



2016 – 2017 G2F Data Update

NASER B. ALKHALIFAH

Introduction & Current Involvement

2016 & 2017 Data Curation Status

Data Release Timeline & Access

Planting Season 2018

Overview

Introduction

Education:

- M.S. Plant Breeding (Agronomy) – Iowa State University
- B.S. Genetics (Liberal Arts and Scientists – Iowa State University

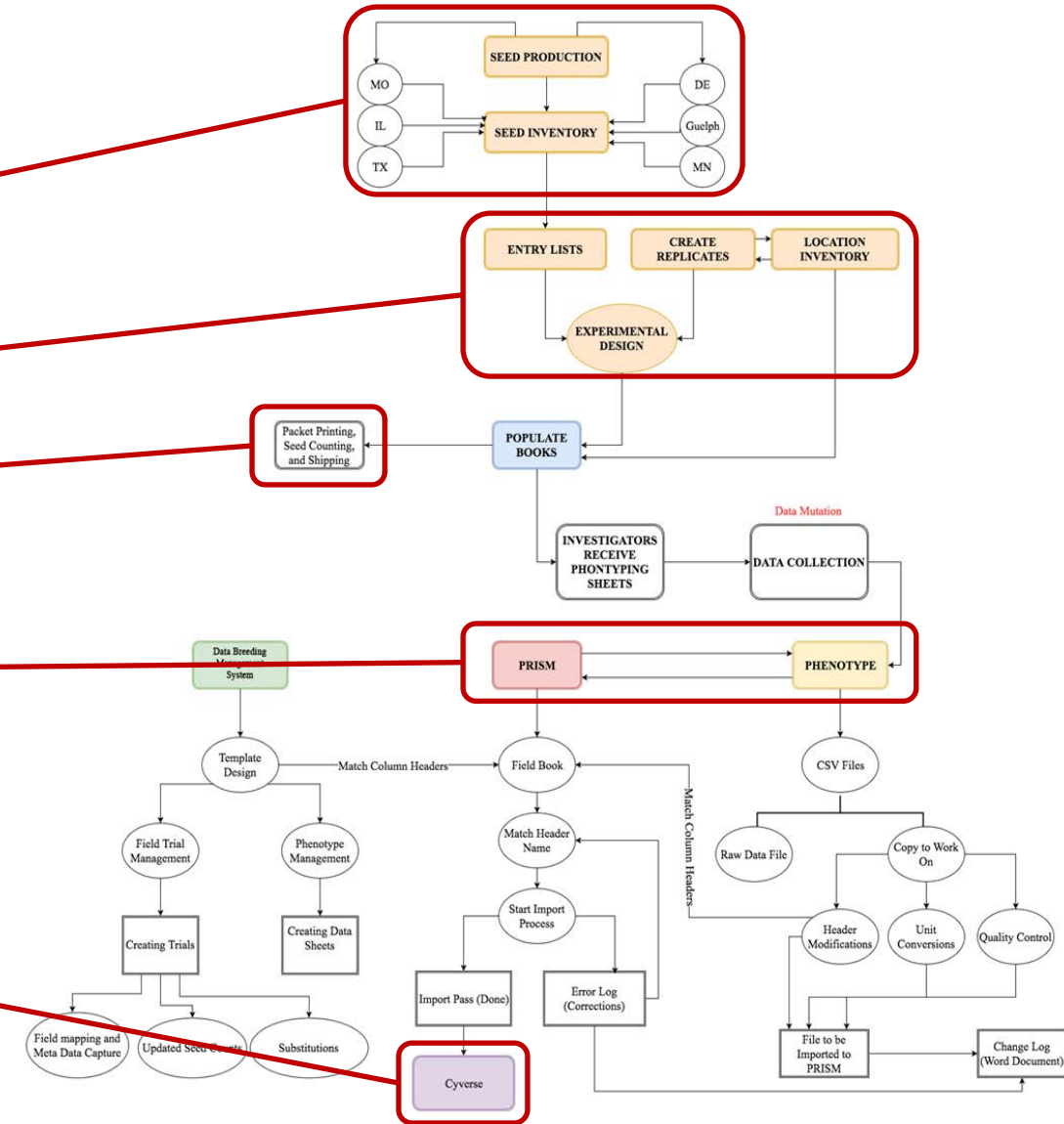
Professional Experience:

- G2F Project Coordinator – University of Wisconsin – Madison (Current)
- G2F Data Scientist – Iowa State University (2016)
- Field Research Associate (II) – Monsanto Company (2014 – 2016)

Current Involvement

Phenotypic Data:

- Planting locations & Seed Inventory
- Experiment Planning & Building
- Seed Logistics
- Data Curation
- Data Release



Current Involvement Cont'd

Weather Data:

- Maintaining and updating data curation pipeline.
- Weather data curation.

Soil Data:

- Collating data from Ward Laboratories.

Metadata:

- Creation, troubleshooting, and maintenance.

Permissions:

- Granting access to google sheets and CyVerse.





2016 & 2017 Data Curation Status



2016 Data Curation Status

Metadata:

- Metadata received from all locations.
- Data imported to PRISM.

Soil Sampling:

- Soil Samples received from all locations.
- Data Collated and ready for DOI release.

2016 Data Curation Status Cont'd

Hybrid Phenotypic Data:

- Hybrid Data received from all locations.
- Data imported to PRISM.
- Data ready for public release (pending 1 location).

Weather Data:

- All locations reported weather data.
- Initial data curation completed.
- Resolving remaining issues (duplicate time stamps etc.)



2017 Data Curation Status

Metadata:

- 19 out of 37 locations reported metadata (Plot length, Alley length, Row spacing, etc.)
- Data imported to PRISM.

Soil Data:

- 28 locations reported soil samples.
- Data has been cleaned and compiled into a csv file.
- Initial pdf files maintained for release.





2017 Data Curation Status Cont'd

Hybrid Phenotypic Data:

- 20 locations provided fieldbooks.
- Data imported into PRISM.
- Metadata combined for yield calculations

Weather Data:

- 20 locations reported weather data.
- Developing new code for handling weather data.



Data Release Timeline and Access

Data Release Timeline

Field Season	Release to Collaborators (ARK)	Public Release (DOI)
N	February of N+1	March of N+2
2016	February of 2017	March of 2018
2017	February of 2018	March of 2019

Data Access

Field Season	Where To Access	Public Links
2014	http://www.genomes2fields.org/	https://doi.org/10.7946/P2V888
2015	http://www.genomes2fields.org/	https://doi.org/10.7946/P24S31
2016	Personalized Link (Feb. 2017)	Available: March of 2018
2017	Personalized Link (Feb. 2018)	Available: March of 2019

Data Access



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G2F Data Downloads

Field Season	Release to Collaborators (ARK)	Release to Public (DOI)
2014	-- NA --	https://doi.org/10.7946/P2V888
2015	February 2017	https://doi.org/10.7946/P24S31
2016	February 2017	March 2018
N	February of N+1	March of N+2



Planting Season 2018

Planting Season 2018

Planning:

- 13 locations have been confirmed for planting season 2018.
- Master plan has been created for 2018.
- Seed from Isolations are being shelled and will imported into PRISM Database.
- First seed shipments projected by February

Genomes To Fields Sponsors



United States Department of Agriculture
National Institute of Food and Agriculture



Illinois Corn
Marketing Board



Arkansas
Corn & Grain Sorghum Board



MinnesotaCorn
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Genomes To Fields Collaborators

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✧ Ed Buckler (ARS)
✧ Darwin Campbell (ISU)
✧ Ignacio Ciampitti (KSU)
✧ James Clohessy (Cornell)
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✧ Fiona Goggin (Univ AR)
✧ Byron Good (Guelph)
✧ Mike Gore (Cornell)
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Questions ?
