Year Production (14.15-15.15 hrs.)**

**Session VII : Improving Livelihoods through Technological interventions/ Production Technologies in Horticulture (15.15-18.15 hrs.)**

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### Day 3, November 20, 2021

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**Session VIII : Rootstocks and Planting Material (09.30-11.10 hrs.)**

**Session IX : Exploiting Alternate Production Systems for Profitability (11.10-13.00 hrs.)**

**Session X : Post-harvest Management and Value Addition (14.00-16.00 hrs.)**

**Session XI : New Initiatives in Produce Management (16.00-17.30 hrs.)**

**Cultural Programme (18.30-19.30 hrs.)**

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### Day 4, November 21, 2021

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**Session XII : Elocution contest on “Fruits and Vegetables are the safest source of Nutrition and maintaining sound Human Health” (10.00-13.00 hrs.)**

**Session XIII : Farmers-Scientists Interface (10.30-13.00)**

*Theme: Next Generation Regeneration Horticulture: Technological and R&D Needs/ Policy Gaps*

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**Valedictory Function (14.30-16.00 hrs.)**

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### Day 5, November 22, 2021

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**Field Visit (09.00-17.00 hrs.)**

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**Day 2 & 3: November 19-20, 2021  
Schedule for Online Poster Sessions**

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## **9<sup>th</sup> Indian Horticulture Congress-2021**

*Horticulture for Health, Livelihoods and Economy*

**Venue : Kailash Bhawan  
Chandra Shekhar Azad University of Agriculture and  
Technology, Kanpur, Uttar Pradesh**

**November 18-21, 2021**

# *Programme*

**Day 1: November 18, 2021**

**Registration of Delegates**

**Time: 08.00-09.45 hrs. (Outside the Venue)**

**Venue: Kailash Bhawan, CSA University of Agriculture and Technology, Kanpur**

**Inaugural Session**

**Time: 10.00-11.30 AM**

09.58 hr	Arrival of Guests in the Auditorium	
10.00-10.05 hr	Welcome of Guests with Bouquet	
10.05-10.10 hr	<i>Rastra Geet &amp; Lighting of Lamp</i>	
10.10-10.15 hr	Welcome Address	<b>Dr D.R. Singh</b> Vice Chancellor, CSAUA&T, Kanpur
10.15-10.20 hr	About the Congress	<b>Dr S.K. Singh</b> Vice President, Indian Academy of Horticultural Sciences, New Delhi
10.25-10.32 hr	Address by the President, IAHS	<b>Dr K.L. Chadha</b> President Indian Academy of Horticultural Sciences, New Delhi
10.32-10.40 hr	Address by Guest of Honour	<b>Smt. Neelima Katiyar</b> Hon'ble State Minister, Higher Education, Science and Technology, Govt. of Uttar Pradesh
10.40-10.42 hr	Release of Publications	<b>Smt. Anandiben Patel</b> Hon'ble Governor, Uttar Pradesh
	<ul style="list-style-type: none"><li>● Souvenir of the 9th Indian Horticulture Congress-2021</li><li>● Policy Paper, IAHS, New Delhi</li><li>● Organic Growers</li><li>● Floriculturists open cultivation</li></ul>	
10.42-10.55 hr	Inaugural Address	<b>Smt. Anandiben Patel</b> Hon'ble Governor, Uttar Pradesh
10.55-10.59 hr	<i>Vote of Thanks</i>	<b>Dr H.G. Prakash</b> Local Organizing Secretary and Director Research, CSAUA&T, Kanpur
10.59-11.00 hr	<i>National Anthem</i>	

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**After Inaugural Session**

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**11.05-11.25 hr Distribution of Awards & Honors****Release of Publications**

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**Conferment of Awards**

- Honorary Fellowship
- Shiva Shakthi Life Time Achievement Award
- Sh. Girdhari Lal Chadha Memorial Medal in Fruit Science
- Dr Kirti Singh Medal in Vegetable Science
- Dr Manmohan Attavar Memorial Medal in Floriculture
- Dr J.C. Anand Memorial Medal in Post-harvest Technology
- Sh. D.P. Ghosh Memorial Young Scientist Award
- Dr B.R. Barwale Best Young Researcher Award
- Best Research Paper Award (Indian Journal of Horticulture)

**By Guest of Honour****Smt. Neelima Katiyar**

Hon'ble State Minister,  
Higher Education, Science  
and Technology, Govt. of  
Uttar Pradesh

**Citation to be read by****Dr Balraj Singh**

Vice President, Indian  
Academy of Horticultural  
Sciences, New Delhi

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**(HIGH TEA : 11.30-11.55 hrs.)**

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**IAHS Foundation Day Lecture****12.00-13.00 hrs.**

**Chair: Dr N.P. Singh**, Chairman, Commission on Agricultural Costs and Prices, MoAFW, New Delhi

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**Foundation  
Day Lecture****Raising India's share in Global  
Fruit and Vegetable Markets****Dr M. Angamuthu, IAS**

Chairman, Agricultural Processed  
Food and Exports Development  
Authority, New Delhi

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**(LUNCH : 13.00 -14.00 hrs.)**

**Day 1: November 18, 2021**

**Time: 14.00-15.45 hrs.**

**Venue: Kailash Bhawan (Hall A), CSAUA&T, Kanpur**

## **Session I**

### **Thematic Session on International Year of Fruits and Vegetables with focus on Nutrition and Health**

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12 min.	Lead	Global and national horticulture scenario including horticulture development programme and their implications on health and nutritional security	<b>Dr S.K. Malhotra</b>	Agriculture Commissioner, Ministry of Agriculture & Farmers Welfare, Govt. of India, Krishi Bhawan, New Delhi - 110007
12 min.	Lead	Bio-fortification of horticultural crops for nutrition and health	<b>Dr T.K. Behera</b>	Director, ICAR-Indian Institute of Vegetable Research, Varanasi - 220005 ,U.P.
12 min.	Lead	Tuber crops for nutrition and health	<b>Dr M.N. Sheela</b>	Director, Central Tuber Crops Research Institute, Sreekariyam P.O., Thiruvananthapuram - 695017, Kerala
12 min.	Lead	Micro-greens: emerging super food for health and wellbeing	<b>Dr Gyan Prakash Mishra</b>	Principal Scientist, Division of Genetics, ICAR-IARI, New Delhi 110 012
12 min.	Lead	Conserving diversity of underutilized fruits for health and nutrition through community participation: a dynamic approach	<b>Dr S.K. Malik</b>	Principal Scientist, ICAR-National Bureau of Plant Genetic Resources, Pusa Campus, New Delhi-110 012
5 min.	Oral	Potatoes for food and nutrition	<b>Dr Brajesh K. Singh</b>	ICAR-Central Potato Research Institute, Shimla, H.P.
5 min.	Oral	Possibilities for developing bioactive-compound rich mango cultivars	<b>Dr Ashish Yadav</b>	ICAR-Central Institute for Subtropical Horticulture, Rehmankhara P.O. Kakori, Lucknow – 227107, Uttar Pradesh

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5 min.	Oral	Phenolic profiling of phalsa ( <i>Grewia asiatica</i> L.) using a high-resolution quadrupole –time of flight LCMS	<b>Dr Tanmay Kole</b>	ICAR Research Complex For Eastern Region, ICAR Parisar, P.O.: Bihar Veterinary College, Patna-800 014, Bihar
5 min.	Oral	Fruits in human nutrition and health	<b>Dr Amit K. Goswami</b>	Division of Fruits and Horticultural Technology, ICAR-IARI, New Delhi 110012
5 min.	Oral	Promoting fruits, vegetable and human health	<b>Dr Abha Singh</b>	Department of Psychology, P.P.N. College, Kanpur
5 min.	Oral Virtual	Can the bananas (banana & plantain) be the panacea for India's hidden hunger?	<b>Dr Ramajayam Devarajan</b>	ICAR-NRC Banana, Thogamalai Road, Thayanur Post, Tiruchirapalli - 620 102, Tamil Nadu
5 min.	Oral Virtual	Development of nutrient rich cauliflower for better public health and nutrition	<b>Dr Shrawan Singh</b>	Division of Vegetable Sciences, ICAR-IARI, New Delhi -110012

**Day 1: November 18, 2021**

**Time: 15:45 to 17.30 hrs.**

**Venue: Kailash Bhawan (Hall A), CSAUA&T, Kanpur**

## **Session II**

### **Management of Biotic and Abiotic Stresses**

12 min.	Lead	Recent development for management of <i>Fusarium</i> wilt in banana with reference to TR-4	<b>Dr S. Uma</b>	Director, ICAR-National Research Centre of Banana, Thogamalai Road, Thayanur, Tiruchirapalli-620102, Tamilnadu
12 min.	Lead	Latest developments in disease management of pomegranate	<b>Dr Jyotsna Sharma</b>	Principal Scientist, ICAR - National Research Center on Pomegranate, NH-65, Solapur-Pune Highway, Kegaon, Solapur - 413 255, Maharashtra
12 min.	Lead	Risk to mango production from newly emerging diseases and disorder	<b>Dr P.K. Shukla</b>	Pr. Scientist, Division of Crop Protection, ICAR-Central Institute for Subtropical Horticulture, Rehmankhera P.O. Kakori, Lucknow-227107, Uttar Pradesh
10 min.	Lead	Microbes mediated plant healthcare in horticultural crops : New paradigms	<b>Dr P. Bora</b>	Coordinator, Biopesticides Research and Development, Department of Plant Pathology, Assam Agriculture University, Jorhat-785013, Assam
5 min.	Oral	Banana fusarium wilt Tropical Race 4 management in the subtropics	<b>Dr T. Damodaran</b>	ICAR-CSSRI, Regional Research Station, Lucknow-226002, Uttar Pradesh
5 min.	Oral	Successful Bio-control of Coconut Slug caterpillar ( <i>Macroleptra nararia</i> ) with potential parasitoid <i>Pediobius imbrues</i> (Hymenoptera: Eulophidae) in Andhra Pradesh	<b>Dr Nagulapati Chalapathi Rao</b>	Dr YSR Horticultural University, Horticultural Research Station, Ambajipeta - 533214 East Godavari District, Andhra Pradesh
5 min.	Oral	Screening of genotypes of Makhana ( <i>Euryale ferox</i> Salisb.) against insect and gastropod pests and yield potential	<b>Dr Paras Nath</b>	Bihar Agricultural University, Sabour -BPS Agricultural College, Purnea-854302, Bihar



5 min.	Oral	Cashew Protect: An Artificial Intelligence (AI) based website and app for identification of pests diseases and nutrient deficiencies in Cashew	<b>Dr Mohana G.S.</b>	ICAR- Directorate of Cashew Research, Puttur - 574 202, Dakshina Kannada, Karnataka
5 min.	Oral	Screening and validation for Tomato Leaf Curl New Delhi Virus (ToLCNDV) resistance in bitter melon ( <i>Momordica charantia</i> L.) germplasm	<b>Dr Gograj Singh</b>	Division of Vegetable Science ICAR-Indian Agricultural Research Institute (IARI) Pusa, New Delhi-110012
5 min.	Oral	Genetic and transcriptome -based study for improvement of okra ( <i>Abelmoschus esculentus</i> L.) against Bhindi yellow vein mosaic virus (BYVMV)	<b>R.K. Yadav</b>	Division of Vegetable Science, ICAR-Indian Agricultural Research Institute, New Delhi-110012
5 min.	Oral	Bio-efficacy of granular insecticides against white grub ( <i>Holotrichia</i> spp.) in tulip ( <i>Tulipa gesneriana</i> L.) under temperate condition of Kashmir	<b>Dr Abu Manzar</b>	Division of Entomology, Sher-e-Kashmir University of Agricultural Sciences and Technology -Kashmir, Shalimar Campus, Srinagar- 190025, Jammu and Kashmir

## Management of Biotic and Abiotic Stresses

### Online Oral Presentation (Hall B)

**November 18, 2021; Time: 15:00 to 15.45 hrs.**

5 min.	Oral	Preference of Fruit Flies Bactrocera spp. in Relation to Size and Ripeness of Intact and Fallen Mango Fruits	<b>Dr Chandra-sekaran, M.</b>	Horticultural College and Research Institute for Women (TNAU), Navalur Kuttapattu Trichy - 620 027; Tamil Nadu
5 min.	Oral	Seasonal Incidence of Leaf Mite Panonychus citri M. on Citrus Citrus aurantifolia C.	<b>Dr Soundararajan R.P.</b>	Horticultural College and Research Institute for Women (TNAU), Navalur Kuttapattu, Trichy - 620 027, Tamil Nadu
5 min.	Oral	Evaluation of IPM modules for management of fruit fly in bitter melon	<b>Dr Arundhati Sasmal</b>	RRTTS (Coastal Zone), OUAT Bhubaneswar, Odisha
5 min.	Oral	Identification of host-plant resistance and genetics of Fusarium wilt (Fw) gene in wild pea ( <i>Pisum sativum</i> ssp. elatius)	<b>Dr Brij Bihari Sharma</b>	Division of Vegetable Science, ICAR-Indian Agricultural Research Institute (IARI), Pusa, New Delhi-110012

5 min.	Oral	Identification of novel source for Fusarium wilt resistance in brinjal and genetic analysis of resistance	<b>Partha Saha</b>	Division of Vegetable Science ICAR-Indian Agricultural Research Institute (IARI) Pusa, New Delhi-110012
5 min.	Oral	Effect of <i>Trichoderma</i> spp. on growth promotion yield and storability of Onion	<b>Dr Ram Dutta</b>	ICAR-DOGR, Rajgurunagar, Pune-410505, Maharashtra
5 min.	Oral	Morpho-anatomical and biochemical assay of onion cultivars in relation to <i>Thrips tabaci</i> Lindeman infestation	<b>Dr Rabiya Basri</b>	School of Agriculture, ITM University, Gwalior- 475 001, Madhya Pradesh

**18.00-19.00 hrs.**

**Annual General Body Meeting of IAHS**

**(DINNER : 19.30-21.00 hrs.)**

## Day 2: November 19, 2021

Time: 9.30-11.15 hrs.

Venue: Kailash Bhawan (Hall A), CSAUA&T, Kanpur

### Session III Unexploited/ Underexploited Crops

12 min.	Lead	Underexploited arid fruits and vegetables and their role in human nutrition	<b>Dr P.L. Saroj</b>	Director, ICAR- Central Institute for Arid Horticulture, Sri Ganga Nagar Highway, Beechwal, Bikaner-334006 Rajasthan
12 min.	Lead	Potential unexploited fruits for combating malnutrition from North Eastern Region	<b>Dr B.N. Hazarika</b>	Dean, College of Horticulture and Forestry & College of Agriculture, CAU, Pasighat-791102, Arunachal Pradesh
12 min.	Lead	Emerging potential new generation fruit crops-associated challenges and perspectives	<b>Dr G. Karunakaran</b>	Principal Scientist & I/c Head, Central Horticultural experiment Station, Hirehalli-572 168, Karnataka
10 min	Lead	Potential un/underexploited horticultural crops for temperate region	<b>Dr M.K. Verma</b>	Principal Scientist, Division of Fruits & Horticultural Technology ICAR-Indian Agricultural Research Institute Pusa Campus, New Delhi 110012
10 min.	Lead	Potential un/underexploited horticultural crops for cold-arid region	<b>Dr T. Stobdon</b>	Head, Horticulture Division of Defence Institute of High Altitude Research, Ladakh
5 min.	Oral	Nutraceutical: present status and prospects of underutilized citrus fruits	<b>Dr Dinesh Kumar</b>	ICAR-Central Citrus Research Institute, Nagpur, Maharashtra
5 min.	Oral	Potential of blue berries in India	<b>Dr N.D. Negi</b>	CSK Himachal Pradesh Krishi Vishwavidyalaya, Palampur-176 062, Himachal Pradesh
5 min.	Oral	Underexploited horticultural crops of North-East India: issues, concerns and future prospective	<b>Dr T.K. Hazarika</b>	Department of Horticulture, Aromatic & Medicinal Plants, School of Earth Science and Natural Resources Management, Mizoram University, Aizawl- 796004, Mizoram

5 min.	Oral	Genetic diversity studies in avocado ( <i>Persea americana</i> M.) accessions of South India for morphological and biochemical characters	<b>Dr Muralidhara B M</b>	Division of Fruit Science, ICAR-Indian Institute of Horticultural Research, Hessaraghatta Bengaluru-560 089, Karnataka
5 min.	Oral	Enhancing the wetland productivity through exploiting genetic diversity in Makhana ( <i>Euryale ferox</i> Salisb.)	<b>Dr Anil Kumar</b>	Bihar Agricultural University, BPS Agricultural College, Purnea-854302, Bihar
5 min.	Oral	Study on morphometric traits and genetic barcoding of Velvet bean ( <i>Mucuna pruriens</i> (L.) DC. Var. Pruriens)	<b>Dr J. Shankara-swamy</b>	Sri Konda Laxman Telangana State Horticultural University, College of Horticulture, Mojerla, Maddigatla-509382, Wanaparthy Telangana
5 min.	Oral	Impact of different spacing on production of pole type lima bean ( <i>Phaseolus lunatus</i> L.) with intercropping of brinjal crop	<b>Dr Sanjay Kumar</b>	Krishi Vigyan Kendram, Farukhabad CS Azad Univ of Agri & Technology, Kanpur 208 002, Uttar Pradesh
5 min.	Oral	Evaluation of Heliconia genotypes for commercial exploitation in humid tropics of Andaman Island	<b>Dr V. Baskaran</b>	ICAR-Central Island Agricultural Research Institute, Port Blair-744101, Andaman and Nicobar Islands

## Unexploited/ Underexploited Crops

### Online Oral Presentation (Hall B)

**November 18, 2021; Time: 16:00 to 16.45 hrs.**

5 min.	Oral	Approaches for enhancing yield and quality of dragon fruit in eastern tropical region of India	<b>Dr Kundan Kishore</b>	Central Horticultural Experiment Station (ICAR-IIHR), Aiginia, Bhubaneswar-751019, Odisha
5 min	Oral	Effect of artificial pollination in fruiting of dragon fruit ( <i>Hylocereus</i> sp.) under tropical Island conditions	<b>Dr K. Abirami</b>	ICAR-Central Island Agricultural Research Institute, Port Blair-744101, Andaman and Nicobar Islands
5 min	Oral	Influence of potassium on mineral acquisition fruit quality and enzymatic activity in dragon fruit ( <i>Selenicereus monacanthus</i> )	<b>Mrs. Ankita Sahu</b>	ICAR-Central Institute for Women in Agriculture, Bhubaneswar-751003, Odisha
5 min.	Oral	Morphological and biochemical characterization of Garcinia fruits of Assam	<b>Dr Bornali Gogoi</b>	College of Horticulture, Assam Agricultural University, Jorhat, Jorhat-785013, Assam

5 min.	Oral	Boon for wastelands: Henna ( <i>Lawsonia inermis</i> L.)- a potential crop for arid zone	<b>Dr Dheeraj Singh</b>	Programme Coordinator, Krishi Vigyan Kendra (CAZRI), Pali, Marwar-306401, Rajasthan
5 min.	Oral	Tropical tuber vegetables in India and their commercial propagation techniques	<b>Dr Mangaldeep Sarkar</b>	College of Agriculture, Navsari Agricultural University, Waghai-394730, The Dangs, Gujarat
5 min.	Oral	Studies on small fruited bitter gourd <i>Momordica charantia</i> L. var. <i>muricata</i> (Willd.) Chakrav. for anti-diabetic activity	<b>Dr Neelavathi R.</b>	Tamil Nadu Agricultural University, Tindivanam – 604 002, Villupuram District. Tamil Nadu

**Day 2: November 19, 2021**

**Time: 09.30 to 10.30 hrs.**

**Venue: Conference Room (Hall B), CSAUA&T, Kanpur**

## **Session IV**

### **Wasteland Utilization through Horticulture**

12 min.	Lead	Exploitation of waste land for horticultural crops in India	<b>Dr M. Madhu</b>	Director, ICAR-Indian Institute of Soil and Water Conservation, 218, Kaulagarh Road, Dehradun-248195, Uttarakhand
12 min.	Lead	Degraded and waste land utilization through Horticulture crops	<b>Dr O.P. Aiswath</b>	Principal Scientist, ICAR-National Research centre on seed spices, Tabiji, Ajmer-305206 Rajasthan
12 min.	Lead	Opportunities for exporting pomegranate cultivation in wasteland	<b>Dr R.A. Marathe</b>	Director, National Research Centre for Pomegranate, NH - 65, Solapur-Pune Highway, Kegaon, Solapur-413255, Maharashtra
12 min	Lead	Urban Tree Plantation in Degradable Land for Sustainable Eco-system	<b>Dr S.S. Sindhu</b>	Head, Division of Floriculture & Landscaping and Coordinator, School of Horticulture, ICAR-Indian Agricultural Research Institute (Pusa Campus), New Delhi-110012
5 min.	Oral	Tamarind : A game changer in wastelands of South India	<b>Mrs. Vimala Bathineni</b>	Horticulture Research Station, Anantapuramu, Dr YSRHU, Ramnagar, Anantapuramu -515004, AP
5 min	Oral	Developing salt tolerant rootstocks in fruit crops for waste land utilisation	<b>Dr Anshuman Singh</b>	Division of Crop Improvement & Biotechnology ICAR- Central Institute for Subtropical Horticulture, Rehmankhera, Lucknow-226101, Uttar Pradesh

**Day 2: November 19, 2021**

**Time: 11.15-13.00 hrs.**

**Venue: Kailash Bhawan (Hall A), CSAUA&T, Kanpur**

**Session V(A)**  
**Genetic Enhancement and Next Generation  
Breeding Strategies**

12	Lead Virtual	Gene discovery and its application in genomics-assisted breeding in horticultural crops	<b>Dr N.K. Singh</b>	B.P Pal Chair, ICAR-National Institute of Plant Biotechnology, New Delhi 110 012
12	Lead Virtual	Genetic manipulation using gene editing techniques and their role in precision breeding of horticultural crops in India	<b>Dr C.S. Prakash</b>	Dean, College of Arts and Sciences (CAS), Tuskegee University, USA
12	Lead	Aroma biology and livelihood security	<b>Dr Ajit Sasany</b>	Director, ICAR-National Institute of Plant Biotechnology, Pusa campus, New Delhi
12	Lead Virtual	Biotechnological and Genomic advancements in improvement of fruit crops	<b>Dr K. Ravishankar</b>	Principal Scientist, Division of Basic Sciences, ICAR-IIHR, Hessaraghatta Lake Post, Bengaluru-560 089, Karnataka
12	Lead	Breeding next generation spices for nutraceuticals and industrial use	<b>Dr D. Prasath</b>	Principal Scientist (Hort.), ICAR-Indian Institute of Spices Research, PB No. 1701, Marikunnu Post, Kozhikode, Kerala
10	Lead Virtual	Biotechnological advancement in the improvement of Plantation crops	<b>Dr M.K. Rajesh</b>	Principal scientist, ICAR- Central Plantation Crops Research Institute, Kasaragod, Kerala
10	Lead	Molecular control of flowering regulation of mango	<b>Dr Bal Krishna</b>	Senior Vice President, M/s Jain Irrigation System Ltd., Jalgaon, Maharashtra
10	Lead	Papaya Breeding-Current strategies & opportunities	<b>Dr Jai Prakash</b>	Principal Scientist (Hort), Division of Fruits and Hort. Technology, ICAR-IARI, New Delhi 110012
10	Lead	Indian Orchid Germplasm: Conservation and Sustainable Utilization	<b>Dr. Ram Pal</b>	Director, ICAR-NRC for Orchids, Pakyong-737106, East Sikkim, Sikkim

**Day 2: November 19, 2021**

**Time: 11.15-13.15 hrs.**

**Venue: Conference Room (Hall B), CSAUA&T, Kanpur**

**Session V(B)**  
**Genetic Enhancement and Next Generation  
Breeding Strategies**

5 min	Oral	Advances in Banana breeding	<b>Dr S. Backiyarani</b>	ICAR-National Research Centre of Banana, Thogamalai Road, Thayanur, Tiruchirapalli-620102, Tamilnadu
5 min.	Oral	Radiation Induced Mutation to Develop Dwarf and Precocious Lines of Papaya ( <i>Carica papaya</i> L.)	<b>Dr Kanhaiya Singh</b>	Principal Scientist, Division of Fruits and Horticultural Technology ICAR-IARI New Delhi 110012
5 min.	Oral	Breeding for Novel Traits in cashew for enhancing farm income	<b>Dr J. Dinakara Adiga</b>	Principal Scientist (Hort-FS), ICAR-Directorate of Cashew Research, Puttur-574202, Karnataka
5 min.	Oral	Genomic wide identification and characterization of micro RNAs for low nitrogen stress in potato	<b>Dr Jagesh Tiwari</b>	ICAR-Central Potato Research Institute, Shimla - 171 001, Himachal Pradesh
5 min.	Oral	DNA barcoding and RNA secondary structure predictions in brinjal and its wild relatives	<b>Dr Gobinda Ch Acharya*</b>	Central Horticultural Experiment Station, ICAR-IIHR Bhubaneswar-751019, Odisha
5 min.	Oral	Genetic Improvement of Chilli for Improved Yield Realization and Consumer Preference	<b>Rajesh Kumar</b>	ICAR-Indian Institute of Vegetable Research, PB No. 01, P.O.–Jakhini (Shahanshahpur), Varanasi 221305
5 min.	Oral	Genetic analysis and identification of SSR markers associated with powdery mildew resistance in bitter melon ( <i>Momordica charantia</i> L.)	<b>Dr Prasanth K.</b>	Kerala Agricultural University, KAU P.O., Vellanikkara, Thrissur-680656, Kerala
5 min.	Oral	Optimising protocol for successful induction of haploids in petaloid types male sterile genotypes of African marigold ( <i>Tagetes erecta</i> L.) using <i>in vitro</i> gynogenesis approach	<b>Dr Reeta Bhatia</b>	Senior Scientist (Horticulture-Floriculture), Division of Floriculture and Landscaping, ICAR-Indian Agricultural Research Institute, New Delhi 110012



5 min.	Oral	Development of shrunken2 and sugary1 based sweet corn through genomics-assisted breeding	<b>Dr Rashmi Chhabra</b>	Maize Genetics Unit, Division of Genetics, ICAR-IARI, Pusa Campus, New Delhi-110012
5 min.	Oral	Genetic improvement in China aster [ <i>Callistephus chinensis</i> (L.) Nees]	<b>Rajiv Kumar</b>	ICAR-Indian Institute of Horticultural Research, Hesaraghatta Lake Post, Bengaluru 560089, Karnataka
5 min.	Oral	Genetic diversity analysis and population structure in oil palm germplasm using SSR markers	<b>Dr Bhagya HP</b>	ICAR-Indian Institute of Oil Palm Research, Pedavegi-534475
5 min.	Oral	Priority traits identification and utilization to develop next generation planting material in oil palm ( <i>Elaeis guineensis</i> Jacq.)	<b>Dr Anitha Pedapati</b>	ICAR-Indian Institute of Oil Palm Research, Pedavegi-534450, West Godavari Dt., Andhra Pradesh New Delhi-110012, India
5 min.	Oral	Ploidy manipulation: an integral part for the genetic enhancement in citrus	<b>Dr Awtar Singh</b>	Division of Fruits and Horticultural Technology ICAR-IARI, New Delhi 110012
5 min	Oral	Construction of genetic linkage map using bi-parental progeny population of Amrapali and Sensation	<b>Dr Manish Srivastav</b>	Division of Fruits and Horticultural Technology, ICAR-IARI, New Delhi 110012
5 min.	Oral	Genetic and genomic resources in cucurbit crops	<b>Dr Manjusha Verma</b>	ICAR-National Bureau of Plant Genetic Resources, New Delhi 110 012
5 min.	Oral	Comparison of flow cytometry stomatal traits and morpho-taxonomical characters for differentiating Ney Poovan diploid from its autotetraploids	<b>Mr. Arjun Singh</b>	ICAR-National Research Centre of Banana, Thogamalai Road, Thayanur, Tiruchirapalli-620102, Tamilnadu
5 min.	Oral	De novo transcriptome analysis of roots of grape rootstock 110R in response to salt stress	<b>Dr Anuradha Upadhyay</b>	ICAR-National Research Centre for Grapes, PB No.3, Manjari Farm PO, Solapur Road, Pune-412 307, Maharashtra
5 min.	Oral	Evaluation and identification of promising genotypes for important fruit characters in pomegranate	<b>Dr Shilpa Parashuram</b>	ICAR-National Research Centre on Pomegranate, Solapur-Pune Highway, Kegaon, Solapur-413 255, Maharashtra

5 min.	Oral	Molecular markers linked to bacterial wilt ( <i>Ralstonia solanacearum</i> ) resistance gene loci in eggplant ( <i>Solanum melongena</i> L.)	<b>Dr Pandiyaraj P.*</b>	Kalasalingam Academy of Research and Education, Anand Nagar, Krishnankovil, Virudhunagar-626128, Theni, Tamil Nadu
5 min.	Oral	Studies on growth analysis traits and <i>AcFT</i> gene expression for bulb yield in <i>kharif</i> onion	<b>Dr Sabina Islam</b>	Division of Vegetable Science ICAR-IARI, New Delhi-110012
5 min.	Oral	From germplasm characterization to functional genomics-A holistic approach for tropical carrot ( <i>Daucus carota</i> sub spp. sativus) improvement	<b>Dr Sarvamangala Cholin*</b>	College of Horticulture, University of Horticultural Sciences, Bagalkote -587103 Karnataka
5 min.	Oral	Innate defense mechanism against chilli leaf curl disease in resistant hot peppers	<b>Dr Manisha Mangal</b>	Division of Vegetable Science, ICAR-IARI, New Delhi 110 012
5 min.	Oral	Degree of genetic determination and expected genetic gain for quantitative traits in luffa gourd ( <i>Luffa cylindrica</i> L.) genetic resources of Assam	<b>Dr Ira Sarma</b>	Assam Agricultural University, Jorhat-785013, Assam

**(LUNCH : 13.15-14.15 hrs.)**

## Day 2: November 19, 2021

Time: 14.15 to 15.15 hrs.

Venue: Kailash Bhawan (Hall A), CSAUA&T, Kanpur

### Session VI Crops for Round the Year Production

12 min.	Lead	Technological intervention for year-round production of vegetable crops	<b>Dr Bhopal Singh Tomar</b>	Joint Director (Extension), ICAR-IARI, New Delhi, 110012
12 min.	Lead	Management of surplus and scarcity of onion in the country	<b>Dr P.K. Gupta</b>	Director, National Horticultural Research and Development Foundation, Janakpuri, New Delhi-110075
12 min.	Lead	Round the year production of cole and root vegetable crops	<b>Dr Pritam Kalia</b>	Former Head, Division of Vegetable Science, ICAR-IARI, New Delhi
5 min.	Oral	Riverbed cultivation for off season production	<b>Dr Sudhakar Pandey</b>	ICAR-Indian Institute of Vegetable Research, Varanasi 220 005, Uttar Pradesh
5 min.	Oral	Genetic diversity and improvement in onion for wider adaptability	<b>Dr Amar Jeet Gupta</b>	ICAR-Directorate of Onion and Garlic Research, Rajgurunagar-410505, Pune Maharashtra
5 min.	Oral	Study of photosensitivity and photosynthetic efficiency in onion varieties for cultivating round the year under climate change scenario	<b>Dr Kiran P. Bhagat</b>	ICAR-Directorate of Floricultural Research, Pune – 411005, Maharashtra

**Day 2: November 19, 2021**

**Time: 15.15 to 18.00 hrs.**

**Venue: Kailash Bhawan (Hall A), CSAUA&T, Kanpur**

## **Session VII**

### **Improving Livelihoods through Technological interventions/ Production Technologies in Horticulture**

12 min.	Lead	Soil nutrient enrichment in fruit orchards through recycling of biomass: Impacts on plant nutrition and productivity	<b>Dr Bikash Das</b>	Principal Scientist, Research Centre, ICAR Research Complex for eastern Region, Plandu, Namkum, Ranchi-834010, Jharkhand
12 min.	Lead	Refining mango rejuvenation technology for enhanced success and profitability	<b>Dr Sushil Kumar Shukla</b>	ICAR- Central Institute for Subtropical Horticulture, Rehmankhara, Kakori, Lucknow-226101
12 min.	Lead	Improved production technologies in vegetable crops	<b>Dr S.N.S. Chaurasia</b>	Principal Scientist & Head, Division of Vegetables Production, ICAR- Indian Institute of Vegetables Res., Varanasi-220005, Uttar Pradesh
12 min.	Lead	Recent advances in potato production technology	<b>Dr Manoj Kumar</b>	Joint Director, ICAR-Central Potato Research Institute, Regional Station Modipuram, Meerut-250110, Uttar Pradesh
12 min.	Lead Virtual	Floriculture development: the future pathway	<b>Dr K.V. Prasad</b>	Director, ICAR-Directorate of Floricultural Research, Shivajinagar, Pune, Maharashtra 411005
12 min.	Lead	Addressing soil fertility and plant nutrition in horticultural crops: Paradigm shifts	<b>Dr A.K. Srivastav</b>	Principal Scientist (Soil Science), ICAR-Central Citrus Research Institute, Amravati Road, Nagpur 440033, Maharashtra
12 min.	Lead	Coconut based farming/ cropping systems: recent developments in system productivity and carbon sequestration	<b>Dr H.P. Maheshwara-rappa</b>	Director Research, University of Horticultural Sciences, Bagalkote-587104 (Karnataka), India
5 min.	Oral	Raised bed planting system in Citrus- A new concept	<b>Dr Raj Kumar Sonkar</b>	Principal Scientist, ICAR-Central Citrus Research Institute, Amravati Road, Nagpur-440033 Maharashtra

5 min.	Oral	Innovative energy and water harvesting model for enhancing water productivity of pomegranate in arid regions	<b>Dr Akath Singh</b>	Division of Integrated Land use Management and Farming System, ICAR-Central Arid Zone Research Institute, Jodhpur- 342003, Rajasthan
5 min.	Oral	Fertigation scheduling based on phenophases for productivity and quality of HDP mango	<b>Dr Dinesh Kumar</b>	ICAR-Central Institute for Subtropical Horticulture, Rehmankhara, Kakori post, Lucknow-226101 Uttar Pradesh
5 min.	Oral	Climate change risks and resilience strategies in citrus	<b>Dr A.D. Huchche</b>	ICAR-Central Citrus Research Institute (formerly National Research Centre for Citrus), Amravati Road, Nagpur-440033 Maharashtra
5 min.	Oral	Soil nutrient index: an index for characterizing the unbalancing of orchard nutrition	<b>Dr Tarun Adak</b>	ICAR-Central Institute for Subtropical Horticulture, Rehmankhara, Lucknow-226101, Uttar Pradesh
5 min.	Oral	Studies on the response of different guava ( <i>Psidium guajava</i> L.) varieties to different mulches and pruning times for quality parameters under ultra high density planting systems	<b>Dr Ghanshyam Sahu</b>	Department of Fruit Science, CoA, IGKV, Raipur-492012 Chhattisgarh
5 min.	Oral	Enhancing yield and quality in apple through tall spindle canopy architectural system under high density plantation	<b>Dr Javid Mir</b>	ICAR-CITH, Srinagar-191201, Jammu and Kashmir
5 min.	Oral	Tree Physiology and Fruiting of Litchi cv. China affected by bearing regulated chemicals and girdling	<b>Dr Sanjay Kumar Singh</b>	ICAR- National Research Centre on Litchi, Muzaffarpur-842002, Bihar/ ICAR-CISH, Lucknow
5 min.	Oral	Impact of INM in coconut based high density cropping system in East Coast region of Andhra Pradesh	<b>Dr B.V.K. Bhagavan</b>	Horticultural Research Station Ambajipeta - 533 214, East Godavari District, Andhra Pradesh
5 min.	Oral	Self-sustainable eco-conscious and low-cost strawberry ( <i>Fragaria x ananassa</i> ) farming model using local resources for small and marginal farmers in the mid-hills of Meghalaya	<b>Dr Mayengbam Premi Devi</b>	College of Agriculture, Central Agricultural University (Imphal), Kyrdemkulai-793105, Meghalaya

5 min.	Oral	Some horticultural technologies for improving farm productivity and profit earning of small and marginal farmers under subtropical area	<b>Naresh Babu</b>	ICAR-Central Institute for Subtropical Horticulture, Rehmankhera, Lucknow-226101, Uttar Pradesh
5 min.	Oral	Impact of bee pollination in mango under low hill conditions of Nagaland	<b>Dr Avinash Chauhan</b>	Dept. of Entomology, SASRD, Nagaland University, Medziphema, Nagaland
5 min.	Oral	Effect of flower regulation on biotic and abiotic stress management in pomegranate ( <i>Punica granatum</i> L.) under hot arid climate	<b>Dr Ramesh Kumar</b>	ICAR-Central Institute for Arid Horticulture, Beechwal, Bikaner-334 006, Rajasthan
5 min.	Oral	Diversified farming enterprises: A Strategy for enhanced income employment and livelihood security of mango farmers in Uttar Pradesh	<b>Dr Ravi S.C.</b>	ICAR-Central Institute for Subtropical Horticulture, Rehmankhera P.O. Kakori, Lucknow – 227107, Uttar Pradesh
5 min.	Oral	Technology of growth stage based fertigation and crop geometry in Cucurbitaceous crops for enhancing yield and water productivity in Eastern Hill and Plateau Region of India	<b>Dr Bal Krishna Jha</b>	ICAR Research Complex for Eastern Region, Farming System Research Center for Hill & Plateau Region, P.O-Rajaulatu, Plandu, Ranchi-834010, Jharkhand
5 min.	Oral	Standardization of pruning intensity for crop regulation in Pomegranate	<b>Dr K. Dhinesh Babu</b>	ICAR-National Research Centre on Pomegranate, NH-65, Solapur-Pune Highway, Kegaon, Solapur-413 255, Maharashtra
5 min.	Oral	Influence of cane length and fruit thinning on the growth yield and fruit quality performance of kiwifruit	<b>Dr Vishal Singh Rana</b>	Department of Fruit Science, College of Horticulture, Dr Y S Parmar University of Horticulture and Forestry, Nauni, Solan-173230, Himachal Pradesh
5 min.	Oral	Pollinators diversity: Importance challenges and researchable issue in India	<b>Dr Kumarnag</b>	ICAR-AICRP on Honey Bees & Pollinators, IARI, New Delhi-110012

## Improving Livelihoods through Technological interventions/ Production Technologies in Horticulture

### Online Oral Presentation (Hall B)

November 19, 2021; Time: 16:45 to 17.30 hrs.

5 min.	Oral	Classification of biotic and abiotic stresses on grape berries using transfer learning	<b>Dr D.S. Yadav</b>	ICAR-National Research Centre for Grapes, Manjri Farm Post, Solapur Road, Pune - 412307, Maharashtra
5 min.	Oral	Bunch improvement in banana through de handing and spray	<b>Dr Nazimuddin Badruddin Shaikh</b>	Zonal Agricultural Research Station, Pune-412 067, Maharashtra
5 min.	Oral	Autumn harvesting of Mango cv. Amrapali and its proximate analysis in the mid hills of West Kameng District in Arunachal Pradesh	<b>Dr Anurag Bajpay</b>	Defence Research Laboratory RDC Salari, DRDO, West Kameng, Arunachal Pradesh, DRL-DRDO, Tezpur-784501, Assam
5 min.	Oral	Role of crop and stage specific customization of nutrients in Horticultural Crops	<b>Dr Murlee Yadav</b>	Deepak Fertilizers and Petrochemicals Ltd., Pune
5 min.	Oral	Precision citriculture through variable fertigation rate in Nagpur mandarin ( <i>Citrus reticulata</i> Blanco)	<b>Dr D.T. Meshram</b>	ICAR-Central Citrus Research Institute, Amravati road, Post Box No. 464, Nagpur-440033, Maharashtra
5 min.	Oral	Canopy architecture management in young mango orchards for quality fruit production	<b>Dr Pranathan Barman</b>	ICAR- Central Institute for Subtropical Horticulture, Rehmankhera, Lucknow-226101, Uttar Pradesh
5 min.	Oral	Studies on morphological characterization flowering and pollination behaviour for higher seed yield and quality in CMS based cauliflower ( <i>Brassica oleracea</i> L. var. <i>botrytis</i> L.) hybrids	<b>Dr Sudipta Basu</b>	Division of Seed Science and Technology, ICAR-IARI, New Delhi 110 012
5 min.	Oral	Effect of various concentrations of boron on growth and corm yield in gladiolus	<b>Dr Anil Kumar Singh</b>	Department of Horticulture, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi-221005, Uttar Pradesh

**DINNER : 19.30 to 21.00 hrs**  
**(Hosted by Seven Star Fruits Pvt Ltd / MAHYCO)**

**Day 3: November 20, 2021**

**Time 09.30 to 11.10 hrs.**

**Venue: Kailash Bhawan, CSAUA&T, Kanpur**

**Session VIII**  
**Rootstocks and Planting Material**

12 min.	Lead	An opportunity to revolutionize fruit production in India	<b>Shri Rajendra Barwale</b>	Chairman, Mahyco Hybrid Seeds Co. Ltd., Resham Bhavan, 4th Floor, 78, Veer Nariman Road, Mumbai-400020 (Maharashtra)
12 min.	Lead	Revolutionizing temperate fruit cultivation through use of rootstocks	<b>Shri Sudhir Chadha</b>	Chadha Seed Farm, Director M/s Indo-Dutch Horticulture Technologies Pvt. Ltd. P.O. Chakalua, Distt. Nainital-263139, Uttarakhand
12 Min	Lead	Mango and guava rootstocks: Current status and future needs	<b>Dr S. Rajan</b>	Director, ICAR-Central Institute for Subtropical Horticulture, Rehmankhara, Lucknow-226101, Uttar Pradesh
12 min.	Lead	Recent developments in citrus rootstocks and production of disease-free quality planting material	<b>Dr D.K. Ghosh</b>	Director, ICAR - Central Citrus Research Institute, Post Box No. 464, Amravati Road, Nagpur - 440033, Maharashtra
12 min.	Lead	Future opportunities for exploiting new rootstocks in grape in India	<b>Dr R.G. Somkunwar</b>	Director, National Research Centre for Grapes, P.B. No. 3, Manjari Farm Post, Solapur Road, Pune-412307, Maharashtra
10 min	Lead Virtual	High-volume virus-free certified planting material production in citrus : a success story of Andhra Pradesh	<b>Dr K. Gopal</b>	Professor and Registrar, Dr Y.S.R. Horticultural University, Venkataramannagudem-534101, West Godavari District, Andhra Pradesh
5 min.	Oral	Quality planting material production in recalcitrant banana varieties through direct regeneration using immature male flower bud explants	<b>Dr M.S. Saraswathi</b>	ICAR, National Research Centre for Banana, Thogamalai Road, Thayanur (Post), Tiruchirapalli-620102, Tamil Nadu



5 min.	Oral	Production of triploids and tetraploids in commercial Citrus Scions and rootstocks by innovative <i>in vitro</i> and <i>ex vitro</i> propagation techniques.	<b>Dr Vijayakumari Narukulla</b>	ICAR, Central Citrus Research Institute, Post Box No. 464, Amravati Road, Shankar Nagar P.O., Kachimet, Nagpur-440033, Maharashtra
5 min.	Oral	Vegetable rootstocks for managing biotic and abiotic stresses	<b>Dr Pradeep Kumar</b>	ICAR- Central Arid Zone Research Institute, Jodhpur, 342003, Rajasthan

## Rootstocks and Planting Material

### Online Oral Presentation (Hall B)

**November 19, 2021; Time: 14:30 to 15.45 hrs.**

5 min.	Oral	Effect of inter-specific grafting in Solanaceous vegetables on yield and quality parameters	<b>Dr Anant Bahadur</b>	ICAR-Indian Institute of Vegetable Research, Post Bag No. 1, PO- Jakhini (Shahanshahpur), Varanasi – 221305 U.P.
5 min.	Oral	Impact of rootstocks on quality and nutrient status of exotic apple varieties under high density plantation	<b>Dr Aroosa Khalil</b>	Division of Fruit Science, Sher-e-Kashmir University of Agricultural Sciences & Technology of Kashmir, Shalimar 190025, Jammu and Kashmir
5 min.	Oral	Citrus rootstock identification by DNA-fingerprinting with InDels	<b>Dr Ashutosh Murkute</b>	ICAR-Central Citrus Research Institute, Amravati Road, Nagpur- 440033, Maharashtra
5 min.	Oral	<i>In vitro</i> mass multiplication through organogenesis and somatic embryogenesis of pineapple ( <i>Ananas comosus</i> L.) for its area expansion in Bihar	<b>Dr H. Mir</b>	Department of Horticulture, Bihar Agricultural University, Sabour, Bhagalpur-813210, Bihar
5 min.	Oral	Performance of cultivated and wild species of brinjal as rootstock against bacterial wilt and effect of grafting on yield attributes	<b>Dr Sunidhi Mishra</b>	Deptt. of Vegetable Science, COA, Indira Gandhi Krishi Vishwavidyalaya, Raipur-492012, Chhattisgarh
5 min.	Oral	Standardization of <i>In-vitro</i> commercial multiplication of ivy gourd ( <i>Coccinia indica</i> )	<b>Dr K. Ravindra Kumar</b>	Dr YSRHU, Horticultural Research station, Kovvur, West Godavari District-534350, Andhra Pradesh

**Day 3: November 20, 2021**

**Time 11.10 to 13.00 hrs.**

**Venue: Kailash Bhawan, CSAUA&T, Kanpur**

**Session IX**  
**Exploiting Alternate Production Systems**  
**for Profitability**

12 min.	Lead	Recent advance in protected cultivation in Horticulture	<b>Dr Balraj Singh</b>	Former Vice Chancellor, Agriculture University, Jodhpur and Project Co-ordinator, ICAR-AICRP Honey Bee, New Delhi 110 012
12 min	Lead	Cosmic farming in horticultural crops: a ray of hope for nutrition & health benefits	<b>Prof. R.K. Pathak</b>	Former Director, ICAR-CISH, Lucknow, Homa Teacher & amp; Preacher, Fivefold Path Mission, pathakramkripal@gmail.com; 094549774422
12 min.	Lead Virtual	Research strategies and future challenges in organic horticulture	<b>Dr N. Ravisankar</b>	Principal Scientist, ICAR - Indian Institute of Farming Systems Research, Modipuram Meerut, Uttar Pradesh
5 min.	Oral	Plant growth promoting, biochemical and antimicrobial properties of microbes isolated from various bio- formulations	<b>Dr R.A. Ram</b>	Central Institute for Subtropical Horticulture Rehmankhera, P.O. Kakori, Lucknow-226101, Uttar Pradesh
5 min.	Oral	Standardization of organic manures for dragon fruit in Central Dry Zone of Karnataka	<b>Dr B. Hemla Naik</b>	Keladi Shivappa Nayaka University of Agricultural and Horticultural Sciences, Shivamogga- 577204; Karnataka
5 min.	Oral	Effect of different organic sources of nutrients on yield and quality of cashew ( <i>Anacardium occidentale</i> L.) cv. BPP-8	<b>Dr P.K. Panda</b>	AICRP on Cashew, College of Agriculture, OUAT, Bhubaneswar, Odisha
5 min.	Oral	Flower and fruit drop in Sikkim mandarin and their organic management practices	<b>Dr Sudip Kumar Dutta</b>	ICAR Research Complex for NEH Region, Sikkim Centre, Tadong, Gangtok-737102, Sikkim
5 min.	Oral	Aeroponics technology application for raising nurseries of horticulture crops through Ayurved Pro Green Hydroponic System	<b>Dr Dipti Rai</b>	Ayurved Research Foundation, 1st Floor, Unit No. 117, KM trade towers Kaushambi, Ghaziabad-201010, Uttar Pradesh

5 min.	Oral	Technology for the vertical expansion of nursery Under protected conditions using the soilless rooting medium for increasing the number of rootstocks per unit area	<b>Dr Wasim Hassan Raja</b>	Central Institute of Temperate Horticulture, Srinagar Old Airfield, Srinagar Srinagar-191132, J&K
5 min.	Oral	Net house cultivation of papaya	<b>Dr Sharath Kumar Reddy</b>	Horticultural Research Station, Anantharajupeta, Dr YSR Horticultural University, Kadapa, Andhra Pradesh
5 min.	Oral	Studies on performance of Chrysanthemum ( <i>Chrysanthemum morifolium</i> Ramat.) cultivars grown under greenhouse in the soil amended with different cyanobacterial formulations.	<b>Dr M.C. Singh</b>	CPCT, ICAR-IARI, Pusa Campus, New Delhi - 110012

## Exploiting Alternate Production Systems for Profitability

### Online Oral Presentation (Hall B)

**November 19, 2021; Time: 15:45 to 16.30 hrs.**

5 min	Oral	Enhancing Climate resilience of grapevine	<b>Dr A.K. Upadhyay</b>	ICAR-National Research Centre for Grapes, PB No. 3, Manjari Farm PO, Solapur Road, Pune-412307, Maharashtra
5 min.	Oral	Enhancing strawberry productivity, improving fruit quality and sustainable management of land under protected condition adopting vertical production technology	<b>Ms. Subhrajyoti Mishra</b>	Department of Fruit Science, College of Horticulture, JAU, Junagadh- 362001, Gujarat.
5 min.	Oral	Containerized fruit culture for nutrition and income generation	<b>Dr K.K. Srivastava</b>	ICAR-Central Institute for Subtropical Horticulture Rehmankhara P.O. Kakori, Lucknow-227101, Uttar Pradesh
5 min.	Online	Evaluation of suitability of soilless potting media containing fly ash and press mud for indoor foliage plants	<b>Dr Shilpa Shree KG</b>	ICAR-DFR, College of agriculture campus, Shivajinagar, Pune-411 005, Maharashtra
5 min.	Oral	Goat based integrated farming system to enhance the productivity and profitability in coconut ecosystem	<b>Dr Sudhalakshmi C.</b>	Coconut Research Station, Tamil Nadu Agricultural University, Aliyar Nagar- 642101, Tamil Nadu

**(LUNCH : 13.00-14.00 hrs.)**

**Day 3: November 20, 2021**

**Time: 14.00 to 16.00 hrs.**

**Venue: Kailash Bhawan, CSAUA&T, Kanpur**

## **Session X**

### **Post-harvest Management and Value Addition**

12 min.	Lead	Pre-harvest bagging for enhanced postharvest quality of commercially important fruits	<b>Dr Ram Asrey</b>	Principal Scientist, FS&PHT Division, ICAR- Indian Agricultural Research Institute, New Delhi-110012
12 min.	Lead	UVC-treatment for safe handling of fruits and vegetables	<b>Dr B.V.C. Mahajan</b>	Director, Punjab Horticultural Post- harvest Technology Centre, Punjab Agricultural University, Ludhiana-141004, Punjab
12 min.	Lead	Physiology, quality and safety of fresh-cut fruits and vegetables	<b>Dr Sunil Pareek</b>	Director (IQAC) and Head, Department of Agriculture & Environmental Sciences, National Institute of Food Technology Entrepreneurship & Management (NIFTEM), Kundli 131028, Sonapat, Haryana
12 min.	Lead Virtual	New development in prolonging storage of fruits and vegetables	<b>Dr Surajit Mitra</b>	Professor and Former Head, Post Harvest Technology, Bidhan Chandra Krishi Viswavidyalaya (BCKV) Mohanpur- 741252, Nadia, West Bengal, India
12 min.	Lead Virtual	New trends in product development and value addition	<b>Dr Madhav Naidu</b>	Senior Principal Scientist, SFS Department, CSIR-CFTRI, Mysore-570 020, Karnataka
12 min.	Lead Virtual	Electrical Field based non-thermal and thermal processing to extend the shelf life of fruits	<b>Dr Brijesh Srivastava</b>	Professor, Department of Food Engineering & Technology, Tezpur University, Tezpur-784028 Assam
12 min.	Lead Virtual	Status of referral labs for certification in horticultural produce: issues and strategies	<b>Dr Kaushik Banerjee</b>	National fellow & Principal Scientist, National Research Centre for Grapes, P.O. Manjiri farm, Solapur Road, Pune- 412307, Maharashtra

5 min.	Oral	Studies on effect of different packaging materials on biochemical changes of fig ( <i>Ficus carica</i> L.) cv. Brown Turkey during storage	<b>Prof. Amayogi Kurubar</b>	College of Agriculture, UAS Campus, Raichur, P.B. No. 24 Pin Code 584102 Karnataka
5 min	Oral	Nitric oxide treatment for postharvest quality retention of fruits	<b>Dr Kalyan Barman</b>	Department of Horticulture, Banaras Hindu University, Institute of Agricultural Sciences, Varanasi-221005, Uttar Pradesh
5 min	Oral	Functional characterization of modified banana starch and preparation of low glycaemic convenience foods	<b>Dr Suresh Kumar Paramasivam</b>	ICAR-NRC for Banana, Thogamalai Road, Trichy, 620 102 Tamil Nadu
5 min	Oral	Value addition of karonda to achieve nutritional security goals	<b>Dr Alok Gupta</b>	ICAR-Central Institute for Subtropical Horticulture, Rehmankhara P.O. Kakori, Lucknow-227107, Uttar Pradesh
5 min	Oral	Formulation and nutritional evaluation of immunity booster-organic soups	<b>Dr Vinita Singh</b>	Food Science and Nutrition Deptt., C.S. Azad University of Agriculture and Technology, Kanpur-208002, Uttar Pradesh
5 min	Oral	Nutrition evaluation of Biscuit fortified through plant resources	<b>Dr Seema Sonkar</b>	Food Science and Nutrition Deptt., C.S. Azad University of Agriculture and Technology, Kanpur-208002, Uttar Pradesh
5 min	Oral	Post-harvest melatonin treatment for enhancing the shelf-life of guava ( <i>Psidium guajava</i> L.) fruits during storage	<b>Bharati Killadi</b>	Division of Post Harvest Management, ICAR-CISH, Rehmankhara, Lucknow-226101
5 min	Oral	Effect of pretreatments on dehydration of oyster mushroom	<b>Priya Vashishtha</b>	Krishi Vigyan Kendra, Hardoi, Directorate of Extension, C.S. Azad University of Agriculture & Tech., Kanpur-208002 (U.P.)

## Post-harvest Management and Value Addition

### Online Oral Presentation (Hall B)

November 19, 2021; Time: 16:30 to 18.00 hrs.

5 min.	Oral	Nano Sticker- Multilayered encapsulation of 1- MCP and Hexanal as a smart delivery system to enhance the shelf life of banana	<b>Dr Srivignesh Sundaesan</b>	Department of Horticulture, School of Life Sciences, Central University of Tamil Nadu (CUTN), Neelakudi campus, Thiruvavur-610 005, Tamil Nadu
5 min.	Oral	X-ray imaging as a non-destructive detection technique for jelly seed disorder in mango ( <i>Mangifera indica</i> L.) fruit	<b>Dr Rama Krishna Karri</b>	Department of Horticulture, School of Life Sciences, Central University of Tamil Nadu (CUTN), Neelakudi campus, Thiruvavur-610 005, Tamil Nadu
5 min.	Oral	Encapsulated nanofibers for ethylene scavenging in sapota fruits	<b>Dr Shalini Rudra</b>	Division of Food Science and Postharvest Technology, ICAR-Indian Agricultural Research Institute, New Delhi-110012
5 min.	Oral	Evaluation of skeletonizing agents for separation of leaf vein skeletons of <i>Polyalthia longifolia</i> var. pendula	<b>Dr Moumita Malakar</b>	Dept. of Horticulture & Floriculture, Central University of Tamil Nadu (CUTN), Neelakudi campus, Thiruvavur-610 005, Tamil Nadu
5 min.	Oral	Physicochemical and total carotenoid variations of fresh Khasi mandarin ( <i>Citrus reticulata</i> Blanco.) fruits of Tinsukia district.	<b>Dr Shahida Choudhury</b>	College of Horticulture, AAU, Jorhat-785013, Assam
5 min.	Oral	Changes in qualitative nutritional and sensory profile of banana biscuits prepared from native variety of Andhra Pradesh in storage period	<b>Dr Kondepalli Venkata Subbaiah</b>	Krishi Vigyan Kendra, Dr Y.S.R. Horticultural University, Venkataramannagudem, West Godavari (District), Andhra Pradesh
5 min.	Oral	Development of low-fat and anthocyanin rich purple sweet potato vacuum fried chips	<b>Dr Chinthia Pradeepika</b>	Division of Crop Utilization, ICAR-CTCRI, Thiruvananthapuram, Kerala
5 min.	Oral	Resistant starch-rich ready-to-reconstitute gruel mix from Makhana ( <i>Euryale ferox</i> )	<b>Dr Manashi Das Purkayastha</b>	Department of Horticulture, Assam Agricultural University, Jorhat- 785013, Assam

5 min.	Oral	Influence of pre-harvest foliar application of iron on post-harvest life in gladiolus cv. Malaviya Kiran	<b>Dr Anjana Sisodia</b>	Department of Horticulture, Institute of Agricultural Sciences, Banaras Hindu University, Varanasi-221005, Uttar Pradesh
5 min.	Oral	Studies on preservation of Nagpur mandarin segments in sugar syrup	<b>Dr Surendra Patil</b>	Department of Fruit Science Dr PDKV, Akola, Akola-444104, Maharashtra
5 min.	Oral	Enhancing growers income through adoption of DOV for raisin making in Nasik	<b>Dr Ajay Sharma</b>	ICAR-National Research Centre for Grapes, Farm, Solapur Road, Pune – 412307, Maharashtra
5 min.	Oral	Process time reduction for development of candied Mosambi peel	<b>Dr Alka Joshi</b>	Division of Food Science & Postharvest Technology, ICAR-Indian Agricultural Research Institute, Pusa Campus, New Delhi-110012
5 min.	Oral	Altering the techno-functional properties of potato powder for suitable food applications	<b>Dr Shruti Sethi</b>	Division of Food Science & Postharvest Technology, ICAR-Indian Agricultural Research Institute (IARI), New Delhi-110012
5 min.	Oral	Pea pod powder as functional ingredient in mayonnaise: effect on rheology and stability	<b>Dr Shalini Rudra</b>	Division of Food Science and Postharvest Technology, Indian Agricultural Research Institute, Pusa, New Delhi 110 012

## Day 3: November 20, 2021

Time: 16.00-17.30 hrs.

Venue: Kailash Bhawan, CSAUA&T, Kanpur

### Session XI

### New Initiatives in Produce Management

12 min.	Lead Virtual	Experience of FPOs in produce management of horticulture crops	<b>Shri Ram Narayan Ghatak</b>	CEO, INDIGRAM LAB'S Foundation, Mohan Cooperative Industrial Estate, New Delhi 110044
12 min.	Lead	FPOs and Startups to enable Innovation and Technology Adoption in Horticulture	<b>Shri Deepak Pareek</b>	CEO AgriWatch, Director – Partnerships and Alliances, ISAP/ILF Technology Pioneer, World Economic Forum, New Delhi
12 min.	Lead	New initiatives in establishing farmers producer organizations for quality production and export promotion in horticultural commodities	<b>Dr R.N. Padaria</b>	Professor and Head, Division of Agricultural Extension, ICAR-IARI, New Delhi-110012
12 min.	Lead Virtual	Bringing synergy between FPOs and agri-startups for value creation for horticulture farmers	<b>Dr Ranjit Kumar</b>	Head, Agribusiness Management Division, ICAR-NAARM, Rajendranagar, Hyderabad-500030, Andhra Pradesh
12 min.	Lead Virtual	Impact of Geographical Indication on Horticultural Crops Trade and Livelihoods	<b>Shri Bhanu Pratap Singh</b>	Founder Executive Director, North East Sales Promotion
12 min.	Lead Virtual	Strategies for balancing rising fruits and vegetables imports	<b>Dr Sri Ram Singh</b>	Professor and HOD (Trade Operations & Logistics), IIFT, New Delhi
12 min.	Lead	Seed spices exports-constraints and opportunities	<b>Dr R.K. Kakani</b>	ICAR-Central Arid Zone Research Institute, Jodhpur-342003, Rajasthan
12 min.	Lead	Empowering tribals in Jharkhand through horticultural enterprises	<b>Shri Rajiv Ranjan</b>	PRADAN, Ashok Kunj, Harmu Housing Colony, Delatoli, Ranchi 834002, Jharkhand



8 min.	Oral	Transforming Livelihood of Tribals through Developing Value Chain in Underutilized Fruits	<b>Dr R. A. Kaushik</b>	Department of Horticulture, Rajasthan College of Agriculture, Maharana Pratap Univ. of Agriculture & Technology, C-10, Durga Nursery Road, Udaipur 313001 Rajasthan
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**18.30-19.30 hrs.**

**Cultural Programme**

*(DINNER : 19.30-21.00 hrs.)*

**Day 4: November 21, 2021**

**Time: 10.00-13.00 hrs.**

**Venue: Kailash Bhawan (Hall B), CSAUA&T, Kanpur**

**Session XII**

**Elocution contest on**

***“Fruits and Vegetables are the safest source of Nutrition and maintaining sound Human Health”***

<b>Welcome and Remarks</b>	Vice Chancellor, CSAUA&T, Kanpur
<b>Opening Remarks</b>	Chairman
<b>Declaration of Rules and regulations</b>	Co-Chair
<b>Presentation by Students/ delegates</b>	
<b>Closing Remarks</b>	Chairman
<b>Vote of Thanks</b>	Dean College of Agriculture, CSAUA&T

**Day 4: November 21, 2021**

**Time: 10.00-11.30 hrs.**

**Venue: Kailash Bhawan (Hall A), CSAUA&T, Kanpur**

**Session XIII**

**Farmers-Scientists Interface**

**Theme: Next Generation Regeneration Horticulture:  
Technological and R&D Needs/ Policy Gaps**

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**Welcome of guests and delegates by Dean**

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**Welcome of Chair and Co-Chair**

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**Sharing of Success stories by Progressive farmers**

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**Address by Co-Chair**

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**Address by Chair**

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**Vote of Thanks**

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*(LUNCH : 13.00 -14.30 hrs.)*

**Day 4: November 21, 2021**

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**14.30-16.00 hrs.**

**Valedictory Function**

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**Day 5: November 22, 2021**

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**09.00-17.00 hrs.**

**Field Visit**

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**Additional fee Rs.200/ per person to be paid on the Day of Registration**

## Schedule for Online Poster Sessions (Day 2&3)

### 9th Indian Horticulture Congress-2021

Theme	Session title	Date	Time
I	International Year of Fruits and Vegetables with focus on Nutrition and Health	19-11-2021	14.30-17.00 Hours
II	Management of Biotic and Abiotic Stresses	19-11-2021	14.30-17.00 Hours
III	Genetic enhancement and next generation breeding strategies	19-11-2021	14.30-17.00 Hours
IV	Crops for Round the Year Production	19-11-2021	15.30-17.00 Hours
V	Unexploited/ Underexploited Crops	19-11-2021	15.30-17.00 Hours
VI	Improving Livelihoods through Technological interventions/ Production technologies in horticulture	20-11-2021	10.30-12.30 Hours
VII	Wasteland utilization through Horticulture	20-11-2021	10.30-12.30 Hours
VIII	Rootstocks and Planting Material	20-11-2021	10.30-12.30 Hours
X	Exploiting Alternate Production Systems for Profitability	20-11-2021	14.30-17.00 Hours
XI	Post-harvest Management and Value Addition	20-11-2021	14.30-17.00 Hours
XII	New Initiatives in Produce Management	20-11-2021	14.30-17.00 Hours

### Note:

1. Separate zoom link will be provided for each session to the participant
2. Recorded poster/ poster in template given may please be presented in 1 minute time highlighting the methodology and work achievements
3. The presenter should also be available for discussion during the session.

## Session Chair/ Co-Chair

Session	Session	Date	Chair	Co-chair
I	Thematic Session on International Year of Fruits and Vegetables with focus on Nutrition and Health	November 18, 2021 14.00-15.45 hrs	<b>Dr S.K. Malhotra</b> Agriculture Commissioner, MoAFW, Govt. of India	<b>Dr J.C. Rana</b> Country representative, India Office, Alliance of Bioversity International and CIAT, Region – Asia, India Office
				<b>Dr S. Rajan</b> Director, ICAR-CISH, Lucknow
II	Management of Biotic and Abiotic Stresses	November 18, 2021 15:45 to 17:30 hrs	<b>Dr A.N. Mukhopadhyay</b> Former Vice Chancellor, AAU, Jorhat	<b>Dr D.K. Ghosh</b> Director, ICAR-CCRI, Nagpur  <b>Dr H.G. Prakash</b> Director Research, CSAUA&T, Kanpur
III	Unexploited/ Underexploited Crops	November 19, 2021 9:30 to 11:15 hrs	<b>Dr T. Janaki Ram</b> Vice Chancellor, Dr YSR Horticulture University, Venkataramannagudem, A.P.	<b>Dr P.L. Saroj</b> Principal Scientist and Former Director, ICAR- Central Institute for Arid Horticulture, Bikaner, Rajasthan
				<b>Dr C.P. Sachan</b> Dean, CSAUA&T, Kanpur
IV	Wasteland utilization through Horticulture (Parallel)	November 19, 2021 9:30 hrs to 10:30 hrs	<b>Dr S.D. Sawant</b> Vice Chancellor, KKV, Dapoli, Maharashtra	<b>Dr R.A. Marathe</b> Director, National Research Centre for Pomegranate, Solapur, Maharashtra
				<b>Dr R.P. Singh</b> DSW, CSAUA&T, Kanpur

Session	Session	Date	Chair	Co-chair
V	Genetic enhancement and next generation breeding strategies	November 19, 2021 10.30 to 12.15 hrs	<b>Dr C. Kofe</b> Former Vice Chancellor	<b>Dr T.K. Behera</b> Director, ICAR-Indian Institute of Vegetable Research, Varanasi
VI	Crops for Round the Year Production	November 19, 2021 12.15 to 13.15 hrs	<b>Dr Bijendra Singh</b> Vice Chancellor and University of Agricultural and Technology, Ayodhya, U.P.	<b>Dr B.S. Tomar</b> Joint Director (Extension), ICAR-IARI, New Delhi  <b>Dr P.K. Gupta</b> Director, National Horticultural Research and Development Foundation, Janakpuri, New Delhi-110075
VII	Improving Livelihoods through Technological interventions/ Production technologies in horticulture	November 19, 2021 14.15 to 17.15 hrs	<b>Dr Balraj Singh</b> Vice President, IAHS and Former Vice Chancellor, A.U. Jodhpur	<b>Dr H.P. Maheswarappa</b> Director Research, University of Horticultural Sciences, Bagalkot, Karnataka  <b>Dr B.N. Hazarika</b> Dean, CAU, Pasighat, Aruchal Pradesh
VIII	Rootstocks and Planting Material	November 20, 2021 9.30 to 11.10 hrs	<b>Dr D.R. Singh</b> Vice Chancellor, CSAUA&T, Kanpur	<b>Dr Raju Barwale</b> Chairman, Mahyco, Maharashtra  <b>Dr R.G. Somkunwar</b> Director, ICAR-NRC Grape, Pune
IX	Exploiting Alternate Production Systems for Profitability	November 20, 2021 11.10 to 13.00 hrs	<b>Dr. R.K. Pathak</b> Former Director, ICAR-CISH, Lucknow	<b>Dr Y.R. Chanana</b> Former Head, PAU, Ludhiana  <b>Dr V.K. Tripathi</b> Professor and Head (Hort), CSAUAT, Kanpur

Session	Session	Date	Chair	Co-chair
X	Post-harvest Management and Value Addition	November 20, 2021 14.00 to 16.00 hrs.	<b>Dr V.S. Thakur</b> Former Vice Chancellor, Dr YS Parmar University of agriculture and Technology, Solan, Himachal Pradesh	<b>Dr. W.S. Dhillon</b> Former ADG( Hort), ICAR, New Delhi
XI	New Initiatives in Produce Management	November 20, 2021 16.00-17.30 hrs	Shri Deepak Pareek CEO, AgriWatch Director –Partnerships and Alliances, ISAP/ILF Technology Pioneer, World Economic Forum, New Delhi	<b>Dr B. Hemla Naik</b> Director (Extension), KSN University of Agricultural and Horticultural Sciences, Shivamogga; Karnataka <b>Dr R.N. Padaria</b> Professor and Head, Division of Extension Education, ICAR-IARI, New Delhi
XII	Elocution contest on Fruits and Vegetables are the safest source of Nutrition and maintaining sound Human Health	November 21, 2021 10.00 to 13.00 hrs.	Dr S.K. Singh Vice President, IAHs, New Delhi	<b>Dr Dharm Raj Singh</b> Dean, CoA, CSAUAT, Kanpur
XIII	Farmers Scientist Interface	November 20, 2021 10.30-13.00 hrs	<b>APC</b> Govt of Uttar Pradesh / Vice Chancellor, CSAUAT, Kanpur	<b>Dr M.J. Khan</b> Chairman, Indian Chamber of Food and Agriculture, New Delhi DGM, NABARD, Lucknow, Director (Extension Education)
	Valedictory Session	14.30- 16.00 hrs		

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Horticulture & Food Processing Uttar Pradesh

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VNR Seeds Pvt. Ltd. Chhattisgarh

# 9<sup>th</sup> Indian Horticulture Congress

18-21<sup>st</sup> January, 2021

## National Organising Secretaries

Dr V.B. Patel

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Dr Jai Prakash

Mob.: 9654761955

## Local Organising Secretaries

Dr H.G. Prakash

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Dr V.K. Tripathi

Mob.: 9450331991

## Online Oral Poster Presentation

Dr Jai Prakash

Mob.: 9654761955

Dr M.K. Verma

Mob.: 9013885259

Dr S.K. Singh

Mob.: 8920968154

## Accommodation and Transport

Dr Sarvesh Kumar

Mob.: 9935202988

Dr Manender Singh

Mob.: 9415175257

## Registration

Dr Shweta Yadav

Mob.: 9450337602

## Food

Dr P.K. Upadhyay

Mob.: 6306014171

## Hall Arrangement

Dr Akhilesh Mishra

Mob.: 9415480433