National Virtual Conference on
Genomics to Phenomics: A New Horizon in Plant Science Research

Organized by
Department of Botany, University of Calcutta

28th February – 1st March 2021

Tentative Program schedule

Day 01: 28th February 2021		
Link to join the event https://zoom.us/j/95038269396?pwd=SlNvcTdrOHNycTlWYzFLam4rekxhUT09		
Time	**Event**	
10:30 AM – 11.00 AM	*Inauguration* Opening Song by Research Scholars, Department of Botany, CU Welcome Address by **Prof. Binay Chaubey, Head of the Department, Department of Botany, CU** Inaugural Speech by Chief guest, **Prof. Swapan K Datta, Vice Chancellor, Biswa Bangla University**, **Bolpur, West Bengal**	
11:00 AM – 12:00 PM	*Keynote Lecture* Chairperson: Prof. Sampa Das, Bose Institute, Kolkata Speaker: **Prof. Probodh Trivedi, Director, CSIR-CIMAP, Lucknow** Title of the talk: Interactions of small molecules play a bigger role in plant growth and development	
Technical Session I Chairperson: Prof. Santanu Paul, CU, Kolkata		
12:00 PM – 12:40 PM	*Invited talk I* Speaker: **Prof. Manoj Prasad, NIPGR, New Delhi** Title of the talk: Millet genomics for food and nutritional security	
12:40 PM – 01:20 PM	*Invited talk II* Speaker: **Prof. Viswanathan Chinnuswami, IARI, New Delhi** Title of the talk: Genome editing for improving abiotic stress tolerance of rice	
01:20 PM – 02:00 PM	*Lunch break*	
02:00 PM – 04:50 PM	**Poster Session I** Cordinators: Dr. Debabrata Maity, CU, Kolkata Dr. Susmita Das, CU, Kolkata **Theme I:** Plant Responses to Environmental Stress (PP01 – PP13) **Theme III:** Plant Growth and Development (PP26 – PP29) **Theme V:** Nanotechnology, Gene Manipulation and Crop Improvement (PP41 – PP44)	**Poster Session II** Coordinators: Dr. Surekha Kundu, CU, Kolkata Dr. Saurav Moktan, CU, Kolkata **Theme II:** Plant-Microbe Interaction (PP14 – PP25) **Theme IV:** Plant Products and Medicinal Importance (PP30 – PP40)
Technical Session II Chairperson: Prof. Rita Kundu, CU, Kolkata		
4:50PM-5:30 PM	*Invited talk III* Speaker: **Dr. Subhadeep Chatterjee, CDFD, Hydrabad** Title of the talk: Understanding the social language of bacteria: Speak or not to speak?	

Day 02: 1st March 2021			
Link to join the event https://zoom.us/j/95038269396?pwd=SlNvcTdrOHNycTlWYzFLam4rekxhUT09			
Time		**Event**	
10:15 AM – 12:30 PM		**Oral Presentations** Coordinator: Prof. Krishnendu Acharya, CU, Kolkata	
OP 01	**Dr. Bijoya Bhattacharjee**	ICAR Research Complex for NEH Region, Meghalaya	*New study on Aluminum tolerance in rice: Expression pattern analysis of Aluminum-responsive genes of rice genotypes of North-East India*
OP 02	**Dr. A. Chandra Sekhar**	School of Life Sciences, Yogi Vemana University, Andhra Pradesh	*Insearch of Superior Alleles for Yield and Yield Related Traits under Drought Stress in Foxtail Millet (Setaria italica L.): Landraces as a Source for Mapping Population Development, Linkage Map Construction and QTL Identification*
OP 03	**Dr. P. Roopa Sowjanya**	ICAR-NRC on Pomegranate, Kegoan, Solapur, Maharashtra	*To combat the malnutrition: Developing maize as a source of protein*
OP 04	**Dr. Parashuram Patroti**	Centre on Rabi Sorghum (ICAR-Indian Institute of Millets Research), Shelgi, Solapur, Maharashtra	*Analysis of genetic diversity in exotic sorghum germplasm and identification of trait specific superior accessions for rabi situation*
OP 05	**Salman Sahid**	University of Calcutta, Kolkata, West Bengal; Dr. A.P.J. Abdul Kalam Government College, Kolkata, West Bengal	*Rice r40c1 protein: a novel regulator of osmotic stress tolerance responses in plants*
OP 06	**Ch. Raveendra**	Agricultural College and Research Institute, Tamil Nadu Agricultural University, Madurai, Tamil Nadu	*The protein kinase gene from traditional rice confers tolerance to low phosphorus stress*
OP 07	**Abhijeeta Nandha**	ICAR research Complex for NEH region, Meghalaya	*Molecular Characterization of Wheat (Triticum aestivum L.) under Heat Stress*
OP 08	**Debabrata Dutta**	Bose Institute (Main Campus), Kolkata, West Bengal	*Transcriptome analysis of three sesame genotypes reveals differentially expressed genes in response to Macrophomina phaseolina infection*
OP 09	**Madhubanti Chaudhuri**	University of Calcutta, Kolkata, West Bengal	*Isolation of potential antimicrobial metabolite from endophytic Bacillus amyloliquefaciens DL06 of carnivorous plant Drosera burmannii Vahl.*
OP 10	**Sheetal Devtare**	Raipur Institute of Technology, Raipur, Chhattisgarh	*Phytochemical Analysis of Dalbergia latifolia and Development of Protocol for Tissue Culture*
OP 11	**Soumila Mondal**	Institute of Science, Banaras Hindu University, Varanasi, Uttar Pradesh	*Detection and estimation of reactive oxygen species using flow cytometry and 2',7'-dichlorodihydrofluorescein diacetate in different morphological forms of cyanobacteria*
Technical Session III Chairperson: Prof. Ruma Pal, CU, Kolkata			
12:30 PM – 01:10 PM		*Invited talk IV* Speaker: **Dr. Jitendra K Thakur, NIPGR, New Delhi** Title of the talk: Structure and function of plant mediator complex	
01:10 PM – 01:50 PM		*Invited talk V* Speaker: **Dr. Sourav Datta, IISER, Bhopal** Title of the talk: Roles of B-box proteins in light and dark	
01:50 PM -02:00 PM		*Award distribution and Valedictory Session*	

02:00 PM – 02:30 PM	*Lunch break*
02:30 PM – 05:30 PM	*Bioinformatics e-Workshop* *on* *Surge on Genomics Datasets: Microbes to Plants* **Coordinator: Dr. Shailesh Kumar, NIPGR, New Delhi**
Link for workshop will be emailed to the selected participants only	

Poster Presentations		
Theme I: Plant Responses to Environmental Stress		
PP 01	**Subhajit Saha** West Bengal State University, West Bengal	Across a wide degradation gradient in Indian Sundarbans, cross-pollination seems to be the preferred mode for reproductive success in mangroves: some data from the native habitat
PP 02	**Aniket Bhattacharya** Ramkrishna Mission Vidyalaya, Narendrapur, Kolkata, West Bengal	Comparative assessment of cadmium tolerance potential of some selected rice cultivars of West Bengal
PP 03	**Joykesh Roy Barman** Presidency University, Kolkata, West Bengal	Plants histone deacetylases (HDACs) are the key regulators of stress responses.
PP 04	**Ayan Adhikari** University of Kalyani, Kalyani, Nadia, West Bengal	Chromium (VI)-induced oxidative stress and antioxidant defense system in maize (*Zea mays* L.)
PP 05	**Ankur Singh** St. Xavier's College, Kolkata, West Bengal	Physiology and grain formation is contrastingly regulated in three rice cultivars exposed to fluoride toxicity, representing a potential biohazard
PP 06	**Ravita** Forest Research Institute, Dehradun	Assessment of salt tolerance behavior in eucalypts clones based on physio-biochemical responses
PP 07	**Rohini Bhat** Indian Institute of Integrative Medicine (CSIR), Jammu	Understanding independent effect of abiotic and biotic conditions in regulation of components of glucosinolate-myrosinase system in *Lepidium latifolium* L.
PP 08	**Subhajit Chakraborty** Serampore College, West Bengal	Investigating Chromium(VI) Resistance in Bacteria Isolated from Hooghly River Water and Sediments
PP 09	**Anjan Hazra** Indian Statistical Institute, Kolkata, West Bengal	Indication and mitigation potential of tea as a climate smart attribute
PP 10	**Pritha De Paul** University of Calcutta, Kolkata, West Bengal	Different Expansins involved in abiotic stress response
PP 11	**Nilabhra Mitra** Presidency University, Kolkata, West Bengal	Role of SIRT1 in Plant stress regulation
PP 12	**Sujit Das** University of Gour Banga, Malda, West Bengal	Estimation of Air pollution tolerance index (APTI) in naturally growing plants under higher Vehicular Pollution
PP13	**Priyanka Boro** CSIR-IICB, Kolkata, West Bengal	Heat shock proteins and glutathione: the dual regulation in mitigating environmental stress
Theme II: Plant-Microbe Interaction		
PP 14	**Ipsita Das** West Bengal State University, West Bengal	Screening for Sigatoka leaf spot disease resistance among fourteen Indian cultivars of banana using activation level of 'core' Phenylpropanoid pathway as biomarker of pathogen resistance
PP 15	**Biswajit Biswas** St. Xavier's College, West Bengal	Culturable community of root endophytic bacteria in Indian Sundarban mangrove species demonstrate high potential for plant growth promoting activities under laboratory conditions
PP 16	**Dr. Prashant R. Shingote** Dr. Panjabrao Deshmukh Krishi Vidyapeeth, Maharashtra	"Full-Genome Characterization of Chilli Leaf Curl Virus Infecting Chilli in Maharashtra"
PP 17	**Dhiraj Wasule** Vasantrao Naik College of Agricultural Biotechnology, Maharastra	Elicitors efficacy against *Alternaria* leaf spot of soybean
PP 18	**Dr. Vikas Sharma**	Plant tissue culture based screening strategies of beneficial plant

	School of Bioengg. and Biosciences, LPU- Jalkandhar	microbial interactions for acclimatization
PP 19	**Sumana Mondal** West Bengal State University, West Bengal	Halophytic grasses and rice rhizosphere in Indian Sundarbans are habitat of nutrient cycling bacteria having high potential of plant growth promotion
PP 20	**Sonali Khan** Presidency University, Kolkata, West Bengal	cobB-like protein- mystery behind a bacterial protein in plant-*Oryza sativa* indica
PP 21	**Sunita Rawat** Forest Research Institute, Dehradun	Endophytes: Common to key performer of plant physiology
PP 22	**Debasmita Pal** University of Calcutta, West Bengal	In silico analysis of *Os*R40g3 protein and its interactions with Rice Blast fungus, *Magnaporthe oryzae*
PP 23	**Dr. Shilpa Parashuram** ICAR-National Research Centre on Pomegranate, Solapur, Maharashtra	Identification of fruit morphological and biochemical traits correlated to bacterial blight disease in Pomegranate
PP24	**Kanika Arora** Govind Ballabh Pant National Institute of Himalayan Environment (GBPNIHE) Kosi-Katarmal, Almora, Uttarakhand	Potential of Potassium Solubilizing Bacteria in Fostering Sustainable Agriculture
PP 25	**Himashree Chhetri** North Bengal University, West Bengal	Metabolite profiling of the affected and unaffected tea leaves by the common pest of Darjeeling.
Theme III: Plant Growth and Development		
PP 26	**Tania Upadhyay** Bethune College, West Bengal	Comparative study of indigenous protein rich rice cultivars of West Bengal
PP 27	**Anamika Jangra** Forest Research Institute, Dehradun	Effects of Zinc, Manganese, and Iron on Growth and Development of *Dendrocalamus strictus* (Roxb.) Nees Grown under Hydroponic Conditions
PP 28	**J. Umadevi** Dr. YSR Horticultural University, Venkataramanna gudem, Andhra Pradesh	Molecular and physiological mechanisms underlying the grafting
PP 29	**Ananya Roy** University of Calcutta, Kolkata, West Bengal	In-silico structural & functional analysis of OsGF14E protein
Theme IV: Plant Products and Medicinal Importance		
PP 30	**Dr. Pragya Tiwari**, Yeungnam University, Republic of Korea	Endophytes as efficient and promising bio-resources in medicine, environment and agriculture
PP 31	**Dr. Debleena Roy** Lady Brabourne College, Kolkata, West Bengal	Evaluation of the bioactive components of two important edible herbs Green *Amaranthus* and red *Amaranthus* thermal processing during home cooking.
PP 32	**Arpita Devi** Tezpur University, Assam	In silico and in vitro studies to identify plant based molecules as inhibitors of major proteins of “big four” snake venoms.
PP 33	**Sejuty Mondal** University of Calcutta, Kolkata, West Bengal	Study of genetic diversity in the golden spice, *Curcuma longa* L.
PP 34	**Pinki Tikadar** Ranaghat College, Nadia, West Bengal	Characterization of partially purified pectinolytic enzyme produced by *Fusarium oxysporum* soil isolate
PP 35	**Sweta Chakraborty** West Bengal State University, West Bengal	PTERIDOPHYTES: Evolutionary Blessings As Ethnomedicinal Plants And Impact of Pharmacogenomic Research On Ferns Of Rural India.
PP 36	**Dwaipee De** University of North Bengal, West Bengal	Isolation and identification of thearubigin from black tea and development of nanoliposome coated thearubigin for enhanced brain targeting ability towards successful treatment of alzheimer’s disease
PP 37	**Debasish Sahoo** Chhattishgarh Swami Vivekanand Technical University, Bhillai, Chhattishgarh.	Phytochemical and Invitro studies for hydro-alcoholic extract (Soxlet extraction) from leaf sample of *Crateva adansonii* collected from tribal region of Odisha State.
PP 38	**Anjali Gupta** Centre of Advanced Study in Botany, Institute of Science, Banaras Hindu	Structural analyses of 3-dehydroquinate synthase (DHQS) and deoxy gadusol synthase (DDGS) proteins for their involvement in mycosporine-like amino acids biosynthesis in cyanobacteria

	University, Varanasi	
PP 39	**Pooja Sahu** Raipur Institute of Technology, Raipur, Chhattisgarh	Adsorption of Crystal Violet through Bio-adsorbent Mango Seed Shell and Kinetics Study of Mango Seed Shell
PP 40	**Abhijit Das** Hooghly Mohsin College, West Bengal	Study of antimicrobial activity of *Parthenium hysterophorus*, *Croton bonplandianum* and *Lantana camara*
Theme V: Nanotechnology, Gene Manipulation and Crop Improvement		
PP 41	**Apurva Sharma** Raipur Institute of Technology Raipur, Chhattisgarh	To identify genetic purity in different bottle gourd cell lines using molecular markers
PP 42	**Nitu Sinha** University of North Bengal, West Bengal	Detection of pesticide treated tea samples using carbon nanoparticles
PP43	**Indrani Manna** University of Calcutta, Kolkata, West Bengal	Engineered Cerium Oxide Nanoparticle ameliorates phytotoxicity induced by Engineered Nickel Oxide Nanoparticles in *Allium cepa* L. and *Lycopersicon esculentum* Mill.
PP44	**Supriya Pandey** Kumaun University, Nainital, Uttarakhand	Zinc-nanobiofertilizers: a novel technology for sustainable agriculture