Poster Session (Salon A+E): Author present on Tuesday, July 9th

Poster No.	Abstract Title	Presenter
1	New insight into the microbiome of the termite mound and its surrounding soils	OO Babalola
3	Garlic stalk- Arbuscular mycorrhizal fungi mediated synergistic interaction sustained the soil environment through regulation of bacterial community composition and diversity structure in an anthropogenic continuous cucumber planted soil.	A ALI
5	Root endophytic Serendipita species affect tomato cultivar-specific responses to Fusarium wilt	K Hage-Ahmed
7	Attachment and growth on the rhizoplane: quantifying root/bacterial dynamics	D Carroll
9	The role of plant-associated microbiota in plant-soil feedback of primary successional plants	L. Meszarosova
11	Contrasting metabolic profiles from hydroponic and soil grown Barley	R Margerison
13	Pythium in cucumber: aluminium toxicity as a predisposing factor under acidic conditions	R Wiyati
15	Soil tillage, catch crops and herbicide application: A challenge for arbuscular mycorrhizal fungi?	S Steinkellner
17	Siderophore-mediated microbial interactions determine pathogen growth and disease incidence	T Yang
19	Evaluation of soil bacteria as biocontrol agents for field pea root rot caused by *Aphanomyces euteiches*	AT Godebo
21	Phosphobacteria and triple superphosphate downregulate phosphate transporter and superoxide dismutase gene expression in *Lolium perenne*	PJ Barra
23	Different metabolic potentials between Firmicutes and other Phyla in a soil amended with manure	SX Yin
25	Cover crops as drivers for *Sclerotinia sclerotiorum* in soybean production	S Steinkellner
27	Diversity and growth promoting potential of bacterial endophytes associated with crops	J. Cordero
29	The impact of long-term fertilization management on rhizodeposition and its role on the rhizosphere microbial communities and health status of lettuce	J Behr
31	Soil microbiomes achieve alternate stable-states after twenty years of crop rotation	B Seuradge
33	Soil binding polysaccharides and the formation of the rhizosheath	J Akhtar
35	Unravelling the role of boron in promoting rhizosphere alkalinization in the root transition zone	MI Yu
37	Assessment of the legacy P by brachiaria and maize in tropical and temperate soils	P. Pavinato
39	Actinobacteria diversity and chitinase C gene abundance in Canadian orchard soils under different land management	M Marin Bruzos
41	Effects of X-ray computed tomography on root transcriptome and rhizosphere microbiota	M Tarkka
43	Effects of biochar on spatial and temporal localization of enzyme activities in maize rhizosphere	X Song
45	Functional analysis of phosphate transporter BnaPHT1; 48 in *Brassica napus*	Y Li
47	The effect of copper toxicity on synergisms and antagonisms between nutrients in grapevine plants	Y Pii
49	Effects of biological nitrification inhibitor 1,9-decanediol and other BNIs from rice root exudates on soil nitrification	YF Lu
51	Soil phosphorus acquisition by cover crop species	PV Nguyen
53	Enhancement of rhizosphere citric acid and decrease of NO_3^-/NH_4^+ ratio by root interactions facilitate N fixation and transfer	Y Gao
55	Organic anion exudation of field grown crops more responsive to nitrogen availability than phosphorus deficiency	D Kidd
57	root responses to sodic-alkaline conditions and their influence on plant growth	J Schulz
59	Securing ecosystem services with above and belowground biodiversity	C Wagg

61	Aluminum toxicity could be mitigated with boron by altering the metabolic patterns of amino acids, carbohydrates, and ascorbate synthesis in trifoliate orange	L Yan
63	Field transcriptomics reveals a gene-coexpression module that regulates mycorrhizal formation and functioning	A Kawahara
65	Is barley resistance towards *Blumeria graminis* influenced by its rhizosphere microbiota?	N Bziuk
67	Solubilization mechanism of non-available potassium and cesium of white lupin under potassium-deficient soil	H Fujimoto
69	Arylsulfatase activity in plant rhizosphere	M Kulhánek
71	Understanding root water uptake and source partitioning: High-resolution stable isotopes measurements and plant hydrodynamics	M Nehemy
73	Changes of soil microbial and physicochemical ecology resulted from long term application of organic fertilizer in cucumber monoculture soil in North China	X Lu
75	The effects of algae fertilizer on wheat root morphology elucidated using phenotyping and metabolomics	L Mau
77	Bacterium *Paenibacillus mucilaginosus* Abi13 may reduce nutrient leaching from agricultural soils	F Mercl
79	Role of Optimal Root morphology in the Reduction of Phosphate Fertilizer Application in Oilseed Rape	BB Zhang
81	Long-term agricultural management practices impact drought resistance of rhizosphere communities and activities	M Li
83	Dissecting rhizosphere related traits for phosphate efficiency in European elite lines and landraces under low phosphate condition	X Li
85	Interspecific differences in plant growth promoting bacteria - a genomic assessment	P de Quadros
87	Differences of unavailable phosphorus utilization ability in Japanese wheat varieties	H Maruyama
89	Rhizosphere processes influencing phosphorus cycling in soil	D McNear Jr
91	the biodiversity of eukaryotes in bambara groundnut rhizosphere	OO Babalola
93	PGPR strains from the rhizosphere of a xerohalophytic plant promoted hemerophytic plant growth, from model plants to forage plants	JL Zhang
95	circadian rhythm of microbiome in rice rhizosphere	KK Zhao
97	Impacts of soil borne disease on plant yield and farm profit in dairying soils of New Zealand.	NL Bell
99	identifying cultivar influences on the oilseed rape microbiome	EB Monaghan
101	Developmental programme and its interaction with rhizosphere microbe in maize	P Yu
103	Arbuscular mycorrhizal fungal diversity response to fertiliser and crop rotation in wheat rhizospheres over multiple years	M Kertesz
105	Arbuscular Mycorrhizal Fungi Enhances Corn Tolerance to Drought Stress	ES Sobat
107	The effect of fungicide on root and leaf associated fungi in Glycine max.	T. Billingsley Tobias
109	Bacteriophage to Control Tomato Bacterial Wilt Disease and Its Effect on Tomato Rhizosphere Microbiome	SY Lee
111	Genotypic and Management Induced Modifications of the Spatiotemporal Development of *Rhizoctonia solani* AG8 Infections	I Madsen
113	The unique illustration of holistic rhizosphere boundaries by coupling zymography and 14C imaging	N. Bilyera
115	spatial distribution of root exudates and its effects on microbial functions under drought	X Zhang
117	Simulating root water uptake regulation under drought stress using DuMux - CRootBox	D Khare
119	Oak fine roots and ectomycorrhizal communities under challenge of abiotic environment	N Sibanc
121	Spatial patterns in the root-associated microbiota of apple trees vary in dependence on root section	M Becker
123	A new neutron tomography approach relating spatiotemporal hydrochemical rhizosphere patterns and 3D root system architecture	S Bereswill
125	Indole-3-acetic acid catabolism in B. japonicum E109 and its impact on soybean inoculation	F Cassan

127	Do commercial arbuscular mycorrhizal fungal inoculants impact indigenous AMF communities in agricultural soils?	MN Islam
129	Streptomyces as a plant's best friend?	S. Langendries
131	Root endophytic Serendipita species affect growth and nutrient contents in tomato plants	AM Hallasgo
133	The impact of nitrogen-modified lignite granules on root growth and mycorrhizal colonization of *Triticum aestivum*	K Boldt-Burisch
135	current season nitrogen fertilization rate, not prior N history, dictates extramatrical hyphal biomass of arbuscular mycorrhizal fungi in soil at maize reproduction	MR McPherson
137	Deciphering the mode of action of biostimulant candidates: a case study on phosphate-solubilizing bacteria	P. Delaplace
139	Polarity of chloroform eluent critical to quantification of arbuscular mycorrhizal fungal biomass in soil using the neutral lipid fatty acid biomarker C16:1cis11	RA Drijber
141	Evaluation of different temperatures in the preservation of the activity of antifungal compounds produced by Bacillus IcBac02.1 to control *Rhizoctonia solani*	M Memenza-Zegarra
143	Rhizobacteria Mediated Changes in Soil Physical and Hydrological Properties	Y Jin
145	Acclimation and seasonal growth of perennial grasses: insight into root apex cellular development and plasma membrane physiology	I Pasakinskiene
147	Functional diversity of the bacterial community and microbial biomass in floodplain forest soils	C. Trasar-Cepeda
149	Tetraploid exhibits more tolerant to salinity than diploid in sugar beet (*Beta vulgaris* L.) seedlings	GQ Wu
151	contributions of the root microbiome to crop abiotic stress tolerance in soil receiving organic amendments	M McMillan
153	Metatranscriptomic responses of the wheat holobiont to decreasing soil water content	P Pande
155	Novel endophytic taxa within the Pleosporales and their influence on plant growth	XJ Pinchi-Davila
157	The bacterial microbiomes of field crops in Saskatchewan, Canada	J Cordero
159	finding the needle in a haystack - development of microbial fertilizers or pesticides for sustainable agriculture	A Soupir
161	Ectomycorrhizal exoenzymatic activity is tightly coupled with host foliar nutrient content	MD Jones
163	Phyllosphere bacterial microbiota of *Coffea arabica* var. *Caturra Roja* using a metagenomic approach and the antagonistic potential of culturable bacteria against Colletotrichum sp.	K. Ogata-Gutiérrez
165	The seed microbiome and its contribution to the plant holobiont	P. Miller
167	Bacterial microbiome in wheat, canola, and lentil genotypes	Z Morales
169	Root blotting method for non-destructive spatial analysis of phosphatase activity in the rhizosphere	V Lin
171	Using positron emission tomography to study mechanisms of bacteria-mediated plant growth promotion in rice	A Pierce
173	Biochar mediated effect on root development in maize cowpea intercrop	IM Uzoh
175	Response of rainfed maize root morphology to plant population under no-tillage	SJ Haarhoff
177	Development and utilization of 2-dimensional high-throughput phenotyping platform for genetic analysis of root system architecture	R Chandnani
179	Rhizo-gel 3D A system to study the three-dimensional root system architecture of Arabidopsis	J Mora-Macias
181	Effects of bio-organic and chemical fertilizer on the root system architecture of pear (*Pyrus pyrifolia*)	YL Kang
183	Effects of photoselective netting on root growth and development of young grafted orange trees under semi-arid climate	KN Zhou
185	Carbon distribution of rhizosphere through plant	X Zhou
187	A hybrid partial differential equations – cellular automaton model for emergent structures bridging scales	A Prechtel
189	Root exudation of coumarins from soil-grown Arabidopsis thaliana in response to iron deficiency	E. Oburger

191	Hydrogen Peroxide Involved in Root Development under Zinc Deficiency Stress in Maize (*Zea mays*.L)	H Wang
193	Ionomic variation in plants grown under nutrient deficiency with emphasis on molybdenum accumulation	T Watanabe
195	LaALMT1 encodes a vascular vessel localized malate and chloride transporter	Y Zhou
197	Impact of long-term N and P fertilization on soil-microbial mediated P cycling processes	J Jae Ho
199	Belowground battles in Brassicaceae. Optimizing chemical defense allocation upon cabbage root fly feeding	NM van Dam