



**46<sup>th</sup> ANNUAL MEETING OF PLANT TISSUE CULTURE ASSOCIATION (INDIA)**  
**- AND SYMPOSIUM ON -**  
**CURRENT TRENDS AND CHALLENGES IN PLANT BIOTECHNOLOGY**  
**24<sup>th</sup> – 26<sup>th</sup> FEBRUARY, 2025**



DAY-0: 23 <sup>rd</sup> February, 2025		REGISTRATION (6:30 PM - 8:30 PM)
DAY-1: 24 <sup>th</sup> February, 2025		REGISTRATION (8:00 AM - 9:30 AM)
INAUGURAL SESSION (9:30 AM - 11:00 AM) INAUGURAL SPEAKER: DR. T. R. SHARMA [DDG (CROP SCIENCE), ICAR, NEW DELHI] VENUE: AUDITORIUM, BITS PILANI, GOA		
GROUP PHOTOGRAPHY AND HIGH TEA (11:00 AM – 11:30 AM)		
MEMORIAL AND KEYNOTE LECTURES [VENUE: AUDITORIUM, BITS PILANI, GOA]		
TIME	SCHEDULE	CHAIRPERSON
11:30 AM – 01:00 PM	<b>DR. P. S. AHUJA AWARD LECTURE</b> <b>SPEAKER:</b> DR. SNEH LATA SINGLA-PAREEK (ICGEB, NEW DELHI) <b>TITLE:</b> FROM STRESS TO SUCCESS: GENERATING CLIMATE-SMART RICE FOR A CHANGING WORLD	<b>CHAIR:</b> PROF. PRAMOD TANDON (SECRETARY PTCA(I)) <b>CO-CHAIR:</b> PROF. UTPAL ROY (BITS PILANI, GOA)
	<b>PROF. F. C. STEWARD MEMORIAL LECTURE</b> <b>SPEAKER:</b> DR. TARUN KANT (ARID FOREST RESEARCH INSTITUTE, JODHPUR) <b>TITLE:</b> COMBATING DEGRADATION AND DESERTIFICATION OF LAND AND ENHANCING LAND PRODUCTIVITY COUPLED WITH CLIMATE CHANGE RESILIENCE THROUGH BIOTECHNOLOGICAL INNOVATIONS	
	<b>KEYNOTE TALK-1</b> <b>SPEAKER:</b> DR. SUDESH KUMAR YADAV (IHBT, PALAMPUR) <b>TITLE:</b> TOWARDS MITIGATING THE CHALLENGES THROUGH METABOLIC ENGINEERING AND BIOPROCESSING FOR VALUE ADDITION IN PLANTS	

## Program Schedule

LUNCH BREAK (01:00 PM – 02:00 PM)					
CONCURRENT SESSIONS					
PTCA(I) MEMBER PRESENTATION [VENUE: DLT-9] CHAIR: PROF. RAKHI CHATURVEDI (IIT, GUWAHATI) CO-CHAIR: DR. ANIL K. SINGH (ICAR-NIPB, DELHI)			THEME 4: PLANT DEVELOPMENT [VENUE: DLT-10] CHAIR: DR. ALOK K. SINHA (NIPGR, NEW DELHI) CO-CHAIR: DR. K. K. MANOHAR (ICAR-CCARI, GOA)		
TIME	SPEAKER	TOPIC	TIME	SPEAKER	TOPIC
02:00 PM - 02:10 PM	DR. ABHISHEK SHARMA	Monoterpenoid indole alkaloids pathway modulation studies in <i>Catharanthus roseus</i>	02:00 PM-02:20 PM	<b>LEAD SPEAKER 1</b> DR. MANOJ MAJHEE (NIPGR, NEW DELHI)	Drying without dying: A fascinating feature of seeds
02:10 PM - 02:20 PM	DR. ASHUTOSH PANDEY	Elucidating the intricacies of regulatory aspects of specialized metabolism in crop plants: From fundamental knowledge to metabolic engineering	02:20 PM - 02:40 PM	<b>LEAD SPEAKER 2</b> DR. ANIRUDDHA P. SANE (CSIR-NBRI)	The EAR motif repressor, SIERF36, controls whole plant growth and stress responses through manipulation of the GA-ethylene pathways
02:20 PM - 02:30 PM	DR. AMIT KUMAR GUPTA	<i>In vitro</i> morphogenesis and genetic diversity studies of woody plant species of Rajasthan	02:40 PM - 03:00 PM	<b>LEAD SPEAKER 3</b> DR. JITENDRA THAKUR (ICGEB)	Structure and function of plant mediator complex
02:30 PM - 02:40 PM	DR. CHARAN PREET KAUR	Digging deeper for harnessing stress resilience in plants: Exploring methylglyoxal dynamics during plant-microbe interactions	03:00 PM - 03:20 PM	<b>LEAD SPEAKER 4</b> PROF. SOURABH DATTA (IISER, BHOPAL)	BBX proteins regulating light-mediated development and UV-B protection in plants
02:40 PM - 02:50 PM	DR. E. A. SIRIL	Micropropagation of dye yielding plants and <i>in vitro</i> production of natural dyes	03:20 PM - 03:30 PM	<b>ORAL PRESENTATION 1</b> DR. VISHAL SHARMA	Developing Fusarium yellows resistant ginger plants by combining gamma irradiations with <i>in vitro</i> selection
02:50 PM - 03:00 PM	DR. HIRANJIT CHOUDHURY	Conservation efforts for some RET and endemic species of North-Eastern Region of India	03:30 PM - 03:40 PM	<b>ORAL PRESENTATION 2</b> DR. GIREESHA T. M.	Loss of RdDM-independent CHH methylation is sufficient for disruption of developmental chromosome-specific rRNA gene silencing

## Program Schedule

03:00 PM - 03:10 PM	DR. MAHIPAL SEKHAWAT	Silicon Nanoparticles (SiNPs) mediated morpho-structural and histochemical improvements in micropropagation of medicinal plants	03:40 PM - 03:50 PM	<b>ORAL PRESENTATION 3</b> DR. GOPAL BANERJEE	MPK3 mediated cell division control maintains rice plant vigor and yield
03:10 PM - 03:20 PM	DR. MEERA DAS	Cryobiotechnology for long term storage and germplasm management with special reference to orchids of North-East India	03:50 PM - 04:00 PM	<b>ORAL PRESENTATION 4</b> RISHI KUMAR VERMA	Regulating the degeneration of anthers' tapetum contributes to male sterility, enabling a rescued fertility system for F <sub>1</sub> cotton production
03:20 PM - 03:30 PM	DR. MUKUL JOSHI	Transcriptomic approach for identification of heat shock proteins from <i>Prosopis cineraria</i> , their interaction studies and crop improvement	<b>TEA BREAK (04:00 PM-04:15 PM)</b>		
03:30 PM - 03:40 PM	DR. NEELAM P. NEGI	Bringing resilience to mustard: Genetic manipulation strategies to combat drought and salinity stress	04:15 PM - 04:25 PM	<b>ORAL PRESENTATION 5</b> SARVESH JONWAL	MPK3-mediated phosphorylation of RbcS via STY Kinase regulates its trafficking from the cytoplasm to the chloroplast
03:40 PM - 03:50 PM	DR. NEHA SHARMA	Biotechnological interventions in some commercially important crops	04:25 PM - 04:35 PM	<b>ORAL PRESENTATION 6</b> RUMI	OsJAZ10-OsMPK3/4&6 signaling module fine-tunes anther development in rice
03:50 PM - 04:00 PM	DR. PRAVEEN C. VERMA	Biotechnological approaches, including genome editing technologies for pest management and crop improvement	04:35 PM - 04:45 PM	<b>ORAL PRESENTATION 7</b> POOJA PATWAL	GARP transcription factor <i>S/GCC</i> regulates root development and negatively regulates salinity stress
<b>TEA BREAK (04:00 PM-04:15 PM)</b>			04:45 PM - 04:55 PM	<b>ORAL PRESENTATION 8</b> ANJIO SAJI	Evolutionary approaches predicted changes in transcription factors and cis-elements that associate with Kranz anatomy development in maize

## Program Schedule

04:15 PM - 04:25 PM	DR. RAJESH MEHROTRA	AtAVT6 family of amino acid transporters as target for crop improvement: A comparative genomics and metabolomics tale	
04:25 PM - 04:35 PM	DR. RAJNISH SHARMA	Biotechnological interventions in the improvement and conservation of temperate horticultural crops	
04:35 PM - 04:45 PM	DR. RIDDHI DATTA	Climate-smart crops for a food secure future: Leveraging plant signaling for sustainable agriculture	
04:45 PM - 04:55 PM	DR. SANJANA NEGI	Molecular insights into stress resilience and xylem development in banana	
04:55 PM - 05:05 PM	DR. SUDIPTA RAY	Dehydrins, raffinose and anthocyanins: gamechangers in stress biology!!	
05:05 PM - 05:15 PM	DR. SUSHMA MISHRA	Interaction between cryptochromes and gibberellin metabolism pathway in regulating seedling photomorphogenesis in <i>Arabidopsis thaliana</i>	
05:15 PM - 05:25 PM	DR. S. GIRIJA	Bioengineering of plants through tissue culture for sustainable production of high value bioactive compounds	
<b>Poster Session I      THEME 1, 4 and 5      (05:00 PM - 06:30 PM)</b>			
<b>General Body Meeting (06:30 PM - 07:30 PM)</b>			
<b>DINNER VGH (07:30 PM ONWARDS)</b>			

## Program Schedule

DAY-2: 25 <sup>th</sup> February, 2025					
KEYNOTE TALK [VENUE: DLT 9]					
TIME	SCHEDULE			CHAIRPERSON	
09:30 AM – 11:00 AM	<b>KEYNOTE TALK-2</b> <b>SPEAKER:</b> DR. P. K. TRIVEDI (CIMAP, LUCKNOW) <b>TITLE:</b> TINY PLAYERS, BIG IMPACT: PEPTIDES IN PLANT DEVELOPMENT AND ENVIRONMENTAL STRESS			<b>CHAIR:</b> PROF. SAMIT CHATTOPADHYAY (BITS PILANI, GOA) <b>CO-CHAIR:</b> PROF. KUNDAN KUMAR (BITS PILANI, GOA)	
	<b>KEYNOTE TALK-3</b> <b>SPEAKER:</b> PROF. ASHWANI PAREEK (NABI, MOHALI) <b>TITLE:</b> DECODING OSMOSENSING: UNRAVELING STRESS-RESILIENCE PATHWAYS IN RICE				
	<b>KEYNOTE TALK-4</b> <b>SPEAKER:</b> DR. ALOK K. SINHA (NIPGR, NEW DELHI) <b>TITLE:</b> MPK4, A NEW PLAYER IN THERMOSENSING IN <i>ARABIDOPSIS</i> REGULATES DEPOSITION OF HISTONE VARIANT H2A.Z				
TEA BREAK (11:00 AM – 11:20 AM)					
CONCURRENT SESSIONS					
THEME 1: PLANT TISSUE CULTURE AND ENTREPRENEURSHIP [VENUE: DLT 9] CHAIR: PROF. PADMANABH DWIVEDI (BHU, VARANASI) CO-CHAIR: DR. SIDDHI JALMI (GOA UNIVERSITY, GOA)			THEME 5: PLANT MICROBE INTERACTION [VENUE: DLT 10] CHAIR: DR. V. ARUNACHALAM (JNTBGRI, TIRUVANANTPURAM) CO-CHAIR: DR. SOUMENDRA KUMAR NAIK (RAVENSHAW UNIVERSITY, CUTTACK)		
TIME	SPEAKER	TOPIC	TIME	SPEAKER	TOPIC
11:20 AM - 11:40 AM	LEAD SPEAKER 1 PROF. RAKHI CHATURVEDI (IIT GUWAHATI)	Scaling-up plant tissue culture products through bioreactor technology	11:20 AM-11:40 AM	LEAD SPEAKER 1 DR. AMEY REDKAR (NCBS, BANGALORE)	The transcriptional plasticity of short-core chromosomes drives plant-fungal compatibility across evolutionarily divergent plant lineages
11:40 AM -12:00 PM	LEAD SPEAKER 2 PROF. PADMANABH DWIVEDI (BHU VARANASI)	<i>In vitro</i> conservation of commercially important anti-diabetic plant <i>Stevia rebaudiana</i> : Insights into elicitation and pharmaceutical relevance	11:40 AM -12:00 PM	LEAD SPEAKER 2 DR. SRIDEV MOHAPATRA (BITS PILANI, HYDERABAD CAMPUS)	Signalling mechanisms in plant-rhizobacterial interaction for abiotic stress tolerance

## Program Schedule

12:00 PM - 12:20 PM	<b>LEAD SPEAKER 3</b> DR. SHRADDHA SINGH (BARC, MUMBAI)	Improvement of horticultural crops using <i>in vitro</i> mutagenesis approach	12:00 PM - 12:10 PM	<b>ORAL PRESENTATION 1</b> DR. BALAKUMARAN CHANDRASEKAR	Glycobiology of <i>Macrophomina</i> -soybean interactions at the cell wall interface
12:20 PM - 12:30 PM	<b>ORAL PRESENTATION 1</b> DR. MANISHA THAKUR	<i>In vitro</i> polyploidy induction in ginger ( <i>Zingiber officinale</i> Rosc.) cv. Himgiri: Morpho-physiological, biochemical and molecular evaluation of regenerates	12:10 PM - 12:20 PM	<b>ORAL PRESENTATION 2</b> DR. POOJA SHARMA	Exploring transcriptome sequencing for identification and characterization of R-genes in <i>Fusarium</i> wilt-tolerant ginger ( <i>Zingiber officinale</i> Rosc.) developed through <i>in vitro</i> mutagenesis
12:30 PM - 12:40 PM	<b>ORAL PRESENTATION 2</b> DR. ASHOK KUMAR PATEL	Indirect organogenesis from mature leaf-derived callus and <i>ex vitro</i> establishment of <i>Cadaba fruticosa</i> (Bahuguni): an endangered shrub	12:20 PM - 12:30 PM	<b>ORAL PRESENTATION 3</b> DR. SHASMITA	Effect of biopriming on PSII of rice plants infected with biotrophic pathogen
12:40 PM - 12:50 PM	<b>ORAL PRESENTATION 3</b> DR. MEENA PANDEY	Conservation of <i>Ceropegia media</i> (Huber) Ans.: An endangered medicinal plant of the Western Ghats	12:30 PM - 12:40 PM	<b>ORAL PRESENTATION 4</b> DR. SIVASUBRAMANIAN RAJARAMOHAN	Deciphering the genetic basis of PAMP-triggered immunity against <i>Alternaria brassicae</i> utilizing the natural variation in <i>Brassica juncea</i>
12:50 PM - 1:00 PM	<b>ORAL PRESENTATION 4</b> DR. KHETA RAM	Optimizing aeroponic propagation for mass multiplication and rooting of Henna ( <i>Lawsonia inermis</i> )	12:40 PM - 12:50 PM	<b>ORAL PRESENTATION 5</b> DR. NISHA TAK	Genomic insights into osmotic stress tolerance mechanisms of symbiotically efficient nitrogen fixing <i>Bradyrhizobium</i> strain TV4 isolated from wild legume <i>Tephrosia villosa</i> in Indian Thar Desert
<b>LUNCH BREAK: 01:00 PM – 02:00 PM</b>			12:50 PM - 01:00 PM	<b>ORAL PRESENTATION 6</b> DR. S. R. DAVE	Necessity, benefit and feature prospects of

## Program Schedule

					Biotization in plant tissue culture
2:00 PM - 2:10 PM	<b>ORAL PRESENTATION 5</b> DR. M. MANOKARI	Synseeds of <i>in vitro</i> roots as inoculum for storage and mass production of adventitious roots in <i>Hemidesmus indicus</i> (L.) R. Br. – An important plant of Siddha medicine	<b>LUNCH BREAK: 01:00 PM – 02:00 PM</b>		
2:10 PM - 02:20 PM	<b>ORAL PRESENTATION 6</b> DR. DEBASHISH MOHAPATRA	Propagation and germplasm transfer of medicinal plants using synthetic seed: a case study of <i>Paederia foetida</i>	02:00 PM - 02:10 PM	<b>ORAL PRESENTATION 7</b> DR. SMRUTISANJITA BEHERA	Understanding the perception of OMVs released by <i>Xanthomonas oryzae</i> pv. <i>oryzae</i> in rice
02:20 PM - 02:30 PM	<b>ORAL PRESENTATION 7</b> ANITA KUMARI	Characterizing glyoxalase family: Expanding functions of fundamental metabolic profiling in <i>Phyllostachys pubescens</i> (Mazel ex. J. Houz.)	02:10 PM - 02:20 PM	<b>ORAL PRESENTATION 8</b> DR. RADHA SHIVHARE	Harnessing <i>Pseudomonas putida</i> for early flowering induction in pearl millet: A sustainable strategy to mitigate drought stress and maintain yield under abiotic challenges
02:30 PM - 02:40 PM	<b>ORAL PRESENTATION 8</b> KRISHNA KANT PACHAURI	Kinetic modelling of root biomass and N-alkylamides production from <i>Spilanthes paniculata</i> in a modified stirred tank reactor	02:20 PM - 02:30 PM	<b>ORAL PRESENTATION 9</b> DR. RANJAN KUMAR	An epigenetic target of RSI1/FLD, negatively regulates systemic acquired resistance in <i>Arabidopsis</i>
02:40 PM - 02:50 PM	<b>ORAL PRESENTATION 9</b> DR. RAJESH SAINI	Micropropagation through root culture, metabolomic, and genetic fidelity assessment of <i>Drypetes roxburghii</i> (Wall.) Hurus.: A highly valuable traditionally used woody medicinal plant	02:30 PM - 02:40 PM	<b>ORAL PRESENTATION 10</b> CHETNA V. N.	Mechanistic insights into <i>Macrophomina phaseolina</i> -soybean interactions in the apoplast: A proteomics and glycomics approach
02:50 PM - 03:00 PM	<b>ORAL PRESENTATION 10</b> JYOTI VISHWAKARMA	Germplasm conservation of economically important medicinal plant <i>Nyctanthes</i>	02:40 PM - 02:50 PM	<b>ORAL PRESENTATION 11</b> RITIKA DWIVEDI	Unravelling the function of the tomato brown rugose fruit virus

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		<i>arbortristis</i> L. through encapsulation technique and maintenance under slow growth conditions			movement protein in facilitating local and systemic movement in plants
			02:50 PM - 03:00 PM	<b>ORAL PRESENTATION 12</b> DR. NEERAJ SOLANKI	PDMS-based root-on-chip: Investigating abiotic stress responses and microbial colonization on <i>Oryza sativa</i> roots
<b>POSTER SESSION</b>					
<b>THEME 2, 3 and 6 (03:00 PM - 04:00 PM)</b>					
<b>TEA BREAK (04:00 PM - 04:15 PM)</b>					
<b>CONCURRENT SESSIONS</b>					
<b>THEME 2: PLANT METABOLITES AND NUTRACEUTICALS [VENUE: DLT 9]</b> <b>CHAIR:</b> DR. P. K. TRIVEDI (CSIR-CIMAP) <b>CO-CHAIR:</b> DR. SRIDEV MOHAPATRA (BITS PILANI, HYDERABAD)			<b>THEME 3: ABIOTIC STRESS BIOLOGY [VENUE: DLT 10]</b> <b>CHAIR:</b> DR. MANOJ PRASAD (DELHI UNIVERSITY SOUTH CAMPUS) <b>CO-CHAIR:</b> DR. MUKUL JOSHI (BITS PILANI, PILANI)		
<b>TIME</b>	<b>SPEAKER</b>	<b>TOPIC</b>	<b>TIME</b>	<b>SPEAKER</b>	<b>TOPIC</b>
04:15 PM - 04:35 PM	<b>LEAD SPEAKER 1</b> DR. SHARMILA CHATTOPADHYAY (CSIR-IICB)	Dynamic potential of Indian medicinal plants: Nutraceuticals and pharmaceuticals perspective	04:15 PM - 04:35 PM	<b>LEAD SPEAKER 1</b> DR. T. K. MONDAL (ICAR-NIPB)	Discovery and validation of novel QTLs/genes associated with awn length variation in African rice ( <i>Oryza glaberrima</i> Steud)
04:35 PM - 04:55 PM	<b>LEAD SPEAKER 2</b> PROF. ADINPUNYA MITRA (IIT KAHARAGPUR)	Biomanufacturing simplified – generating added-value products in aromatic plants	04:35 PM - 04:55 PM	<b>LEAD SPEAKER 2</b> DR. PRADEEP AGARWAL (CSIR-CSMCRI)	Role of <i>SiMYB77</i> transcription factor from <i>Sesamum indicum</i> towards abiotic stress tolerance in transgenic plants
04:55 PM - 05:15 PM	<b>LEAD SPEAKER 3</b> DR. RAKESH K. SHUKLA (CSIR-CIMAP)	Understanding the role of UDP-glycosyltransferases and regulatory modules involved in the bacoside	4:55 PM - 5:15 PM	<b>LEAD SPEAKER 3</b> DR. ANIL KUMAR (ICAR-NIPB)	<i>AtUSP17</i> negatively regulates salt stress tolerance by modulating



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		biosynthetic pathway in <i>Bacopa monnieri</i>			multiple signalling pathways in <i>Arabidopsis</i>
05:15 PM - 05:35 PM	<b>LEAD SPEAKER 4</b> DR. SUMIT GHOSH (CSIR-CIMAP)	Unravelling enzyme function in the multi-step pathways of plant specialized metabolism	05:15 PM - 05:25 PM	<b>ORAL PRESENTATION 1</b> DR. GIRIDHAR PARVATAM	The effectiveness of nanomaterials on plant growth and stress resistance: Insights gained so far and promising avenues for future research
05:35 PM - 05:45 PM	<b>ORAL PRESENTATION 1</b> DR. PANKAJ K. SHARMA	Antioxidants from edible desert plants: Validation of phytochemical synergy towards potential nutraceutical development	05:25 PM - 05:35 PM	<b>ORAL PRESENTATION 2</b> DR. ANANDA MUSTAFIZ	Exploring the role of Phytosulfokine Receptor as a positive regulator of leaf senescence and amplifier of ABA signalling in <i>Arabidopsis thaliana</i>
05:45 PM - 05:55 PM	<b>ORAL PRESENTATION 2</b> PROF. CHITTA RANJAN DEB	Ethnomedicinal plants from Nagaland and their potential use in treatment/management of diabetes mellitus	05:35 PM - 05:45 PM	<b>ORAL PRESENTATION 3</b> DR. DEEPAK KUMAR	Unmasking the role of MYB transcription factors of mungbean in the battle against waterlogging stress
05:55 PM - 06:05 PM	<b>ORAL PRESENTATION 3</b> DR. MONISHA KOTTAYI	Plant tissue culture: a novel tool for biotransformation of cell culture metabolites in <i>Mesosphaerum suaveolens</i> (L.) Kuntze. and <i>Ocimum basilicum</i> L.	05:45 PM - 05:55 PM	<b>ORAL PRESENTATION 4</b> DR. SHWETA JHA	Evaluating salt-adaptation mechanism in xero-halophyte: a step towards climate-smart agriculture
06:05 PM - 06:15 PM	<b>ORAL PRESENTATION 4</b> DR. JAYA ARORA	Isolation and characterization of bioactive peptides from <i>Balanites aegyptiaca</i> (linn.) Delile (Desert Date) for health and sustainability	05:55 PM - 06:05 PM	<b>ORAL PRESENTATION 5</b> DR. NAVEEN MALIK	Phosphate starvation response in pearl millet ( <i>Pennisetum glaucum</i> ): An unsolved puzzle

## Program Schedule

		goals: <i>In vitro</i> and <i>in silico</i> investigations			
06:15 PM - 06:25 PM	<b>ORAL PRESENTATION 5</b> DR. NITHYA KUTTY	Exploring the use of natural deep eutectic solvents for green extraction of floral metabolites to develop nutraceuticals	06:05 PM - 06:15 PM	<b>ORAL PRESENTATION 6</b> DR. SUMIT KUMAR MISHRA	An insight into regulatory role of a class A <i>HSF</i> gene in abiotic stress response in barley
06:25 PM - 06:35 PM	<b>ORAL PRESENTATION 6</b> DR. MEENA BARUPAL	Metabolic diversity in <i>Phyllanthus</i> species from semi-arid regions under natural climate conditions	06:15 PM - 06:25 PM	<b>ORAL PRESENTATION 7</b> ANKUSH SHARMA	Natural variation in shoot biomass reveals genetic candidates responsible for salt tolerance and thiourea responsiveness in soybean
06:35 PM - 06:45 PM	<b>ORAL PRESENTATION 7</b> DR. ANCHAL GARG	Functional characterization of the ent-copalyl pyrophosphate synthases revealed important role of <i>ApCPS2</i> in medicinal diterpenoid biosynthesis and defense against insect herbivore in kalmegh ( <i>Andrographis paniculata</i> )	06:25 PM - 06:35 PM	<b>ORAL PRESENTATION 8</b> YOGESH NEGI	Overexpression of ABA-dependent <i>OsWNK9</i> improves root growth and regulates stomatal opening in rice under salinity stress
06:45 PM - 06:55 PM	<b>ORAL PRESENTATION 8</b> DIPANJALI CHATTERJEE	Harnessing the potential of spectral LED lights in enhancing glandular trichome density and accumulation of bioactive specialized metabolites in spearmint	06:35 PM - 06:45 PM	<b>ORAL PRESENTATION 9</b> SUMAN GUSAIN	Exploring elicitor mitigated changes in cellular dynamics during <i>in vivo</i> and <i>in vitro</i> propagation of saffron ( <i>Crocus sativus</i> L.) under drought Stress
06:55 PM - 07:05 PM	<b>ORAL PRESENTATION 9</b> PRAVEEN KUMAR SHUKLA	<i>Phyllanthus fraternus</i> G.L. Webster leaves metabolomics profiling, antioxidant estimation, and <i>in silico</i> characterizations for potent	06:45 PM - 06:55 PM	<b>ORAL PRESENTATION 10</b> DEEPIKA DAKE	Melatonin mediated induction of autophagy via regulation of drought induced methylglyoxal levels in cotton ( <i>Gossypium hirsutum</i> L.)

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		hepatoprotective nutraceuticals			
07:05 PM - 07:15 PM	ORAL PRESENTATION 10 POONAM VYAS	Functional characterization of UDP-glycosyltransferase of the arjuna triterpene saponin pathway	06:55 PM - 07:05 PM	ORAL PRESENTATION 11 LISHA KHUNGAR	Decoding The code for high temperature resilience in barley
07:15 PM - 07:25 PM	ORAL PRESENTATION 11 K. P. SREELAKSHMI	Antimicrobial lipopeptides as secondary metabolites produced by microbes and plants and their applications in agriculture and nutraceuticals			
DINNER VGH (07:30 PM ONWARDS)					
DAY-3: 26 <sup>th</sup> February, 2025					
KEYNOTE LECTURE [VENUE: DLT 9]					
TIME	SCHEDULE			CHAIRPERSON	
09:30 AM – 11:30 AM	KEYNOTE TALK-5  SPEAKER: DR. K. C. BANSAL (MURDOCH UNIVERSITY, PERTH, AUSTRALIA) TITLE: GENOME EDITING: INDIAN INITIATIVES AND PROSPECTS FOR CROP IMPROVEMENT			CHAIR: DR. K. C. BANSAL (MURDOCH UNIVERSITY, PERTH, AUSTRALIA) CO-CHAIR: DR. GIREESHA T.M. (BITS PILANI, HYDERABAD)	
	KEYNOTE TALK-6  SPEAKER: PROF. OM PRAKASH DHANKHER (UMASS AMHERST, USA) TITLE: A NOVEL GAMMA-GLUTAMYL CYCLE FOR IMPROVING OXIDATIVE STRESS TOLERANCE AND FOOD SAFETY VIA MAINTAINING GSH HOMEOSTASIS IN PLANTS				
	KEYNOTE TALK-7  SPEAKER: PROF. MANOJ PRASAD (DELHI UNIVERSITY SOUTH CAMPUS, NEW DELHI) TITLE: NON-CODING RNAS: ARMOR AGAINST VIRUS INFECTION				
	KEYNOTE TALK-8  SPEAKER: DR. SUBHRA CHAKRABORTY (NIPGR, NEW DELHI) TITLE: DEMYSTIFYING PROTEOGENOMIC LANDSCAPE AND ORGANELLER CONTROL OF HEALTH TO DISEASE LINKING MULTI-HOST RESPONSE				
TEA BREAK (11:30 AM – 11:45 AM)					

## Program Schedule

CONCURRENT SESSIONS					
<b>THEME 6: PLANT GENOME AND EDITING [VENUE: DLT 9]</b> <b>CHAIR:</b> DR. K. C. BANSAL (MURDOCH UNIVERSITY, PERTH, AUSTRALIA) <b>CO-CHAIR:</b> DR. BALAKUMARAN CHANDRASEKAR (BITS PILANI, PILANI)			<b>ENTREPRENEURSHIP &amp; INDUSTRIES [VENUE: DLT 10]</b> <b>CHAIR:</b> DR. ASHUTOSH PANDEY (NIPGR, NEW DELHI) <b>CO-CHAIR:</b> DR. MALABIKA BISWAS (BITS PILANI, GOA)		
TIME	SPEAKER	TOPIC	TIME	SPEAKER	TOPIC
11:45 AM-12:05 PM	<b>LEAD SPEAKER 1</b> DR. JITENDRA GIRI (NIPGR, NEW DELHI)	Editing cis-elements of <i>OsPHO1;2</i> improved phosphate transport and yield in rice	11:45 AM-12:05 PM	<b>LEAD SPEAKER 1</b> DR. ASHUTOSH PANDEY (NIPGR, NEW DELHI)	NCS-TCP: Encouraging entrepreneurs and safeguarding farmers using plant tissue culture technology (THEME: I)
12:05 PM-12:25 PM	<b>LEAD SPEAKER 2</b> DR. SATENDRA K. MANGRAUTHIA (ICAR-IIRR, HYDERABAD)	<i>KAMALA</i> : a novel rice mutant developed through multiplex genome editing offers sustainable solutions for Indian agriculture	12:05 PM - 12:25 PM	<b>LEAD SPEAKER 2</b> DR. SANJAY KUMAR (BITS PILANI, GOA)	Nutraceuticals: Nature's Pharmacy for a healthier tomorrow (THEME: II)
12:25 PM-12:35 PM	<b>ORAL PRESENTATION 1</b> DR. VIDHU A. SANE	Hidden story of roots: Role of HSFs in root development and plant growth	12:25 PM - 12:45 PM	<b>LEAD SPEAKER 3</b> <b>DR. ARUNA KILARU</b> (EAST TENNESSEE STATE UNIVERSITY, USA)	Harnessing Moss Bioreactors for Scalable Production of Oils: A Synthetic Biology Approach (THEME: I)
12:35 PM-12:45 PM	<b>ORAL PRESENTATION 2</b> DR. RITA SHARMA	Genetic enhancement of <i>Sorghum</i> for heat tolerance and nutritional food security	12:45 PM – 1:00 PM	<b>INDUSTRY SPEAKER 1</b> <b>DR. K. B. PATIL</b> (JAIN IRRIGATION SYSTEMS LTD. JALGAON, MAHARASHTRA)	Management of Cucumber Mosaic Virus in Banana
12:45 PM-12:55 PM	<b>ORAL PRESENTATION 3</b> DR. MANOJ K. SHARMA	<i>Sorghum</i> genome engineering: Optimization of regeneration and transformation procedures for <i>Sorghum</i> cultivars	<b>LUNCH (01:00 PM - 02:00 PM)</b>		
<b>LUNCH (01:00 PM - 02:00 PM)</b>					
02:00 PM-02:10 PM	<b>ORAL PRESENTATION 4</b> DR. HASTHI RAM	Developing higher-order knockout population in rice through CRISPR-Cas9 library approach	2:00 PM-2:15 PM	<b>INDUSTRY SPEAKER 2</b> <b>DR. NIBIR ROY</b> (SASHANKA AGRO TECH PVT. LTD. RANCHI, JHARKHAND)	Overview of Sashanka Agro Tech

## Program Schedule

02:10 PM-02:20 PM	<b>ORAL PRESENTATION 5</b> DR. PRAFULL SALVI	Deciphering the molecular roles of seed-associated transcription factors in rice using CRISPR/CAS9 based multiplex genome editing approach			
02:20 PM-02:30 PM	<b>ORAL PRESENTATION 6</b> DR. SHAIESH MORAJKAR	Exploring the combination of SSR markers and 3-Locus DNA barcode-based SNPs for DNA fingerprinting and identification of local rice landraces			
02:30 PM-02:40 PM	<b>ORAL PRESENTATION 7</b> DR. RUPAM KUMAR BHUNIA	Gene editing of rice bran lipase improves shelf-life of bran lipid			
02:40 PM-02:50 PM	<b>ORAL PRESENTATION 8</b> DR. SHUVOBRATA MAJUMDER	Pyramided transgenic lines resistant to insects, fungi, and herbicides: Super Jute			
02:50 PM-03:00 PM	<b>ORAL PRESENTATION 9</b> PRABHATAM MISHRA	Exploring targeted DNA methylation and de-methylation of genes for trait manifestations in the Indian Himalayan populations of <i>Arabidopsis thaliana</i>			
03:00 PM-03:10 PM	<b>ORAL PRESENTATION 10</b> PROF. ASHWANI KUMAR	Gene editing in plants: Crispr-Cas and its applications			
<b>VALEDICTORY SESSION (03:15 PM -04:00 PM) [Venue: DLT 9]</b>					
<b>HIGH TEA (04:00-04:15 PM)</b>					