



October 17-19, 2023

ICAR-IIHR, Hesaraghatta Lake Post, Bengaluru-560089

Programme Schedule

Venue:

**Dr. G. S. Randhawa Auditorium,
ICAR-IIHR Hesaraghatta Campus**

Registration

Venue: G. S. Randhawa Auditorium

Date: 17.10.2023

Time 9.00 am - 5.00 pm

Organized by

**Indian Council of Agricultural Research (ICAR), New Delhi, India
ICAR-Indian Institute of Horticultural Research, Bengaluru, India
Society for Promotion of Horticulture, ICAR-IIHR, Bengaluru, India**

Fruits and Palms



Day 1, October 17, 2023

Technical Session

Session - I: Global Scenario (Fruits and Palms)

Venue: Dr. G. S. Randhawa Auditorium

Date: 17.10.2023

Time: 09.30 AM - 12.00 Noon

Introduction about the seminar	
Chairman	Dr. V. A. Parthasarathy , Emeritus Scientist & Formerly Director , ICAR- IISR, Calicut, Kerala
Co- Chairman	Dr. Prakash Patil , Project Coordinator (Fruit Crops), ICAR-IIHR, Bengaluru Dr. Anjani Kumar Jha , Principal Scientist, DKMU, ICAR, New Delhi
Rapporteurs	Dr. Kundan Kishore , PS, CHES, Bhuvaneshwar Dr. Muralidhara, B.M. Scientist, CHES-Chettalli, ICAR-IIHR, Bengaluru
Key Note Speaker	
Topic	Speakers
Heirlooms in Horticulture - Fascinating history of conservation	Dr. V. A. Parthasarathy Emeritus Scientist & Formerly Director, ICAR-IISR, Calicut, Kerala
Speakers	
1. International Scenario on Avocado Industry	Dr. Neena Mitter , Director, Centre for Horticultural Science at Queensland Alliance for Agriculture and Food Innovation (QAAFI), the University of Queensland, Brisbane, Australia
2. Potential Exotic Berries in India: Initiatives and Future Strategies	Dr. V.B. Patel , ADG (F&PC), SMD (Horticultural Science), ICAR, New Delhi
3. Telangana Oilpalm Mission: Policy, Challenges and achievements	Dr. E. Srinivasa Rao , Horticulture Advisor, Govt. of Telangana, Hyderabad
4. Underutilised palms- progress and prospects, tapping for sap and processing for value added products	Dr. K. B. Hebbar , Director, ICAR- CPCRI, Kasaragod, Kerala
5. Horticultural crops diversity: an unexploited treasure trove for food security	Dr. S. Mayes , Associate Professor (Crop Genetics), University of Nottingham, United Kingdom
6. Potential under exploited arid fruits for Mainstreaming	Dr. Jagadish Rane , Director, ICAR-CIAH, Bikaner, Maharashtra
7. Cashew-Issues and Emerging trends	Dr. J. Dinakar Adiga , Director, DCR, Puttur.
8. Strategic approaches for climate resilient and sustainable production of less known fruits	Dr. Kavino, M , Associate Professor, TNAU, Coimbatore, Tamil Nadu
Tea break (11.15 to 11.30 AM)	
Oral Presentations (11.30 AM to 12.00 Noon)	
1. Mainstreaming the underutilized fruits of Sikkim Himalayas - <i>Maniyannan, S.</i>	
2. Avocado: from niche to global staple production and trade trends – <i>HarishKumar, H. V.</i>	
3. Global scenario of dragon fruit production: A review- <i>Raju, R.</i>	
4. Recent advances in kiwifruit production under Indian scenario- <i>Vishal S. Rana</i>	
5. Dragon fruit, an adaptive option for climate change resilience in sub-himalayan subtropical horticulture- <i>Shashi K. Sharma</i>	
Chairman's Remarks	
Poster Presentations- (17.10.2023) Time: 5.15 to 6.30 PM	
Venue: Biotechnology Block	

Session II

(a): Genetic Improvement (Fruits and Palms)

Venue: Dr. G. S. Randhawa Auditorium

Date: 17.10.2023

Time 12.00-1.30 PM

Chairman	Dr. V. B. Patel , ADG (F&PC), SMD (Horticultural Science), ICAR, New Delhi
Co- Chairman	Dr. Bikas Das , Director, NRC Litchi, Muzaffarpur Dr. P. C. Tripathi , PS, SMD (Horticultural Science), ICAR, New Delhi
Rapporteurs	Dr. Dinesh Babu , PS, ICAR-NRC on Pomegranate, Solapur Dr. Anupa , Scientist, ICAR-IIHR, Bengaluru

Key note Presentation

Topic	Speakers
Strategies for enhanced utilization of germplasm in crop improvement	Dr. Hari Deo Upadhyay , Former Director, Gene Bank and Principal Scientist, ICRISAT, Hyderabad, Telangana

Lead Speakers

1. Underutilized tropical and subtropical fruits of Asia	Dr. Sisir Kumar Mitra , Former Dean, BCKV, Kalyani, Nadia, West Bengal
2. Genetic resources and breeding of Litchi and other Sapindaceous fruits	Dr. Bikas Das , Director, ICAR- NRC Litchi, Muzaffarpur
3. Potential of underutilized fruit and nut crops of temperate region	Dr. M. K. Verma , Director, ICAR-Central Institute of Temperate Horticulture, Srinagar, J&K
4. Unlocking the Economic Potential of Jackfruit in India	Dr. Prakash Patil , Project Coordinator (Fruit Crops), ICAR-IIHR, Bengaluru
5. Varietal development of Avocado in Israel	Dr. Vered Irihimovitch , Researcher Agricultural Research Organization The Volcani Center, Israel
6. Improvement of pummelo and grape fruit: Problems and prospects	Dr. M. Sankaran Head, Division of Fruit Crops ICAR-IIHR, Bengaluru

Lunch (1.30 PM to 2.15PM)

Inaugural Program (3.00 to 5.15 PM)

High Tea (5.15 to 5.30 PM)

Oral Presentations (5.30 to 6.55 PM)

1. Uniqueness in Diversity of Bael (<i>Aegle marmelos</i> Corr.) in Subtropical region of India- Pandey, D.
2. Assessment of genetic divergence of twenty Longan (<i>Dimocarpus longan</i> L.) genotypes under North Zone of Bihar- Ajay kumar
3. Exploring the diversity in Jackfruit (<i>Artocarpus heterophyllus</i> Lam) grown in Tamil Nadu with an emphasis on variations in pulp colour - Shruthi, S.
4. Variability in qualitative morphological characters of Mangosteen (<i>Garcinia mangostana</i> L.) grown in Kerala - Ananya, P.S.
5. Survey, collection and evaluation of avocado (<i>Persea americana</i> Mill.) genotypes for yield and quality parameters- Venkata Rao
6. Performance of Dragon fruit under northern Telangana conditions- Suchitra, V.
7. Phenological growth stages in rambutan (<i>Nephelium lappaceum</i> L.) based on extended BBCH- scale - Ranganna, G.
8. Genetic variability studies in native germplasm of gundi (<i>Cordia gharaf</i> L.) of Maharashtra state - Dalve, P.D.
9. Reproductive Phenology of dragon fruit: A critical dimension of plant function - Kundan Kishore
10. Development of bio-fortified pomegranate var. Solapur Lal for table purpose & Solapur Anardana for anardana purpose - Dinesh Babu, K.

Chairman's Remarks

Poster Presentations- (17.10.2023) Time: 11.30 AM to 1.00 PM

Venue: Biotechnology Block

Day 2, October 18, 2023

Technical Sessions

Session II (b): Genetic Improvement (Fruits and Palms)

Venue: Dr. G. S. Randhawa Auditorium

Date: 18.10.2023

Time: 9.00 AM- 11.30 AM

Chairman	Dr. S. B. Dandin , Former VC, UHS, Bagalkot
Co-Chairman	Dr. Jagadish Rane , Director, ICAR-CIAH, Bikaner. Dr. M. Sankaran , Head, Division of Fruit Crops, ICAR-IIHR, Bengaluru
Rapporteurs	Dr. A. Nagaraja , PS, Division of Fruit Crops, ICAR-IIHR, Bengaluru Dr. L. G. Veena , Scientist, ICAR - DCR, Puttur
Key note Speakers	
Topic	Speakers
Genetic resources and sustainable production of Underutilized fruit crops	Dr. S. B. Dandin Former VC, UHS, Bagalkot
Lead Speakers	
1. Approaches for Conservation and Utilization of Wild Fruit Genetic Resources of the Western Ghats	Dr. Vasudeva , Dean, College of Horticulture, Sirsi, Uttara Kannada Karnataka
2. Under exploited potential edible fruits of Kodagu region	Dr. P. C. Tripathi , PS, SMD (Horticultural Science), ICAR, New Delhi
3. Genetic resources and varietal wealth of semi-arid Fruit crops	Dr. A. K. Singh , Principal Scientist & I/c Head CIAH, RS, Godhra, Gujarat
4. Mainstreaming underutilized fruit species resources for increasing fruit crop diversity	Dr. S. Ganeshan , Former Director, JNTBGRI, Palode Trivandrum
5. New Generation Luna Avocado Variety- A game changer	Dr. Eric Focht , University of California, Riverside, Eric.focht@ucr.edu
Oral Presentations (10.40 to 11.10 AM)	
1. Scientific Studies in <i>Garcinia dhanikhariensis</i> : an endemic fruit species from bay Islands, India - Pooja Bohra	
2. Characterization and evaluation of jackfruit (<i>Artocarpus heterophyllus</i> L.) germplasm at jack garden, kolar for processing - Manjula, G. S.	
3. Assessment of biochemical attributes and genetic diversity of elite jamun (<i>Syzygium cumini</i> Skeels) genotypes Ruchitha, T.	
4. Morphological, biochemical and molecular characterization of Indian avocado (<i>Persea americana</i> Mill.) accessions - Muralidhara, B. M.	
5. Pummelo (<i>C. maxima</i> [Burm. f.] Osbeck) improvement for fruit quality and enhanced nutritional properties through interspecific hybridization - Narendra Singh, R. M.	
Chairman's Remarks	
Tea Break (11.15 to 11.30 AM)	
Poster Presentations- (18.10.2023) Time: 1.30 to 2.00 PM and 2.30 to 3.00 PM	
Venue: Biotechnology Block	

Session III: Production Management (Fruits and Palms)

Venue: Dr. G. S. Randhawa Auditorium

Date: 18.10.2023

Time: 11.40 AM – 3.15 PM

Chairman	Dr. Shikhamany, S. D., Former VC, YSRHU, Andhra Pradesh and Director, ICAR-IIHR, Bengaluru
Co- Chairman	Dr. P. L. Saroj, Principal Scientist & Former Director, ICAR-CIAH & DCR, Puttur, Karnataka Dr. Maheswarappa H. P., Director of Research, UHS, Bagalkot
Rapporteurs	Dr. B. L. Manjunath, PS, ICAR-IIHR, Bengaluru Dr. Chethankumar, Scientist, ICAR-IIHR, Bengaluru

Key note Speakers

Topic	Speakers
Mangosteen - A boon for humid tropic region growers for doubling of income	Mr. Yacob Ahmed, Advisor, International Tropical Fruits Network (TFNET), Malaysia

Lead Speakers

1. Collection and characterization of germplasm of an underutilized fruit <i>Balanites roxburghii</i> (Desert date) from South India	Hosakatte Niranjana Murthy Research Center for the Development of Advanced Horticultural Technology, Chungbuk National University, Cheongju, Republic of Korea
2. Production of under-utilized arid fruit crops	Dr. P. L. Saroj, Principal Scientist & Former Director, ICAR-CIAH and DCR, Puttur
3. Potential of underutilized palms	Dr. Augustin Jerard, Project Coordinator (Palms) ICAR-CPCRI, Kasaragod.
4. Potential of mainstreaming underutilized fruit crops of North-East region	Prof. C. P. Suresh, Professor and Head, NEHU, Tura Campus, Tura
5. Exploitation of genetic diversity of indigenous underutilized horticultural crops of the region	Prof. T. K. Hazarika, Professor, Department of Horticulture, Mizoram University, Aizwal
6. Avocado Cultivation- lessons from Africa	Mr. Kenneth Blades, Head Avocado Project NAVA Ltd. Zambia
7. Coconut based multistorey cropping system in horticultural crops	Dr. Hanumanthe Gowda Chief Coconut Development Officer, Coconut Development Board, Kochi, Kerala

Lunch break (1.30 to 2.15 PM)

Oral Presentations (2.15 to 3.30 PM)

1. Effect of Paclobutrazol on fruiting and quality parameters in mangosteen (<i>Garcinia mangostana</i>)- Bhagya D. Kartha
2. Top working in “Kodampuli” - Zahida, P.M.
3. Effects of plant growth regulators on yield and quality of rambutan (<i>Nephelium lappaceum</i> var. <i>lappaceum</i>) - Ashok, P.
4. Effect of different grafting methods on dragon fruit (<i>Hylocereus</i> sp.) - Mohammed Billal, M.
5. An insight to dragon fruit cultivation in Kerala by Keerthana, S and Jyothi Bhaskar
6. Enhancing efficiency of propagation in Pitaya (<i>Hylocereus undatus</i> (Haworth) Britton & Rose) involving growing media, IBA and stem cuttings - Anagha, P. K.

7. In vitro micro propagation and hardening of red fleshed Dragon fruit [<i>Hylocereus costaricensis</i> (F.A.C.Weber) Britton & Rose] - Prakasha, D. P.
8. Magnesium Deficiency in Avocado: Causes, Symptoms and Management Rajendiran, S.
9. Alleviating the Cracking Issue in Pomegranate (<i>Punica granatum</i> L.) Cultivar Bhagwa through Soil and Foliar Nutrient Treatment in the Arid Western Rajasthan - Sheetal Rawath, R.S.
10. Influence of nitrogen and potassium application on growth and yield of jamun cv. AJG-85 under high density planting system - Anil I Sabarad
11. Effect of NPK doses on yield and nutrient removal of pink-pulped Kamalam (Dragon fruit) in Alfisols of the Deccan Plateau of India - Ramchandran, S.
12. Impact of customized nutrient solution through enhanced efficiency fertilizers on productivity, quality, soil health & climatic resilience in grapes - Murlee Yadav
13. Zinc use efficiency of arecanut (<i>Areca catechu</i> L.) varieties as influenced by varied levels of zinc - Thanuja, G.
14. Impact of auxin and bio-formulation on rooting vigour and success of air layers in rose apple (<i>Syzygium jambos</i> L.) - Yallesh kumar, H. S.
15. Floral Biology-based technologies to enhance the yield and quality of dragon fruit (<i>Hylocereus undatus</i> [Haworth] Britton & Rose)- Boraiah, K. M.
16. Mineral Profile of Under-Utilized and Exotic Fruits of Humid Tropics: A Comparative study for Bio-nutritional Source - Satisha, G.C.
Chairman's Remarks
Tea Break (3.30 – 3.45 PM)
Poster Presentations- (18.10.2023) Time: 4.00 - 5.30 PM
Venue: Biotechnology Block

Session IV: Post Harvest Management and Nutraceuticals (Fruits and Palms)

Venue: Dr. G. S. Randhawa Auditorium

Date: 18.10.2023

Time: 3.45 PM to 6.30 PM

Chairman	Dr. R. K. Pal , Former Director, ICAR-NRC Pomegranate, Solapur
Co- Chairman	Dr. C. K. Narayana , Principal Scientist (Hort.), Division of Post Harvest Technology & Agricultural Engineering, ICAR-IIHR, Bengaluru
Rapporteurs	Dr. Bhuvaneshwari , PS and Dr. Vijay Rakesh Reddy , Scientist, ICAR-IIHR, Bengaluru
Key note Speakers	
Topic	Speakers
Post harvest technology, products and strategies to ensure nutritional and economical security	Dr. R. K. Pal , Former Director, NRC Pomegranate, Solapur
Lead Speakers	
1. Post harvest processing and value addition in underutilised indigenous and exotic fruit crops	Dr. C. K. Narayana Principal Scientist (Hort.), ICAR-IIHR, Bengaluru
Oral Presentations (4.30 to 6.15 PM)	
1. Minimally processing of breadfruit using chemical elicitors - Chithra, M.	

2. Dragon Fruit blended Ready-to-Serve Beverage: Optimization based on biochemical parameters and storage stability - Lekshmi, S.G.
3. Effect of packaging, ventilation and ethylene scavenger on postharvest quality of manila tamarind var. PKM 1 - Saraswathy, S.
4. Wood apple fruit powder: A novel ingredient for cookies - Pushpa Chethan Kumar
5. Extension of shelf life and quality of minimally processed jackfruit (<i>Artocarpus heterophyllus</i> Lam.) through postharvest treatment and packaging - Premalakshmi, V.
6. Exploring and understanding the biochemical nutritional and biochemical diversity of <i>Artocarpus species</i> - Arivalagan, M.
7. Cashew Apple Pomace based nutri rich cookies - Veena, G. L
8. Experiments on debittering pomelo juice (<i>Citrus maxima</i> Merr.) - Shamina Azeez
9. Mineral nutrients profile of indigenous and exotic underutilized fruits in seasonally dry tropical savanna climate- Rupa, T. R.
10. Collection and evaluation of karonda selections suitable for pickling - Lakshman Kukanoor
11. Changes in physio-chemical composition of avocado fruit during different stages of growth and development - Vittal Kamble
12. Baking, physico-chemical and sensory properties of pouteria forte muffins - Merlin Jose
13. Evaluation of bioactive constituents of <i>Garcinia indica</i> (kokum) as a potential source of hydroxycitric acid, anthocyanin, and phenolic compounds- Pritee Singh
14. Development of biodegradable trays from wood apple shell waste - Bhuvaneswari, S.
15. Application of impregnation technique for value addition as well as utilization of underutilised fruits - Tiwari, R.B.
Chairman's Remarks
Tea Break (6.15 to 6.30 PM)
Poster Presentations- (18.10.2023) Time: 10.40 to 11.40 AM
Venue: Biotechnology Block
Cultural events and Dinner, Time: 7:00 PM to 9:00 PM

Day 3, October 19, 2023

Technical Sessions

Session – V : Biotic and Abiotic Stress Management (Fruits and Palms)

Venue: Dr. G. S. Randhawa Auditorium

Date: 19.10.2023

Time: 9:00 to 11.30 AM

Chairman	Dr. N. K. Krishna Kumar , Ex-DDG, ICAR, New Delhi
Co- Chairman	Dr. R. Selvarajan , Director, NRC Banana, Tiruchirapalli, Tamil Nadu
Rapporteurs	Dr. V. Sridhar , PS and Priti Sonavane , Senior Scientist, ICAR-IIHR
Key note Speakers	
Topic	Speakers
Underutilized crops, biodiversity and ecosystem services	Dr. N. K. Krishna Kumar , Ex-DDG, ICAR, New Delhi
Lead Speakers	
1. Biological control for insect pest management	Dr. Chandish Ballal , Former Director, National Bureau of Agricultural Insect Resources, Bengaluru
2. Sickly Sweet: Insecticidal polyols to control pest fruit flies	Diana Perez Staples , INBIOTECA, Universidad Veracruzana, Xalapa, Veracruz, Mexico
3. India Preparedness to combat (TR4) in banana: Status and strategies	Dr. R. Selvarajan , Director, NRC Banana, Tiruchirapalli, Tamil Nadu
4. IDM of viral diseases in fruit crops	Dr. Krishna Reddy , Former Head, Division of crop protection, ICAR-IIHR, Bengaluru
5. Biotic stresses in Palms	Dr. Vinayaka Hegde , Head, Division of Crop Protection, ICAR- CPCRI, Kasargod
6. Biological approaches in disease management of Fruit crops	Dr. S. Sriram , Principal Scientist and Head, Division of Crop protection, ICAR-IIHR, Bengaluru.
7. Etiology of destructive diseases infecting dragon fruit (<i>Selenicereus Spp.</i>) in India	Dr. G. Sangeetha , Principal Scientist , Division of Crop protection, ICAR-IIHR, Bengaluru.
8. Mitigating nematode stress in Future Fruit crops	Dr. Umamaheshwari , Principal Scientist, Division of Crop protection, ICAR-IIHR, Bengaluru.
Oral Presentations (10.45 to 11.30 AM)	
1. Studies on seasonal incidence of insect pests and natural enemies in jamun, <i>Syzygium cumini</i> L. - Suganya Kanna, S	
2. Prevalence of key diseases in arid zone fruit crops in Haryana - Manoj Kumar Buswal	
3. Outbreak of black inch worm, <i>Hyposidra talaca</i> (Walker) (Lepidoptera: Geometridae) on Jamun (<i>Syzygium cumini</i> L.) under subtropical conditions - Gundappa Baradevanal	
4. Emerging Insect Pests of Avocado in India - Rani, A. T.	
5. Twig and Shoot Dieback: A new <i>colletotrichum</i> disease of Cempedak - Daliyamol	
6. Ants and their eco-friendly management approaches in dragon fruit, <i>Hylocereus sp</i> - Jayanthimala, B. R.	
7. Appropriating pest management (PM) strategies from utilized to underutilized fruits - Abraham Varghese	
8. Assessment of potential distribution and impact of climate change on cucurbit fruit fly, <i>Zeugodacus cucurbitae</i> on Spine gourd and Tea mosquito bug, <i>Helopeltis antonii</i> on Avocado, using CLIMEX - Sridhar, V	
Chairman's Remarks	
Tea break (11.30 to 11.45 PM)	
Poster Presentations- (19.10.2023) Time: 1.00 to 2.00 PM	
Venue: Biotechnology Block	

**Panel Discussion and combined session on
“PPV&FRA, Role of GI, Pollinators, Cropping system for sustainable
production on Horticultural crops”**

Venue: Dr. G. S. Randhawa Auditorium

Date: 19.10.2023

Time: 11.45 AM to 12.45 PM

Chairman	Dr. B. N. S. Murthy , Former, Horticulture Commissioner, GoI, New Delhi
Co-Chairman	Dr. T. K. Nagarathna , Professor and Scientific Officer, GKVK, Bengaluru
Rapporteurs	Dr. Balakrishna B. ICAR-IIHR, Bengaluru Dr. R. Raju , ICAR-IIHR, Bengaluru
Panelists:	APEDA / Honey bee Board / CDB
Invited Speakers	
Topic	Speakers
1. Clean planting material concept: A new initiative in India	Shri. Priya Ranjan , Joint Secretary (Horticulture), New Delhi
2. Awareness programme on protections of farmers varieties and IPR Issues	Dr. D. K. Agarwal , Registrar, PPV&FRA, New Delhi
3. GI on Horticulture crops: preparedness and commercial exploitation	Shri. V. K. Vidyarthi Managing Director, APEDA New Delhi
4. Role of honeybee and other pollinator for sustainable horticultural crop production	Shri. Naveen Kumar Patle Additional Commissioner (Horti.) & Executive Director, National Bee Board, New Delhi
5. Holistic schemes for development of the Horticulture sector	Mr. Gandhi C.P. NHB, Deputy Director
6. Bioactive compounds from natural sources and agro-industrial by-products	Dr. P S Negi , Senior Principal Scientist, CFTRI, Mysore

Session VI: Technology Assessment (Fruits and Palms)

Venue: Dr. G. S. Randhawa Auditorium

Date: 19.10.2023

Time: 12.50 to 1.30 PM

Chairman	Dr. S.K. Singh , Director, ICAR-IIHR, Bengaluru
Co- Chairman	Dr. Vikramaditya Pandey , PS, SMD (Horticulture), ICAR-New Delhi Dr. M. J. Chandre Gowda , Principal Scientist, ATARI, Bengaluru
Rapporteurs	Dr. Atheequlla and Dr. Harish Kumar , Division of Social Science, ICAR-IIHR
Key note Speakers	
Topic	Speakers
Role of KVK in technology assessment, refinement and demonstrations in perennial horticultural crops	Dr. M. J. Chandre Gowda , Principal Scientist, ATARI, Bengaluru
Lead Speakers	
1. Role of Horticultural crops: Doubling the farmers income in India	Dr. Ranjit Kumar , Principal Scientist, NAARM, Hyderabad
2. Potential role of farmer's exotic and underutilized Horticulture crop varieties in assuring nutritional security and their importance in Plant Variety Protection as per PPVFRA Act, 2001	Dr. T. K. Nagarathna , Professor and Scientific Officer, GKVK, Bengaluru
Oral Presentations (1.10 to 1.30 PM)	
1. Leveraging Ag-startups in mid-stream segment of supply chain of underutilized horticultural crops - Sekar, I.	
2. Mangosteen Cultivation: Successful Case Studies from Southern India - Ramya, H. R.	
3. Cultivating Avocados in Tropical Climate: Farmers Perspective - Atheequlla, G. A.	
Chairman's remarks	
Lunch break	
Poster Presentations- (19.10.2023) Time: 12.30 to 1.30 PM	
Venue: Biotechnology Block	

Session VII:
Farmers, Scientist and Entrepreneurs Interface Meet
(Fruits and Palms)

Venue: G. S. Randhawa Auditorium
Date: 19.10.2023 **Time: 2.15 to 4.15 PM**

Chairman	Dr. B. N. S. Murthy , Former, Horticulture Commissioner, GoI, New Delhi
Co-Chairman	Dr. Reju Kurian , PS, Division of Fruit crops, ICAR-IIHR, Bengaluru
Rapporteurs	Dr. V. Sankar and Dr. Reena Rosy Thomas Division of Social Sciences, ICAR-IIHR, Bengaluru

Lead Speakers

Topic	Speakers
1. Under exploited Exotic fruit crops and their future scope in India	Mr. Anil Balanja , Belthangady Dakshina Kannada
2. IT professional transformed into Dragon fruit grower: Iconic story	Mr. Arun Dragon fruit grower, Tumkur
3. Intercropping of exotic fruits in traditional cash crop plantation (new planting/replanting)	Mr. Jose Jacob , Homegrown Nursery & Farms, Kerala
4. Tissue culture is the future for elite planting material of exotic and minor fruits	Dr. Balakrishna Jade Irrigation Systems Ltd., Jalgaon
5. Next generation avocado varieties/ rootstocks grown by Indian farmers	Dr. Srinivasa Rao , IG Deccan-Exotics, Hyderabad, Telangana
6. Startups in Exotic fruits by KEFA	Mr. Babu Siddakumar , KEFA President, Tumkuru
7. From Haskelberg to India, the journey of the avocado saplings	Mr. Udi , CEO, Haskelberg Nursery, Isarel
8. Modern Production systems for enhancing productivity in Underutilized fruit crops	Mr. D. Shukla , VNR Nursery Private Limited, Raipur, Chhattisgarh
9. Success story on dragon fruit cultivation	Mr. Rao , Guntoor, Andhra Pradesh
10. Avocado farming in India- Initiative of young women	Ms. Riya Kothagiri , Ooty, Tamil Nadu
11. Pest Management strategies in Dragon fruit	Dr. Teddy Tepora , Professor, Philippines
12. Disease Management strategies in Dragon fruit	Dr. Mark Balendres , Professor, Philippines

Plenary and valedictory function (4.30 to 6.00 PM)

High Tea (6.00 to 6.30 PM)

Vegetable, Tuber and Root Crops



Session II

(a): Genetic Improvement (Vegetable, Tuber and Root Crops)

Venue: Hall-3 (Committee Room), Administrative building

Date: 17.10.2023

Time: 9.30 AM to 1.30 PM

Chairman	Dr. K. E. Lawande Former Vice Chancellor, Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli
Co- Chairman	Dr. Vijay Mahajan , Director, ICAR-DOGR, Pune.
Rapporteurs	Dr. B. Varalakshmi , Principal Scientist, IIHR, Bengaluru Dr. T.H. Singh , Principal Scientist, IIHR, Bengaluru
Key Note Presentation	
Topic	Speakers
Crop for future/ neglected and underutilized vegetables on FAO perspective for India	Dr. Sudhakar Pandey Asstt. Director General (Flowers, Vegetables, Spices & Med. Plants) ICAR, New Delhi
Lead Speakers	
1. Paving the way towards future- proofing neglected and Underutilized species (NUS) for the pharmaceutical and industries	Dr. T. K. Behera Director ICAR-Indian Institute of Vegetable Research, Varanasi
2. New Vegetable Brassica Foods: A Promising Source of Bioactive Compounds	Dr. Pritam Kalia Former Head, Division of Vegetable crops ICAR-IARI, New Delhi
3. Omics of neglected and underutilized crop species: One small step for NUCS one giant leap for addressing global hunger	Prof. R. Sowdhamini National Centre for Biological Sciences (TIFR), Bellary Road, Bengaluru-560065
4. Genetic improvement of Amaranthus: Problems and prospects	Dr. B. Varalakshmi Principal Scientist, Division of Vegetable crops ICAR-IIHR, Bengaluru
Tea break (11.15 AM to 11.30 AM)	
Oral Presentations (11.30 AM to 1.30 PM)	
1. Optimization of Cucumber Haploid Line Production Using In-Vitro Rescue of In-Vivo Induced Parthenogenetic Embryos- Pradeep kumara, N.	
2. The performance of Sambar Sauthe (<i>Cucumis melo</i> var. <i>conomon</i>) breeding lines for yield and quality traits- Manjunathagowda, D. C.	
3. Selective genotyping to identify markers linked to fruit bursting in Indian Snap melon- Rashmi, K.	
4. Breeding potential of Taro (<i>Colocasia esculenta</i> L.) genotypes using D ² analysis under hill zone of Karnataka- Devaraju	
5. Multiple trait introgression through interspecific hybridization of sponge gourd (<i>Luffa cylindrica</i> L.) and underutilized Satputia (<i>Luffa hermaphrodita</i>)- Mohinder Kaur Sidhu	
6. Genetic variability and character association studies in M ³ generation of <i>Momordica balsamina</i> L. and molecular characterization of putative mutant lines through bulk segregant analysis- Sharavati	
7. Germplasm evaluation for yield and biochemical/nutritional quality in Rat-tail Radish (<i>Raphanus sativus</i> var. <i>caudatus</i>) - an underutilized vegetable crop- Padmini, K.	
8. Evaluation of advance generation of interspecific BC ₁ F ₂ -6 clone for yield, quality and root propagation efficiency in teal gourd (<i>Momordica dioica</i> Roxb.)- Pitchaimuthu M.	
9. Insights into <i>Ogura</i> Cytoplasmic male sterility system expediting breeding of exotic vegetables: case of Brassica oleracea- Saurabh Singh	
10. Gyno-Cis Hybrid in Sahyadri gourd- Chaudhari Ganesh Vasudeo	
11. Characterization of yardlong bean germplasm (<i>Vigna unguiculata</i> var. <i>sesquipedalis</i>) for pod yield and attributing traits, and field tolerance to cowpea aphid borne virus disease- Mahadevaiah C.	
Chairman's Remarks	
Poster Presentations- (18.10.2023) Time: 3.30 PM to 6.30 PM	
Venue: Biotechnology Block	

Day 2, October 18, 2023

Technical Sessions

Session II (b): Genetic Improvement (Vegetable, Tuber and Root Crops)

Venue: Hall-3 (Committee Room), Administrative building

Date: 18.10.2023

Time: 9.30 AM to 11.30 AM

Chairman	Dr. B. Neerja Prabakar Vice Chancellor, Sri Konda Laxman Telangana State Horticultural University, Budwel, Hyderabad (Telangana)	
Co-Chairman	Dr. H.C. Prasanna , HOD, Division of Vegetable Crops ICAR-IIHR, Bengaluru	
Rapporteurs	Dr. M. Thangam , Principal Scientist, IIHR, Bengaluru	
	Dr. M.V. Dhanajaya , Principal Scientist, IIHR, Bengaluru	
Key note Speakers		
Topic		Speakers
Genetic improvement and bio conservation of underutilized vegetable crops		Dr. B. Neerja Prabakar , Vice Chancellor, SKLTSHU, Hyderabad
Lead Speakers		
1. Prospects in underutilized allium for Food, medicine, processing and Export achievements		Dr. Vijay Mahajan Director ICAR-Directorate of Onion and Garlic Research, Pune-410505
2. Moringa Breeding: An International scenario		Dr. Raja Shankar Principal Scientist Division of Vegetable crops ICAR-IIHR, Bengaluru
3. Lesser-known vegetables for income and nutritional security of Tribal belts of India		Dr. Gobind Chandra Acharya Principal Scientist & Head IIHR RS-Bhubaneswar, Odisha
4. Underutilized vegetables: Potential sources of nutrition and livelihood security		Dr. Rajesh Kumar Principal Scientist Division of Crop Improvement ICAR-IIVR, Varanasi
Oral Presentations (10.40 AM to 11.10 AM)		
1. Phylogenetic and genetic diversity analysis of South Indian underexploited vegetable Mangalore melon using ISSR and SSR markers- Ratnakar M. Shet		
2. Genetic diversity analysis of ajowan (<i>Trachyspermum ammi</i> L.) genotypes for growth and yield parameters - Subramaniyan		
3. Characterization and Genetic divergence of Pointed gourd clones of Eastern and North eastern India - Gayatri Sinha		
4. Ex-situ conservation of curry leaf (<i>Murraya koenigii</i> (L.) Spreng): an insight into untapped genetic resources of underexploited native plants- Raghu, B. R.		
5. Genetic diversity studies of <i>Momordica cymbalaria</i> - Rajamanickam, C.		
Chairman's Remarks		
Tea Break (11.15 AM to 11.30 AM)		

Session III: Production Management (Vegetable, Tuber and Root Crops)

Venue: Hall-3 (Committee Room), Administrative building

Date: 18.10.2023

Time: 11.40 AM – 3.15 PM

Chairman	Dr. S. K. Malhotra , Director, DKMU, ICAR-New Delhi
Co- Chairman	Dr. M. Senthil Kumar , Director of Research, Central Coffee Research Institute, Chikmangalur
Rapporteurs	Dr. Anil Kumar Nair , Principal Scientist, IIHR, Bengaluru Dr. D. Kalaivanan , Senior Scientist, IIHR, Bengaluru
Key note Speakers	
Topic	Speakers
Production augmentation of under exploited vegetables for emerging demand in India	Dr. S. K. Malhotra , Director, DKMU, ICAR-New Delhi
Lead Speakers	
1. Challenges and Future prospects of vegetable seed system in India	Dr. Gyan Prakash Mishra Head, Division of Seed Science & Technology. ICAR-IARI, New Delhi
2. Scope, innovation and commercial exploitation of underutilized roots and tuber crops	Dr. M. Nedunchezhiyan Principal Scientist & Head CTCRI RS- Bhubaneswar ICAR-Central Tuber Crops Research Institute, Thiruvananthapuram
3. Vegetable grafting: Scope to promote and sustain yield and quality of NUS vegetables in developing countries	Dr. M. Senthil Kumar Director of Research, Central Coffee Research Institute, Chikmangalur
4. Scope for hydro-aeroponic and Soilless production in underexploited crops	Dr. S. S. Hebbar Principal Scientist Division of Vegetable crops ICAR-IIHR, Bengaluru
Lunch break (1.30 to 2.15 PM)	
Oral Presentations (2.15 PM to 3.30 PM)	
1. Effect of sowing date and nitrogen on quality of beet leaf (<i>Beta vulgaris</i> var. <i>bengalensis</i>)- Ganvit, J. M.	
2. Effect of Various Sources of Nitrogen and Performance on Vegetable Amaranthus- Nirankar	
3. Influence of plant density and deblossoming on zombie pea (<i>Vigna vexillata</i>): an underutilized nutritious vegetable- Srija Priyadarsini	
4. Insights into vegetative propagation of Moringa-grafting and stem cuttings- Sangeeta Kutty, M.	
5. Seasonal influences in Indian Bean varieties for flowering and yield- Thangam, M.	
6. Moonlighting of <i>Talinum triangulare</i> L cv Divya with Organic and Inorganic Fertilizers in South Coastal Odisha, Bharat- Vangapandu Thriveni	
7. Effect of Organic Nutrient Management Practices on Growth, Yield and Quality of Broccoli (<i>Brassica oleracea</i> L var. <i>Italica</i>) cv. “Green Magic”- Preksha Nagar	
8. Effect of foliar application of salicylic acid (SA) along with micronutrients (Boron & Zinc) on growth and yield of parthenocarpic cucumber (<i>Cucumis sativus</i> L.)- Akshata	
9. Effect of fertigation on quality of curry leaf (<i>Murraya koenigii</i> Spreng.)- Jagadeesh kanth	
10. An optimized substract combination for cultivating exotic king oyster mushroom <i>Pleurotus eryngii</i> - Chandrashekar, C.	
11. Performance of exotic vegetable crops at high altitude high rainfall areas of Coorg region- Sankar, V.	
Chairman's Remarks	
Tea Break (3.30 PM to 3.45 PM)	
Poster Presentations (18.10.2023) Time: 9.30 AM to 11.30 AM	
Venue: Biotechnology Block	

Session IV: Post Harvest Management and Nutraceuticals (Vegetable, Tuber and Root Crops)

Venue: Hall-3 (Committee Room), Administrative building

Date: 18.10.2023

Time: 3.45 PM to 6.30 PM

Chairman	Dr. Sridevi Annapurna Singh Director – Central Food Technological Research Institute (CFTRI), Mysuru
Co- Chairman	Dr. Vishnuvardhana, Dean, College of Horticulture (UHS, Bagalkot), Mysuru-571130
Rapporteurs	Dr. R.B. Tiwari, Head (I/C), Division of PHT & AE, ICAR, IIHR, Bengaluru Dr. G. Senthil Kumaran, Principal Scientist, IIHR, Bengaluru

Key note Speakers

Topic	Speakers
Neglected and underutilized vegetables (NUV): Nutrient dense food for common, defense and athletes on processing and value addition perspective	Dr. Sridevi Annapurna Singh Director – Central Food Technological Research Institute (CFTRI), Mysuru

Lead Speakers

1. Discovery of novel compounds in underexploited vegetables for biological control of crop plants	Dr. Prashant Kaushik Kikugawa Research Station, Yokohama Ueki, 2265, Kamo, Kikugawa City, Shizuoka, 439-0031, Japan
2. Value Addition in Mushroom: For Nutrition and Income security	Dr. Meera Pandey Former Principal Scientist Division of Crop Protection ICAR-IIHR, Bengaluru
3. Scope and prospects of mechanization in underexploited vegetables	Dr. G. Senthil Kumaran Principal Scientist Division of Post Harvest and Agri. Engineering ICAR-IIHR, Bengaluru

Oral Presentations (4.30 PM to 6.15 PM)

1. Collection, Formulation and Evaluation of a new Product of Underutilized Vegetable crop (<i>Momordica cymbalaria</i>) for Antidiabetic Property- <i>Rekha Chittapur</i>
2. From Neglect to Nourishment: Tubers Reimagined for Nutrition & Livelihoods- <i>Archana Bhatt</i>
3. Drying Techniques of Waterleaf (<i>Talinum triangulare</i> L) cv Divyaon the convergence of quality attributes- <i>Vangapandu Thriveni</i>
4. Characterization and comparison of the biochemical composition of a novel variety of hull-less (PMK-1) and hulled (PCK-1) genotypes of pumpkin seeds- <i>Ananaya Charaya</i>
5. Potential of selected underutilized leafy vegetables against ccl4 induced oxidative stress on wistar rats- <i>Hamsa, R.</i>
6. Utilization of Watermelon with Special Reference to Citrulline and its Product Valorization- <i>Sajidullah, S.</i>
7. Processing techniques determine bioactive constituents and antioxidant activity of functional beverage from moringa (<i>Moringa oleifera</i> Lam.)- <i>Saji Gomez</i>
8. Evaluation and identification of elite lines for processing in Arrowroot – an emerging and underutilized starch reserve tuber crop- <i>Asha, K.</i>
9. Underutilized Vegetable Crops: Nutri-dense Super Food for Humans- <i>Roshni, P.</i>
10. Bottle gourd seed oil: A new source of omega-3 and omega- 6 fatty acids- <i>Dhananjaya, M. V.</i>
11. Assessment of nutritional composition in wild edible Solanum Plants from Northeast India- <i>Chandra Deo</i>
12. Multivariate analysis for seed related traits in Moringa for diversified exploitation in food industry- <i>Raja Shankar</i>

13. Development of low-calorie nutraceutical beverage from snapmelon and gac fruit containing stevia glycosides- Anupam Raj S
14. Development of ready-to-use Kachri curry powder- S.V.R. Reddy
Chairman's Remarks
Tea Break (6.15 to 6.30 PM)
Poster Presentations- (17.10.2023) Time: 9.30 AM to 11.40 AM
Venue: Biotechnology Block
Cultural events and Dinner, Time: 7.00 PM to 9.00 PM

Day 3, October 19, 2023

Technical Sessions

Session – V : Biotic and Abiotic Stress Management Vegetable, Tuber and Root Crops)

Venue: Hall-3 (Committee Room), Administrative building

Date: 19.10.2023

Time: 9. 00AM to 11.30 AM

Chairman	Dr. P. D. Kamala Jayanti , ICAR National Professor
Co- Chairman	Dr. M. Mani , Emeritus Scientist National Bureau of Agricultural Insect Resources, Bellary road, Bengaluru
Rapporteurs	Dr. Mahesha B , Senior Scientist, ICAR-IIHR, Bengaluru Dr. Prasanna Kumar , Senior Scientist, ICAR-IIHR, Bengaluru
Key note Speakers	
Topic	Speakers
Insurgence and Management of Invasive Pests in Horticultural Crops	Dr. P.D. Kamala Jayanti , ICAR National Professor
Lead Speakers	
1. Role of Honeybees in production and productivity of underutilized vegetable	Dr. P. Venkata Rami Reddy Principal Scientist & PME incharge, ICAR-IIHR, Bengaluru
2. Emerging pest and its management in Neglected vegetable crops	Dr. M. Mani Emeritus Scientist National Bureau of Agricultural Insect Resources, Bellary Road, Bengaluru
3. Disease management strategies in exotic vegetables	Dr. Girija Ganesan Former Principal Scientist Division of Pathology ICAR-IIHR, Bengaluru
4. Development and Prospects in Imperative underexploited vegetable legume breeding with special reference to biotic and abiotic stresses	Dr. Nagendra Rai , Principal Scientist Division of Crop Improvement ICAR-IIVR, Varanasi
Oral Presentations (10.45 AM to 11.30 AM)	
1. Combining of Fusarium wilt and WBNV resistance in watermelon using underexploited <i>Citrullus amarus</i> derived pre-bred line- Shruti Soni	
2. Introgression of fusarium wilt and gummy stem blight resistance in watermelon [<i>Citrullus lanatus</i> (Thunb.) Matsum & Nakai] through rootstock breeding- Kowsalya K.B.	
3. Velvet bean (<i>Mucuna pruriens</i> var. <i>utilis</i>) as a rotational crop to manage root knot nematodes in cucumber under protected conditions- Umamaheswar, R.	
4. Morphological and molecular characterization of taro leaf blight and its resistance assessment through germplasm screening under gangetic plains of West Bengal- Poorvasandhya R	
5. Evaluation of bio-pesticides against Tea Mosquito Bug on Moringa- Jaya Prabhavathi, S.	

6. Evaluation of resistant line of tropical carrot to root-knot nematode <i>Meloidogyne incognita</i> using conventional method and molecular markers- Manishaa, K.
7. Exploration of underutilized cucurbitaceous species as rootstocks to mitigate Fusarium wilt in bitter melon (<i>Momordica charantia</i> L.)- Tamilselvi, N.A.
8. An IZOSYME marker for resistance to root-knot nematode in Brinjal (<i>Solanum melongena</i> L.)- Sherly, J.
9. Antimicrobial activity of macro algae against <i>Colletotrichum Capsici</i> and its management- Suthin Raj, T.
Chairman's Remarks
Tea break (11.30 AM to 11.45 AM)
Poster Presentations- (18.10.2023) Time: 2.30 PM to 3.30 PM
Venue: Biotechnology Block

Session VI: Technology Assessment (Vegetable, Tuber and Root Crops)

Venue: Hall-3 (Committee Room), Administrative building

Date: 19.10.2023

Time: 11.45 AM - 1.30 PM

Chairman	Dr. S. Rajendra Prasad , Former Vice Chancellor, University of Agricultural Sciences
Co- Chairman	Dr. V.K. Jayaragavendra Rao , Head I/c), IIHR, Bengaluru
Rapporteurs	Dr. Srinivas Petikam , Principal Scientist, CHES (ICAR-IIHR), Bhuvanewar and Dr. Harish Kumar H.V. Scientist, IIHR, Bengaluru
Key note Speakers	
Topic	Speakers
Markets, Trade and Institutions on underutilized vegetables	Dr. Gopal N. Naik Professor Indian Institute of Management, Bengaluru
Lead Speakers	
1. Digital Strategies for vegetable crops: Production, Management and Marketing	Dr. Shaik M Meera Director ATARI, Hyderabad
2. Participatory conservation of exotic crops by farmers	Dr. V.K. Jayaragavendra Rao , Head (I/c), IIHR, Bengaluru
3. Role of FPOs, self-help groups on production and export of under exploited vegetables	Dr. R. Venkatta Kumar Head, Division Extension Management System, NAARM Hyderabad
4. Economic feasibility and sustainability analysis in underutilized vegetable crops	Dr. Siva Kumar Head Market and Trade Division ICAR-National Institute for Agricultural Economics and Policy Research New Delhi
Oral Presentations (12.30 PM to 1.30 PM)	
1. Kashi Manu: A Climate Resilient Water spinach Variety for Upland Cultivation, Crop Diversification and Economic Security- Rakesh K Dubey	
2. Phule Suvarn' variety of underutilized crop Double bean- Rajenimbalkar, V. M.	
3. Ganesh Broccoli- A New Genotype for tropical climate- Kadam, M. B.	

4. Demonstration of performance of cluster beans (<i>Cyamopsis tetragloba</i> L.) variety MDU- 1 for higher productivity- Malathi, G
5. Design and development of low cost tower growing system for leafy vegetables (Lettuce)- Carolyn Rathina Kumari, A.
6. Unearthing the Hidden Treasure: Economic Viability of Teasel Gourd (Madahagalakayi) Enterprise in Uttara Kannada District- Ashoka, N.
7. Impact and Assessment study of Oyster Mushroom Production Technology through training and demonstration- Chavan, S. M.
8. Punjab Tarwanga 1: A commercial viable outcome of intraspecific hybridization between two underutilized vegetable crops, namely Long melon and Wanga- Madhu Sharma
9. Enhancing socio-economic status of farmers through adoption of cultivation of an underutilized vegetable teasel gourd- Srinivas, P.
Chairman's remarks
Lunch break
Poster Presentations- (19.10.2023) Time: 9.30 AM to 10.30 AM
Venue: Biotechnology Block

Session VII: Farmers, Scientist and Entrepreneurs Interface Meet (Vegetable, Tuber and Root Crops)

Venue: Hall-3 (Committee Room), Administrative building

Date: 19.10.2023

Time: 2.15 - 4.15 PM

Chairman	Dr. Gopal N. Naik , Professor Indian Institute of Management, Bengaluru
Co-Chairman	Dr. H.C. Prasanna , Head, Division of Vegetable Crops
Rapporteurs	Dr. Mahadevaiah C and Dr. Smaranika Mishra , Division of Vegetable Crops
Lead Speakers	
Topic	Speakers
1. Organic cultivation of curry leaf for trade and export	Mr. Muthusamy , Sri Aranganathar Famers Produces Organization, Mettupalayam, Coimbatore
2. Prospects and Challenges of Moringa product exports from Tamil Nadu	Mr. Ramesh Kumar , RK Exports and Imports, 2/140 Chinnaia Gounden Valasu, Ottanchatram, Dindigul-624612
3. Processing and export chain of Gharkins in India	Mr. Loganathan , Golden Harvest Agritech Benagluru
4. Farmers interactions on production challenges under exploited vegetables	Invited farmers
Plenary and valedictory function (4.30 to 6.00 PM)	
High Tea (6.00 to 6.30 PM)	

Flowers, Medicinal crops, Aromatic crops & Spices



Session II:

Genetic Improvement

(Flowers, Medicinal crops, Aromatic crops & Spices)

Venue: Video Conference Room (Administrative building)

Date: 17.10.2023

Time: 11.30 am to 1.30 pm.

Chairman	Dr. K.V. Prasad , Director, ICAR-DFR, Pune, Maharashtra
Co-Chairman	Dr. N. Anil kumar , Senior Consultant to M. S. Swaminathan Research Foundation (MSSRF), Wayanad, Kerala Dr. C. Aswath , Former Head, Division of Flower & Medicinal Crops, ICAR-IIHR, Bengaluru
Rapporteurs	Dr. Tarak Nath Saha , Senior Scientist, ICAR-DFR, Pune, Maharashtra Dr. Rohini M.R. , Scientist, ICAR-IIHR, Bengaluru

Keynote Speaker

Time	Topic	Speakers
11.30 am-12.00 pm	Developments and Prospects in utilization of exotic and underutilized flower crops	Prof. K.V. Prasad Director ICAR-DFR, Pune, Maharashtra

Lead Speakers

12.00 pm-12.15 pm	Strategies for harnessing the potential of orchids in India	Dr. S.P. Das Director, ICAR-NRC for Orchids, Pakyong, Sikkim
12.15 pm 12.30 pm	Medicinal and aromatic plant conservation and cultivation for livelihood security and human wellness: Role of botanic gardens	Dr. N. Anil Kumar Senior Consultant to M. S. Swaminathan Research Foundation (MSSRF), Wayanad, Kerala
12.30 pm-12.45 pm	Untapped opportunities: Unveiling the potential of flower crops	Dr. Tejaswini Prakash Principal Scientist ICAR-IIHR, Bengaluru
12.45 pm-12.55 pm	The unexplored ornamental wealth of India - Diversity and potential	Dr. Sumangala H.P. Principal Scientist ICAR-IIHR, Bengaluru, Karnataka

Oral Presentations (12.45 pm -1.30 pm)

1	Evolving scope of GMS lines for production of heterotic bacterial wilt resistant hybrids in marigold- Shilpa, P.
2	Genetic diversity of native <i>Dendrobium</i> species revealed by simple sequence repeat (SSR) markers- Mahesh Reddy, D.
3	Isolation and establishment of novel mutant from chimeric ray florets in Chrysanthemum (<i>Dendranthema grandiflora</i> Tzvelev)- Ayesha, N.
4	Exploiting the potential of Heliconia species for ornamental and landscape uses - Safeena, S. A
5	Studies on inter varietal immature seed germination under <i>in vitro</i> conditions and conformation of hybridity in Nerium (<i>Nerium oleander</i> L.)- Parashuram, M.
6	Crossability studies in <i>Dendranthema x grandiflora</i> for novel chrysanthemum germplasm- Sunil Kumar
7	Underutilized elite inter-specific ornamental banana hybrids (<i>Musa</i> spp.) for aesthetics- Tarak Nath Saha
8	Evaluation of mango ginger (<i>Curcuma amada</i> Roxb.) genotypes for yield and essential oil- Gobu, R.
9	Domestication efforts in woody pepper from Andaman and Nicobar Islands- Ajit Arun Waman
	Chairman's Remarks

Lunch (1.30 pm to 2.15 pm)

Inaugural Program (3.00 pm to 5.15 pm)

High Tea (5.15 pm to 5.30 pm)

Session II:

Genetic Improvement

(Flowers, Medicinal crops, Aromatic crops & Spices)

Venue: Video Conference Room (Administrative building)

Date: 18.10.2023

Time: 9.00 am to 11.15 am

Chairman	Dr. D. Prasath , Project Coordinator, AICRP on Spices, ICAR-IISR, Kozhikode, Kerala	
Co-Chairman	Dr. Ram Pal , Principal Scientist, ICAR-DFR Regional Station, Kadiyam, Andhra Pradesh Dr. P.E. Rajasekharan , Former Principal Scientist, ICAR-IIHR, Bengaluru	
Rapporteurs	Dr. T. Usha Bharathi , Senior Scientist, ICAR-IIHR, Bengaluru Dr. Ajit Arun Waman , Senior Scientist, ICAR-CIARI, Port Blair, A&N	
Keynote Speaker		
Time	Topic	Speaker
9.00 am-9.30 am	New dimensions in improvement of exotic and underutilized spices	Dr. D. Prasath Project Coordinator, AICRP on Spices ICAR-IISR, Kozhikode, Kerala
Lead Speakers		
9.30 am -9.45 am	Potential and prospects of native orchid species for their commercial utility	Dr. Ram Pal Principal Scientist ICAR-DFR Regional Station, Kadiyam, Andhra Pradesh
9.45 am-10.00 am	Challenges in genetic resource management and conservation of medicinal and aromatic plants (MAPs)	Dr. P.E. Rajasekharan Former Principal Scientist ICAR-IIHR, Bengaluru
10.00 am-10.15 am	Challenges and future prospects of under exploited and exotic flower crops	Dr. Imtiyaz Nazki Professor and Head Division of Floriculture and Landscaping SKUAS&T, Kashmir
10.15 am-10.30 am	Functional genomics for understanding and improvement of medicinal and aromatic traits	Dr. Dinesh A. Nagegowda Chief Scientist & Scientist In-Charge, CSIR-CIMAP Research Centre Allalasaandra, GKVK Post, Bengaluru
10.30 am-10.40 am	The unexplored ornamental wealth of India -Diversity and potential	Dr. Sumangala, H.P. Principal Scientist, ICAR-IIHR, Bengaluru
Oral Presentations (10.30 am-11.15 am)		
1.	Molecular characterization of native indigenous orchids- Chaitra, H.P.	
2.	Assessment of genetic diversity and growth potential of <i>Barleria</i> genotypes: Exploring its untapped potential as a floral gem - Harshavardhan, M.	
3.	<i>Gladiolus murielae</i> : an underutilized fragrant species of gladiolus - Bhusaraddi Priya, T.	
4.	Evaluation of warm and cool season turf grasses for morphological and quality traits under eastern dry zone of Karnataka - Raviteja, P.	
5.	Expression analysis of photoperiodic flowering genes <i>DgCRY2</i> , <i>DgCOL</i> , and <i>DgLFY</i> in photo-sensitive and photo-insensitive chrysanthemum (<i>Dendranthema</i> x <i>grandiflora</i> Tzvelev) genotypes - Anamika Gurung	
6	<i>Enhancing phytoconstituents and yield in medicinal crops through plant breeding</i> K. Hima Bindu	
6.	Studies on genetic variability in gomphrena (<i>Gomphrena globosa</i> L.) genotypes for productivity and quality traits - Nagajyothi, G.N.	
7.	Genome sequencing, microsatellites characterization and genetic diversity analysis of <i>Pterocarpus santalinus</i> L.f.: An economically important endangered tree of Eastern Ghats, India - Mohana Kumara, P.	
8.	Induced tetraploid reveals improved yield and enhanced phytochemical profile in <i>Centella asiatica</i> (L.) Urban: An underutilized green leafy vegetable - Rohini, M.R.	
	Chairman's Remarks	
	Tea Break (11.15 am to 11.30 am)	
	Poster Presentations: Products and Value addition, Time: 10.30 -11.30 am Venue: Biotechnology Block	

Session III:

Production Management

(Flowers, Medicinal crops, Aromatic crops & Spices)

Venue: Video Conference Room (Administrative building)

Date: 18.10.2023

Time: 11.30 am to 1.45 pm

Chairman	Dr. N.K. Dadlani , Former Director (Horticulture), Govt. of India and Technical Director, Asia Pacific Seed Association
Co-Chairman	Dr. M. Kannan , Former Professor, TNAU, Coimbatore, Tamil Nadu Dr. Sreelatha U. , Former Professor & Head, KAU, Thrissur, Kerala
Rapporteurs	Dr. Sujatha A. Nair , Principal Scientist, ICAR-IIHR, Bengaluru Dr. Shilpa Shree K.G. , Scientist, ICAR-IIHR, Bengaluru

Keynote Speaker

Time	Topic	Speakers
11.30 am-12.00 pm	Exploration of systems for affordable production of exotic and underutilized flower crops	Dr. M. Kannan Former Professor TNAU, Coimbatore, Tamil Nadu

Lead Speakers

12.00 pm-12.15 pm	The current status of research in exotic and underutilized flower crops	Dr. Sreelatha U. Former Professor & Head KAU, Thrissur, Kerala
12.15 pm-12.30 pm	Production management of exotic and underutilized flower crops	Dr. Bharati Kashyap Associate Professor Dept. of Floriculture & Landscape Architecture Dr. Y.S.PUH&F, Solan, HP
12.30 pm-12.45 pm	Sustainable agro technology development and healthy planting material production of under exploited and exotic spices	Dr. K. Kandiannan Principal Scientist ICAR-IISR, Calicut, Kerala
12.45 pm-1.00 pm	Advances in production management of underutilised and exotic medicinal and aromatic crops	Dr. K. Rajamani Professor & Head Department of Floriculture & Landscape Architecture TNAU, Coimbatore

Oral Presentations (12.45 pm – 1.45 pm)

1.	Impact of pruning months with different heights on growth and flower yield of <i>Jasminum</i> sp. - Khanchana, K.
2.	Influence of organics on phenology of chia (<i>Salvia Hispanica</i> L.) under agro-condition of Jabalpur, Madhya Pradesh, India - Rashmi Tiwari
3.	Enhancement of dye yield through nutrient interventions and biological extractions in indigo (<i>Indigofera tinctoria</i> L.) - Dhanasekaran Dhanraj
4.	Effect of aluminium sulphate and lime on colour intensification of hydrangea (<i>Hydrangea macrophylla</i> Thunb.) cut flower under protected cultivation - Yashaswini, M. P.
5.	Standardization of suitable vegetative propagation method in Rue (<i>Ruta graveolens</i> L.) - Abhijith Sasi
6.	Response of gerbera var. Arka Nesara to different growing substrates - Sangeetha Priya, S.
7.	Impact of crop geometry and plant nutrition on yield, quality and nutrient uptake of Davana (<i>Artemisia pallens</i> Wall) cv. Theni under northern dry zone of Karnataka - Lokesh
8.	Effect of organic manures, consortium of bio fertilizers and inorganic fertilizers on productivity and biochemical parameters of mint (<i>Mentha arvensis</i> L.) - Rajamanickam, V.

9.	Influence of light intensity potting media and container type on growth of <i>Dendrobium</i> orchid cv. Emma white on vertigrow structures - Chandana, S.
10.	Optimization of <i>in vitro</i> protocol for direct regeneration of bulbs from scale explant of <i>Lilium longiflorum</i> cv. Gran Paradiso - Soudamini Karjee
11.	Effect of half-strength MS medium supplemented with plant growth regulators on <i>in vitro</i> response in Bird of Paradise (<i>Strelitzia reginae</i> L.) - Swagath Kumar
12.	Effect of different fertigation levels on growth and flower production in gerbera (<i>Gerbera jamesonii</i> L.) - Parminder Singh
	Chairman's Remarks
	Lunch break (1.45 pm - 2.30 pm)
	Poster Presentations: Genetic Improvement, Time: 11.30 am to 12.30 pm) Venue: Biotechnology Block

Session IV: Products and Value addition (Flowers, Medicinal crops, Aromatic crops & Spices)

Venue: Video Conference Room (Administrative building)

Date: 18.10.2023

Time: 3.00 pm to 5.00 pm

Chairperson	Dr. S.P. Das , Director, ICAR-NRC for Orchids, Sikkim
Co-chairpersons	Dr. Suhrita Chakrabarty , Professor and Head, Department of Postharvest Management, BCKV, Mohanpur, West Bengal Dr. M. Madhava Naidu , Former Chief Scientist, SFS Department, CSIR-CFTRI, Mysore, Karnataka
Rapporteurs	Dr. Ranjitha K. , Senior Scientist, ICAR-IIHR, Bengaluru Dr. P. Preethi , Scientist, ICAR-IIHR, Bengaluru

Keynote Speaker

Time	Topic	Speakers
03.00 pm-03.30 pm	Postharvest techniques for value addition of exotic and underutilized flower crops	Dr. Suhrita Chakrabarty Professor and Head Department of Postharvest Management BCKV, Mohanpur, West Bengal

Lead Speakers

03.30 pm-03.45 pm	<i>Atmanirbhar</i> Bharat in Floriculture: for fostering self-reliance in floriculture	Dr. C. Aswath Former Head Division of Flower and Medicinal Crops ICAR-IIHR, Bengaluru
03.45pm-04.00 pm	New dimensions in postharvest techniques for value addition in spices	Dr. M. Madhava Naidu Former Chief Scientist, SFS Department, CSIR-CFTRI, Mysore, Karnataka

Oral Presentations (4.00 pm- 5.00 pm)

1.	Response of <i>Exacum bicolor</i> Roxb. seeds towards priming and heat scarification - Aswathi, S.
2.	Enhancing the vase life of <i>Hydrangea macrophylla</i> Thunb. with different readily available preservative solutions - Kritika Pant
3.	Determining the quality changes in Indian bay leaf (<i>Cinnamomum tamala</i>) as affected by drying methods - Ajit Arun Waman

4.	Anti-cancer properties of <i>Nigella sativa</i> L. seed extract and isolated thymoquinone against K652 cell line - Ravi, Y.
5.	Effects of drying methods and storage duration on nutraceutical compounds in <i>Hibiscus</i> tea - Ganesh B. Kadam
6.	Comparative evaluation of essential oils extracted from <i>Eucalyptus pulverulenta</i> using hydro distillation and microwave assisted extraction method - Kuppusamy, D.
7.	Effect of thermal and non-thermal treatments on enzymatic and non-enzymatic antioxidants of tree bean - Premi Devi, M.
8.	Effect of polyamines on post-harvest physiology and vase life of cut gerbera - Vijayalaxmi, M.
9.	Enhancing phytoconstituents and yield in medicinal crops through plant breeding - Hima Bindu, K.
10.	Decoding the chemical identity of <i>Pimenta</i> spp. from Western Ghats region and exploring its anti-bacterial activity against ginger bacterial wilt - Sivaranjani, R.
Chairman's Remarks	
Tea break (5.00 pm to 5.15 pm)	
Poster Presentations: Production Management, Time: 4 pm to 5 pm	
Venue: Biotechnology Block	
Cultural events and Dinner, Time: 7:00 PM to 9:00 PM	

Session VI: Technology Assessment (Flowers, Medicinal crops, Aromatic crops & Spices)

Venue: Video Conference Room (Administrative building)

Date: 19.10.2023

Time: 09.00 am to 11.15 am

Chairman	Dr. T. Janakiram, Vice Chancellor, Dr. Y.S.R. Horticultural University, Andhra Pradesh	
Co-Chairman	Dr. P. Naveen Kumar, Head, Division of Flower & Medicinal Crops, ICAR-IIHR, Bengaluru Dr. M. Viswanath, Managing Director & Joint Director of Horticulture, Govt. of Karnataka	
Rapporteurs	Dr. Ganesh B. Kadam, Senior Scientist, ICAR-DFR, Pune Dr. Ramya H.R., Scientist, ICAR-IIHR, Bengaluru	
Keynote Speaker		
Time	Topic	Speakers
9.00 am-9.30 am	Technological interventions for improving market potential of underutilized and exotic flower, medicinal and spice crops	Dr. T. Janakiram Vice Chancellor, Dr. Y.S.R. Horticultural University, Andhra Pradesh
Lead Speakers		
9.30 am -9.45 am	Advances in commercial production of underutilized and exotic flower crops	Dr. Prabhat Kumar Horticulture Commissioner, Department of Agriculture & Farmers Welfare, Ministry of Agriculture, Govt. of India, New Delhi
9.45 am-10.00 am	Intellectual property rights and plant genetic resource management in underutilized and exotic flower, medicinal and spice crops	Dr. R.R. Hanchinal Former Chairperson PPV & FRA, New Delhi

Oral Presentations (10.00 am-11.15 am)	
1.	Heliconia-An exotic floral crop for enhancing of income from coconut plantation in coastal regions of India - Thangam, M.
2.	Role of agro-eco tourism (AET) centres in the promotion of underutilized and exotic horticulture crops - Maneesha, S.R.
3.	Sigandhini: The resilient savior of India's spice heritage - Ashoka, N.
4.	Local natural resource utilization and conservation through strategic natural farming system – A concept model for Churachandpur district, Manipur - Premi Devi, M.
5.	Economic resurgence of nigella to safeguard Byadgi chilli agripreneurs in Karnataka - Ashoka, N.
6.	The way forward for hedging price risk in turmeric: a curcumin-based price discovery mechanism - Gurlal Singh
7.	ICAR–CIAH <i>Khejri</i> technology for climate resilient horticulture and eco-system services in thar desert - Samadia, D. K.
8.	Challenges and opportunities in <i>Gypsophila</i> cultivation in Karnataka: An Overview - Atheequlla G.A.
	Chairman's Remarks
	Tea Break (11.15 am to 11.30 am)

Session VII:

Farmers, Scientists and Entrepreneurs Interface Meet

Flowers, Medicinal crops, Aromatic crops & Spices)

Venue: Video Conference Room (Administrative building)

Date: 19.10.2023

Time: 12.45 pm- 2.00 p.m.

Chairman	Dr. Hanchinal R.R., Former Chairperson, Protection of Plant Varieties & Farmers Rights Authority, Govt. of India	
Co-Chairman	Dr. M. Viswanath, Managing Director & Joint Director of Horticulture, Govt. of Karnataka	
Rapporteurs	Dr. Sumangala H.P., Principal Scientist, ICAR-IIHR, Bengaluru Dr. Atheequlla G.A., Scientist, ICAR-IIHR, Bengaluru	
Lead Speakers		
Time	Topic	Speakers
12.45 pm-1.00 pm	Role of IFAB, FPOs, self-help groups on production and export of exotic and under exploited flower crop and medicinal crops	Dr. M. Viswanath Managing Director & Joint Director of Horticulture, Govt. of Karnataka
1.00 pm-1.15 pm	Transformation of Urban Horticulture in NDMC	Mr. S. Chellaiah Sellamuthu Director (Horticulture) Archaeological Survey of India Ministry of Culture, Govt. of India Dharohar Bhawan, Tilak Marg New Delhi

1.15 pm-1.30 pm	Harnessing the Potential of exotic and underutilized flowers and medicinal crops in India	Mr. Bala Shivprasath President, Hosur Flower Growers' Association Growers Flower Council of India
1.30 pm-1.45 pm	Scope and opportunities of exotic and underutilized flower crops in greening the landscape	Mr. Prasanna Murti Desai Vice President (Landscaping), Kempegowda International Airport
1.45 pm-2.00 pm	Exploring the potential of exotic and underutilized flowers for Indian flower growers	Mr. Ashish Phadke General Manager, KF Bioplants, Pune
	Chairman's Remarks	
	Lunch Break (2.00 pm to 02.30 pm)	

Session – V

Biotic and Abiotic Stress Management (Flowers, Medicinal crops, Aromatic crops & Spices)

Venue: Video Conference Room (Administrative building)

Date: 19.10.2023

Time: 2:30 pm- 04:15 pm

Chairman	Dr. P.K. Chakraborty Former ADG (PP & B), ICAR and Member, ASRB, Govt. of India	
Co-Chairman	Dr. V. Sridhar , Principal Scientist, ICAR-IIHR, Bengaluru Dr. K. S. Shankarappa , Associate Professor, Department of Plant Pathology, College of Horticulture, UHS Campus, Bengaluru	
Rapporteurs	Dr. Priti Sonavane , Senior Scientist, ICAR-IIHR, Bengaluru Dr. Sandeep Kumar G.M. , Scientist, ICAR-IIHR, Bengaluru	
Keynote Speaker		
Time	Topic	Speakers
2.30 pm-3.00 pm	Plant quarantine measures for detection of pathogens and pests in exotic and underutilized flower, medicinal and spice crops	Dr. P.K. Chakraborty Former ADG (PP & B), ICAR and Member, ASRB, Govt. of India
Lead Speakers		
3.00 pm-3.15 pm	Integrated pest management interventions in exotic and underutilized ornamentals	Dr. V. Sridhar Principal Scientist Division of Crop Protection ICAR-IIHR, Bengaluru
3.15pm -3.30 pm	Diagnostics for production of virus free planting material in flowers and ornamental crops	Dr. K.S. Shankarappa Associate Professor Department of Plant Pathology College of Horticulture, UHS Campus, Bengaluru
Oral Presentations (03.30 pm- 04.15 pm)		
1.	Genetic diversity and management of <i>Phytophthora nicotianae</i> in Crossandra - Priti Sonavane	
2.	Detection and diagnosis of soilborne pathogen <i>Sclerotium rolfsii</i> from flower crops - Manikandan, K.	

3.	Prevalence of root knot nematodes (<i>Meloidogyne</i> spp.) in coconut intercrops and their integrated management - Anes, K.M.
4.	Exploring the biodiversity in East Indian arrowroot (<i>Curcuma angustifolia</i>) for elucidating broad spectrum antibiotic effects - Krishna Radhika, N.
5.	Studies on the eco-friendly management of leaf blight of jasmine (<i>Jasminum sambac</i> L. Aliton) caused by <i>Alternaria jasmine</i> (Fr. Keissier) - Muthukumar
6.	Studies on insect pests and natural enemies in manilla tamarind, <i>Pithecellobium dulce</i> (roxb.) benth. - Muthiah, C.
7.	Variation in total phenol content in response to <i>Phytophthora</i> inoculation in betelvine - Mohankumar, G.P.
8.	Effect of botanicals in management of septoria leaf blight on chrysanthemum caused by <i>Septoria chrysanthemi</i> under Punjab condition - Aman Sharma
Chairman's Remarks	
Poster Presentations: Technology Assessment, Time: 1 pm – 2 pm Venue: Biotechnology Block	
Plenary and valedictory function (4.30 to 6.00 pm)	
High Tea (6.00 to 6.30 pm)	

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