

19th July (Monday)

Plenary - Red Room

9:00 – 9:05	OPENING by Dr. István Nagy, Minister for Agriculture - Hungary (to be confirmed)
9:05 – 9:10	Her Excellency Pascale Adréani, Ambassador of France in Hungary (to be confirmed)
9:10 – 9:30	Prof. Dr. Csaba Gyuricza - Rector - MATE
9:30 – 9:50	Dr. János Lázár - State Stud Farm and Study Farm of Mezőhegyes
9:50 – 10:20	Rajiv Khosla: Farming the Data – New paradigm in Precision Agriculture
10:20 – 10:50	Jacob van den Borne: to be announced
11:00 – 11:30	Coffee break
11:30 – 13:00	Session 1 - Topic 21: Education in Precision Agriculture - Chair: tbc.
11:30 – 11:50	E.M. Hawkins , B.W. Beam, A.A. Klopfenstein, S.A. Shearer, J.P. Fulton:Using Virtual Reality Field Demonstrations to Increase Engagement with Farmers
11:50 – 12:10	A.L.-H. Pang :Virtual PA-dagogy: Design and delivery of an eWorkshop on PA under COVID19 restrictions
12:10 – 12:30	T. Pavlenko , D.S. Paraforos, D. Fenrich, S. Braun, A. Murdoch, R. Tranter, Y. Gadanakis, M. Arnoult, T. Engel:Increasing adoption of precision agriculture via gamification: The Farming Simulator case
12:30 – 12:50	C. Valero , A. Krus, P. Barreiro, B. Diezma, M. Garrido-Izard, N. Hernández, G. Moreda, E.C. Correa, J.R. Marqués Da Silva, A. Ribeiro, A. Guadagni, M. Pérez-Ruiz, M. Vieri, V. De Pascale, S. Lombardo, D. Sarri, R. Lisci, T. Bourmaris, E. Loizou, S. Nastis: Teaching precision farming and entrepreneurship for European students: Sparkle online course
13:00 – 14:00	Lunch
14:00 – 16:00	Session 2 - Topic 04: Precision Crop Protection - Chair: tbc.
14:00 – 14:20	A. Chen , M. Jacob, G. Shoshani, M. Dafny-Yelin, O. Degani, O. Rabinovitz:Early detection of soil-borne diseases in field crops via remote sensing
14:20 – 14:40	C. Gée , V. Mignon, L. Dujourny, E. Denimal:High Throughput Field Phenotyping of wheat and weed cover in plot field experiments using RGB images
14:40 – 15:00	A. Lazar , A. Bechar:A four-channel weed detection and classification using ML algorithms based on hyperspectral images
15:00 – 15:20	G. Egea : J.N. Rodríguez-Vázquez, O.E. Apolo-Apolo, P. Castro-Valdecantos, M. Pérez-Ruiz, J. Martínez, F. Martínez, I. Solis,Determination of wheat rust severity using hyperspectral imagery and 3D plant modeling
15:20 – 15:40	F.E. Sári-Barnácz , M. Szalai, M. Kun, D. Iványi, M. Chaddadi, F.M. Barnácz, J. Kiss:Sentinels-based spectral indexes for predicting Helicoverpa armigera damage in maize
15:40 – 16:00	M. Spaeth , R. Gerhards:Comparison of Sensor-based Harrowing (SenHa) with conventional mechanical weed control
16:00 – 16:30	Coffee break
16:30 – 17:30	Poster session

Room1 - White Room

11:00 – 11:30	Coffee break
11:30 – 13:00	Session 1 - Topic 14: Drainage Optimization and Variable Rate Irrigation - Chair: tbc.
11:30 – 11:50	J. Vandermaesen , S. Delalieux, D. Bylemans, S. Remy:Variable rate irrigation based on real-time sensor data in pear orchards
11:50 – 12:10	G. Vellidis , V. Liakos, X. Liang, M. Tucker:Five Years of On-Farm Testing of Soil Moisture Sensor-Based Dynamic Variable Rate Irrigation
12:10 – 12:30	E.A. Woolley , R. Kerry, N.C. Hansen, B.G. Hopkins:Variable Rate Irrigation: Investigating Within Zone Variability
12:30 – 12:50	A. Nagy , A. Szabó, B. Gálya Farkasné, J. Tamás:Real-time spectral information to control crop water stress (in VRI irrigation technology)
13:00 – 14:00	Lunch
14:00 – 16:00	Session 2 - Topic 15: Geostatistics, mapping and spatial data analysis - Chair: tbc.
14:00 – 14:20	M. Karampoiki , A. Heiß, G.M. Sharipov, S. Mahmood, L.C. Todman, A.J. Murdoch, H.W. Griepentrog, D.S. Paraforos:Producing grain yield maps by merging combine harvester and remote sensing data
14:20 – 14:40	R. Kerry , J. Oldag, B.V. Ortiz, M.A. Oliver, Z. Frogbrook:A review of soil mapping approaches that farmers with differing amounts of data can use
14:40 – 15:00	C. Leroux , P. Vismara:A Constraint Programming approach to optimize the delineation of within-field zones
15:00 – 15:20	B. Oger , S. Roux, G. Le Moguedec, P. Vismara, B. Tisseyre:Model and auxiliary data for an accurate estimate of the field mean
15:20 – 15:40	T. Sasaki , Y. Moriuchi, H. Mihara, K. Nakamura, J. Murayama:Georeferenced Image Stitching with Pose Optimization using Image Similarity with Little Overlap
15:40 – 16:00	A. Šupčík , V. Oršulová:Using OBIA for detection of canopy and row-gap with using a drones images in vineyards
16:00 – 16:30	Coffee break
16:30 – 17:30	Poster session

Room2 - Green Room

11:00 – 11:30	Coffee break
11:30 – 13:00	Session 1 - Topic 01/1: Precision Agriculture - Chair: tbc.
11:30 – 11:50	S. Bökle , L. Könn, D. Reiser, D.S. Paraforos, H.W. Griepentrog:Considering resilience in digital farming systems
11:50 – 12:10	P. Castro-Valdecantos , O.E. Apolo-Apolo, M. Pérez-Ruiz, G. Egea:Leaf Area Index Estimation in Maize Breeding Trials from RGB Imagery and Machine Learning Algorithms
12:10 – 12:30	R. Ferrise , G. Trombi, S. Costafreda Aumedes, G. Padovan, M. Pasqui, E. Di Giuseppe, J. Moretto, F. Morari:A simple web-based tool for optimizing nitrogen variable rate application in durum wheat
12:30 – 12:50	S. Gobbo , F. Morari, R. Ferrise, M. De Antoni Migliorati, L. Furlan, L. Sartori:Evaluation of different crop model-based approaches for variable rate nitrogen fertilization
13:00 – 14:00	Lunch
14:00 – 16:00	Topic 01/2: Precision Agriculture - Chair: tbc.
14:00 – 14:20	F. Grillo , I. Piccoli, I. Furlanetto, F. Ragazzi, S. Obber, F. Morari:Variable rate application of liquid digestate for improving Nitrogen use efficiency
14:20 – 14:40	A. Heiß , G.M. Sharipov, M. Karampoiki, H.W. Griepentrog:Real-time fuzzy system for variable rate nitrogen application based on multiple parameters
14:40 – 15:00	L. Katz , A. Naor, M.I. Litaor, A. Ben Gal, V. Alchanatis, M. Peres, Y. Cohen:Comparison between uniform and variable rate application in a drip-irrigated peach orchard

15:00 – 15:20	J. Lopez-Correa , J. Karouta, J. Bengochea, A. Ribeiro, A. Arija, R. Gerhards, G. Peteinatos, D. Andújar:Detection and classification of weeds using object detection architectures in corn fields
15:20 – 15:40	Y. Reckleben , B. Brandenburg:Influence on rooting intensity and nutrient utilization of maize at different plant spacing
15:40 – 16:00	G.M. Sharipov , A. Heiß, M. Karampoiki, H.W. Griepentrog, D.S. Paraforos:Modelling of in-field dynamic response of a centrifugal disk spreader to variable rate application
16:00 – 16:30	Coffee break
16:30 – 17:30	Poster session
Room3 - Blue room	
11:00 – 11:30	Coffee break
11:30 – 13:00	Session 1 - Topic 05/1: Proximal and Remote Sensing of Soil and Crop - Chair: tbc.
11:30 – 11:50	V. Gonzalez-Dugo , P. Zarco-Tejada, D. Intrigliolo, J. Ramirez-Cuesta:Thermal sensitivity index: monitoring the spatial variability of water stress sensitivity in fields
11:50 – 12:10	B. Cohen , Y. Edan, V. Alchanatis:Early detection of grapevine downy mildew using thermal imaging
12:10 – 12:30	J. Furlanetto , N. Dal Ferro, F. Briffaut, L. Carotta, R. Polese, A. Dramis, E. Pracucci, C. Miele, A. Persichetti, L. Nicoli, F. Morari:Mapping of hailstorm damaged crop areas using thermal imagery data
12:30 – 12:50	N. Kalo , Y. Edan, V. Alchanatis:Detection of Irrigation Malfunctions Based on Thermal Imaging
13:00 – 14:00	Lunch
14:00 – 16:00	Session 2 - Topic 22: On Farm Experimentation with Site-Specific Technologies - Chair: tbc.
14:00 – 14:20	G. Brunel , S. Moinard, L. Pichon, B. Tisseyre:Potential of time series of VIS images from connected static camera for decision support in vineyard
14:20 – 14:40	L.P. Oliveira , B.V. Ortiz, R.P. Silva, G. Pate:Variability of the active hydraulic downforce system related to cotton seed depth and emergence
14:40 – 15:00	D.S. Paraforos , G.M. Sharipov, T. Pavlenko, M. Pérez Ruiz, J. Martínez Guanter, J. Carballido, A. Abecker, T. Anken, F. Argento, D. Argyropoulos:iFAROS - A digital farming system for site-specific mineral nitrogen application in winter wheat
15:00 – 15:20	S. Samborski , R. Leszczyńska, D. Gozdowski:Detecting spatial variability of potato canopy using different remote sensing data
15:20 – 15:40	T. Shilo , O. Beeri, R. Pelta, S. Mey-Tal:Remote irrigation intelligence application assessments by multi-location and multi-crop experiments
15:40 – 16:00	T. Tanaka , R. Tanabe, T. Matsui:Can on-farm experiments benefit small to moderate-scale farmers?
16:00 – 16:30	Coffee break
16:30 – 17:30	Poster session