Introduction to Field-Based High Throughput Phenotyping
7 April, Mon, 9:00 AM
Jesse Poland

I. Introduction
   a. Overview of Plant Breeding and Genomics
      i. Present and future constraints
      ii. Phenotyping objectives
      iii. Needs and challenges in phenotyping
   b. Phenotyping concepts
      i. Precision
      ii. High-throughput

II. Phenotyping Systems
   a. Moving plants vs moving sensors
   b. Controlled Environment
      i. Growth chambers
      ii. Greenhouses
   c. Field-based phenotyping

III. Field-based phenotyping - Platform Overview
   a. Aerial systems
   b. Ground-based systems

IV. Data analysis concepts
   a. Processing raw sensors / image data
   b. Connecting data with experimental entries
   c. Genetic analysis of HTP data

V. Conclusions