

# The 5<sup>th</sup> Annual - Nordic Plant Phenotyping Network Workshop

Hotel Skansen – Bådstad, Sweden - November 21<sup>st</sup> – 22<sup>nd</sup>, 2019

*‘Phenotyping in practice – experiences with phenotyping in breeding’*

Thursday – November 21		
9.30-10.00	Workshop registration and coffee	
10.00-10.15	Official Welcome	
10.15-10.40	<i>Summarizing growth - the development seen from above</i> <b>Signe Marie Jensen</b> , Assistant Professor, University of Copenhagen	Presentation (20 min) & discussion (5 min)
10.40-11.05	<i>A note about radiometric calibration of drone (remote sensing) images</i> <b>Jesper Svensgaard</b> , Phd fellow, University of Copenhagen	Presentation (20 min) & discussion (5 min)
11.05-11.30	<i>Extracting field plot image data in QGIS: General concepts and PlotCut 3 status</i> <b>Jesper Cairo Westergaard</b> , Research IT Coordinator, University of Copenhagen	Presentation (20 min) & discussion (5 min)
11.30-11.45	Short bio break	
11.45-13.00	<i>What are the limits for crop phenotyping using drones and ground-based platforms?</i> <b>Malcolm Hawkesford</b> , Head of Plant Science and Designing Future Wheat (ISP) Leader, Rothamsted Research, UK	Keynote presentation (45 min) & discussion (30 min)
13.00-14.15	Lunch	
14.15-15.30	<i>Hyperspectral imaging in the UV-range – new steps in phenotyping</i> <b>Anna Brugger</b> , Institute of Sugar Beet Research, University of Goettingen	Keynote presentation (45 min) & discussion (30 min)
15.30-16.10	Coffee Break	
16.10-16.35	<i>Detecting potato late blight in the field</i> <b>Erik Alexandersson</b> , Associate Professor, Swedish University of Agricultural Sciences	Presentation (20 min) & discussion (5 min)
16.35-17.00	<i>Integrating multiple sensors for phenotyping – case studies</i> <b>Aakash Chawade</b> , Associate Professor, Swedish University of Agricultural Sciences	Presentation (20 min) & discussion (5 min)
17.00-17.25	<i>Genotype-to-phenotype mapping of selected species/accessions</i> <b>Svend Christensen</b> , Head of Department of Plant and Environmental Sciences, University of Copenhagen	Presentation (20 min) & discussion (5 min)
18.15-22.00	The NPPN Dinner	

<b>Friday – November 22</b>		<b>NB: This day is for 6P2 project partners only.</b>
<b>7.30-9.00</b>	Breakfast	
<b>9.00-9.25</b>	<i>Phenotyping a dynamic trait: leaf growth response to environmental restrictions</i> <b>Kristina Jaskune</b> , Lithuanian Research Centre for Agriculture and Forestry (LAMMC)	Presentation (20 min) & discussion (5 min)
<b>9.25-9.50</b>	<i>Overview of relevant field phenotyping activities at NMBU and progress in predicting grain yield from multispectral UAV images</i> <b>Morten Lillemo</b> , researcher, Norwegian University of Life Sciences	Presentation (20 min) & discussion (5 min)
<b>9.50-10.15</b>	<i>Phenotyping of sugar beet seeds: A case for machine learning</i> <b>Tobias Ekblad</b> , Seed Quality Lead, MariboHilleshög (DLF)	Presentation (20 min) & discussion (5 min)
<b>10.15-10.45</b>	Coffee Break	
<b>10.45-11.10</b>	<i>Drone image based predictions in a breeding program</i> <b>Winnie Fücthbauer</b> , Faba bean breeder/Head of laboratory, Sejet	Presentation (20 min) & discussion (5 min)
<b>11.10-11.35</b>	<i>NDVI in Winter wheat</i> <b>Karl-Johan Langvad</b> , Secobra Recherces/Lantmännen	Presentation (20 min) & discussion (5 min)
<b>11.35-12.00</b>	<i>A practical view on drones in a potato field</i> <b>Ea Høegh Riis Sundmark</b> , Assistant breeder, Danespo	Presentation (20 min) & discussion (5 min)
<b>12.00-12.10</b>	Short bio break	
<b>12.10-13.10</b>	The 5 <sup>th</sup> Annual NPPN General Assembly	
<b>13.10-14.25</b>	Lunch	
<b>14.25-16.00</b>	Plenum discussion: Going forward in 6P2 – what does the future hold Facilitated by Bo Gertsson and Svend Christensen With coffee, tea and cake	
<b>16.00-16.15</b>	Final Remarks	