

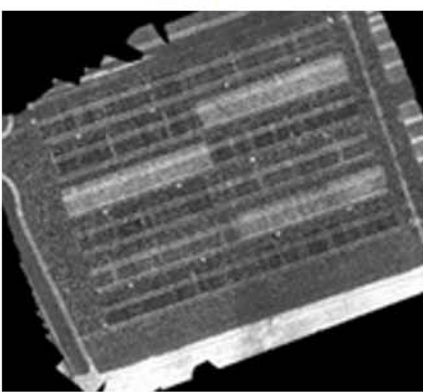
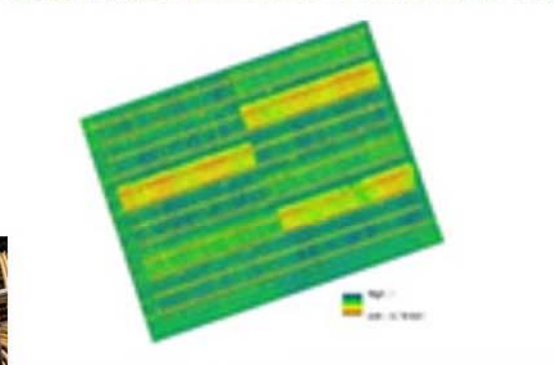
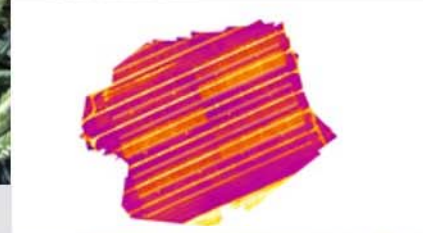
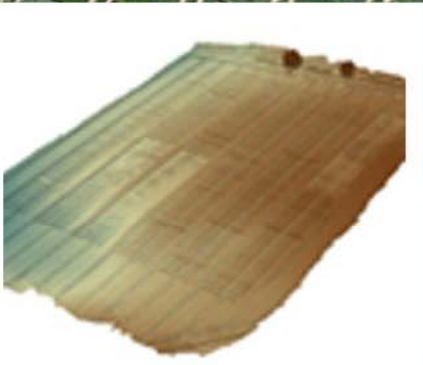
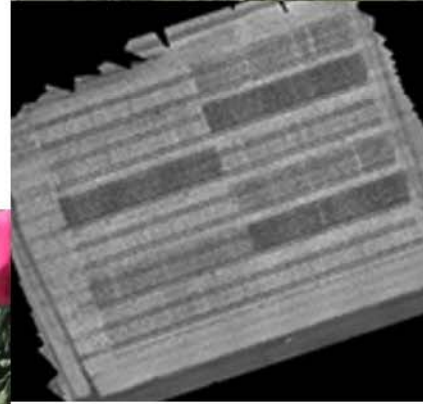


The Indo-UK Centre
for the Improvement
of Nitrogen Use
Efficiency in Wheat

Course on Phenotyping and Phenomics

7-9 June 2017

Rothamsted Research, Harpenden, UK, AL5 2JQ
with visits to the John Innes Centre and the University of Nottingham



Phenotyping and Phenomics course (7-9 June 2017)

Overview

As part of the INEW project, training for students and early-career researchers are provided in UK and in India. The first of the UK workshops, on Phenotyping and Phenomics, will take place on the 7-9 June 2017.

The phenotyping course will be conducted by Rothamsted Research, the University of Nottingham and the John Innes Centre. This 3-day course will provide the opportunity to meet and exchange with scientists working on phenotyping at different scales. They will demonstrate current technologies and approaches for phenotyping plant roots and shoots in field and controlled environments, using manual and automated methods. Participants will also gain exclusive invites to Breeder's day at the John Innes Centre.

Workshop Details

Based at Rothamsted Research, Harpenden, UK, AL5 2JQ.

Duration: 3 days - Wednesday 7 to Friday 9 June 2017.

The course will start at 9:30am and finish at 5:30pm

Course Cost: The course is fully financed by INEW and includes:

- Accommodation at the Aubrey Park hotel in Redbourn for four nights (www.aubreypark.co.uk)
- All transport during the course by private coach
- Registration at the Breeders Day at the John Innes Centre
- Meals and refreshments and guest lectures

Please note: Participants are responsible for booking and paying for their own travel arrangements to/from Rothamsted Research, Harpenden. Participants are also responsible for obtaining their own visas; INEW will provide letters of support for these.

How to apply: Complete and return the accompanying form and you will be notified of your application outcome.

Contact details: Please address any queries to Ann Foxcroft by email: inew.communication@rothamsted.ac.uk or by telephone: +44 (0)1582 938126

Preliminary Course Outline

7 June 2016 at Rothamsted Research

- **Guest lectures**
 - Introduction to phenotyping
 - Traditional vs. modern high-throughput phenotyping
- **Practical workshops**
 - Manual phenotyping methods (height, growth stage determination, ceptometer (leaf area index), handheld spectrometer and understanding spectral curves
 - Demonstrations of automated phenotyping measurements (Field Scanalyzer and drones)
- **Tour of Rothamsted's Broadbalk experiment** (world's longest running agricultural experiment)

8 June 2016 at John Innes Centre

- **Breeder's Day**

The day will bring together scientists, breeders, end users, policy-makers and funding bodies to talk about scientific agriculture which include maintenance of crop yield, disease resistance, drought tolerance, heat tolerance, and a healthy diet
- **Presentation on low-cost phenotyping solution**

9 June 2016 at University of Nottingham

- **Lectures** on approaches towards phenotyping traits associated with
 - Nutrition/biofortification
 - Photosynthesis and canopy architecture
 - Roots
- **Lecture and demonstration** of 2-D seedling root phenotyping and the Hounsfield CT root platform.