

December 01, 2018: Registration begins from 2.30 PM at the Reception, Garden Block, CSIR-NBRI and 5 PM onwards at major accommodations

Note: Keynote lecture: 40 min; ASPB Special lecture: 40 min; Plenary Lecture: 30 min; Lead Lecture: 25 min; Session Lecture: 20 min; YSA Lecture: 10 min

Day 1 : December 02, 2018			
8:00 AM - 9:00 AM	Registration and Breakfast at Indira Gandhi Pratishthan (IGP), Gomti Nagar		
9:20 AM- 11:00 AM	INAUGURAL SESSION (Auditorium: Mars)		
11:00 AM - 11:30 AM	Tea Break		
11:30 AM - 01:00 PM	<p>PLENARY SESSION-I (Auditorium Mars, IGP)</p> <p>Chairperson: PV Sane Co-Chairperson: Pravendra Nath</p> <p>Speakers Control of plant growth and development by the light environment Ute Hoecker, University of Cologne, Germany</p> <p>Plant 'Metabolic caravans': From Anti-nutritional to anti-parkinson alkaloids Asaph Aharoni, Weizmann Institute of Science, Israel</p> <p>Chemical Ecology: unravelling mechanisms for plant defence and nutrition SK Barik, CSIR-National Botanical Research Institute, Lucknow, India</p>		
1:00 PM –1:45 PM	Lunch		
1:45 PM - 3:30 PM	Concurrent Session A-I (Mars auditorium)	Concurrent Session B-I (Pluto auditorium)	Concurrent Session C-I (Media Centre)
	<p>Photosynthesis & Productivity</p> <p>Chairperson: SK Sopory Co-chairperson: Alok Sinha</p>	<p>Climate change impact and adaptation strategies</p> <p>Chairperson: Julie E Gray Co-chairperson: CS Mohanty</p>	<p>Plant Metabolism and Metabolomics</p> <p>Chairperson: Asaph Aharoni Co-chairperson: Ashok Giri</p>
	Lead Speaker	Lead Speaker	Lead Speaker
	<p>A systems approach to increasing carbon flux to seed oil for biofuels and bioproducts production Danny Schnell, Michigan State University, USA</p>	<p>Impact of Climate Change Factors on Productivity of Grain Crops PV Vara Prasad, Kansas State University, USA</p>	<p>Metabolic ingenuities of rose-Scented geranium provide new secondary agri-business flavour to the aroma crop RS Sangwan, AcSIR, Ghaziabad, India</p>
	Session Speakers	Session Speakers	Session Speakers
	<p>Photorespiration works in co-ordination with chloroplastic cyclic electron transport and mitochondrial alternative oxidase to optimize and protect photosynthesis AS Raghavendra, University of Hyderabad, Hyderabad, India</p>	<p>Optimally-increased ClpB-C/Hsp100 levels are critical for the genetic improvement of plants against heat stress Anil Grover, University of Delhi South Campus, New Delhi, INDIA</p>	<p>Systematic Molecular Dissection of Limonoid Biosynthetic Pathway in <i>Azadirachta indica</i> HV Thulasiram, CSIR-NCL, Pune, India</p>

	<p>Adaptation strategies in leaves of <i>Prosopis juliflora</i> in response to diurnal and seasonal changes PA Shirke, CSIR-NBRI, Lucknow, India</p> <p>Developmental and biochemical basis of leaf photosynthetic differences across wild and cultivated rice Aashish Ranjan, NIPGR, New Delhi, India</p> <p>Responses of photosynthesis, crop production and leaf spectral traits in green gram (<i>Vigna radiata</i> L.) under shade Badre Alam, ICAR-CARI, Jhansi, India</p>	<p>Mechanistic insight on the interaction of GSH with phyto-hormones to endure environmental stress Sharmila Chattopadhyay, CSIR-IICB, Kolkata, India</p> <p>Surrogate traits to facilitate high throughput screening for drought tolerance in crop plants Jagadish Rane, ICAR-National Institute of Abiotic Stress Management, Baramati, Pune, India</p> <p>Improving drought tolerance in rainfed crops: Potential role of phenomic and molecular approaches M. Maheswari, ICAR-CRIDA, Hyderabad, India</p>	<p>The potential health benefit of secondary plant metabolites from <i>Dalbergia sissoo</i> for osteoporosis, Ritu Trivedi, CSIR-CDRI, Lucknow, India</p> <p>Is there an alternate lycopene synthesis pathway in ripening tomato fruits? Yellamaraju Sreelakshmi, University of Hyderabad, Hyderabad, India</p> <p>An integrative approach to understand triterpene biosynthesis in medicinal tree Sumit Ghosh, CSIR-CIMAP, Lucknow, India</p>
3:30 PM - 3:55 PM	Tea Break		
3:55 PM - 5:40 PM	Concurrent Session A-II	Concurrent Session B-II	Concurrent Session C-II
	<p>Plant Nutrition: Physiology and Genetics</p> <p>Chairperson: MB Chetti Co-chairperson: SV Krishna Jagadish</p>	<p>Genomics and epigenomics</p> <p>Chairperson: Danny Schnell Co-chairperson: Hemant Yadav</p>	<p>Post-harvest Biology</p> <p>Chairperson: Mondher Bouzayen Co-chairperson: MS Sheshshayee</p>
	Lead Speaker	Lead Speaker	Lead speaker
	<p>The multiple layers of iron deficiency response regulation Petra Bauer, Heinrich Heine University Düsseldorf, Germany</p>	<p>Tandemly duplicated rubisco activase genes of cereals show differential evolution and response to heat stress Kulvinder Gill, Washington State University, USA</p>	<p>Physiogenomic Characterization of a ripening anomaly in <i>Pyrus communis</i> – discovery and application Amit Dhingra, Washington State University, USA</p>
	Session Speakers	Session Speakers	Session Speakers
	<p>Root-specific expression of ZIP genes in the control of Zn and Cd translocation to shoots in tobacco Danuta Maria Antosiewicz, University of Warsaw, Poland</p> <p>Development of low arsenic accumulating rice variety for safer human consumption Debasis Chakrabarty, CSIR-NBRI, Lucknow, India</p> <p>Transcriptome and co-expression network-guided identification of key regulators of nitrogen use efficiency in <i>Brassica juncea</i> Anil Singh, ICAR-IIAB, Ranchi, India</p> <p>ROS based regulation through glutathione redox status in magnetoprimed soybean seeds Anjali Anand, ICAR-IARI, New Delhi, India</p>	<p>Histone deacetylase 5: An important epigenetic regulator of cotton fiber initiation Samir V Sawant, CSIR-NBRI, Lucknow</p> <p>Genomic resources and genetic improvement of legume for sustainable food, feed and fuel production Babu Valliyodan, University of Missouri, USA</p> <p>Integrated genomics approaches for discovery of molecular signatures associated with seed traits in chickpea Mukesh Jain, JNU, New Delhi, India</p> <p>Insight into conserved roles of chromatin remodeling and chromatin modifying proteins in the early land plant, <i>Physcomitrella patens</i> Meenu Kapoor, GGSIV, New Delhi, India</p>	<p>Genetic interference of polyamine biosynthesis for modulation of development and stress responses in tobacco and tomato MV Rajam, University of Delhi, New Delhi, India</p> <p>Ripening in tomato is governed by an ABA-ethylene cross-talk regulated by the AP2/ERF domain gene, SIDREB3 Aniruddha P Sane, CSIR-NBRI, Lucknow</p> <p>Regulatory mechanisms involved in banana fruit ripening Mehar H Asif, CSIR-NBRI, Lucknow</p> <p>A novel biocatalysts for biosynthesis of functional sugar, D-allulose, from in-situ D-fructose present in fruit juices Sudhir Singh, CIAB, Mohali, India</p>

7:00 PM - 9:00 PM	Welcome Dinner (CSIR-NBRI Garden)		
Day 2 : December 03, 2018			
8:00 AM -9:00 AM	Breakfast		
9:15 - 10:45 AM	<p>PLENARY SESSION-II (Auditorium Mars, IGP)</p> <p>Chairperson: Jaume Martínez García Co-Chairperson: Prabodh Trivedi</p> <p>Speakers MicroProteins, versatile tools to influence plant growth and development Stephan Wenkel, University of Copenhagen, Denmark</p> <p>Regulation of expression and activity of microRNAs Jean-Philippe COMBIER, Université de Toulouse, France</p> <p>Functional characterization of an Arabidopsis FD ortholog in rice in regulating floral induction and development in rice JP Khurana, University of Delhi, South Campus, New Delhi, India</p>		
10:45 AM - 11:15 AM	Tea Break		
11:15 AM - 12:45 PM	<p>ISPP Memorial Award Lectures</p> <p>Chairperson: AK Tyagi Co-Chairperson: Vidhu A Sane</p> <p>Speakers:</p> <p>I. Professor SK Sinha Memorial Lecture Functions for some evolutionarily conserved transcription factors in rice inflorescence and flower development Usha Vijayraghavan</p> <p>II. Professor KK Nanda Memorial Lecture Greenhouse gas emission from agriculture: Crisis to Cure an Indian perspective KK Baruah, Tezpur University, Assam, India</p> <p>III. Professor GV Joshi Memorial Lecture Trade-off between spikelet number and grain filling in rice panicle: The physiological linkage PK Mohapatra, School of Life Science, Sambalpur University, Jyoti Vihar, Sambalpur, India</p>		
12:45 PM - 1:45 PM	Lunch		
1:45 PM - 3:50 PM	Concurrent Session AIII	Concurrent Session BIII	Concurrent Session CIII
	<p>Signaling and Plant Development Chairperson: Ute Hoecker Co-chairperson: V Chinnusamy</p>	<p>Biotic Stress: Management and Interactions Chairperson: AS Raghvendra Co-chairperson: Ishwar Singh</p>	<p>Abiotic Stress: Adaptation and Management Chairperson: PV Vara Prasad Co-chairperson: SR Voleti</p>
	Lead Speakers	Lead Speakers	Lead Speakers
	<p>Enhancing Crop Drought Tolerance through Stomatal Manipulation Julie E Gray, The University of Sheffield, UK</p> <p>Small RNAs and their targets regulate tuber development and defense responses in</p>	<p>SUMO conjugation to the pattern recognition receptor FLS2 triggers intracellular signalling in plant innate immunity Sadanandom Ari, Durham University, United Kingdom</p> <p>Plant immunity regulation through mitogen-activated protein kinases</p>	<p>A Mini-Lysimeter Phenomics platform to assess genetic variability in real time changes in Water Use Efficiency and component traits M Udayakumar, University of Agricultural Sciences, Bangalore</p> <p>Safeguarding cereals from high night-time temperature damage – current</p>

	potato Anjan Banerjee , IISER Pune, India	Justin Lee , Leibniz Institut für Pflanzenbiochemie, Germany	status and future perspectives SV Krishna Jagadish , Kansas State University, USA
	Session speakers	Session speakers	Session speakers
	Plant Reproductive Biology: Molecular mechanism that uncover novel seed development pathways for fixation of heterosis Yelam Sreenivasulu , CCMB, Hyderabad, India	Role of proteasomal pathway gene(s) in combating virus infection in plants Manoj Prasad , NIPGR, New Delhi, India	Alleviation of abiotic stress in plants: Halotolerant endophytic fungus imparts tolerance to salinity-sensitive rice plants Nataraja Karaba , University of Agricultural Sciences, GKVK Bengaluru, India
	Role of BBX proteins in signal transduction mechanisms in Arabidopsis Sourav Datta , IISER, Bhopal, India	Trick with mimics: role of hormone mimics in plant interactions Radhika Venkatesan , NCBS, Bengaluru, India	Unique miRNA mediated drought regulatory pathway in drought-tolerant rice variety N22 Saurabh Raghuvanshi , University of Delhi South Campus, New Delhi, India
	Decoding the non-coding RNAs and heat stress transcription factors circuitry in tomato Saloni Mathur , NIPGR, New Delhi, India	Molecular and chemical ecology of the plant-insect herbivore-natural enemy interactions Sagar Pandit , IISER, Pune	PROTEIN L-ISOASPARTYL METHYLTRANSFERASES (PIMTs) play an important role in abiotic stress tolerance by protecting isoAsp mediated damage of antioxidative enzymes in plant Manoj Majee , NIPGR, New Delhi
	Mechanisms underlying root developmental plasticity to differential availability of nutrients in the plants Amar P Singh , NIPGR, New Delhi, India	Drought and pathogen stress: what do we know about this stress combination? Muthappa Senthil Kumar , NIPGR, New Delhi, India	Smart roots for development of climate-smart crops Eswarayya Ramireddy , IISER, Tirupati, India
3:50–6:00 PM	Tea Break +Poster Session		
5:30 - 6:30 PM	General Body Meeting (by invitation to members only)		
4:00-4.45 PM	Workshop: RNA Guided Genome Editing in Plants (V Chinnusamy, IARI, New Delhi)		
6.00-6.30 PM	ASPB special session Chairperson: Ashwani Pareek Co-Chairperson: Samir Sawant Speaker: Crispin Taylor, Chief Executive Officer, American Society of Plant Physiology		
6:45 - 8:15 PM	Cultural Program		
8:15 PM	Dinner		

Day 3 : December 04, 2018

8:00 AM - 9:00 AM	Breakfast		
9:00 AM - 10:45 AM	ASPB Special lecture and PLENARY SESSION-III (Auditorium Mars, IGP) Chairperson: Peter Waterhouse Co-Chairperson: PK Singh Speakers ASPB Special lecture Antioxidants and cellular redox homeostasis Christine H. Foyer , University of Leeds, Leeds, UK Plenary speakers To grow or not to grow... or how to deal with too close neighbors Jaume Martínez García , Centre de Recerca en Agrigenòmica (CRAG), Spain Phosphorylation of Gα proteins by a receptor-like kinase regulates signaling during nodulation in soybean Sona Pandey , Donald Danforth Plant Science Center, USA		
10:45 - 11:05 AM	Tea Break		
11:05 AM- 1:30 PM	Young Scientist Award Session (Auditorium Mars, IGP) Chairperson: Sanjay Kumar Co-Chairperson: Mehar H Asif		
1:30 - 2:30 PM	Lunch		
2:30 PM- 4:00 PM	Poster Session - II + Tea		
2:30 PM- 3:15 PM	Workshop: Phenomics, Next Generation Phenotyping (NGP) for trait dissection (Sudhir Kumar/Dhandapani Raju)		
3.15 PM-4.00 PM	Workshop: Floral Craft for entrepreneurship (SK Tiwari, CSIR-NBRI and team)		
3.00 PM- 4.00 PM	Industry Academia meet		
4:00 - 6:05 PM	Concurrent Session AIV	Concurrent Session BIV	Concurrent Session CIV
	Plant Metabolism and Metabolomics Chairperson: Stephan Wenkel Co-chairperson: JP Combier	Signaling and Plant Development Chairperson: Sona Pandey Co-chairperson: Petra Bauer	Stress Management and Growth Regulators Chairperson: Anil Tripathi Co-chairperson: Madan Pal
	Lead Speaker	Lead Speaker	Lead Speaker
	Fueling and feeding the future: metabolic engineering of oil seeds for biofuels and edible oil production and increasing tolerance to abiotic stresses OP Dhankher , University of Massachusetts, USA	Auxin regulates root hair elongation in response to low external phosphate Ranjan Swarup , University of Nottingham, UK	Abiotic stress-tolerant rice through induced mutagenesis Ashwani Pareek , Jawaharlal Nehru University, New Delhi
	Session speakers	Session speakers	Session speakers
	Regulatory network of the flavonoid biosynthesis: exploitation for the pathway engineering Prabodh K. Trivedi , CSIR-NBRI, Lucknow,	OsMPK3, the most versatile mitogen activated protein kinase member in rice Alok Sinha , NIPGR New Delhi, India	Bioengineered rice with low cadmium accumulation to reduce dietary intake David Wing OW , Chinese Academy of Sciences, China

	<p>India</p> <p>Unraveling biosynthesis of distinct aroma compounds in Alphonso mango fruits Ashok Giri, CSIR-NCL, Pune, India</p> <p>Translating NGS data in Medicinal plants metabolomics: A Scientists perspective through Ocimum Genome A K Shasany, CSIR-CIMAP, Lucknow, India</p> <p>A plastid localized bona fide geranylgeranyl(C20) diphosphate synthase regulates monoterpene(C10) indole alkaloid biosynthesis in <i>Catharanthus roseus</i> Dinesh Nagegowda, CSIR-CIMAP, Lucknow, India</p> <p>Regulatory roles of melatonin in abiotic stress tolerance in plants Ajay Arora, IARI, New Delhi</p>	<p>Tomato MYB transcription factor, SIMYBHTH, regulates root growth and plant architecture Vidhu A Sane, CSIR-NBRI, Lucknow, India</p> <p>Targeting roots for improving phosphate-use-efficiency in rice Jitender Giri, NIPGR, New Delhi, India</p> <p>Major Domestication-Related Phenotypes in Indica Rice are Due to Loss of miRNA-Mediated Laccase Silencing Shiva Prasad, NCBS, Bengaluru, India</p> <p>ABA and SHORT VEGETATIVE PHASE mediate control of phenology by acting on cell-cell communication in shoot apex Rajesh Singh, Swedish University of Agricultural Science, Sweden</p>	<p>Aphid-host interactions: It's about host resistance, aphid virulence and pest control Anna-Maria Oberholster, Stellenbosch University, South Africa</p> <p>Ensuring food security by generating climate resilient rice Sneh Lata Singla-Pareek, ICGEB, New Delhi, INDIA</p> <p>Possible connect between viral pathogenesis and host-plant physiology Shelly Praveen, Indian Agricultural Research Institute, New Delhi, India</p> <p>Harnessing the interaction effect of PGR and fertilizer nutrients for enhancement of sugarcane yield :A farmers participatory programme Balakrishna Jamadagni, The Deccan Sugar Technologists' Association, Pune, India</p>
7:30 - 9:00 PM	Dinner (Venue to be decided)		

Day 4 : December 05, 2018

8:00 AM - 9:00 AM	Breakfast	
9:00 AM - 10:30 AM	<p>PLENARY SESSION – IV</p> <p>Chairperson: Christine H Foyer Co-Chairperson: AP Sane</p> <p>Speakers Interactions between the parasitic plant <i>Cuscuta</i> and its tomato host Neelima Sinha, University of California, Davis, USA</p> <p>Analysis of rice gene function during development AK Tyagi, University of Delhi, South Campus, New Delhi, India</p> <p>Fleshy fruit development: case of a series of developmental transitions and transcriptomic reprogramming Mondher Bouzayen, Laboratoire Génomique et Biotechnologie du Fruit, INRA/INP-ENSAT, France</p>	
10:30 AM - 11:00 AM	Tea Break	
11:00 AM - 1:25 PM	Concurrent Session AV	Concurrent Session BV
	<p>Biotic Stress: Management and Interactions</p> <p>Chairperson: Justin Lee Co-chairperson: VP Singh</p>	<p>Stress Management and Growth Regulators</p> <p>Chairperson: PK Ghosh Co-chairperson: SK Tiwari</p>
	Lead Speaker	Lead Speaker
	<p>Bioprospection of lower plant diversity for novel insecticidal proteins and development of next generation GM crop PK Singh, CSIR-NBRI, Lucknow, India</p>	<p>Improving sink regulation as a promising option to increase yield potential Tanguy Lafarge, CIRAD, France</p>
	Session speakers	Session speakers
	<p>Role of Armadillo/U-box proteins in plants: Utilization for development of stress tolerance Girdhar Pandey, University of Delhi, Delhi, India</p> <p>Interference of bacterial effector proteins with mitogen-activated protein kinase signalling Eschen Lennart, Leibniz Institut für Pflanzen biochemie, Germany</p> <p>Insect inducible methanol production for insect resistance in plants Praveen C Verma, CSIR-NBRI, Lucknow</p> <p>Insights into Fusarium-Safflower interaction reveal novel molecules controlling pathogen resistance Manu Agarwal, University of Delhi, India</p> <p>Field trial and molecular characterization of RNAi-transgenic cowpea plants exhibiting resistance to MYMIV geminivirus Lingaraj Sahoo, IIT, Guwahati, India</p>	<p>Overexpression of C4 genes in <i>Arabidopsis thaliana</i> and <i>Oryza sativa</i> enhances photosynthesis, plant productivity and water use efficiency BC Tripathy, Jawaharlal Nehru University, New Delhi, India</p> <p>Regulation of rice seed development by a NAC transcription factor Pinky Agarwal, National Institute of Plant Genome Research, New Delhi, India</p> <p>Morphological and Anatomical alterations in sugarcane roots under waterlogged conditions Radha Jain, ICAR-IISR, Lucknow</p> <p>Characterization of Centromeric Histone H3 (CENH3) genes in <i>Brassica oleracea</i> to design sgRNAs for CRISPR/Cas9 based genome editing towards developing haploid inducer line Anshul Watts, ICAR-NRCPB, New Delhi</p> <p>Dynamics of photosystem II and Chlorophyll fluorescence induction kinetics (OJIP) in wheat varieties under combined heat and drought stress Arun Shanker, ICAR-CRIDA, Hyderabad, India</p>

	<p>Cucumber mosaic virus movement and suppressor proteins associate with the host rubisco small subunit to facilitate movement Vipin Hallan, CSIR-IHBT, Palampur, India</p>	<p>1-Cys peroxiredoxin (AnPrx6) from Anabaena sp. PCC 7120: Structure and function beyond expectations Yogesh Mishra, BHU, Varanasi, India</p>
1:30 - 2:30 PM	Lunch	
2:30 PM - 3:30 PM	<p>Panel Discussion (Mars auditorium; Indira Gandhi Pratishthan) Proposed Title: Biotechnological intervention for enhancement of plant productivity</p>	
3:30 PM - 4:30 PM	Valedictory function	
4:30 PM	High Tea	

