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Topic	Title	AllAuthors	AuthorInstitutions	Postersession
M-1.1-2	A refined protocol for wheat and barley root phenotyping	Bartolo Giuseppe Dimattia ¹ ; Giuseppe Sangiorgi ¹ ; Daniele Rabboni ¹ ; Silvio Pierbattista ¹ ; Marco Maccaferri ¹ ; Alberto Tassinari ¹ ; Marco Bittelli ¹ ; Francesco Camerlengo ¹ ; Maria Hernandez-Soriano ² ; Roberto Tuberosa ¹ ; Salvi Silvio ¹	¹ University of Bologna; ² John Innes Centre	Monday
M-1.1-3	Uncovering Plant Belowground Secrets: Enzymatic Activities in the Rhizosphere and on the Root of Quercus cerris L. in Urban Soil	Anna Gillini ¹ ; Nataliya Bilyera ² ; Dalila Trupiano ¹ ; Iryna Loginova ² ; Michaela Anna Dippold ² ; Gabriella Stefania Scippa ¹	¹ University of Molise; ² University of Tuebingen, Geo-Biosphere Interactions	Monday
M-1.1-4	The influence of engineered biochar on root growth of annual and perennial crops from a physicochemical and morphophysiological perspective	Taza Gul	Aarhus University	Monday
M-1.1-5	Controlled Traffic Farming increased vegetable root intensity on a sandy loam	Margita Hefner ¹ ; Hanne Lakkenborg Kristensen ²	¹ Organic Agricultural Sciences, University of Kassel; ² Aarhus University	Monday
M-1.1-6	Rhizotrons for WISH-ROOTS- foraging root traits for healthier soils.	Josefine Kant; Tanja Ehrlich; Kerstin A Nagel; Borjana Arsova	Forschungszentrum Juelich	Monday
M-1.1-7	Soil structure and texture have an important impact on root morphology	Maxime Phalempin; Eva Lippold; Dr Steffen Schlüter; Doris Vetterlein	Helmholtz Centre for Environmental Research - UFZ	Monday
M-1.1-8	Effect of mucilage on mechanical properties in the rhizosphere as a function of water content	Ulla Roskopf ¹ ; Daniel Uteau; Stephan Peth ¹	¹ Leibniz Universität Hannover	Monday
M-1.1-10	Mesh-based computational 3D model extraction of root architectures for cereal root phenotyping	Luis Torres-Cisneros ¹ ; Thomas Lang ¹ ; Mareike Weule ¹ ; Stefan Gerth	¹ Fraunhofer IIS, EZRT	Monday

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M-1.1-11	Unlocking the future of resource-efficient cereal lines: Root and rhizosphere traits for enhanced phosphorus efficiency under water limitation	Anaclara Visconti ¹ ; Matthias Wissuwa ² ; Maire Holz ¹	¹ ZALF - Leibniz-Centre for Agricultural Landscape Research; ² Japan International Research Center for Agricultural Sciences (JIRCAS),	Monday
M-1.1-12	Restricted root growth caused by traffic induced soil compaction – a field study in wheat and maize	Elron Wiedermann MSc ¹ ; Laura Reinelt ¹ ; Lennart Rolfes ² ; Axel Don ¹	¹ Thünen-Institute of Climate-Smart Agriculture; ² Thünen-Institute of Agricultural Technology	Monday
M-1.2-1	Syndrome “basses richesses” disease induced sectorial distribution of photoassimilates in sugar beet revealed by combined MRI-PET	Kwabena Agyei ¹ ; Justus Detring ² ; Ralf Metzner ¹ ; Gregor Huber ¹ ; Daniel Pflugfelder ¹ ; Omid Eini ² ; Mark Varrelmann ² ; Anne-Katrin Mahlein ² ; Robert Koller ¹	¹ Forschungszentrum Jülich GmbH; ² Institute of Sugar Beet Research	Monday
M-1.2-2	RootXplorer: a deep learning-based 3D pipeline for high-throughput quantification of root system penetrability in multiple plant species.	Elohim Bello Bello; Suyash B. Patil; Ashish B. Rajurkar; Lin Wang; Shree Pariyar; Lucas Funaro; Elizabeth Berrigan; Kimberly Echegoyen; Samantha Bellier-Igasaki; Wolfgang Busch	Salk Institute for Biological Studies	Monday
M-1.2-3	Fate of carbon rhizodeposition across soil organic matter fractions in an improved ley with grasses, forbes and legumes	Ferdinando Binacchi; Carsten W. Mueller; Florian Wichern; Dorte Bodin Dresbøll; Frederik van der Bom		Monday
M-1.2-4	Root Segmentation Reimagined: Exploring Image Analysis for Root Biomass Phenotyping	Kyriaki Boulata; Olga Popovic; Kristian Thorup-Kristensen	University of Copenhagen	Monday

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M-1.2-5	Do mixed-species agricultural systems increase root C stock and C sequestration in subsoil? New data from across Europe	Jeremy Detrey ¹ ; Gabin Piton ¹ ; Jose Antonio Navarro-Cano ² ; Diego Abalos ³ ; Abdulkadir Bal ⁴ ; Simon Boudsocq ¹ ; Abad Chabbi ⁵ ; José Antonio González Pérez ⁶ ; Josef Haki ⁷ ; Jonathan Holland ⁸ ; Katja Klump ⁹ ; Frederique Louault ⁹ ; Ansa Palojärvi ¹⁰ ; Catherine Picon-Cochard ⁹ ; Chiara Pistocchi ¹¹ ; Levina Sturite ¹² ; Frederic Rees ⁵ ; Celine Richard-Molard ⁵ ; Monika Toleikienė ¹³ ; Agne Versulienė ¹³ ; Pirjo Yli-Hemminki ¹⁰ ; Jim Rasmussen ¹⁴ ; Isabelle Bertrand ¹	¹ INRAE, France; ² INIA - CSIC; ³ Aarhus University; ⁴ TAGEM; ⁵ INRAE - AgroParisTech, Université Paris-Saclay; ⁶ IRNAS-CSIC; ⁷ CZU; ⁸ AFBI; ⁹ INRAE, Université Clermont Auvergne; ¹⁰ Natural Resources Institute (LUKE); ¹¹ SupAgro Montpellier; ¹² NIBIO; ¹³ LAMMC; ¹⁴ Aarhus University	Monday
M-1.2-6	Elucidating the interactions between belowground C allocation and iron cycling in the rice rhizosphere and implications for CH4 emissions	Alexine Ehlinger; Davide Patono; Luisella Celi; Prof Daniel Said Pullicino; Prof Daniel Said Pullicino	University of Torino	Monday
M-1.2-8	Enhancing root derived carbon input to soil by genotype selection: a case study for wheat varieties using a stable isotope approach.	Celia Fernández-Balado ¹ ; Tim Juchli ² ; Monika Toleikienė ³ ; Juliane Hirte ² ; Jochen Mayer ² ; José Antonio González-Pérez ⁴ ; Rebecca Hood-Nowotny ¹	¹ University of Life Sciences Vienna; ² Agroscope; ³ Lithuanian Research Center for Agriculture and Forestry; ⁴ CSIC	Monday
M-1.2-9	Using aboveground proxies for root phenotyping in field experiments	Fatou Gning ; Kristian Thorup-Kristensen	University of Copenhagen	Monday
M-1.2-10	Seasonal variation in fine root respiration in Japan Alps: how do subalpine-trees use non-structural carbohydrates for root respiration?	Yuki Hashimoto; Taiga Masumoto; Takumi Ito; Koichi Takahashi; Naoki Makita	Shinshu University	Monday
M-1.2-11	Increasing root-derived soil carbon input to agricultural soils by variety selection of winter wheat	Henrike Heinemann ¹ ; Felix Seidel ¹ ; Axel Don ¹ ; Juliane Hirte ²	¹ Thuenen Institute of Climate-Smart Agriculture; ² Agroscope Switzerland	Monday

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M-1.2-12	Warming effects on fine root respiration, decomposition, and mycorrhizal community composition in a mixed coniferous temperate forest.	Steve Kwatcho Kengdo; Lucy Bennett; Niklas Blanadet; Elaine F. Pegoraro; Margaret S. Torn	Lawrence Berkeley National Laboratory	Monday
M-1.2-13	The influence of iron plaque and root traits on organic carbon cycling in the rice root detritusphere	Sara Martinengo; Maria Sofia Lasagna; Alexine Ehlinger; Maria Martin; Luisella Celi; Daniel Said Pullicino	University of Torino	Monday
M-1.2-14	How does a combination of root-contrasted phenotypes of wheat affect C and N fluxes in the soil-plant system?	Christian Poll ¹ ; Adrian Lattacher ¹ ; Giulia Tosca ¹ ; Samuel Le Gall ² ; Holger Pagel ² ; Moritz Harings ² ; Youri Rothfuss ² ; Ellen Kandeler ¹	¹ University of Hohenheim; ² Forschungszentrum Jülich GmbH	Monday
M-1.2-15	How does a 20% reduction in nitrogen fertilisation affect crop roots?	Laura Reinelt; Felix Seidel; Axel Don	Thünen Institute of Climate-Smart Agriculture	Monday
M-1.2-16	Coupling scales in process-based soil organic carbon modeling including dynamic aggregation	Nadja Ray ¹ ; Simon Zech; Alexander Prechtel	¹ Katholische Universität Eichstätt-Ingolstadt	Monday
M-1.2-17	Tree growth is better explained by absorptive fine root traits than transport root	Anvar Sanaei	Leipzig University	Monday
M-1.2-18	Total carbon and nitrogen exudation of barley, faba bean, potato and sweet potato-cultivars grown in different European soils	DI Henning Schwalm ¹ ; Carmen Escudero-Martinez ² ; Molly Brown ³ ; Lawrie Brown ³ ; David Roberts ³ ; Susan Mitchell ³ ; Ignacio Lozano Romero ⁴ ; Natacha Bodenhausen ⁴ ; Davide Bulgarelli ² ; Tim George ³ ; Eva Oburger ¹	¹ University of Natural Resources and Life Sciences - BOKU Vienna; ² University of Dundee; ³ James Hutton Institute; ⁴ FiBL Switzerland	Monday
M-1.2-19	Intercropping alters root exudation and hence phosphorus mobilization of the main crop maize	Ulrike Schwerdtner ¹ ; Marie Spohn ²	¹ Bayreuth Center of Ecology and Environmental Research (BayCEER), University of Bayreuth; ² Swedish University of Agricultural Sciences (SLU)	Monday

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M-1.2-20	Linking fine root distributions and turnover times to the flow of carbon in plants and to soils	Emily Solly	Helmholtz - Centre for Environmental Research - UFZ	Monday
M-1.3-1	Root mucilage enhances plant water use under combined soil and atmospheric drought	Asegidew Akale; Tina Köhler; Mohanned Abdalla; Mutez Ahmed	Technical University of Munich	Monday
M-1.3-2	Effect of breeding on root hydraulic properties of wheat and its impact on root water uptake: insights from a field experiment and modelling	Juan C Baca Cabrera ¹ ; Jan Vanderborgh ¹ ; Dominik Behrend ² ; Thomas Gaiser ² ; Guillaume Lobet ¹	¹ IBG 3, Forschungszentrum Jülich GmbH; ² INRES, University of Bonn	Monday
M-1.3-3	The variation in rice lateral root formation and its influence on water uptake	Helena Bochmann ¹ ; Dagmar van Dusschoten ¹ ; Uwe Rascher ¹ ; Amelia Henry ² ; Josefine Kant ¹ ; Johannes Auke Postma ¹	¹ Forschungszentrum Juelich/IBG-2; ² International Rice Research Institute	Monday
M-1.3-4	The Impact of Arbuscular Mycorrhiza Fungi on Root-Soil Contact and Soil-Plant Hydraulics under Drought	Henri Braunmiller; Nicolai Koebernick; Mohanned Abdalla; Mutez Ali Ahmed	Technical University Munich	Monday
M-1.3-5	Identifying Root Traits to improve Climate Change Resilience in Potatoes	Molly Brown; Lawrie Brown; Clemence Daubin; Max Whisson; David Roberts; Susan Mitchell; Brian Harrower; Tim George ¹	¹ The James Hutton Institute	Monday
M-1.3-6	A holistic approach of high-throughput non-destructive assessment of plant roots	Joelle Claussen; Eva Hufnagel; Mareike Weule; Luis Torres-Cisneros; Stefan Gerth	Fraunhofer Institute for Integrated Circuits IIS	Monday
M-1.3-7	Douglas-fir and western redcedar family tolerance to soil moisture extremes in greenhouse studies: survival, growth, and phenotypic adaptation.	Mike Cruickshank ¹ ; Cosmin Filipescu ²	¹ Canadian Forest Service; ² Natural Resources Canada	Monday

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M-1.3-8	Estimating water potential gradients across the rhizosphere of transpiring plants	Sara Di Bert ¹ ; Pascal Benard ¹ ; Mahdieh Shakoorioskooie ² ; Anders Kaestner ² ; Fabian Joscha Pascal Wankmüller ¹ ; Andrea Nardini ³ ; Andrea Carminati ¹	¹ ETH; ² Paul Scherrer Institute; ³ University of Trieste	Monday
M-1.3-9	How does root take up water from dried soil in maize plants?	Lei Ding	Earth and life institute, UCLouvain	Monday
M-1.3-10	Root-root interactions and deep water uptake in clover-grass intercropping	Dorte Bodin Dresbøll; Tomke Susanne Wacker; Viktor Gjerløv Hertz; Nawa Raj Dhamala	University of Copenhagen	Monday
M-1.3-11	Characterizing root system architecture traits for drought tolerance in grapevine rootstocks	Sam Dudley ¹ ; Isaac K. Uyehara ² ; Andrew McElrone ³ ; Megan K. Bartlett ¹	¹ University of California Davis; ² Center for the Advanced Study of Collective Behavior; ³ USDA - Agricultural Research Service	Monday
M-1.3-12	Root hairs enhanced rhizosheath formation of three cereal species but only affected shoot water relations of rice grown in drying soil.	Vasileios Giannakopoulos ¹ ; Jing Chen ² ; Ryan Edge ¹ ; Frank Hochholdinger ³ ; Shin Taketa ⁴ ; Jianchang Yang ² ; Ian Dodd ¹	¹ Lancaster University; ² Yangzhou University; ³ University Bonn, Campus Klein-Altendorf; ⁴ Okayama University,	Monday
M-1.3-13	A whole plant scan: assessing the above and below-ground effects of waterlogging in European heritage barley	Joey Henchy; Saoirse Tracy; Sonia Negrão	University College Dublin	Monday
M-1.3-14	Sweet potato carbon allocation and storage roots formation in response to nitrogen depletion and drought	David Sampson Issaka; Gopika Shibu; Shimon Rachmilevitch	Ben-Gurion University of the Negev	Monday
M-1.3-15	Development of a standardized protocol for phenotyping of genotypic variation in sunflower root traits in response to drought stress	Laura Verena Junker-Frohn ¹ ; Henning Lenz ¹ ; Anna Galinski ¹ ; Boško Dedić ² ; Nemanja Ćuk ² ; Dragana Miladinović ² ; Kerstin Nagel ¹	¹ Forschungszentrum Jülich GmbH; ² Institute of Field and Vegetable Crops Novi Sad	Monday

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M-1.3-16	Elevational responses in water relation traits of fine roots in subalpine forests: comparison between a broad-leaved and coniferous tree	Taiga Masumoto; Yuki Hashimoto; Takumi Ito; Koichi Takahashi; Naoki Makita	Shinshu University	Monday
M-1.3-17	Impact of the root hairs and soil texture in maize plant water relation under field conditions	Osman Mustafa Ahmed Osman ¹ ; Florian Stoll ² ; Asegidew Akale ³ ; Andrea Carminati ² ; Mathieu Javaux ⁴ ; Mutez Ahmed ³ ; Jan Vanderborght ¹	¹ Forschungszentrum Juelich GmbH; ² ETH Zürich; ³ TUM School of Life Sciences; ⁴ Université Catholique de Louvain-la-Neuve, Belgium	Monday
M-1.3-18	Intra- and interspecific root trait variation of four temperate forest tree species examined by excavation to 4 m depth	Katrin Pietig; Martyna Kotowska; Heinz Coners; Christoph Leuschner	Albrecht-von-Haller Institute for Plant Sciences, Georg-August-University Goettingen	Monday
M-1.3-19	Robust potato varieties for stable yield performance in changing climates: exploring the role of deep root system	Olga Popovic ¹ ; Kristian Thorup-Kristensen ²	¹ Copenhagen University, Faculty of Science; ² Copenhagen University	Monday
M-1.3-20	Natural variation in a nitrate tranceptor homolog NPF2.12 modulates root growth and nitrogen use efficiency in wheat and barley	Md. Nurealam Siddiqui ^{1,2} , Jens Léon ¹ ; Agim Ballvora ¹	¹ University of Bonn, Germany; ² Bangabandhu Sheikh Mujibur Rahman Agricultural University, Bangladesh	Monday
M-1.3-21	Seeing Unseen: Unveiling Novel Latent Insights in Image Data Through Algorithmic Root Traits (ART)	Mirza Shoaib	La Trobe University	Monday
M-1.3-22	Fine mapping and positional cloning of a major root system architecture QTL in maize	Alberto Tassinari ¹ ; Cristian Forestan ¹ ; Li Kai ¹ ; Silvia Giuliani ¹ ; Giuseppe Sangiorgi ¹ ; Claude Urbany ² ; Thomas Prestler ² ; Milena Ouzunova ² ; Pierangelo Landi ¹ ; Roberto Tuberosa ¹ ; Silvio Salvi ¹	¹ University of Bologna ; ² KWS-KGaA, DEEL	Monday

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M-1.3-23	Sugar and amino acid exhibit different spatial patterns of exudation in response to water stress and n nutrition in Pisum sativum.	Aude Tixier; Romain Barnard; Christian Jeudy; Marion Prudent	INRAE (Institut national de la recherche agronomique)	Monday
M-1.3-24	Root water uptake and plant transpiration dynamics are significantly distinctive	Dagmar van Dusschoten; Daniel Pflugfelder; Johannes Kochs	Forschungszentrum Juelich	Monday
M-1.3-25	Depth profiles of soil moisture and root length density governed by land use	Mengqi Wu; Tobias Klauer; Martin Schädler; Steffen Schlüter; Mika Tarkka; Doris Vetterlein	Helmholtz-Centre for Environmental Research - UFZ, Halle, Germany	Monday
M-1.3-26	Evaluation of Novel Soil Surfactants to Mitigate Drought Stress and Influence Beneficial Root Function of Creeping Bentgrass	Xunzhong Zhang ¹ ; Cale Bigelow ² ; Michael Fidanza ³ ; Stan Kostka ⁴ ; Nick Gadd ⁴	¹ Virginia Polytechnic Institute and State University; ² Purdue University; ³ Pennsylvania State University; ⁴ RhizoSolutions	Monday
Do-1.4-1	Arbuscular mycorrhizal fungus, Glomus mossae AOB2, improves maize plant growth	Olubukola Oluranti Babalola ¹ ; Oluwaseun Adeyinka Fasusi ² ; Adenike Eunice Amoo ³ ; Ayansina Segun Ayangbenro ⁴	¹ North-West University; ² Kings University; ³ Edge Hill University; ⁴ North-west University	Thursday
Do-1.4-2	Effect of N released from root nodules of hairy vetch on N absorption of wheat in mixed cropping	Hiroyuki Daimon; Kan Tamaki; Nao Murata; Ayami Fujita; Daisuke Yoshimura; Takuji Seo; Toru Kira	Ryukoku University	Thursday
Do-1.4-3	Unravelling the barley genetic control of its associated microbiota	Carmen Escudero Martinez ¹ ; Henning Schwalm ² ; Molly Brown ³ ; Lawrie Brown ³ ; David Roberts ³ ; Eva Oburger; Davide Bulgarelli ¹ ; Tim George ³	¹ University of Dundee; ² BOKU, University of Natural Resources and Life Sciences Vienna; ³ The James Hutton Institute	Thursday
Do-1.4-4	Assemblage and function of rhizosphere microbiome under drought stress during heterosis manifestation in maize	Ling Gu ¹ ; Xiaoming He ² ; Peng Yu ¹ ; Frank Hochholdinger ³	¹ University of Bonn, Germany	Thursday

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Do-1.4-5	Unraveling mycorrhizal-induced root plasticity and adaptation to soil phosphorus limitation of ten durum wheat varieties	Esther Guillot ¹ ; Florian Fort ² ; Damien Dezette ¹ ; Carlos Trives-Segura ¹ ; Philippe Hinsinger ¹ ; Elisa Taschen ¹	¹ INRAE ; ² CNRS	Thursday
Do-1.4-6	Responses and growth-promoting functions of maize root microbiome to soil salt stress	Xiaofang Huang	University of Bonn	Thursday
Do-1.4-7	Live imaging of root cells and organelles during microbe interactions	Amelia Keynton ¹ ; Jacob Calabria ¹ ; Vicky J. Waymouth ¹ ; Douglas R. Brumley ¹ ; Berit Ebert ² ; Michelle Watt ¹	¹ The University of Melbourne; ² Ruhr University Bochum	Thursday
Do-1.4-8	Chinese cabbage Growth enhanced by Bacillus and low fertigation input is related to the enrichment of Lechevalieria in rhizosphere	Shi-Dong Li; Shi-Chang Zhang; Yu-Lu Zhang; Xiao-Jing Guo; Rong-Jun Guo		Thursday
Do-1.4-9	Managing plant-soil-microbiome interactions for grassland Nitrogen efficiency through plant diversity and biostimulants	Katie Martin ¹ ; Fiona Brennan ² ; Olaf Schmidt ¹ ; Saoirse Tracy ¹	¹ University College Dublin; ² Teagasc, Environmental Research Centre	Thursday
Do-1.4-10	Quantfying the role of the hyphosphere microbiome in mycorrhizal potatoes	Susan Mitchell ¹ ; Hazel Surtees; David Roberts; Molly Brown; Lawrie Brown; Tim George ¹	¹ The James Hutton Institute	Thursday
Do-1.4-11	Hidden guardian revelations: the mysterious role of root-cap in biotic interaction	Abin Panackal George ¹ ; Krishna Kodappully Das ¹ ; Subiya Haque; Eswarayya Ramireddy	¹ Indian institute of science education and research Tirupati	Thursday
Do-1.4-12	Drought tolerant synthetic bacterial community from barley and wheat rhizosphere	Linda Rigerte ¹ ; Thomas Reitz; Anna Heintz-Buschart; Mika T. Tarkka	¹ UFZ Helmholtz Centre for Environmental Research	Thursday
Do-1.4-13	The relationship between volatile organic compounds and apple replant disease	Anne-Sophie Wachter ¹ ; Doris Vetterlein ¹ ; Alain Tissier ² ; Esther Armah Harding	¹ UFZ - Helmholtz Zentrum für Umweltforschung; ² IPB Halle	Thursday

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Do-1.4-14	Mitigation of drought stress in maize plants via seed inoculation with beneficial microbes	Bunlong Yim ¹ ; Doris Vetterlein ² ; Doreen Babin ³ ; Kornelia Smalla ⁴	¹ Julius Kühn-Institute ; ² Helmholtz Centre for Environmental Research; ³ Julius Kühn Institute; ⁴ Julius Kühn Institute	Thursday
Do-1.4-15	Ammonia-oxidizing bacteria rather than ammonia-oxidizing archaea dominate nitrification in a nitrogen-fertilized calcareous soil	Wenxin Zou ¹ ; Ming Lang ² ; Peng Yu ¹ ; Xinping Chen ²	¹ University of Bonn; ² Southwest University	Thursday
Di-1.5-1	Effect of available soil volume on root system architecture, plasticity and above ground growth in a pot experiment with barley	Luca Giovannini ² ; Fabiano Sillo ² ; Carla Díaz Tielas ³ ; Jessica Clayton ¹ ; Raffaella Balestrini ² ; Adela Sánchez-Moreiras ³ ; Doris Vetterlein ¹	¹ Helmholtz Centre for Environmental Research GmbH - UFZ; ² National Research Council of Italy (CNR); ³ Universidade de Vigo	Tuesday
Di-1.5-2	Effect of combined submergence and cold stress on seedling establishment in direct seeded rice	Maurene Bombay ¹ ; Maribel Dionisio-Sese ² ; Evangelina Salcedo-Ella ³ ; Abdelbagi Ismail ³	¹ Forschungszentrum Jülich; ² University of the Philippines-Los Baños; ³ International Rice Research Institute	Tuesday
Di-1.5-3	Functional Architecture of Fine Roots – A Tool for Adaptation in Changing Environment	Victoria Boycheva; Ivika Ostonen ¹	¹ University of Tartu	Tuesday
Di-1.5-4	Dual banded phosphorus: Plants digging deeper for phosphorus use efficiency	Olivia Brunton ¹ ; Jeffrey McCormick ² ; Rebecca Haling ³ ; Jason Condon ² ; Stephanie Watts-Fawkes ⁴	¹ CSIRO Charles Sturt University ; ² Charles Sturt University; ³ CSIRO; ⁴ University of Adelaide	Tuesday
Di-1.5-5	Enhancing Fertigation Optimization Through Root Traits Phenotyping for Increased Productivity	Naftali Lazarovitch; Sharon Chemweno; Ephrath Jhonathan E	Ben Gurion University of the Negev	Tuesday
Di-1.5-6	Evaluation of the root traits in sugarcane legume intercropping under contrasting nitrogen and water availability in a tropical island.	Léa Chevalier ¹ ; Antoine Versini ² ; Pauline Viaud ³ ; Sophie Graillot ⁴ ; Christophe Jourdan ⁵ ; Mathias Christina ³	¹ eRcane; ² cirad; ³ CIRAD, UPR AIDA, Montpellier, France; ⁴ SupAgro Montpellier; ⁵ CIRAD, UMR Eco&Sols	Tuesday

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Di-1.5-7	Influence of weeds on sugarcane coarse and fine root distributions and traits in a tropical island.	Léa Chevalier ¹ ; Mathias Christina ² ; Antoine Versini ³ ; Marceau Labadie ⁴ ; Christophe Jourdan ⁵	¹ eRcane, Ste Clotilde, La Réunion; ² CIRAD, Montpellier, France; ³ CIRAD, Recyclage et risque, La Réunion; ⁴ JUNIA, Lille, France; ⁵ CIRAD	Tuesday
Di-1.5-8	The effect of root hairs and soil substrate on the development of above ground vs below ground traits in maize in a 5-year field experiment	Jessica Clayton; Susanne Schreiter; Anne-Sophie Wachter M.Sc.; Eric Braatz; Doris Vetterlein	Helmholtz - Centre for Environmental Research - UFZ	Tuesday
Di-1.5-9	Cultivar differences in root system development and function of forage legumes	Nawa Raj Dhamala; Tomke Susanne Wacker; Viktor Gjerløv Hertz; Dorte Bodin Dresbøll	University of Copenhagen	Tuesday
Di-1.5-10	Studying the root responses of faba bean and barley cultivars to abiotic stresses related to climate change	Carla Díaz-Tielas ¹ ; Eva González García ¹ ; Sara González-Orenga ² ; Yedra Vieites-Álvarez ¹ ; Adela M Sánchez-Moreiras ¹	¹ Universidade de Vigo (IAA); ² Universidade de Vigo / Universitat Politècnica de València	Tuesday
Di-1.5-11	Assessing Winter Cold Sensitivity and Growth Dynamics in Roots of European Broadleaf Tree Species in Response to Changing Winter Climate	Jana Hoppe ¹ ; Christoph Leuschner ¹ ; Lena Muffler-Weigel ² ; Robert Weigel ²	¹ Georg-August-Universität Göttingen - Albrecht-von-Haller-Institute for Plant Sciences; ² University of Bayreuth	Tuesday
Di-1.5-12	Variations in root anatomical traits along soil depth under coniferous trees: development of protoxylem groups within the fine root system	Sayaka Hosoi; Chika Asakura; Rin Sakashita; Taiga Masumoto; Naoki Makita	Shinshu University	Tuesday
Di-1.5-13	Automated analysis of maize root growth development using X-ray technology	Eva Hufnagel ¹ ; Joelle Claussen ¹ ; Jorge del Cueto ² ; Mareike Weule ¹ ; Stefan Gerth ¹ ; Christian Hermans ²	¹ Fraunhofer Institute for Integrated Circuits IIS; ² Université libre de Bruxelles	Tuesday
Di-1.5-14	Control of the root gravitropic set-point angle in barley	Gwendolyn K. Kirschner; Tracy A. Valentine; Timothy S. George	The James Hutton Institute	Tuesday

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Di-1.5-15	Family ties – root-root communications within the Solanaceae	Aye Nyein Ko ¹ ; Milena Oliveira ¹ ; Shikha Verma ¹ ; Omer Falik ² ; Shimon Rachmilevitch ¹	¹ The French Associates Institute for Agriculture and Biotechnology of Drylands, Ben-Gurion University of the Negev, Israel; ² Achva Academic College, Israel	Tuesday
Di-1.5-16	Do maize (<i>Zea mays L.</i>) root trait adaptations to soil water limitations affect plant water use and yield stability under field conditions?	Tina Koehler ¹ ; Yunhee Kim ¹ ; Shu-Yin Tung ² ; Hannah Schneider ³ ; Franziska Steiner ¹ ; Nicolas Tyborski ⁴ ; Andreas J. Wild ⁴ ; Johanna Pausch ⁴ ; Mutez A. Ahmed ¹	¹ Technical University Munich; ² Bavarian State Research Center for Agriculture (LfL); ³ Leibniz Institute for Plant Genetics and Crop Plant Research (IPK); ⁴ University Bayreuth	Tuesday
Di-1.5-17	Dynamics of fine root morphology of European beech (<i>Fagus sylvatica</i>) in sandy soils with different moisture regimes	Alexandra Koller; Goddert von Oheimb	Dresden University of Technology	Tuesday
Di-1.5-18	Transcriptomic Profiling Reveals Early Woody Root Responses to Mechanical Stress	Mohamed Kouhen	University of Molise	Tuesday
Di-1.5-19	Comparative Analysis of Suberin Lamellae Formation and Nutrient Uptake in Maize Roots under Potassium Deficiency: Soil vs. Hydroponic Growth Conditions	Tino Kreszies	University Göttingen	Tuesday
Di-1.5-20	Genetic variation of switchgrass root morphology plasticity across the continental U.S.	Bennet Krueger ¹ ; Joel Reyes-Cabrera ² ; Li Zhang; Weile Chen ³ ; Jason Bonnette ⁴ ; David Lowry ⁵ ; John Reilley ⁶ ; Rob Mitchell ⁷ ; Francis Roquette ⁸ ; Yanqi Wu ⁹ ; Phillip Fay ⁷ ; Thomas Juenger ³ ; Felix Fritschi ¹	¹ University of Missouri - Columbia; ² Texas A&M University ; ³ University of Texas at Austin; ⁴ University of Texas, Austin; ⁵ Michigan State University; ⁶ USDA Natural Resources Conservation Service; ⁷ USDA - Agricultural Research Service; ⁸ Texas A&M University and Texas AgriLife Research; ⁹ Oklahoma State University	Tuesday

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Di-1.5-21	Root resilience in sulphur-deficient conditions: exploring the role of pectin-modifying enzymes in Arabidopsis root	Monika Kubalová; Matyáš Fendrych	Charles University in Prague	Tuesday
Di-1.5-22	The role of plant diversity and plant and soil history on leaf and fine root defence traits.	Bassi Leonardo	Leipzig University	Tuesday
Di-1.5-23	Hypoxia-triggered endocytosis of PIN2 auxin efflux carrier control root bending in Arabidopsis	Anindya Majumder; Emese Eysholdt-Derzsó; Jennifer Selinski	Universität zu Kiel	Tuesday
Di-1.5-24	Breeding adaptive barley varieties with improved root systems through functional root phenotyping under drought stress	Babak Malekian ¹ ; Katarzyna Retzer	¹ BOKU, University of Natural Resources and Life Sciences Vienna	Tuesday
Di-1.5-25	Towards the genetic basis of cluster roots development in lupins	Hélène Pidon ¹ ; Bárbara Hufnagel ² ; Laurence Marquès ³ ; Fanchon Divol ⁴ ; Esther Izquierdo ¹ ; Benjamin Péret ⁴	¹ INRAE - UMR IPSiM; ² CIRAD - UMR AGAP; ³ University of Montpellier - UMR IPSiM; ⁴ CNRS - UMR IPSiM	Tuesday
Di-1.5-26	Impact of combined sulphur deficiency and drought stress on pea root system architecture, water and nutrient uptake.	Pratikshya Joshi ¹ ; Christian Jeudy ¹ ; Sylvie Girodet ¹ ; Delphine Aime ¹ ; Fanny Leroy ² ; Aude Tixier ¹ ; Karine Gallardo ¹ ; Marion Prudent ¹	¹ INRAE; ² Normandie Université, Unicaen	Tuesday
Di-1.5-27	GWAS reveal candidate genes affecting root architectural traits and Phosphorus uptake under different phosphorous conditions in wheat	Vijay Rajamanickam ¹ ; Renu Pandey ¹ ; Amitha Mithra Sevanti ² ; Krishnapriya Vengavasi ³ ; Stéphanie M. Swarbreck ⁴ ; Viswanathan Chinnusamy ¹ ; Viswanathan Chinnusamy ¹ ; Nisha Singh ⁵ ; Tally Wright ⁶	¹ ICAR-Indian Agricultural Research Institute; ² ICAR-National Institute for Plant Biotechnology; ³ ICAR-Sugarcane Breeding Institute ; ⁴ National Institute of Agricultural Botany; ⁵ Gujarat Biotechnology University; ⁶ National Institute of Agricultural Botany	Tuesday

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Di-1.5-28	Genetic control of radicle attributes in a maize (<i>Zea mays</i> L.) double haploid population under simulated drought	Scolari Luca Maria ^{1,2} , Bienert GP ² and Gutjahr C ^{1,3}	¹ Plant Genetics, TUM School of Life Sciences; ² Crop Physiology, TUM School of Life Sciences; ³ Root Biology and Symbiosis Max-Planck-Institute of Molecular Physiology, Germany	Tuesday
Di-1.5-29	Root development strongly affected the distribution of amino-N and an activity of the N-acquiring enzyme in the rhizosphere	Guoting Shen ¹ ; Andrey Guber; Evgenia Blagodatskaya	¹ UFZ Helmholtz Centre for Environmental Research	Tuesday
Di-1.5-30	Species-specific uptake of inorganic and organic nitrogen by fine root system in alpine forest	Ryunosuke Suwa; Takumi Ito; Hiroki Iwata; Naoki Makita	Shinshu University	Tuesday
Di-1.5-31	Genotypic Diversity in Sugarcane Root Phenotypes: Exploring the Saccharum Complex and Allied Genera under Drought and Waterlogging Stress	Krishnapriya Vengavasi ¹ ; Karpagam Elumalai; Raja Arunkumar; Gomathi Raju; Vasantha Srinivasavedantham; Chandran Kookal; M Nisha; R Gopi; B Mahendran; Anusha Shareef; Vinu Vazhakkannadi; Alagupalamuthirsolai Muthalagu	¹ Indian Council of Agricultural Research - Sugarcane Breeding Institute	Tuesday
Di-1.5-32	Phosphorus absorption kinetics and exudation strategies of roots developed by three lupin species to tackle P deficiency	Ruixin Wang ¹ ; Wasaki Jun ¹ ; Sachiko Funayama-Noguchi ² ; Zilin Xiong ¹ ; Christiana Staudinger ³	¹ Hiroshima University; ² The University of Tokyo; ³ University of Natural Resources and Life Sciences (BOKU) Vienna	Tuesday
Di-1.5-33	CO ₂ Dynamics in the Rhizosphere of Aquatic and Terrestrial <i>Littorella uniflora</i> (L.) Lifeforms	Monica Wilson ¹ , Alina Frei ¹ , Nikola Lenzewski ¹ , Kai Jensen ¹ , Ketil Koop-Jakobsen ²	¹ University of Hamburg, ² The Ecosystems Center, Marine Biological Laboratory, USA	Tuesday
Di-1.5-34	Regulation of the root foraging response to low nitrogen in <i>Arabidopsis thaliana</i> by a MYB-like transcription factor	Lulu Wu; Ricardo F. H. Giehl; Nicolaus von Wirén	Leibniz Institute of Plant Genetics and Crop Plant Research (IPK)	Tuesday

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Di-1.5-35	The efficient nitrogen use in intercropping is accounted for partly by plasticity of crop roots	Hao Yang ¹ ; Hua-Sen Xu; Wei-Ping Zhang; Ye Su; Surigaoge Surigaoge; Hans Lambers; Long Li	¹ China Agricultural University (CAU)	Tuesday
Di-1.5-36	A newly evolved rice-specific gene JAUP1 regulates jasmonate biosynthesis and signaling to promote root development and multi-stress tolerance	Adnan Muzaffar ^{1,2} , Yi-Shih Chen ² , Hsiang-Ting Lee ^{1,2} , Cheng-Chieh Wu ³ , Tuan-Hua David Ho ^{3,4} and <u>Su-May Yu</u> ^{1,2,4}	¹ Academia Sinica, and Graduate Institute of Life Science, National Defense Medical Center, ^{2/3} Academia Sinica, ⁴ National Chung Hsing University, Taiwan	Tuesday
Di-1.5-37	Roots in action: early respons-omics of tomato roots to low Fe availability depend on the applied N form	Arianna Lodovici ¹ , Nicola Tomasi ¹ , Fabio Marroni ¹ , Biancamaria Senizza ² , Leilei Zhang ² , Mustapha Arkoun ³ , Luigi Lucini ² , Laura Zanin ¹	¹ University of Udine, Udine, Italy; ² Università Cattolica del Sacro Cuore, Piacenza, Italy; ³ Centre Mondial d'Innovation of Roullier Group, Saint-Malo, France.	Tuesday
Di-1.5-38	Exploring the interplay of shoot-to-root hydraulic conductance in varying soil water contents and textures	Mohsen Zare ¹ ; Samantha Spinoso Sosa; Ruth Adamczewski; Benjamin Hafner	Technical University Munich, Germany	Tuesday
Di-1.5-39	Deciphering the epigenetic and molecular logic of WOX5 function in the root columella stem cell niche of Arabidopsis thaliana	Ning Zhang; Pamela Bitterli; Peter Oluoch; Ernst Aichinger; Edwin Groot; Marita Hermann; Thomas Laux	Universität Freiburg	Tuesday
Di-1.5-40	Deciphering the mechanism of root development in wheat triggered by dosage changes in monocot-specific genes (OPRIII)	Gilad Gabay	Ben-Gurion University of the Negev, Israel	Tuesday
Di-1.5-41	Root plasticity in RhizoChip microfluidics devices as soil analogs using time-series analysis with an extended RhizoVision Explorer	Larry York	Oak Ridge National Laboratory, USA	Tuesday

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Di-1.6-1	Maize is tailoring its rhizosphere properties to varying soil textures and moistures	Ruth Adamczewski ¹ ; Anders Kaestner ² ; <u>Mohsen Zarebanadkouki</u> ¹	¹ Technical University Munich, School of Life Science, Soil Biophysics and Environmental Systems ; ² Paul-Scherrer-Institute, Switzerland	Tuesday
Di-1.6-2	Understanding the Rhizosphere: Opportunities for Manipulating the Soil Root Interface	Tim George ¹ ; Lawrie Brown	¹ The James Hutton Institute	Tuesday
Di-1.6-3	Rhizosphere organic matter composition of maize controlled by root traits and soil properties	Martina Gocke ¹ ; <u>Andrea Scheibe</u> ² ; Eva Lehndorff ²	¹ University of Bonn, Institute of Crop Science and Resource Conservation (INRES), Soil Science and Soil Ecology; ² University Bayreuth, Soil Ecology	Tuesday
Di-1.6-4	Visualizing and quantifying 33P uptake by maize plants grown in soil	Maire Holz ¹ ; Mohsen Zarebanadkouki; Eva Mundschenk; Valerie Pusch; Rainer Remus; Eva Oburger; Christiana Staudinger; Matthias Wissuwa	¹ Leibniz Center for Agricultural Landscape Research (ZALF)	Tuesday
Di-1.6-5	Leave the slow behind! Ontogeny-driven fine root trait variation in the field	Adam Hroudá ¹ ; Timothy Harris ² ; Andrea Kučerová ² ; Jitka Klimešová CSc ²	¹ Faculty of Science, Charles University in Prague; ² Institute of Botany Czech Academy of Sciences	Tuesday
Di-1.6-7	Microbial community assembly within single aggregate in response to soil texture and density	Bei Liu; Christoph Tebbe; Eva Lippold; Maxime Phalempin; Doris Vetterlein		Tuesday
Di-1.6-8	Unraveling phosphorus mobilization in White Lupine: Exploring soil dynamics and Low-phosphorus responses at specific root locations	Ayane Kan ¹ , <u>Hayato Maruyama</u> ¹ , Nao Aoyama ¹ , Jun Wasaki ² , Yoshiko Tateishi ² , Toshihiro Watanabe ¹ , Takuro Shinano ¹	¹ Hokkaido Univ. Sapporo, Japan, ² Hiroshima Univ. Higashi-Hiroshima, Japan	Tuesday
Di-1.6-9	Root system architecture mutants and genes in barley reveal new mechanisms of root growth and response to gravitropism	Silvio Salvi	University of Bologna, Italy	Tuesday

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Di-1.6-10	Temporal visualization of root morphology effects on carbon exudation via laser ablation-isotope ratio mass spectrometry	Anna-Lena Prommersberger; Andrea Scheibe ¹ ; Andrei Rodionov; Eva Lehndorff	¹ University Bayreuth	Tuesday
Di-1.6-11	Trait-based Modeling of Microbial Interactions and Carbon Turnover in Rhizosphere	Ahmet Sircan ¹ ; Thilo Streck ¹ ; Andrea Schnepf ² ; Holger Pagel ³	¹ University of Hohenheim; ² Forschungszentrum Jülich; ³ Forschungszentrum Jülich, / University of Bonn	Tuesday
Di-1.6-12	Spatiotemporal phosphorus deficiency responses in B73 wild-type maize (<i>Zea mays</i> L.) and its root-hairless (<i>rth3</i>) mutant	Ariel Tasca; Anna Kulbashna; Thomas D. Alcock; Gerd Patrick Bienert	Technical University of Munich	Tuesday
Di-1.6-13	Nutritional properties of cluster root forming woody plants grown in poor nutrient soils in western Japan.	Jun Wasaki; Takeshi Aihara; Tadashi Okamura; Hirotsuna Yamada; Hiromi Tsubota	Hiroshima University	Tuesday
Do-2.1-1	Studying plant-microbe interactions for improved plant abiotic resistance, in systems of progressive complexity	Stefan Sanow; Allene Macabuhay; Olha Kapitanska; Josefine Kant; Henning Lenz; Tanja Ehrlich; Jana Kelm; Maria Maria Hernandez-Soriano; Pitter Huesgen; Kersin Nagel; Ute Roessner; Michelle Watt; Borjana Arsova		Thursday
Do-2.1-2	Management of nitrogen fertilization and application of biostimulants as key factors to improve root growth	Heike Hahn; Katrin Kannenberg; Thomas Kreuter; Carola Schuster	SKW Stickstoffwerke Piesteritz GmbH	Thursday
Do-2.1-3	Bioinspired Rice Root Architecture: Unveiling Sustainable Solutions for Food Security	Vedika Joshi; Shri Ram Yadav	Indian Institute of Technology, Roorkee, India	Thursday

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Do-2.1-4	Linking Root System Traits from lab to field by Genomic Prediction as a cost - effective option for rice improvement under abiotic stress	Lukas Krusenbaum; Matthias Wissuwa	University of Bonn (INRES)	Thursday
Do-2.1-5	Elucidating rhizosphere processes in a short rotation forestry field experiment in a former Uranium mining area	Sarah Nettemann; Johanna Ziethe; Peter Wiemuth; Erika Kothe ² ; Thorsten Schäfer	Friedrich Schiller University Jena	Thursday
Do-2.1-6	Distribution and phylogeny of groundnut (<i>Arachis hypogaea</i> L.) nodulating microsymbionts from Ghana and South Africa.	Titus Ngmenzuma; Dapaare Felix Dakora	Tshwane University of Technology, Pretoria South Africa	Thursday
Do-2.1-7	Translating roots from rhizotron tubes to the field: assessing genotype variability of deep rooting across scales	Arnesta Odone	Copenhagen University	Thursday
Do-2.1-8	Evaluating the effect of the sampling solution volume and the suitability of the microbial activity inhibitor Micropur on root exudation	Uxue Otxandorena Ieregi; Michael Santangeli; David Aleksza; Eva Oburger	University of Natural Resources and Life Sciences, Vienna, Austria	Thursday
Do-2.1-9	Using simple microfluidics approaches for the investigation of root-microbe interactions	Daniel Patko ¹ ; Beatriz Meza Manzaneque MA ² ; Lionel Dupuy ³ ; Lourdes Basabe-Desmonts ¹ ; Fernando Benito-Lopez ¹	¹ University of the Basque Country (UPV/EHU); ² NEIKER-Tecnalia; ³ Neiker and Ikerbasque, Basque Foundation for Science, Spain	Thursday
Do-2.1-10	Is root exudation affected by root tissue type and location along the root?	Michael Santangeli; Flora Brumen; Alireza Golestanifard; Eva Oburger	BOKU, University of Natural Resources and Life Sciences Vienna	Thursday

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Do-2.1-11	Back to the roots: Standardizing root length density terminology and units	Tomke Susanne Wacker ¹ ; Frederik van der Bom ¹ ; Benjamin M Delory ² ; Doris Vetterlein ³ ; Andrew Leakey ⁴ ; Johannes Auke Postma ⁵ ; Sibghat Ullah ⁶ ; Daniel Leitner ⁶ ; Andrea Schnepf ⁶ ; <u>Dorte Bodin Dresbøll</u> ¹	¹ University of Copenhagen; ² Leuphana University of Lüneburg; ³ Helmholtz-Centre for Environmental Research – UFZ; ⁴ University of Illinois at Urbana-Champaign; ⁵ Forschungszentrum Juelich/IBG-2; ⁶ Forschungszentrum Juelich/IBG-3	Thursday
Do-2.2-1	In situ soil imaging, a tool for monitoring the hourly to monthly temporal dynamics of soil biota around the roots	Emma Belaud ¹ ; Christophe Jourdan ¹ ; Mickael Hedde ²	¹ CIRAD, UMR Eco&Sols; ² INRAE, UMR Eco&Sols, Montpellier, France	Thursday
Do-2.2-2	Modelling the spread of exudates around a growing root system under field conditions within one growing season	Magdalena Landl ¹ ; Michael Santangeli ² ; Mona Giraud ³ ; Daniel Leitner ⁴ ; Eva Oburger; Doris Vetterlein ⁵ ; Andrea Schnepf ³	¹ FZ Jülich; ² Universität für Bodenkultur Wien; ³ Forschungszentrum Jülich IBG-3: Agrosphere; ⁴ Forschungszentrum Juelich/IBG-3; ⁵ UFZ Helmholtz Center for Environmental Research	Thursday
Do-2.2-3	Modeling the influence of soil and root properties on the spatial dispersal of carbon in the rhizosphere	Maximilian Rötzer ¹ ; Alexander Prechtel ² ; Nadja Ray ³	¹ Universität Erlangen-Nürnberg ; ² Universität Erlangen-Nürnberg; ³ Katholische Universität Eichstätt-Ingolstadt	Thursday
Do-2.2-4	Investigating relationships between 3D pore space morphology and soil gas diffusion based on data-driven spatial modeling	Benedikt Prifling ¹ , <u>Matthias Weber</u> ¹ , Nadja Ray ² , Maximilian Rötzer ³ , Alexander Prechtel ³ , Maxime Phalempin ⁴ , Steffen Schlüter ⁴ , Doris Vetterlein ⁴ , Volker Schmidt ¹	¹ Ulm University, ² Catholic University of Eichstätt-Ingolstadt, ³ university of Erlangen–Nürnberg, ⁴ UFZ Halle	Thursday
Do-2.3-1	What methods to assess root architecture traits in the field? Phenotyping toolbox from Root2Res project	Katia Beauchene; Florent Chlebowski; Jean Pierre Cohan	ARVALIS	Thursday

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Do-2.3-2	A new method to investigate changes in carbon partitioning between roots and shoot of winter wheat under field conditions	Dominik Behrend ¹ ; Thuy Huu Nguyen ¹ ; Hubert Hüging ¹ ; Juan C. Baca Cabrera ² ; Guillaume Lobet ² ; Sabine J. Seidel ¹ ; Thomas Gaiser ¹	¹ INRES, University of Bonn; ² IBG-3, Forschungszentrum Jülich	Thursday
Do-2.3-3	Root Length Estimation: Automated MR Image Analysis with Convolutional Networks (CNN) without Segmentation	Jhonathan Ephrath ¹ ; Kaining Zhou; Faina Khoroshevsky ¹ ; Ofer Hadar ¹ ; Yael Eidan ¹ ; Naftali Lazarovitch ¹	¹ Ben-Gurion University of the Negev	Thursday
Do-2.3-4	Dual chamber rizotron with means for the control and assessment of root growth	Vicente Espinosa -Hernandez; Juan Espinosa-Gonzalez	Colegio de Postgraduados	Thursday
Do-2.3-5	Enhancing root studies by DNA barcoding: a first step for a species-specific identification of Quercus cerris by PCR primers development.	Daniele Fantozzi; Dalila Trupiano; Gabriella Stefania Scippa; Gabriella Sferra	University of Molise	Thursday
Do-2.3-6	Phenotypic and genetic diversity of root traits in recombinant barley inbred lines	Shiyan Jia ¹ ; Henning Lenz ¹ ; Benjamin Stich ² ; Kerstin A. Nagel ¹ ; Fabio Fiorani ¹	¹ IBG-2, Forschungszentrum Jülich; ² Julius Kühn Institute (JKI) - Federal Research Centre for Cultivated Plants	Thursday
Do-2.3-7	Unearthing Plant Belowground Community Composition in Cover Crop Mixtures	Emma Rice ¹ ; Terrence Bell ² ; Liana Burghardt ¹ ; Jason Kaye ¹ ; Carolyn Lowry ¹	¹ Pennsylvania State University; ² University of Toronto Scarborough	Thursday
Do-2.3-8	A systematic review dissecting fine and coarse root functional traits' studies to enhance urban forests monitoring and management	Daniele Fantozzi ¹ ; Antonio Montagnoli ² ; Dalila Trupiano ¹ ; Paolo Di Martino ¹ ; Gabriella Stefania Scippa ¹ ; Gustavo Agosto ² ; Donato Chiatante ² ; Gabriella Sferra ¹	¹ University of Molise; ² University of Insubria	Thursday
Do-2.3-9	Tensile strength measurements of single roots from grasses and wildflowers for slope stabilisation	Monika Sobotik ¹ ; Margarita Himmelbauer ² ; Willibald Loiskandl ² ; <u>Rosemarie Stangl</u> ²	¹ Pflanzensoziologisches Institut; ² BOKU, University of Natural Resources and Life Sciences Vienna	Thursday

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Do-2.3-10	Microdialysis for measuring the root exudates in the rhizosphere	Aliya Sultonova; Ivika Ostonen	University of Tartu	Thursday
Do-2.3-11	A newly evolved rice-specific gene JAUP1 regulates jasmonate biosynthesis and signaling to promote root development and multi-stress tolerance	Simmon Pree	BOKU Wien, Austria	Thursday
Do-2.4-1	Preferential Flow and Transport in the Root Zone of Agricultural Crops	Ishank Agarwal; Saumyen Guha; Richa Ojha	Indian Institute of Technology Kanpur	Thursday
Do-2.4-2	Fine root economic strategies and the link to plant N nutrition	Joana Bergmann; Simon Lewin; Steffen Kolb; Maire Holz	Leibniz Centre for Agricultural Landscape Research	Thursday
Do-2.4-3	Root traits, Fe plaque kinetics and P uptake by rice plants	Sara Martinengo; Michela Schiavon; Maria Martin; Luisella Celi; Daniel Said-Pullicino	University of Turin	Thursday
Do-2.5-1	Automatic tracking of root apex diameters and elongation rates using image analysis	Valentin Aillery; Eric Roy; Gaëtan Louarn	INRAE	Thursday
Do-2.5-2	How root traits predict plant-plant interactions in an Australian biodiversity hotspot?	Wing Man Siu	The University of Melbourne	Thursday