

College of Agriculture and Life Sciences
Department of Horticulture Sciences
Plant Breeding Consortium
HTP In Plant Science

Introduction

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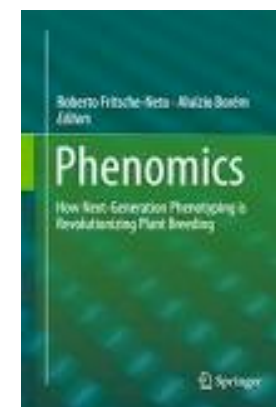
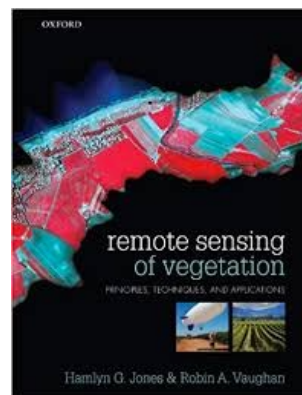
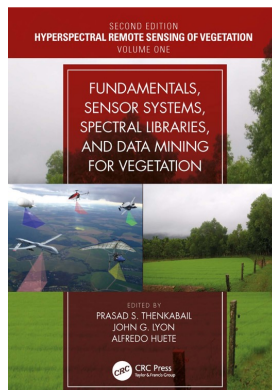
2025

Schedule

Shift	Workflow
Day 1 Morning	Introduction to HTP / Image properties, and acquisition Image matrix practice on R Build shapefiles (plots) in R
Day 1 Afternoon	Indices, tools, and their applications Raster, index, counts, areas, and plant height on R
Day 2 Morning	Pre-processing images on R (filters, masks, extraction, and augmentation) Data mining and modeling (Theory)
Day 2 Afternoon	Data mining and modeling (Practice on R) Envirotyping (Theory and Practice on R)

Main bibliography and material

- Books



- Softwares

- QGIS - <https://www.qgis.org/en/site/>
- Metashape - <https://www.agisoft.com/>
- R - <https://cran.r-project.org/>
- Rstudio - <https://posit.co/download/rstudio-desktop/>