



## Bison-Fly: A UAV Pipeline Applied to Plant Breeding Programs

**U**AVs have been changing the way of doing phenotyping in plant breeding. In this workshop, Filipe Matias will present a new pipeline developed for wheat breeding applications during his time at North Dakota State University. The idea is to share a complete dataset with images, field data, and code to start applying UAVs in your research (e.g., date extraction from images, correlation, PCA, heritability, etc.). This project is supported by the group Drone2Phenome.

Reference: <https://github.com/filipematias23/Bison-Fly>

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### Workshop Presenter

**Filipe Matias** has a Ph.D. in genetic and plant breeding with experience working with corn, tropical grasses, potato, and wheat from eight different institutions around the world including Brazil, Portugal, and the USA. His interests are quantitative genetics, genomic selection, GWAS, phenomics, high-throughput phenotyping, remote sensing, image analysis, and R.



**July 12, 2022**

**1:00-3:00 PM**

(Central Time, UTC-5)

**Purpose:** Learn the basics of using a UAV in your research, including a data collection and analysis pipeline.

**Register for this Zoom virtual workshop:**

<https://tinyurl.com/AG2PI-w13>

Upon registration, you will receive a confirmation email with information about joining the meeting.

A recording will be available at a later date at: [www.ag2pi.org/](http://www.ag2pi.org/)