43rd ANNUAL MEETING OF PLANT TISSUE CULTURE ASSOCIATION (INDIA)
&
INTERNATIONAL SYMPOSIUM ON ADVANCES IN PLANT BIOTECHNOLOGY AND NUTRITIONAL SECURITY-2022

(April 28-30, 2022)

Important Contacts

For Accommodation:

NPL Guest House	Dr. Yuvaraj I 8861547600
Ganga Guest House, IARI	Dr. Prolay Bhowmick 9968024408
NBPGR Guest House	Dr. Amit K Singh 9968449805
IGH, NASC complex	Mr. Krishan Gopal 8130368399
IASRI Guest House	Dr. Samarth Godara 8114499630
Hotel Kingston Park	Mrs. Ashima 9810384998

For Local Transport

Prof. Debasis Pattanayak	9910014695
Dr. Ramawatar Nagar	8882283993

For Medical Emergency

Dr Anita Srivastava	9968314545

Venue

National Agricultural Science Complex (NASC) 124,
Dev Prakash Shastri Marg, New Delhi 110012

Convener: 9958711064/8744892317

LAY OUT OF THE SCIENTIFIC PROGRAM IN *HYBRID MODE*

Day 1: April 28, 2022 (Thursday)			
08:30 - 09:30	REGISTRATION		
09:30 - 11:00	WELCOME & INAUGURATION		
11:00 - 11:30	HIGH TEA		
11:30 - 12:10	PLENARY LECTURE		
12:10 – 13:10	KEYNOTE LECTURES		
13:10 - 13:50	LUNCH BREAK		
13:50 – 15:05	PTCA(I) MEMORIAL LECTURES		
15:05 -15:20	TEA BREAK	15:00 -17:20	
15:20 - 17:20	PTCA(I) MEMBERSHIP PRESENTATIONS	E-talk session-I	E-talk session-II
17:20 - 18:50	Workshop on Nutritional Genomics		
19:00 – 20:15	Cultural Program		
	DINNER		

Day 2: April 29, 2022 (Friday)			
09:00 - 10.30	KEYNOTE LECTURES		
10:30 - 10.45	TEA BREAK		
10:45 - 12.55	CONCURRENT SESSIONS		
	SESSION 1: Abiotic Stress Tolerance	SESSION 2: Biotic Stress Tolerance	SESSION 3: Genetics and Genomics
12:55 - 13:45	LUNCH		
13:45 - 16.15	CONCURRENT SESSIONS		
	SESSION 4: Yield and Quality Traits	SESSION 5: Plant Tissue Culture and Transgenics	SESSION 6: Developmental Biology and Epigenetics
14:05 - 16:15	E-talk session-III	E-talk session-IV	
16:15 - 16.30	TEA BREAK		
16:30 - 18:00	KEYNOTE LECTURES		
18:00 - 20:00	Offline Poster Session I	E-talk session-V	E-talk session-VI
DINNER			

Day 3: April 30, 2022 (Saturday)			
9:00 – 10:30	**KEYNOTE LECTURES**		
10:30 – 10:45	**TEA BREAK**		
10:45 – 13:05	**CONCURRENT SESSIONS**		
	SESSION 7: Genome Sequencing, Bioinformatics and Artificial Intelligence	**SESSION 8: Pre-breeding, Wild Relatives of Crop Plants**	**SESSION 9: Emerging Threats in Indian Agriculture, Biopiracy, IPR issues**
13:05 - 13:50	**LUNCH BREAK**	**13:30-15:30**	
13:50 - 15:30	**Offline Poster session -II**	**E-talk session-VII**	**E-talk session-VIII**
15:30 - 16:00	**VALEDICTORY AND AWARD DISTRIBUTION**		
16:00 - 17:00	**HIGH TEA**		

DETAILED TECHNICAL PROGRAM

Day 1: April 28, 2022 (Thursday)		
Registration (8.30-9.30)		
WELCOME & INAUGURATION (Venue: AP Shinde Hall)		
9:30-9:35	Welcome address	**Dr. Ajit Kumar Shasany,** Director, NIPB and Symposium Chair
9:35-9:40	About the Symposium	**Dr. Tapan Kumar Mondal**, Principal Scientist, NIPB and Symposium Convener
9:40-9:50	Address by Secretary, PTCA (I)	**Padma Shri Prof. Pramod Tandon**, Secretary, PTCA(I) and Symposium Patron
9:50-10:00	Address by the Guest of Honor	**Padma Shri Prof. Sudhir Kumar Sopory,** Former Vice-Chancellor, JNU, and Symposium Chief Patron
10:00-10:10	Address by the Guest of Honor	**Dr. Tilak Raj Sharma,** DDG (CS), ICAR and Symposium Patron
10:10-10:55	Address by the Chief Guest and Prof V L Chopra memorial lecture	**Dr. Trilochan Mohapatra**, Director General, ICAR and Secretary DARE, Symposium Chief Patron
10:55-11:05	Address by the Chairman	**Prof. R.P. Sharma,** Former Director, NRCPB, New Delhi
10:05-11:15	Vote of Thanks	**Dr. Rekha Kansal**, Principal Scientist, NIPB and Organizing Secretary
HIGH TEA (11:00-11:30)		
PLENARY LECTURE		
Chair: Prof. R. P. Sharma		

11:30-12:10	**Dr Tilak Raj Sharma,** Deputy Director General (Crop Science), ICAR, New Delhi **Title:** Agricultural Innovations for Food and Nutritional Security
KEYNOTE LECTURES	
Chair: Prof. Sudhir Kumar Sopory **Co-Chair: Dr. I.D. Arya**	
12:10-12:40	***Prof. Swapan Kumar Datta**, University of Calcutta, Kolkata, India **Title:** Perception of modern plant biotechnology with the past history of plant regeneration from protoplast, microspore and future strategies in genome research for crop improvement
12:40-13:10	**Prof. Nagendra Kumar Singh,** NIPB, New Delhi, India **Title**: Decoding of the plant genomes economically important for India
LUNCH BREAK **(13:10 – 13:50)**	
PTCA(I) MEMORIAL LECTURES	
Chair: Prof. Akhilesh Tyagi **Co-chair: Dr. Sneh L. Singla-Pareek**	
13:50-14:15	Prof. H E Street Memorial Lecture by **Prof. Anjan Banerjee**, IISER, Pune **Title:** Tuber (aerial and belowground) development in potato: An example of modulation of plant architecture and plasticity
14:15-14:40	Prof. HC Arya Gold Medal Award Lecture, **Prof. S. Rama Rao**, NEHU, Shillong **Title:** Evaluation of tissue culture regenerants-Genomic perspectives
14:40-15:05	Prof. Gadgil Memorial Lecture, ***Dr. Suchitra Banerjee**, CIMAP, Lucknow **Title:** Reminiscing my scientific journey down memory lane against the backdrop of Medicinal & Aromatic Plant Research
TEA BREAK **(15:05-15:20)**	
PTCA(I) MEMBERSHIP PRESENTATIONS	
Chair: Prof. Pramod Tandon **Co-chair: Prof. Rakhi Chaturvedi**	
Time	**Speaker**
15:20-15:35	**Dr. Ananda Mustafiz**, South Asian University, New Delhi **Title:** Reverse Genetics: A quest to find the master regulator of abiotic stress response
15:35-15:50	**Dr. Anil Khar**, IARI, New Delhi **Title:** Onion and Garlic Biotechnology- The road less travelled
15:50-16:05	**Dr. Devanna**, NRRI, Cuttack **Title:** Tissue-culture based rice genetic transformation for resistance against major diseases
16:05-16:20	**Dr. Iram Siddique**, Aligarh Muslim University, Aligarh **Title:** Biotechnological approaches for propagation and conservation of some important medicinal and aromatic plants
16:20-16:35	**Dr. Jasmine M. Shah**, Central University of Kerala, Kasargod **Title:** From plant tissue culture to genetic engineering and genetic/epigenetic changes in plants
16:35-16:50	**Dr. Malay Das**, Presidency University, Kolkata **Title:** Bamboo biotechnology: many avenues of commercial exploitation and fundamental knowledge gain from a non-timber, forest plant of high utility
16:50-17:05	**Dr. Penna Suprasanna**, Homi Bhabha National Institute, BARC, Mumbai **Title:** Radiation induced *in vitro* mutagenesis approaches for improving crop plants
17:05-17:20	**Dr. Rohit Jain**, Manipal University, Jaipur **Title:** Experimental morphogenesis, metabolome & transcriptome studies of medicinally important plants
17:30-18:30	**Annual General Body Meeting of PTCA(I)** **(Venue: NIPB Auditorium)**

17:20-18:50	**Workshop on Nutritional Genomics** **Chair: Dr. Ajit Kumar Shasany** **Co-Chair: Amitha Charu**
17:20-17:45	**Dr. Ajit Kumar Shasany**, Director, NIPB, New Delhi **Title:** Metabolomics channeling and biotechnological intervention in medicinal and aromatics plants for health and immunity.
17:45-18:00	**Dr. Monika Garg**, NABI, Mohali, India **Title**: The rising demand for healthy foods-Anthocyanin biofortified, antioxidants rich colored wheat is a new research trend
18:00-18:15	**Dr. Dinesh Nagegowda**, CIMAP, Bengaluru, **Title:** Functional characterization of two inducible potato terpene synthases and their role in biotic stress tolerance
18:15-18:30	***Dr. C.N. Neeraja,** IRRI, Hyderabad. **Title**: Biofortification in rice: molecular breeding for high grain zinc
18:30-18:45	***Dr. Dipak Santra**, University of Nebraska, USA **Title**: Genetic manipulation to improve proso millet and pea for climate-resilient food and nutritional security through biotechnology and genomics
19:00-20:15	**Cultural Program** **Coordinator: Dr. Sharmistha Barthakur** **Co-coordinators: Dr. Monika Dalal, Dr Pankaj Singh**
DINNER	
END OF THE DAY	

Day 2: April 29, 2022 (Friday)					
KEYNOTE LECTURES **(Venue:** AP Shinde Hall)					
Chair: Prof. S. L. Mehta **Co-chair: Dr Anil Kumar Datta**					
9:00-9:30	**Dr. Ashok Kumar Singh,** IARI, New Delhi **Title:** Molecular breeding for biotic stress tolerance in rice				
9:30-10:00	**Dr. D K Yadava**, ICAR, New Delhi, India **Title:** Enhancement of nutritional quality in crops in India: Status and prospects				
10:00-10:30	**Prof. Ashwani Pareek,** NABI, Mohali, India **Title:** Ensuring seeds in salt but no salt in seeds				
TEA BREAK **(10:30-10:45)**					
CONCURRENT SESSIONS					
SESSION 1: Abiotic Stress Tolerance **Chair: Dr. Pradep Kumar Chand** **Co-Chair: Dr. Kanika** (**Venue:** AP Shinde Hall)		**SESSION 2:** Biotic Stress Tolerance **Chair: Dr. Anupam Verma** **Co-Chair: Dr. Gopala Krishnan S.** (**Venue:** Conference Hall)		**SESSION 3:** Genetics and Genomics **Chair: Dr. K. V. Bhat** **Co-Chair: Dr. Akshay Talukdar** (**Venue:** Training Hall)	
Time	**Speaker**	**Time**	**Speaker**	**Time**	**Speaker**
10:45-11:05	**Viswanathan C,** IARI, New Delhi **Title**: Genome editing for	10:45-11:05	**Maitrayee Das Gupta,** Univ. of Calcutta, Kolkata **Title:** ENOD40-	10:45-11:05	***Paul E. Verslues**, Academic Sinica, Taiwan. **Title**: Opposing gradients of EGR phosphatase and

	improvement of yield and abiotic stress tolerance of rice		DONE40, a sense-antisense lncRNA pair is at the root of nodule organogenesis during rhizobia-legume symbiosis		Microtubule-Associated Stress Protein1 control root meristem size and activity during drought stress.
11:05-11:25	**G. Venkataraman,** MSSRF, Chennai **Title**: Role of rhizomatous tissues in the salinity tolerance of the halophytic wild rice, Oryza coarctata'	11:05-11:25	**Manoj Prasad,** NIPGR, New Delhi **Title**: Sw5a: The Trojan Horse against ToLCNDV infection in tomato	11:05-11:25	***Blanca Estela Barrera**, Univ. of Papaloapan, Mexico **Title**: Development of RNAi-based fungicides for protection of tropical crops
11:25-11:45	**Debashish Chakraborty,** NBRI, Lucknow **Title**: Tau class Glutathione-S-Transferase have more functions than a Swiss army knife	11:25-11:45	**Ashis Kumar Nandi,** JNU, New Delhi, India **Title**: NPR1-Independent SA signaling in Arabidopsis	11:25-11:45	**C. Bhardwaj** IARI, New Delhi. **Title:** Morpho physiological processes, gene mechanisms underlying drought tolerance in chickpea and development of Super Chickpea Pusa 10216 through MABC approach
11:45-12:05	**Ashverya Laxmi,** NIPGR, New Delhi, **Title**: Understanding role of sugar signal transduction in regulating plant growth development and stress responses	11:45-12:05	**Divya Chandran**, RCB, Faridabad **Title**: Medicarpin confers powdery mildew resistance in *Medicago truncatula* and activates the salicylic acid signalling pathway.	11:45-12:05	**Rohini Garg** SNU, G. Noida **Title**: Decoding DNA methylation dynamics during drought and salinity stress in chickpea and rice
12:05-12:15	**Soumitra Paul,** Univ. of Calcutta, Kolkata **Title**: Lectins in developing climate resilient rice: A mechanistic approach	12:05-12:15	***Sambasivam Periyannan** Agriculture & Food, CSIRO, Australia **Title**: Engineering rust disease resilient wheat to safeguard global food security	12:05-12:15	**Firoz Hossain,** IARI, New Delhi, **Title**: Genomics-assisted breeding for biofortification in maize: Status and Prospects
12:15-12:25	**Deepak Kumar**, UBKV, West Bengal. **Title**: Role of glutathione in modulating the expression of Heat shock proteins	12:15-12:25	**Navin Chandra Gupta,** NIPB**,** New Delhi. **Title**: Chemodiversity profiling in differentially aggressive *Sclerotinia sclerotiorum* isolates under axenic conditions	12:15-12:25	**Deepak Singh Bisht,** NIPB, New Delhi. **Title**: De novo assembly and genetic mapping revealed a PPR cluster restoring *Moricandia arvensis* cytoplasm induced sterility in *Brassica juncea*
12:25-12:35	**Gaurav Zinta,** IHBT, Palampur **Title**: Elevated CO_2 differentially mitigate the impact of abiotic stresses on C3 and C4 cereal	12:25-12:35	**Hossain Ali Mondal** CAU, Meghalaya **Title:** Novel perspectives in plant-aphid interaction biology for addressing plant defense response to aphid clonal proliferation	12:25-12:35	**Krishnamurthy,** CSSRI, Karnal **Title**: Arvattelu: Genome sequencing and analysis of rice landrace for salinity tolerance at seedling stage

	crops		on leaf foliage		
12:35-12:45	**Abhijit Hazra,** NIPGR**,** New Delhi **Title**: Methionine Sulfoxide Reductase (MSR) improves seed vigour and longevity in rice.	12:35-12:45	**Amolkumar U Solanke,** NIPB**,** New Delhi **Title**: Understanding rice-*Magnaporthe oryzae* interaction for panicle blast resistance in rice	12:35-12:45	**Gireesh C,** IIRR, Hyderabad **Title**: Breeding for direct seeded rice improvement: Present Status and future prospects
12:45-12:55	**Aditi Dwivedi,** NIPGR, New Delhi **Title**: Transcriptional landscape of evolutionarily different plant species to environmental changes.	12:45-12:55	**Jyoti Singh,** NBRI, Lucknow **Title**: Mechanism of action of a novel insecticidal plant protein in whitefly (*Bemisia tabaci*)	12:45-12:55	**Haritha Bollinedi,** IARI, New Delhi **Title:** Deciphering the molecular and biochemical mechanisms contributing to Glycaemic potential in rice
LUNCH (12:55-13:45)					
CONCURRENT SESSIONS					
SESSION 4: Yield and Quality Traits **Chair: Dr. Malavika Dadlani** **Co-Chair: Dr. Debasis Pattanayak** (**Venue:** AP Shinde Hall)		**SESSION 5:** Plant Tissue Culture, Transgenics **Chair*:* Prof. Mohammad Anis** **Co-Chair*:* Dr. A. Mujib** (**Venue:** Conference Hall)		**SESSION 6:** Developmental Biology, Epigenetics **Chair: Dr. R. Srinivasan** **Co-Chair: Dr. Subodh Sinha** (**Venue:** Training Hall)	
Time	**Speaker**	**Time**	**Speaker**	**Time**	**Speaker**
13:45-14:05	**M.K. Reddy,** ICGEB, New Delhi **Title**: Targeted genome editing for improved agronomic performance in rice	13:45-14:05	**Veena Agarwal,** Univ. of Delhi, New Delhi **Title**: Generation of sex-linked markers and Genetic Diversity analysis in *Simmondsia chinensis*: a multipurpose oil-yielding dioecious crop	13:45-14:05	**P. V. Srivaprsad,** NCBS, Bengaluru **Title**: Small RNA-mediated regulation of crop phenotypes
14:05-14:25	**Navin C Bisht,** NIPGR, New Delhi **Title**: Improving oilseed mustard by CRISPR/ Cas9-mediated genome editing	14:05-14:25	***Bharathi N,** Grow More, Tamil Nadu **Title**: Commercial micropropagation of bamboo	14:05-14:25	***Sharmila Chattopadhyay,** IICB, Kolkata. **Title**: To unravel the non-model medicinal herb – Podophyllum hexandrum
14:25-14:45	**Siddharth Tiwari,** NABI, Mohali **Title**: Banana genome engineering for combating vitamin A deficiency	14:25-14:45	**Jasdeep Padaria,** NIPB, New Delhi. **Title:** *Agrobacterium* mediated transformation studies in Indian bread wheat (*Triticum aestivum* L.)	14:25-14:45	**Alok Sinha,** NIPGR, New Delhi, **Title**: Crosstalk between MAP Kinase and ABA signaling in Arabidopsis
14:45-15:05	**Kutubuddin Ali**	14:45-15:05	**Dipankar**	14:45-15:05	**Ram Yadav,**

	Molla, NRRI, Cuttack **Title**: Precise single nucleotide insertion and replacement in rice for disease resistance		**Chakraborti,** University of Calcutta, Kolkata **Title**: Plumular meristem transformation system to implement clean gene technology in transgenic pigeonpea conferring resistance against *Helicoverpa armigera*		IISER, Mohali **Title**: Abiotic stress induced transcription factors orchestrate cytokinin signal homeostasis in Arabidopsis shoot apex
15:05-15:25	***Sangram K. Lenka**, Gujrat Biotechnology University, Gujarat **Title:** Metabolic engineering of rice cells with *vanillin synthase* gene (*VpVAN*) to produce vanillin	15:05-15:25	**Alka Narula,** Jamia Hamdard, New Delhi. **Title**: Micropropagation and transformation of *Dendrocalamus strictus* Nees	15:05-15:25	***Ananda Kumar Sarkar,** JNU, New Delhi, **Title**: The miR775-*GALT9* module plays an important role in the post-submergence recovery process in *Arabidopsis thaliana*
15:25-15:40	***Ratna Kalita,** AAU**,** Jorhat **Title**: Engineering of CRISPR/Cpf1-mediated Potato Virus Y (PVY) resistance in Bhut jolokia (*Capsicum chinense* Jacq.)	15:25-15:40	**Neelakantan Arumugam,** Pondicherry Univ., Puducherry **Title**: Purification of larvicidal N-alkylamides from *Acmella ciliata* HBK Cass.	15:25-15:40	**Sribash Roy**, NBRI, Lucknow **Title**: Indian Himalayan natural *Arabidopsis thaliana* accessions with abolished miR158 levels exhibit robust miR173-initiated trans-acting cascade silencing
15:40-15:55	**Prashant Mohanpuria,** PAU**,** Ludhiana **Title**: RNA interference technology for fruit fly [*Bactrocera dorsalis* (Hendel)] resistance in guava	15:40-15:55	**Davinder Singh,** TIET, Patiala **Title**: Strategies for the screening of existing germplasm of *Eucalyptus tereticornis* Sm. for salt stress	15:40-15:55	**Saloni Mathur, NIPGR,** New Delhi **Title**: Insights into the role of coding and noncoding RNAs in cultivar-biased regulation during heat stress in tomato
15:55-16:05	**Kajol B M Singh**, NIPGR, New Delhi **Title**: Identifying the epigenetic writings on rice genome during seed development	15:55-16:05	**Alvareen Nongsiang,** NEHU, Shillong **Title**: Meristem culture and subsequent regeneration of *Cymbidium iridioide*	15:55-16:05	**Shipra Goyal,** University of Delhi, New Delhi **Title**: Characterization of *CcKIP1* gene promoter in *Arabidopsis thaliana*
16:05-16:15	**Chirag Maheshwari,** IARI New Delhi **Title:** Impact of ribulose-1,5-bisphosphate carboxylase/oxygenase (Rubisco) and glycine decarboxylase	16:05-16:15	**Lucy Lalthafamkimi,** NEIST, Assam **Title**: Metabolite bioprospection and expression analysis of *patchoulol synthase* gene in different callus lines of *Pogostemon cablin* (Patchouli)	16:05-16:15	**Simran Kaur,** TERI University, New Delhi **Title**: An integrated approach to understand complex combinatorial interaction patterns among homeologs of *SOC1* promoter and its upstream transcription factor FUL in *B. juncea*

	complex h (Gdch) knockdown on photosynthesis and growth characteristics of rice plants				
TEA BREAK (16:15-16:30)					
KEYNOTE LECTURES (Venue: AP Shinde Hall)					
Chair: Prof. K. C. Bansal Co-chair: Dr. Pradip Kumar Jain					
16:30-17:00	***Robert J Henry**, UQ, Australia **Title**: Sequencing and assembly of plant genomes: advances in methods and applications.				
17:00-17:30	*** Ramanjulu Sunkar,** Oklahoma State University, USA **Title**: The role of RNA methylation in cold stress responses in Arabidopsis				
17:30-18:00	***Stephen P Moose**, University of Illinois, USA **Title:** Multiplex CRISPR/Cas9 editing of genes targeted by long-term selection for grain protein concentration in maize.				
Time	**Session**				
18:00-20:00	Poster Session-I				
DINNER					
END OF THE DAY					

Day 3: April 30, 2022 (Saturday)					
KEYNOTE LECTURES (Venue: AP Shinde Hall)					
Chair: Prof. R. K. Jain Co-Chair Dr. Sarvjeet Kaur					
9:00-9:30	**Dr. Himanshu Pathak**, NIASM, Baramati, Maharashtra **Title**: Managing Emerging Abiotic Stresses in Agriculture				
9:30-10:00	**Dr. Subhra Chakraborty**, NIPGR, New Delhi **Title**: System level understanding of organeller control of multi host resistance in fungal disease				
10:00-10:30	**Dr. Prabodh K. Trivedi**, CIMAP, Lucknow **Title**: Small molecules as regulatory components play bigger role in plant growth and development				
TEA BREAK (10:30-10:45)					
CONCURRENT SESSIONS					
SESSION 7: Genome Sequencing, Bioinformatics **Chair: Dr. Anil Rai Co-Chair: Dr. Kishor Gaikwad (Venue:** AP Shinde Hall)		**SESSION 8:** Pre-breeding, Wild Relatives of Crop Plants **Chair: Dr. J.C. Rana Co-Chair: Dr. Manjusha Verma (Venue:** Conference Hall)		**SESSION 9:** Emerging Threats in Indian Agriculture, Biopiracy, IPR issues **Chair: Prof. Deepak Pental Co-Chair: N. Raghuram (Venue:** Training Hall)	
Time	**Speaker**	**Time**	**Speaker**	**Time**	**Speaker**

10:45-11:05	**A.R. Rao,** ICAR, New Delhi **Title**: Artificial Intelligence and Genomics – A blended approach for unravelling some underlying complex trait phenomena in plants	10:45-11:05	**Bhaskar C. Patra**, NRRI, Cuttack **Title**: Pre-breeding for enriching the gene pool of rice crop for both cultivated and wild/weedy rice	10:45-11:05	***Malathi Laxmikumaran,** Laksmikumaran & Sridharan, New Delhi, **Title:** India Patenting in the area of Plant Biotechnology
11:05-11:25	**Divyank Mahajan,** RedCliff, Noida **Title**: Targeted SNPs to Spatial Genomics– tools to navigate and harness the molecular knowledge	11:05-11:25	**Mohar Singh,** NBPGR, Shimla. **Title:** Pre-breeding and genetic enhancement for breaking yield barriers in grain legumes	11:05-11:25	**Sunil C. Dubey**, ICAR, New Delhi **Title**: Safeguarding Indian agriculture from pandemic situation through effective and stringent biosecurity and biosafety
11:25-11:45	**Nityanand Sharma,** Premas Life Science, New Delhi **Title**: Advancing agrigenomics breakthroughs with advanced technologies	11:25-11:45	**Nevtaj Singh Bains**, PAU, Punjab **Title**: Introgression strategies using progenitor and non progenitor species for wheat improvement	11:25-11:45	**N. Raghuram,** IP University, New Delhi. **Title**: Research and Publishing Ethics in Plant biology
11:45-12:05	**Prabina Kumar Meher,** IASRI, New Delhi **Title:** Machine learning driven prediction of multiple abiotic stress-responsive genes in plants: A novel computational model	11:45-12:00	**Mridul Chakraborty**, NRRI. Cuttack. **Title:** Development and utilization of chromosome segment substitution lines (CSSLs) for pre-breeding in rice	11:45-12:05	**Vibha Ahuja**, BCIL, New Delhi. **Title**: Regulation of genome editing in plants
12:05-12:25	***Ajay Mahato,** CDFD**,** Hyderabad **Title:** Decoding of mango genome (*Mangifera indica L.*) Variety 'Amrapali' and its parents Dushehari" and Neelam, via next-generation trio binning approach	12:00-12:15	**P. Revathi,** IARI, New Delhi Pre-breeding to enhance the yield potential of hybrid rice parental lines.	12:05-12:25	**Alka Singh,** IARI, New Delhi **Title:** Role of social studies on formulating the research aim in biotechnology
12:25-12:45	**Rakesh Murya,** Next Gen Bio., New Delhi. **Title**: High accuracy Single molecule sequencing and chromosome level assemblies	12:15-12:30	**Soni Chowrasia,** NIPB, New Delhi **Title:** *Oryza coarctata* an excellent source for various stress tolerance genes	12:25-12:45	**Shilpi Paul** SERB, New Delhi **Title**: Research funding policies in Science and Technology in India
12:45-13:05	***Ramachandran Baskaran,** Nucleome Informatics Pvt Ltd, Hyderabad **Title**: Iso-Seq based full length transcriptome for	12:30-12:45	**Preetesh Kumari,** IARI, New Delhi. **Title**: Introgression of genes responsible for climate resilience in Indian mustard from allied member (*Sinapis*	12:45-13:05	**Pratibha Bhambi**, NBPGR, New Delhi **Title**: Policies and Guidelines for access and use of genetic resources

	Novel Gene and Isoform discovery		*alba* L.) through somatic hybridization		
		12:45-13:05	***Annaliese Mason,** University of Bonn, Germany **Title:** Polyploidy and hybridization for *Brassica* crop improvement		
LUNCH BREAK (13:05 –13:50)					
Time 13:50-15:30	**Poster session –II**				
15:30-16:00	**VALEDICTORY AND AWARD DISTRIBUTION**				
HIGH TEA					
***Lectures will be delivered through on-line mode**					

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Offline Poster Session I		
Session 1: Abiotic stress tolerance		
List of in-person posters **Date: Apr. 29, 2022** **Time:18:00-20:00**		
Sl. No.	**Name**	**Title of the Abstract**
S1-PP-01	Abhishek Mazumder	Assessing the phenotypic response of the recombinant inbred lines derived from IR 29 (*Oryza sativa* L.) /African rice (Accession no. TKM-239) {*Oryza glaberrima*Steud.} for seedling stage salinity tolerance in rice.
S1-PP-02	Abhishek Kumar	Effect of abiotic stress on seed germination in Kalmegh (*Andrographis paniculata*)
S1-PP-03	Apoorva Gupta	Elucidating the role of microRNA169:NF-YA module in heat stress
S1-PP-04	Arunima Singh	Identification and characterization of abiotic stress responsive *USP* genes in *Triticum aestivum*
S1-PP-05	Chanchal Singhal	Genome wide identification and expression analysis of Isopentenyl transferase and cytokinin oxidase gene family in mulberry
S1-PP-06	Harmeet Kaur	Rice E3 Ubiquitin ligase imparts heat and drought stress tolerance in transgenic Arabidopsis
S1-PP-07	Jyoti Maurya	Understanding the regulatory role of protein tyrosine phosphatases during dehydration stress in foxtail millet (*Setariaitalica* L.)
S1-PP-08	Jyoti Nishad	Study of allantoin mediated salinity tolerance in rice genotype IR-29
S1-PP-09	Meenakshi	CAMTA transcription factor regulates drought tolerance in chickpea (*Cicer arietinum* L.)
S1-PP-11	Monika Shrivastava	Investigating the impact of DNA polymorphism on heat stress response in contrasting tomato cultivars
S1-PP-12	Nilima Karmakar	A comparative study on tomato quality and yield under different soil and nutrient management
S1-PP-13	Paheli Malakar	Investigations on salinity stress signalling pathway in chickpea: Insights into the missing link between CBL-CIPK signalling pathway and potassium uptake by High affinity potassium transporter HAK5
S1-PP-14	Ragini Bhardwaj	Physio- biochemical response of mung-bean [*Vigna radiata* (l.) Wilczek] genotypes under high temperature stress at reproductive stage.
S1-PP-15	Rakesh Kumar Achary	PIMT and HSF- The combating role against seed aging
S1-PP-16	Rekha Agrawal	Mediator complex facilitates crosstalk between JA and auxin signalling to regulate thermo morphogenesis
S1-PP-17	Riddhi Datta	Glutathione regulates iron deficiency response by modulating subcellular iron homeostasis in Arabidopsis
S1-PP-19	Tanya Biswas Sardana	Case studies on application of heavy metal stress for modulating secondary metabolism in triterpenoid yielding medicinal herbs
S1-PP-20	Vijendra Singh	Characterization of the role of *Arabidopsis* Methyl-CpG Binding Domain Protein 1 (AtMBD1) in salt stress
S1-PP-21	Hemangini Parmar	RING E3 ligase selective knockouts confer drought tolerance in rice by regulating stomatal density
Session 2: Biotic stress tolerance		
List of in-person posters **Date: Apr. 29, 2022** **Time:18:00-20:00**		
S2-PP-01	Asma Sultana	GSH mediated phytohormonal signalling- fine tuning the mode of stress mitigation
S2-PP-02	Gitanjali Jiwani	Deciphering the molecular mechanism of silicon mediated resistance against rice blast
S2-PP-03	Ila Mukul Tiwari	Role of cAMP dependent protein kinase in *R. solani* pathogenicity

S2-PP-04	JyotsanaTilgam	Host delivered RNAi-mediated *Helicoverpaarmigera* resistance in tobacco by combinatorial silencing of Acetylcholine esterase (Ace-1) and 20-Hydroxyecdysone receptor (EcR) genes
S2-PP-05	Kanchan BM Singh	Development of transgenic tuberose (*Polianthes tuberosa*) for root knot nematode resistance
S2-PP-06	Kanti Kiran	Expression of novel *Puccinia triticina*pathogenicity related genes in susceptible and resistant wheat varieties
S2-PP-07	Kusum Rana	Knockdown of *Sclerotinia sclerotiorum* oxaloacetate acetylhydrolase gene by host-induced gene silencing confers Sclerotinia stem rot resistance
S2-PP-08	Rekha	The role of nitrogen nutrition and nitric oxide in resistance against *Botrytris cinerea* in tomato
S2-PP-09	Rishika K S	Whole Genome Sequencing (WGS) and assembly of promising native *Bacillus thuringiensis* isolates for identification of novel insecticidal genes
S2-PP-10	Sambhavana Chauhan	Host-induced gene silencing of *Fusarium oxysporum* f. sp. lycopersici specific fasciclin like protein (FoFLP) controlled vascular wilt disease in *Solanum lycopersicum*
S2-PP-11	Samridhi	Identification of new sources of resistance against white rust (Albugo candida) disease in Brassica and its wild relative
S2-PP-12	Sarvjeet Kaur	Recent advances and challenges in Bacillus thuringiensis research for crop protection from insect pests
S2-PP-13	Sharani Choudhury	Molecular pathways regulating the resistance against Alternaria blight in Brassicaceae
S2-PP-14	Shikha Gautam	PIMT: A safeguard for proteins under stress
S2-PP-15	SuhasGorakh	The von Willebrand factor domain A containing gene vWA36 confers blast resistance in rice
S2-PP-16	Susmita Sett	Novel Trio Sw-5a- Myb33-miR159: An Arsenal against ToLCNDV infection in tomato
S2-PP-17	Vinod Kumar	Harnessing underutilized variation in rice germplasm collection for identification of novel QTLs/gene(s) for sheath blight tolerance
S2-PP-18	Vishesh Kumar	Standardization of syringe inoculation method of panicle blast disease and identification of resistance wild rice genotypes and Nagina 22 mutants
S2-PP-19	Y. Sanatombi Devi	Evaluation of *Brassica juncea* parental lines for White rust resistance BjuWRR1 gene
Offline Poster Session II		
Session 3: Yield and quality traits		
List of in-person posters **Date: Apr. 30, 2022** **Time: 13:30-15:30**		
S3-PP-01	Alka Bharati	Transcriptome of developing grain reveals differential regulation of genes in wheat genotypes contrasting for grain filling efficiency under nitrogen stress.
S3-PP-02	AratiYadawad	Genetic variability and character association studies for cane yield and quality in advanced clones of sugarcane
S3-PP-03	Nitin U Kmble	Protein L-Isoaspartyl Methyltransferase increases seed length and weight in Arabidopsis by protecting enolase
S3-PP-04	Nimmy MS	Identification and expression analysis of candidate genes involved in β carotene biosynthesis in chickpea (*Cicer arietinum* L.)
S3-PP-05	Ravi Singh Thapa	Genetic diversity analysis for yield and yield contributing traits in chickpea (*Cicer arietinum* L.) under timely and late sowing conditions
S3-PP-06	Ruchika Rajput	The *R2R3-MYB* gene family in *Cicer arietinum*: genome-wide identification and expression analysis leads to functional characterization of proanthocyanidin biosynthesis regulators in the seed coat
S3-PP-07	Sagnik Chanda	*In-silico* analysis of Carotenoid cleavage dioxygenase1(Ccd1) gene and it's expression in vegetative part in maize (*Zea mays* l)
S3-PP-08	SarveshJonwal	Investigation of the role of mitogen activated protein kinase cascade in regulating photosynthesis in rice
S3-PP-10	Tapan Kumar Nailwal	Quality evaluation of *Oroxylum indicum* through HPLC fingerprint for flavonoids
Session 4: Genetics and genomics		

List of in-person posters **Date: Apr. 30, 2022** **Time: 13:30-15:30**		
S4-PP-01	Parneeta Mishra	The target gene of miR775 regulates arabinogalactan biosynthesis in *Arabidopsis thaliana*
S4-PP-02	Swati Gupta	Transcriptome sequencing, *de novo* assembly, functional annotation and differential gene expression analysis of *invitro* raised *Withaniacoagulans* leaf and root tissues
S4-PP-03	Saumya Raizada	Role of MAPKs in mango fruit ripening
S4-PP-04	Amresh Kumar	Genome-wide identification of the NRT2 and NAR2 family, expression analysis and its protein interaction in wheat
Session 5: Plant tissue culture and transgenics		
List of in-person posters **Date: Apr. 30, 2022** **Time: 13:30-15:30**		
S5-PP-01	Adity Majee	SlHSFB3, a heat shock transcription factor plays role in root as well as aerial development in tomato under unstressed conditions
S5-PP-02	Amit Kumar	Development of highly efficient Agrobacterium-mediated transformation protocol in maize using immature embryos
S5-PP-04	Ayyagari Ramlal	Optimization of physical factors responsible for callogenesis in soybean towards haploidy
S5-PP-05	Firdaus	Germline transformation of *Artemisia annua* L. by *in-planta* transformation technology
S5-PP-06	Ishita Khatua	In vitro regeneration potentiality evaluation from different explants of curry leaf [*Murrayakoenigii* (L.)spreng]
S5-PP-07	Mahalle Mayuri Dilip	Standardization of genetic fidelity testing protocols for tissue culture raised plants under national certification system for tissue culture raised plants
S5-PP-10	Nitasana Rajkumari	Silver nanoparticles mediated DNA delivery for plant genetic engineering
S5-PP-12	Nuzat Banu	Development of a novel protocol using internodal explants of mature seeds for in vitro regeneration in maize
S5-PP-13	Priyanka	Transformation of rice with legume-derived symbiosis related genes that mediate rhizobial infection and colonization in roots
S5-PP-14	Priyanka Raha	Direct Somatic Embryogenesis from root explant of Limonium Misty Blue (*Limonium latifolium* X *Limonium bellidifolium*)
S5-PP-15	Rakhi Prabhakar	SlDREB3 alters ABA levels and regulates plant growth, flowering time and fruit ripening in tomato
S5-PP-16	Shubham Joshi	Impact assessment of gold nanoparticles on in-vitro development and growth of *Nardostachysjatamansi*
S5-PP-17	Subham Bhakta	MusaATAF2, a NAC transcription factor regulates senescence and shoot multiplication in banana plants
S5-PP-19	Vereena Rodrigues	Effect of light and precursor feeding on the production of vanillin in cell suspension cultures of *Decalepissalicifolia*
S5-PP-20	Alok Ranjan	Auxin Response Factor (ARF), PttARF6, PttARF8 positively and PttARF17.1 and PttMYC2.1 negatively regulate adventitious root formation in stem cutting of poplar
Session 6: Developmental biology and epigenetics		
List of in-person posters **Date: Apr. 30, 2022** **Time: 13:30-15:30**		
S6-PP-01	Aishwarye Sharma	OsATL, a RING-H2 domain containing protein, modulates lignin biosynthesis in rice
S6-PP-02	Ashwani Kumar	Methylome remodelling under elevated CO2: A strategy better adopted by the low

	Verma	elevation *Arabidopsis thaliana* population than high elevation one
S6-PP-03	Dhanraj Singh	Phosphorylation of cell cycle regulator, E2F2 by rice MAP kinase controls cell division and proliferation
S6-PP-04	Pallabi Thakur	Regulation of root system architecture by mediator in Matrilineal specific patanin *Arabidopsis thaliana*
S6-PP-05	Vikram Jathar	Gibberellic acid-mediated spatial control of cell division expounds the leaf size differences between cultivated and wild rice
S6-PP-06	Khushboo Dasauni	Green Synthesis of Sulphur Nanoparticles using *Cannabis sativa* Leaves and it's Effect on *In Vitro* Regeneration of *Cannabis sativa*
Session 7: Genome sequencing, bioinformatics and artificial intelligence		
List of in-person posters **Date: Apr. 30, 2022** **Time: 13:30-15:30**		
S7-PP-01	Anupam Singh	Genome-wide identification and characterization of InDels and SNPs in fast neutron induced early maturing pigeon pea mutant and its parent
S7-PP-02	Megha Kaushik	Comparative transcriptome analysis of hexaploid vs. tetraploid wheat to study intolerant protein genes during grain development
S7-PP-03	Samarth Godara	Deep learning-based sequence alignment of genomic data
S7-PP-05	Hukam Chand Rawal	Identification and analysis of salt-stress responsive circRNAs from salt-susceptible and salt-tolerant rice genotypes
Session 8: Pre-breeding, wild relatives of crop plants		
List of in-person posters **Date: Apr. 30, 2022** **Time: 13:30-15:30**		
S8-PP-01	Shikha Tripathi	Morphological variations among the Brassica U triangle species and its crop wild relatives

e-Talk Session-I			
Abiotic stress tolerance			
List of online oral presenters **Date: April 28, 2022** **Time: 15:00-17:20**			
Sl. No.	**Name**	**Time**	**Title of the Abstract**
S1-VO-01	Anuj Kumar Dwivedi	15:00-15:05	Genome-wide characterization of miRNAs and their functional relevance in drought stress response in rice
S1-VO-02	Bimal Das	15:05-15:10	Morphological and SSR marker-based genetic diversity of indigenous submergence rice
S1-VO-03	Dip Pal	15:10-15:15	miRNA based molecular marker system in rice with special reference to abiotic stress tolerance
S1-VO-04	Dipnarayan Saha	15:15-15:20	Leveraging genomics and epigenomics to address heat stress tolerance and improve wider climatic adaptability of fibre flax
S1-VO-05	Divya Batra	15:20-15:25	Impact of heat stress on the storage protein content in germinating seeds of *Vigna radiata* (L.)
S1-VO-06	Giriraj Kumawat	15:25-15:30	Phenotyping of root traits and characterization of OsSOR1 orthologs in soybean
S1-VO-07	Gurpreet Kaur	15:30-15:35	Impact of saline irrigation on morphophysiological, biochemical and molecular traits of chickpea (*Cicer arietinum* L.) roots
S1-VO-08	Vipasha verma	15:35-15:40	Melatonin application ameliorates salt stress impact on growth and photosynthesis of Tagetes erecta L.
S1-VO-09	Khushboo Gupta	15:40-15:45	Decoding DNA methylation dynamics during salinity stress response in chickpea cultivars
S1-VO-10	Komal Goel	15:45-15:50	Investigating heat sensitivity of underutilized C4 grain amaranth (*Amaranthus hypochondriacus*)
S1-VO-12	Naira Nayab	15:50-15:55	Detrimental impacts of pollen drought stress on: floral volatiles, floral rewards, pollinator activity and seed set in *Ocimum basilicum* L. Plants.
S1-VO-13	Narottam Dey	15:55-16:00	Sub1A and SK locus – Regulation and Role in submergence tolerance of rice (*Oryza sativa* L.)
S1-VO-14	Pooja Singh	16:00-16:05	Heterologous expression of ACC deaminase gene in *Pelargonium graveolens* showed elevated tolerance to

			chromium stress
S1-VO-15	Satveer Kaur	16:05-16:10	Physiological and molecular response of colored wheat seedlings against phosphate deficiency is linked to accumulation of distinct anthocyanins
S1-VO-16	Shiksha Chaurasia	16:10-16:15	Ionomic approaches for discovery of novel salt stress resilient genes in wheat (*Triticum aestivum* L.)
S1-VO-17	Simardeep Kaur	16:15-16:20	Biochemical and epigenetic memory of drought stress impart enhanced stress tolerance in rice (*Oryza sativa* L.)
S1-VO-18	Smitha Hegde	16:20-16:25	Pteridophytes: Heavy metal stress tolerance
S1-VO-19	Sweta Sinha	16:25-16:30	Marker assisted improvement of an elite rice variety Sabour Shree for submergence tolerance
S1-VO-20	Subhash Chandra	16:30-16:35	Genome wide association studies (GWAS) for water logging tolerance in Soybean: Comprehensive phenotyping for multiple traits
S1-VO-21	Swetannita Chattopadhyay	16:35-16:40	Regulation of MIR160 and its targets ARF10, ARF16, and ARF17 in regulating Root System Architecture (RSA) under nitrogen deficit conditions in *Brassica juncea*
S1-VO-22	Gowtham TP	16:40-16:45	Understanding the role of 'Hinge region' of Phytochrome-A in low light perception and signaling in rice
S1-VO-23	Priyanka Jain	16:45-16:50	Fine mapping of QTL qDTY3.2 for yield under drought in Rice (*Oryza sativa* L.)
Developmental biology and epigenetics			
List of online oral presenters			
S6-VO-01	Jeremy Dkhar	16:50-16:55	Genetic basis of carnivorous leaf development
S6-VO-02	Surabhi Singh	16:55-17:00	Biochemical characterization of GQSes helicase homologue from *Arabidopsis thaliana*
S6-VO-03	Pooja Garg	17:00-17:05	Resynthesis and alien introgression in *B. juncea*: Diversifying the native genetic stock
S6-VO-04	Payal Gupta	17:05-17:10	Comparative genomics for microsynteny analysis of MIR397 and MIR408 involved in yield enhancement in rice

S6-VO-05	Shivam Sharma	17:10-17:15	OsCPK29 regulates pollen development in rice by interacting with MADS68
e-Talk Session-II			
Plant tissue culture and transgenics			
List of online oral presenters **Date: April 28, 2022** **Time: 15:00-17:20**			
S5-VO-01	B.L. Manjula	15:00-15:05	Effect of precursor on the biosynthesis of Psoralen and Bergapten in callus culture of *Ruta graveolens* L., a medicinal plant
S5-VO-02	Bushra Ejaz	15:05-15:10	SCoT marker assisted clonal stability assessment and flow cytometric genome size analysis of in vitro direct and somatic embryo regenerated *Carthamus tinctorius* L. – an important medicinal plant.
S5-VO-03	Dennis S.	15:10-15:15	Embryogenic callus induction and high frequency plant regeneration in Buckwheat (*Fagopyrum tartaricum* Gaertn.)
S5-VO-04	Dhanashree Subhash Patil	15:15-15:20	Antioxidant status of *in vitro* cultures of *Solanum virginianum* (L.) treated with Turquoise Blue H5G dye
S5-VO-05	Kanchan Birat	15:20-15:25	Enhancement of vincristine under *in vitro* culture of *Catharanthus roseus* supplemented with *Alternaria sesami* endophytic fungal extract as biotic elicitor
S5-VO-06	Lakhani Hiralben Lavtibhai	15:25-15:30	Genome editing of Carotenoid Cleavage Dioxygenase4 (CCD4) gene revealed its role as a negative regulator of β-carotene in banana
S5-VO-07	Mihin Targu	15:30-15:35	Ex situ conservation of *Bulbophyllum griffithii* (Lindl.) Rchb.f, an endangered medicinal orchid of Northeast India
S5-VO-08	Neema M	15:35-15:40	Attenuation of phenolic interference in *Cocos nucifera* L. suspension culture utilizing charcoal impregnated calcium alginate spherules
S5-VO-09	Neha Sharma	15:40-15:45	*In vitro* propagation from rhizomes and molecular evaluation of regenerants in Himalayan May Apple (*Podophyllum hexandrum* Royle)- critically endangered medicinal plant
S5-VO-10	Parul Sharma	15:45-15:50	Factors affecting *in vitro* organogenesis in commercially important *Actinidia* species (Kiwifruit and Kiwiberry)
S5-VO-11	Rajnish Sharma	15:50-15:55	Genetic diversity analysis and *in vitro* mini rhizome induction in an endangered medicinal herb *Trillium govanianum* (Nag chhatri) – substantial insights towards conservation prioritization

S5-VO-13	Sameena Maqbool Lone	15:55-16:00	An Introduction to plant tissue culture: Advances and perspectives
S5-VO-14	Sharad Vats	16:00-16:05	Larvicidal activity of rotenoids from *Cassia occidentalis* L. and its enhanced production in callus culture
S5-VO-15	Sirisha Kaniganti	16:05-16:10	Genome editing studies in sorghum towards the management of parasitic weed striga
S5-VO-16	Subhadeep Biswas	16:10-16:15	Assessment of bioenergy potential of seven bamboo species by biochemical, FT-IR and thermo-gravimetric analysis
S5-VO-17	Swagata Debnath	16:15-16:20	In vitro propagation of Pholidota articulata Lindl. (Medicinal orchid): A novel method for enhancement of secondary metabolites and antioxidant activity in cultures
S5-VO-18	Alok Das	16:20-16:25	Plant Tissue Culture based innovations for genetic gain in chickpea (*Cicer arietinum* L.)
S5-VO-19	Swati Patel	16:25-16:30	*In vitro* regeneration of *Cynodondactylon* variety Selection 1
S5-VO-20	Tikkam Singh	16:30-16:35	*In vitro* shoot regeneration, evaluation of genetic fidelity and elicitation of luteolin and rutin in root callus of *Rumex hastatus* D. Don
S5-VO-21	Vibha Pandey	16:35-16:40	Effective seed germination and regeneration of *Psoralea corylifolia* L.
S5-VO-22	Vinod Kumar	16:40-16:45	Eco-friendly approaches towards synthesis and characterization of silver nanoparticles derived from leaves of in vitro grown *Stevia rebaudiana*
S5-VO-23	Vishal Sharma	16:45-16:50	Gamma irradiations induced morphological and biochemical variations in *in vitro* regenerated ginger (*Zingiber officinale* Rosc.)- an invaluable medicinal spice
S5-VO-24	Yashika Bansal	16:50-16:55	Development of *in vitro* plant regeneration system and genetic fidelity assessment by flow cytometry in *Digitalis purpurea* L.
Pre-breeding, wild relatives of crop plants			
List of online oral presenters			
S8-V0-01	Aseem Kumar Anshu	16:55-17:00	Phosphatidylcholine content in soybean (*Glycine max*): Genetic variability and parental polymorphism survey
S8-VO-03	Sumitra Kumari Choudhary	17:00-17:05	Molecular characterization of pearl millet land races to address crop improvement for food security
e-Talk Session-III			
Biotic stress tolerance			

List of online oral presenters **Date: April 29, 2022** **Time: 14:05-16:15**			
S2-VO-02	Baljinder Singh	14:05-14:10	Understanding the mechanism of rust resistance in lentil through RNA-seq and QTL mapping approaches
S2-VO-03	H. B. Santosh	14:10-14:15	Introgression of transgenic cotton event Tg2E13 (*cry1Ac*) through marker assisted
S2-VO-04	Punam Kumari	14:15-14:20	Protein thiol oxidation acts as an oxidative stress marker during *Fusarium* infection in *Triticum aestivum*
S2-VO-05	Reshma Ahmed	14:20-14:25	Screening for defence related genes against Alternaria blight in rapeseed mustard
S2-VO-06	Surbhi Shriti	14:25-14:30	Characterisation of chickpea R2R3 MYB transcription factor of CaMYB78 in modulation of biotic stress response and anthocyanin biosynthesis
S2-VO-08	Yamuna K.T.	14:30-14:35	Identification of a suitable method of infection for reducing background effect in mock-inoculated controls during plant-*Agrobacterium* interaction studies
S2-VO-09	Joshitha Vijayan	14:35-14:40	Selection of suitable internal control gene for assaying gene expression in rice through qRT-PCR during sheath blight infection.
Genetics and genomics			
List of online oral presenters			
S4-VO-01	Anjan Hazra	14:40-14:45	Integrated transcriptome analyses reveals genome-wide profiles of alternative splicing in *Vigna mungo*
S4-VO-02	Avinash Sharma	14:45-14:50	Involvement of CRISPR-Cas 9 gene editing tool in crop improvement and development
S4-VO-03	Hema Singh Chauhan	14:50-14:55	Accelerated development of vitamin-A and vitamin-E rich sweet corn hybrids through marker-assisted introgression of crtRB1 and vte4 genes
S4-VO-05	Mridushree Basak	14:55-15:00	Effect of temperature in regulation of flowering in bamboo (*Bambusa tulda*)
S4-VO-06	Nitish Ranjan Prakash	15:00-15:05	Genetic analysis and molecular characterization of prolificacy in Sikkim Primitive – A unique maize landrace of North Eastern Himalaya
S4-VO-08	Sandeep Sharma	15:05-15:10	Soybean leaf proteome analysis revealed differentially abundant proteins involved in foliar iron absorption
S4-VO-10	Soham Ray	15:10-15:15	*In silico* STMS-marker cross-transferability analysis can aid in quick, easy and low-cost identification of markers for studying comparative genomics of genic region in closely related angiosperm species
Developmental biology and epigenetics			

List of online poster presenters			
S6-VP-01	Anshika Pandey	15:15-15:20	Auxin and BR coordinates to regulate root growth under high ammonium stress
S6-VP-02	Diksha Kalia	15:20-15:25	Molecular cloning and characterization of PEPB genes and their putative roles in flowering regulation in saffron (*Crocus sativus*)
S6-VP-03	Joel Jose-Santhi	15:25-15:30	Photoperiodic regulation of corm development in saffron (*Crocus sativus.* L)
S6-VP-04	Reetu	15:30-15:35	Transcriptome analysis of ovules in *Cicer arietinum* L. for exploring set of key regulatory genes activated after fertilization
S6-VP-05	Shipra Goyal	15:35-15:40	Characterization of CcKIP1 gene promoter in Arabidopsis thaliana
e-Talk Session-IV			
Yield and quality traits			
List of online oral presenters **Date: April 29, 2022** **Time: 14:05-16:15**			
S3-VO-01	Brijesh K. Mehta	14:05-14:10	Enrichment of sweet corn hybrids with provitamin A, lysine and tryptophan through marker-assisted introgression of *crtRB1* and *opaque2* alleles
S3-VO-02	Gulab Chand	14:10-14:15	Marker-assisted introgression of *opaque2* and *opaque16* genes and accumulation of lysine and tryptophan during endosperm development in maize
S3-VO-03	Ashvin Kumar Katral	14:15-14:20	Enrichment of kernel oil through marker-assisted introgression of dgat1 and fatb genes in elite multi-nutrient rich maize inbreds
S3-VO-05	Hriipulou Duo	14:20-14:2	Molecular characterization of Aspartate kinase2 gene – A key regulator in amino acid biosynthesis pathway in maize
S3-VO-06	Ikkurti Gopinath	14:25-14:30	Development of novel popcorn inbreds with enhanced protein quality using molecular breeding
S3-VO-07	Krishna Kumar Dwivedi	14:30-14:35	Expression of ZmZIP1 a gene involved in zinc transport after nutrient application in Oat (*Avena sativa* L.)
S3-VO-08	Madhurjit Singh Rathore	14:35-14:40	Diversity assessment for disease resistance and fatty acid profiling based on morphological, biochemical and molecular makers in Groundnut (*Arachis hypogaea* L.)
S3-VO-09	Mohammad ZahirulAlamTal	14:40-14:45	Genomics-assisted introgression of Granule-Bound Starch Synthase (GBSS) gene into elite hybrids for

	ukder		enhancement of amylopectin in maize hybrids
S3-VO-10	Pooja Sharma	14:45-14:50	Molecular insights into genetic diversity and population dynamics of carnation (*Dianthus caryophyllus* L.) genotypes and mutants developed using gamma irradiation
S3-VO-11	Rajkumar U. Zunjare	14:50-14:55	Deploying marker-assisted breeding for accelerated development of dual-purpose baby corn hybrid
S3-VO-12	Rashmi Chhabra	14:55-15:00	Enhancement of kernel sweetness through genomics-assisted pyramiding of *shrunken2* and *sugary1* genes in sweet corn
S3-VO-13	Saravanan krishnagowdu	15:00-15:05	Enhancement of plant performance using quercetin (a flavonol) in Indian soybean (*Glycine max* (L.) Merrill) cv. JS335: An *in-vitro* and *in-silico* approach
S3-VO-14	Kshitija Sinha	15:05-15:10	Genetic improvement of rice bran stability for human health and nutrition
S3-VO-15	Surya S	15:10-15:15	Seed priming using vitamin B6 and morpho-physiological assessment in Indian soybean (*Glycine max* (L.) Merrill) cv.JS335
S3-VO-16	Vinay Bhatt	15:15-15:20	Enrichment of multinutrients in maize using genomic-assisted stacking of *lpa-1*, *opaque2* and *crtRB1* genes
Genome sequencing, bioinformatics and artificial intelligence			
List of online oral presenters			
S7-VO-01	Anjali Gupta	15:20-15:21	Genomic and comparative protein structure analyses of UV- absorbing microsporin line amino acids (MAAs) biosynthesis in cyanobacteria
S7-VO-02	Oluwamodupe Cecilia Ejelonu	15:25-15:30	Molecular docking study of TGR5/GLP1 pathway as possible antidiabetic mechanism of action of triterpenoid from
S7-VO-03	Md. Ashraful Haque	15:30-15:35	Artificial Intelligence-based approach for identification of severity levels of maydis leaf blight disease
S7-VO-04	Parinita Das	15:35-15:40	Transcriptomic profiling of *Triticum aestivum* near-isogenic lines for stripe rust resistance
S7-VO-05	P Supriya	15:40-15:45	Identification and expression analysis of long non-coding RNAs induced during Rhizoctonia solani infection in rice
S7-VO-06	Suman Dutta	15:45-15:50	Prediction of maize Matrilineal specific patanin-like protein involved in *in-vivo* maternal haploid induction using support vector machine and di-peptide composition

S7-VO-07	Tamanna Sharma	15:50-15:55	Homology modelling of Photosystem I iron-sulfur Center (PsaC) from *Citrullus lanatus* using Modeller
S7-VO-08	Upendra Kumar Pradhan	15:55-16:00	PlDBPred: an Artificial Intelligence-based generalized computational model for discovery of DNA binding proteins in Plants
e-Talk Session-V			
Abiotic stress tolerance			
List of online poster presenters **Date: April 29, 2022** **Time: 18:00-20:00**			
S1-VP-01	AbuBarkat Md Gulzar	18:00-18:05	Growth promotion of tomato plant under arsenic stress by rhizobacteria *Bacillus subtilis* RK27 isolated from rice rhizosphere
S1-VP-03	Anmol Sidhu	18:05-18:10	Morpho-physiological, biochemical and yield attributes in response to drought heat and their interactive effect in rice (*Oryza sativa* L.)
S1-VP-04	Atreyee Chatterjee	18:10-18:15	Responses of rice plants to combination of light and drought stresses: A physiological and biochemical approach
S1-VP-05	Bablee Kumari Singh	18:15-18:20	Identification of genes governing heat stress tolerance in rice (*Oryza sativa* L.) by expression profiling of candidate genes from major QTL regions
S1-VP-06	Doyel Roy	18:20-18:25	Toxicity of CuO nano and bulk particles on maize (*Zea mays* L.): Interpretation of antioxidant defense mechanisms
S1-VP-07	Gayatri	18:25-18:30	Characteristics of the root system in the diploid progenitors and domesticated wheat under low nitrogen stress
S1-VP-08	Gurvarinder Kaur	18:30-18:35	28-Homobrassinolide restores growth in *Brassica juncea* seedlings under cadmium toxicity
S1-VP-09	Himanshi Sharma	18:35-18:40	Understanding the role of GQS Helicase in stress adaptation in *Arabidopsis thaliana*
S1-VP-10	Karikalan J	18:40-18:45	Stress-inducible expression of a novel DUF740 gene family member from rice (*OsSRDP*) imparts abiotic and biotic stress tolerance
S1-VP-12	Megha Ujinwal	18:45-18:50	In Silico proteome wide analysis of drought response dehydrin proteins (DHNs) across fabaceae family
S1-VP-13	Monika P. Patel	18:50-18:55	Regulatory role of silicon for mitigation of potassium deficiency stress tolerance in peanut (*Arachis hypogaea*) through ion homeostasis, activation of antioxidant defense, and metabolic dynamics

S1-VP-14	Neha Dogra	18:55-19:00	Brassinosteroids induced temperature stress tolerance in *Brassica juncea* seedlings by modulating the ROS scavenging machinery
S1-VP-15	Priyanka	19:00-19:05	Deciphering genetics of lodging tolerance in maize
S1-VP-16	Priyanka Boro	19:05-19:10	Crucial roles of GSH in plant stress response: In perspective to the improvements in Indian agriculture
S1-VP-17	Sabhyata	19:10-19:15	Diversity in indigenous collections for agro-morphological traits
S1-VP-18	Samrat Banerjee	19:15-19:20	MYB4 regulates cadmium tolerance via protection against oxidative damage and glutathione-dependent pathway in Arabidopsis
S1-VP-20	Satyabrata Pradhan	19:20-19:25	Physico-biochemical changes of *in vitro* cultured mango (*Mangifera indica* L.) calli under PEG 6000 induced drought stress
S1-VP-21	Shruti Kaushik	19:25-19:30	Methyl jasmonate modulation of ROS scavenging machinery for cadmium tolerance in *Cajanus cajan*
S1-VP-22	Tapas Paul	19:30-19:35	Segregation distortion and linkage analysis in rice for drought tolerance using microsatellite markers
e-Talk Session-VI			
Yield and quality traits			
List of online poster presenters **Date: April 29, 2022** **Time: 18:00-20:00**			
S3-VP-01	Ajay Kumar	18:00-18:05	Understanding the molecular basis of grain filling and grain number in a pair of EMS induced rice mutants (*Oryza sativa* L.)
S3-VP-02	Arjun Sharma	18:05-18:10	Use of biofilm to improve food shelf life and nutritional quality
S3-VP-04	Bhavna Singh	18:10-18:15	Marker-assisted stacking of *opaque2* and *crtRB1* genes in 'Pusa Super Sweet Corn-1' hybrid for enrichment of provitamin-A, lysine and tryptophan
S3-VP-05	Gandra Jawahar	18:15-18:20	Isolation of pure alkaloids from *Gloriosa superba* by a novel technique, metabolomic and proteomic studies for the identification of key enzymes in the alkaloid pathway
S3-VP-06	Gorle Roja Ramani	18:20-18:25	Identification of good quality traits genotypes of oil palm using SSR markers
S3-VP-08	L. Madhavilatha	18:25-18:30	Studies on finger millet genotypes for yield and yield contributing Traits

S3-VP-09	Manish Ranjan Saini	18:30-18:35	Accessing nitrogen use efficiency in EMS induced N22 rice mutants under the hydroponic system
S3-VP-10	Neetu Singh Kushwah	18:35-18:40	Biochemical profiling of grass pea (*Lathyrus sativus* L.) genotypes for ODAP content
S3-VP-11	Nisrita Gain	18:40-18:45	Introgression of *MATRILINEAL* and *DMP* genes through molecular breeding for development of maternal haploid inducer lines in maize
S3-VP-12	Priyanka Singh	18:45-18:50	Meta-analysis of QTLs for chalkiness in rice: Approach to robustness
S3-VP-13	Rajendra Adak	18:50-18:55	HPLC reveals different tissues specific accumulation of nimbin from neem plant (*Azadirachta indica*)
S3-VP-15	Shridhar Ragi	18:55-19:00	Genetic and molecular characterization of low phytic acid-2 (*lpa2*)-based maize inbreds for its utilisation in biofortification programme
S3-VP-16	Subhra Jyotshna Mishra	19:00-19:05	Marker-assisted introgression of waxy1 gene into elite biofortified maize inbreds
S3-VP-18	A.Vinod Kumar	19:05-19:10	Altering the expression of *CAld5H* gene in lignin biosynthetic pathway using CRISPR-Cas9 technology in Sorghum for getting better biofuel yield
Plant tissue culture and transgenics			
List of online poster presenters			
S5-VP-01	Ajinder Kaur	19:10-19:15	Effect of different growth regulators, carbon sources, agar, amino acids and adjuvants on direct somatic embryogenesis and regeneration in sugarcane spindle leaf segments
S5-VP-02	Alisha Gupta	19:15-19:20	Regeneration in *Commiphora wightii* through somatic embryogenesis using the leaf as an explant
S5-VP-03	Amol Kailas Jadhav	19:20-19:25	Efficient in vitro embryo rescue technique in grape
S5-VP-04	Anjulata Singh	19:25-19:30	FRET analysis of Ca2+ signalling in *Oryza sativa* root hairs expressing the legume Nod factor receptor kinases MtNFP and MtLYK3
S5-VP-05	Arabindu Debbarma	19:30-19:35	*In vitro* callus induction from seeds of Indian black rice (*Oryza sativa* L.)
S5-VP-06	Ayesha Masih	19:35-19:40	Development of in vitro tuberization protocol for *Dipcadi erythraeum*, a threatened medicinal plant
e-Talk Session-VII			
Plant tissue culture and transgenics			
List of online poster presenters **Date: April 30, 2022**			

Time: 13:30-15:30			
S5-VP-07	Bollempally Prashanth	13:30-13:35	CRISPR-Cas9 mediated editing of COMT and CCoAOMT genes of Sorghum for improving lignocellulosic biomass and bioethanol production
S5-VP-08	Charu Sharma	13:35-13:40	Development of cryopreservation and plant regeneration protocol for *Saussurea costus*: a critically endangered Himalayan medicinal herb
S5-VP-09	Debasmita Panda	13:40-13:45	Development of highly efficient protocol of protoplast isolation from rice and transfection study with CRISPR-Cas9 plasmid targeting rice semi-dwarf-1 gene
S5-VP-10	Deepika Choudhary	13:45-13:50	*In vitro* adventitious roots of *Valeriana jatamansi*: a sustainable source of valerenic acid derivatives
S5-VP-11	Halka Jayachandran	13:50-13:55	Effects of sterilant on establishing *in-vitro* callus induction in *Hemidesmus indicus* L. R. Br : An important endangered medicinal plant
S5-VP-12	Himal Pokhrel	13:55-14:00	Effect of explants and growth hormones for Plb formation of *Vanda coerulea*
S5-VP-13	Ipsita Panigrahi	14:00-14:05	Bt Brinjal: A new array of hope towards sustainability
S5-VP-14	K. Kowsalya	14:05-14:10	Role of sodium nitroprusside in adventitious root induction from leaf explants of *Vitex negundo*: A multipotent medicinal plant
S5-VP-16	Maharana Pratap	14:10-14:15	*In vitro* propagation of Glinuslotoides L.: An important medicinal plant species of western Rajasthan
S5-VP-17	Manape Tushar K.	14:15-14:20	Efficiency of *Agrobacterium* strains in onion transformation
S5-VP-18	Meena Barupal	14:20-14:25	*In vitro* juvenile cells production in C3, C4 and C3-C4 intermediate plants an approach to address genetic manipulation for desired expression
S5-VP-19	Priyanka Rajput	14:25-14:30	Development of high frequency adventitious shoot regeneration protocol using de-embryonated explant in an important oilseed crop *Sesamum indicum* L.
S5-VP-20	Rhitisha Sood	14:30-14:35	Cisgenesis: A one-step gene transfer technique integrating modern and traditional breeding for sustainable agriculture growth
S5-VP-21	Shareefa M	14:35-14:40	Effect of culture vessels and type of agar on *in vitro* culture of coconut
S5-VP-22	Shashikanta Behera	14:40-14:45	Assessment of phytochemical contents, essential oil compositions, and pharmacological activities of *in vitro* regenerated plant *Curcuma amada* Roxb.: An important medicinal plant of India

S5-VP-23	Shruti Shukla	14:45-14:50	An assessment of factors affecting *Agrobacterium*-mediated transformation efficiency in soybean
S5-VP-24	Sneh Sharma	14:50-14:55	Comparative estimation of antimicrobial potential of *Tinospora cordifolia* from different districts of Himachal Pradesh
S5-VP-25	Subhasis Karmakar	14:55-15:00	*In vitro* cleavage assay demarcates the potential of long form of tracrRNA (tracr-L) in plant genome editing
S5-VP-26	Supriya Babasaheb Aglawe	15:00-15:05	Standardization of somatic embryogenesis in grapes
S5-VP-27	Tapas Das	15:05-15:10	Establishment of *in vitro* culture of *Phyllanthus niruri* using nodal segment cultures
S5-VP-28	Theivanai M	15:10-15:15	Auxin induced non embryogenic callus induction in Kinnow mandarin
S5-VP-29	Vasudha Datta	15:15-15:20	Factor affecting shoot regeneration of *Eclipta alba*: An important medicinal plant
S5-VP-30	Waquar Ahmad	15:20-15:25	Use of salicylic acid as an adjuvant enhances *in vitro* regeneration potential of nodal explants of *Lagerstroemia speciosa* L.
S5-VP-31	Anita Kumari	15:25-15:30	Insight into the potential application of gold nanoparticles in enhancing biomass production in bamboo
S5-VP-32	Meghna Patial	15:30-15:35	Optimization of micropropagation protocol for *Ferula asafoetida* using leaf explant: A historic step towards self-sustainability in India.
S5-VP-33	Nitu Gautam	15:35-15:40	Development of callus and cell culture as alternative *in vitro* system for production of saffron bioactives
e-Talk Session-VIII			
Biotic stress tolerance			
List of online poster presenters **Date: April 30, 2022** **Time: 13:30-15:30**			
S2-VP-01	Abhaya Kumar Sahu	13:30-13:35	Immuno-compromission of wheat host by the development of carbonylation (CO) during *Fusarium* infection
S2-VP-02	Anjali	13:35-13:40	Apoplasmic metabolite profile during *Pseudomonas syringae*pv tomato T1 infection in tomato plants
S2-VP-03	Archana Bal	13:40-13:45	Expression analysis of putative candidate genes present within the QTL, *qShB-1.1* in response to sheath blight disease resistance in rice (*O. sativa* L.) from the cultivar CR 1014

Genetics and genomics			
List of online poster presenters			
S4-VP-01	Aastha Sharma	13:45-13:50	Molecular analysis of flower color variants of *Tecomella undulata* using start codon targeted markers
S4-VP-02	Aswini Nunavath	13:50-13:55	Speed breeding: Role in crop improvement
S4-VP-03	Irum Gul	13:55-14:00	Potential of teosinte accession (*Zea mays* ssp. parviglumis) for enhancement of prolificacy in baby corn through molecular breeding
S4-VP-04	Bhavesh Vinodkumar Palan	14:00-14:05	Development of TILLING population in Tomato
S4-VP-05	Manisha Saini	14:05-14:10	Genetics and mapping of loci linked to seed viability in soybean
S4-VP-06	Rahul Kumar	14:10-14:15	Genetic study of seed coat colour in soybean [*Glycine max* (L.) Merr.]
S4-VP-07	Rashmi Rani Boro	14:15-14:20	Identification of specific threonine phosphorylation sites imparting dual-affinity to nitrate transporter NRT1.1 gene in various monocot and dicot species
S4-VP-09	Rohit Kumar Mahto	14:20-14:25	Effects of various combinations of Rhizobium, VAM and fertilizer on nodulation and yield
S4-VP-10	Sonali Panda	14:25-14:30	Optimization of prime editing system for precise editing in rice
S4-VP-11	Sreeshma N	14:30-14:35	Fine mapping of qPH5.1 QTL region for dwarfness in pigeon pea (*Cajanus cajan* L. Milsp. cv Pusa Dwarf).
Genome sequencing, bioinformatics and artificial intelligence			
List of online poster presenters			
S7-VP-02	Mainkar Pawan Sitaram	14:35-14:40	Identification and characterization of AcMSH1 gene in onion (*Allium cepa* L)
S7-VP-03	Reena Kumari	14:40--14:45	Comparative analysis of PAL gene isolated from soft and hard seeded varieties of *Punica granatum* L.
S7-VP-04	Sanchita Naha	14:45-14:50	Ontology driven context aware recommender system for maize cultivation
S7-VP-05	Sapna Nigam	14:50-14:55	Image based wheat rust severity estimation using deep learning
S7-VP-06	Vidya Nandakumar	14:55-15:00	Sequence alignment and phylogenetic analysis of MYB transcription factors that are influencing the synthesis of isoflavones in soybean (*Glycine max*. Merill)