PSB 2014 – Poster Sessions

March 7-8 (up to Lunch), 2014

Poster Session A			
Session Number	**Abstract Number**	**Poster**	**Title**
I. CONTRIBUTIONS OF SIR J. C. BOSE TO PLANT ELECTROPHYSIOLOGY			
I	**No Posters**		
II. ELECTROPHYSIOLOGY RESPONSES			
II	P2.1	Katicheva L. A.	Participation of passive ionic flows in the variation potential generation in wheat leaves
	P2.2	Sukhov V.	A participation of changes in cytoplasmic and apoplastic pH in variation potential-induced photosynthetic response
III. PLANT RESPONSES TO ENVIRONMENT - BIOTIC			
III	P3.1	Bhatia V.	Transgenic Arabidopsis overexpressing E-β-farnesene synthase in cytosol and plastids confers repellence to green peach aphids
	P3.2	Choudhary P.	Development and analysis of expressed sequence tags induced by toxin, isolated from *Fusarium oxysporum* in chickpea
	P3.3	Das D.R.	Role of cyclops in an Aeschynomeneae legume *Arachis hypogaea*
	P3.4	Jain P.	Expression profiling of NILs carrying rice blast resistance gene *Pi9* to understand molecular basis of host-pathogen interactions
	P3.5	Kaur P.	Identification and characterization of miRNAome of tomato roots infected with root knot nematode (*Meloidogyne incognita*)

III	P3.6	Kumar S.	Putative roles of selected OY-M phytoplasma effector proteins in plant hosts: A bioinformatic approach
	P3.7	Jain P.K.	Host mediated RNAi of a parasitic gene for eliciting root knot nematode resistance
	P3.8	Masahito N.	Involvement of phospholipase C and D in plant immune responses against *Ralstonia solanacearum*
	P3.9	Mazumdar-Leighton S.	Towards developing Rubisco as a physiologically-relevant substrate for measuring herbivory
	P3.10	Nagar R.	NGS based small RNA transcriptome profiling of sheath blight resistance and susceptible rice lines
	P3.11	Purwar S.	Signaling through cAMP controls pathogenesis in Karnal bunt fungus (*Tilletia indica*) in wheat (*Triticum aestivum*)
	P3.12	Singh Vijayata	*Flowering Locus D,* a putative histone demethylase of *Arabidopsis thaliana,* functions as a modulator of systemic acquired resistance
	P3.13	Saha C.	Endophytes isolated from *Typha angustifolia* alter nitrogen use efficiency in Rice
	P3.14	Shukla N.	Transcriptome profiling of roots of susceptible and resistant tomato cultivars at various stages of infection with root knot nematode (*Meloidogyne incognita*)
	P3.15	Thakur B.	Sheath blight: Efficacy of resistance inducers
	P3.16	Sarkar M.	*Arachis* and *Oryza* in an intercropped field are colonized by nod+ and nod divergent Bradyrhizobial populations

			respectively
	P3.17	Mariya Khodakovskaya & Mohamed H. Lahiani	Effect of carbon nanotubes on plant cell stress signaling
IV. PHOTOSENSORY MECHANISMS			
IV	P4.1	Burman N.	Functional characterization of HY5 homolog in rice
	P4.2	Mishra Sushma	Over-expression of *indica* rice cryptochrome 2 gene induces partial photomorphogenesis in dark, semi-dwarfism and early flowering
V. SIGNALING IN PLANT DEVELOPMENT AND REPRODUCTION			
V	P5.1	Bamel K.	Acetylcholine suppresses shoot formation and callusing in leaf explants of *in vitro* raised seedlings of tomato, *Lycopersicon esculentum* Miller var. Pusa Ruby
	P5.2	Borah P.	OsFBK, a rice F-box protein, is a component of the Ubiquitin-26S proteasome system (UPS) and involved in anther and root development
	P5.3	Dwivedi A.	*In silico* analysis indicates Receptor Like Kinase and Kinase Interacting Protein 1 genes isolated from *Cenchrus ciliaris* interact during apomictic female gametophyte development
	P5.4	Dwivedi V.	Analysis of root system architecture in Chickpea
	P5.5	Kalra C.	Ameliorating effect of nitric oxide on *in vitro* caulogenesis of *Linum usitatissimum* on iron-deficient culture medium possibly by its internal mobilization
	P5.6	Khurana A.	ROS is also involved in *in vitro* flowering of *Lemna aequinoctialis* under non-inductive conditions

	P5.7	Kumar R.	Isolation and molecular characterization of heterotrimeric G-protein family from *Brassica nigra*
	P5.8	Kumar V.	Exploring the role of histone deacetylases in epigenetic regulation of fiber development in *Gossypium hirsutum* L.
	P5.9	Mishra B.S.	Unknown function protein having Serine Rich Repeat is involved in glucose and auxin dependent root growth and development
	P5.10	Sharma B.	Structural and biochemical changes accompanying attainment of stigma receptivity and pollen-stigma interaction in sunflower
	P5.11	Singh G.	YABBY and MYB transcription factors genes as master regulators for plants developmental process- a review
	P5.12	Singh M.	Glucose control of root growth direction in *Arabidopsis thaliana*
	P5.13	Singh S.P.	Cellular characterisation of *Nicotiana* tapetum developmental stages and differential gene expression analysis to reveal the PCD signalling in their degeneration
	P5.14	Thomas S.	Tomato root tips regulate lateral root formation during early seedling development
VI. PLANT HORMONES AND SIGNALING			
	P6.1	Gayatri G.	Signaling components involved during stomatal closure by three microbial elicitors, compared with the effects of abscisic acid
	P6.2	Gupta A.	Brassinosteroid and glucose signaling interaction during early seeding growth and development in *Arabidopsis thaliana*

VI	P6.3	Kaur H.	28-Homobrassinolide in plant signaling and behavior
	P6.4	Kushwah S.	The interaction between glucose and cytokinin signal transduction pathway in *Arabidopsis thaliana*
	P6.5	Maitra-Majee S.	Drought induced 19 protein: A putative interacting partner of Aux/IAA13 in rice
	P6.6	Pandit Shatakshi	Understanding the role of phosphatidic acid-sphingosine kinase1 interaction during ABA signaling
	P6.7	Sharma P.	Narrating the role of JA signaling molecule in alleviation of copper toxicity in *Cajanus cajan* (L.) Millsp
	P6.8	Singh A.	Functional characterisation of wheat *Brassinosteroid independent-1* (*TaBRI* 1) overexpressed in *Arabidopsis thaliana*
VI	P6.9	Yadav S.	Auxin-induced nitric oxide accumulation and tyrosine nitration of proteins during adventitious root development in sunflower
	P6.10	Lee R.D.	Pro-rich receptor-like kinase RHS10 may transduce cell wall signals to inhibit root hair tip growth in angiosperms

March 9, 2014

FIELD TRIP

March 8 (Post Lunch) – 10, 2014

Poster Session B			
Session Number	**Abstract Number**	**Speaker**	**Title**
VII. MECHANISMS OF PLANT COMMUNICATION			
VII	P7.1	Sharma R.	Cholinergic system: A novel approach to understand allelopathy
VIII. PLANT RESPONSES TO ENVIRONMENT - ABIOTIC			
VIII	P8.1	Agarwal M.	Landscape of open chromatin during abiotic stress in *Arabidopsis*
	P8.2	Agrawal V.	Salt and heavy metal stress modulated biochemical and physiological changes and their amelioration through glutathione in Chickpea
	P8.3	Bazihizina N.	Root acclimation enhance zinc tolerance in tobacco plants
	P8.4	Bhatt D.	Identification and characterization of stress inducible promoters from *Oryza sativa*
	P8.5	Chandna R.	Characterization of glutamate receptor in *Arabidopsis thaliana*
	P8.6	Fatma M.	Nitric oxide interacts with sulfur assimilation and alleviates decrease in photosynthesis and growth of salt treated mustard by enhancing antioxidant metabolism
	P8.7	Grover M.	Heat stress signalling in plants as a context sensitive language acceptance problem
	P8.8	Jogawat A.	The root endophytic fungus *Piriformospora indica* improves growth of rice seedlings during high salt stress
	P8.9	Khalid H.	*In vitro* culture approach to study the effect of salt stress on *Camelina sativa* L. cv Calena: an emerging biofuel crop

	P8.10	Khan M.I.R.	Ethylene reverses photosynthetic inhibition by nickel and zinc in mustard through changes in PS II activity, photosynthetic nitrogen use efficiency and antioxidant metabolism
	P8.11	Marik A.	Study reveals *Brassica juncea* natural resistance-associated macrophage Protein 4.1 (BjNRAMP4.1) as an interactor of G-protein coupled receptor like protein associated signalling
	P8.12	Manuka R.	Identification of abiotic stress responsive with no lysine kinase in rice
	P8.13	Mukherjee S.	Analysis of salt-stress induced modulation of ouabain-sensitive ATPase activity in sunflower seedling roots using a novel fluorescence imaging approach
	P8.14	Chaturvedi A.K.	Physiological approaches for mitigating high temperature stress effects in rice
	P8.15	Pandey B.K.	Comparative transcriptome analysis of signaling regulators in traditional and modern indica rice genotypes under phosphorus deficiency
	P8.16	Pandey S.	*In silico* analysis of rice ascorbate peroxidase gene expression reveals its role in stress
	P8.17	Pandey V.	Elucidating the role of *Trichoderma harzianum* on drought-specific expression of genes in different genotypes of rice (*Oryza sativa* L.)
	P8.18	Per T.S.	Variation in phytocystatin activity in mustard seeds is correlative with efficient antioxidant metabolism and protection of cadmium-inhibited photosynthesis
	P8.19	Roy Chowdhuri S.	"Lipidomics"- an approach to assess the

			plasticity of the membrane for ecological adaptation in eastern himalayan mosses
	P8.20	Sehrawat A.	Proteome and S-nitrosoproteome analysis suggest a cross talk between nitric oxide and cold stress signaling
	P8.21	Seth C.S.	Synthesis of phytochelatins and antioxidants in response to lead accumulation in Indian mustard (*Brassica juncea* L.)
	P8.22	Sharma E.	Comparative analysis of drought stress responsive genes in contrasting rice cultivars
	P8.23	Singh A.	Transcriptional expression analysis of potato tuberization in response to heat stress
	P8.24	Syeed S.	Protective role of exogenously applied proline on photosynthetic inhibition by salt stress through changes in proline and antioxidant in mungbean cultivars
	P8.25	Sree K. S	Accumulation of Starch in *Lemna minor* under heavy metal stress
IX. PLANT SIGNALING AND BIOTECHNOLOGY			
	P9.1	Arora K.	Functional complementation of rice blast resistance gene *Pi54* using RNA interference approach
IX	P9.2	Baluska F.	Serine rich peptide domain regulates the activity of AtMTM1 towards ATX1
	P9.3	Gupta N.C.	Molecular characterization and expression analysis of a wound-responsive promoter cloned from *Arabidopsis thaliana*
	P9.4	Kaul T.	Glyphosate and sulphonyl urea tolerant "Swarna" rice for sustainable weed management, high water-use efficiency and enhanced yield
	P9.5	Kumar R.	A GH3 gene, *SlGH3*.2, is required in the regulation of various auxin-mediated

			responses during tomato (*Solanum lycopersicum*) development
	P9.6	Mandal S.	Localization of hydrogen peroxide in glandular trichomes and its effect on artemisinin production in *Artemisia annua* colonized by arbuscular mycorrhizal fungi *Glomus intraradices*
	P9.7	Reddy S.	Pyramiding genes of "ascorbate-glutathione pathway" for conferring multiple abiotic stress tolerance in rice
	P9.8	Sardar A.	Understanding the role of a putative protein kinase from *Arabidopsis* in plant defense response
	P9.9	Singh H.R.	Synergistic effect of potato class I chitinase and mung bean defensin gene on defense signaling against blister blight in transgenic tea
	P9.10	Srivastava V.K.	P-protein forisome from *Pisum sativum* functions in sealing of wounds and confers mode of recovery from biotic stress
	P9.11	Sierpien B.	Searching for interactions between *Arabidopsis thaliana* annexins
X. REDOX SIGNALING			
X	P10.1	Agurla S.	Effect of salicylic acid and its esters on stomatal closure and increase in reactive oxygen speices, nitric oxide in *Pisum sativum* guard cells
	P10.2	Jain P.	Enzymatic scavenging of reactive oxygen species accompanying sodium chloride-induced stress in sunflower seedlings
	P10.3	Singh S.	Understanding of calcium ion regulation and ROS-interacting enzymes in *Anabaena* sp. PCC 7120 under varied calcium chloride levels
	P10.4	Thakur A.	Correlation between accumulation of

			reactive oxygen species, their enzymatic scavenging mechanisms, Ca^{+2} and modulation of protein kinase C activity during seed development in sunflower
XI. PLANT SIGNALING MOLECULES			
XI	P11.1	Arya G.C.	Isolation and functional characterization of heterotrimeric G-proteins from *Brassica rapa*
	P11.2	Augustine R.	Glucosinolates in plant fitness
	P11.3	Baluska F.	Potential Involvements of Arabidopsis Glutamate-Receptor-Like Receptors in Endocytosis
	P11.4	Bhardwaj D.	*Pisum sativum* G-protein beta subunit interacts with small pathogenesis-related cysteine rich protein to regulate stomatal functions
	P11.5	Kilaru A.	Elucidation of *N*-acylethanolamine pathway and its physiological role in *Physcomitrella patens*
	P11.6	Mathur V.	Molecular interaction studies of *Brassica* annexin with methyl jasmonate
	P11.7	Mitra S.	Fatty acid derived oxylipin signalling molecules in some eastern himalayan mosses analysed by headspace sample enrichment probe-gas chromatography mass spectrometry (HS-SEP-GC-MS)