Program for the NBPPN Workshop, November 21ˢᵗ-22ⁿᵈ

Location: Hotel Skansen Båstad, Sweden

Title: Use and Interpretation of Crop Phenotyping Data for Agriculture

Participants: NBPPN members and others interested in the use and interpretation of crop phenotyping data for agriculture.

Fee: Participation is free of charge for NBPPN members– attendees are responsible for their own transport and accommodation. ´

There will be a participation fee for non-members of 2.500 DKK.

Format: Keynote speakers, oral presentations with one session from all six representing countries (Norway, Sweden, Denmark, Finland, Estonia, Lithuania), poster sessions, a tech corner, and writing group meetings.

Organisers: The NBPPN Steering Committee

About NBPPN: The NBPPN was founded as an independent organization in 2015, originally as part of the public-private partnership project entitled "6P: Nordic Public Private Partnership Plant Phenotyping," funded by a Nordic Council grant until December 31, 2023. As of February 1, 2024, the network will continue as a membership-based organization. NBPPN aims to promote, enable, and enhance the exchange of research and innovation in plant/crop sensing and phenotyping among technology providers, plant breeders, agricultural advisors, industries, and research institutions in the Nordic and Baltic regions.

Thursday 21 November		
09:30-09:50	Workshop registration and coffee	
09:50-10:00	Official Welcome	Svend Christensen
10:00-10:45	**Ioannis N. Athanasiadis**, Professor and Chair of Artificial Intelligence, Wageningen University and Research, The Netherlands, "Artificial intelligence in plant phenotyping – towards end-to-end modelling".	
10:45-11:00	*Coffee break*	
11:00-11:30	**Abozar Nasirahmadi,** SLU: "Generative AI for plant identification and phenotyping- use case in Rangeland monitoring"	11:00 - 12:00 **Session 1** (Chair: Erik Alexandersson- Swedish University of Agricultural Sciences): Oral Presentations
11:30-12:00	**Adrian Gustafson,** LU: "Realising the perennial vision – measurements and modelling"	11:00 - 12:00 **Session 1** (Chair: Erik Alexandersson- Swedish University of Agricultural Sciences): Oral Presentations
12:00-13:00	*Lunch*	
13:00-14:30	**Tech Corner & Poster Session Interactive sessions for technology demonstrations and poster presentations**	
14:30-15:00	**Dr Juho Hautsalo,** Natural Resources Institute Finland: "Experiences from appliance of drones in practical research projects at Natural resources institute Finland"	14:30 - 15:30 **Session 2** (Chair: Kristiina Himanen- University of Helsinki): Oral Presentations
14:30-15:00	**Sylvain Poque,** University of Helsinki, National Plant Phenotyping Infrastructure: "European efforts for phenomics data management "	14:30 - 15:30 **Session 2** (Chair: Kristiina Himanen- University of Helsinki): Oral Presentations
15:30-15:45	*Coffee Break*	
15:45-16:15	**Shirin Mohammadi,** NMBU: "Phenotyping of faba bean agronomical traits and disease classification based on RGB and multispectral cameras"	15:45 - 16:45 **Session 3** (Chair: Morten Lillemo- Norwegian University of Life Science): Oral Presentations
15:30-16:00	**Mallikarjuna Rao Kovi,** NMBU: "Estimation of nitrogen use efficiency and yield in perennial ryegrass using RGB, multispectral cameras and LiDAR sensors"	15:45 - 16:45 **Session 3** (Chair: Morten Lillemo- Norwegian University of Life Science): Oral Presentations
16:45-17:00	*Coffee Break*	
17:00-17:30	**Rita Armonienė,** Dr. Head of the Laboratory of genetic and Physiology: "Freezing Tolerance in the Nordic-Baltic	17:00 - 18:00

	Region: A Vital Trait for the Survival of Overwintering Crops."	**Session 4** (Chair: Gintaras Brazauskas - Lithuanian Research Centre for Agriculture and Forestry): Oral Presentations
17:30-18:00	**Birutė Frercks**, Dr. Head of the Department of Orchard Plant Genetics and Biotechnology: "Phenotyping of plants and its whole-community: who plays the crucial role in horticulture?"	**Session 4** (Chair: Gintaras Brazauskas - Lithuanian Research Centre for Agriculture and Forestry): Oral Presentations
19:00-open end	*Dinner*	*Location: Hotel Skansen in Båstad - Restaurant Sand*

Friday 22 November		
08:30-09:15	**Filippo Biscarini,** Senior Research Scientist, National Research Council (CNR), Milan (Italy): "Computer vision for plant phenotyping: the Polyploidbreeding 4.0 project and the AGRI-VISION initiative"	
09:15-09:30	*Coffee break*	
09:30-10:00	**Ainar Härm,** METK:" UAV remote sensing application in METK for phenotyping and crop monitoring: a brief overview of past challenges and future considerations"	09:30 - 10:30 **Session 5** (Chair: ?): Oral Presentations
11:30-12:00	**Merko Kärp,** METK: "Exploitation of agrometeorological data in crop breeding"	09:30 - 10:30 **Session 5** (Chair: ?): Oral Presentations
10:30-10:45	*Coffee break*	
10:45-11:15	**Andreas Bergmann, KU:** "Reliability of Crop Height Estimations from UAV Imagery"	10:45 - 11:45 **Session 6** (Chair: Svend Christensen- University of Copenhagen): Oral Presentations
11:15-11:45	**Chandana Pandey,** KU: "Assessment of the impact of drought stress on barley resistance against fungal pathogens by high-throughput multispectral, microscopic and physiological phenotyping"	10:45 - 11:45 **Session 6** (Chair: Svend Christensen- University of Copenhagen): Oral Presentations
11:45-12:00	**Closing Remarks and Farewell**	Svend Christensen-
12:00-12:45	*Lunch*	
12:45-14:45	**Writing Group Meetings-** *Interactive sessions for collaborative writing*	