

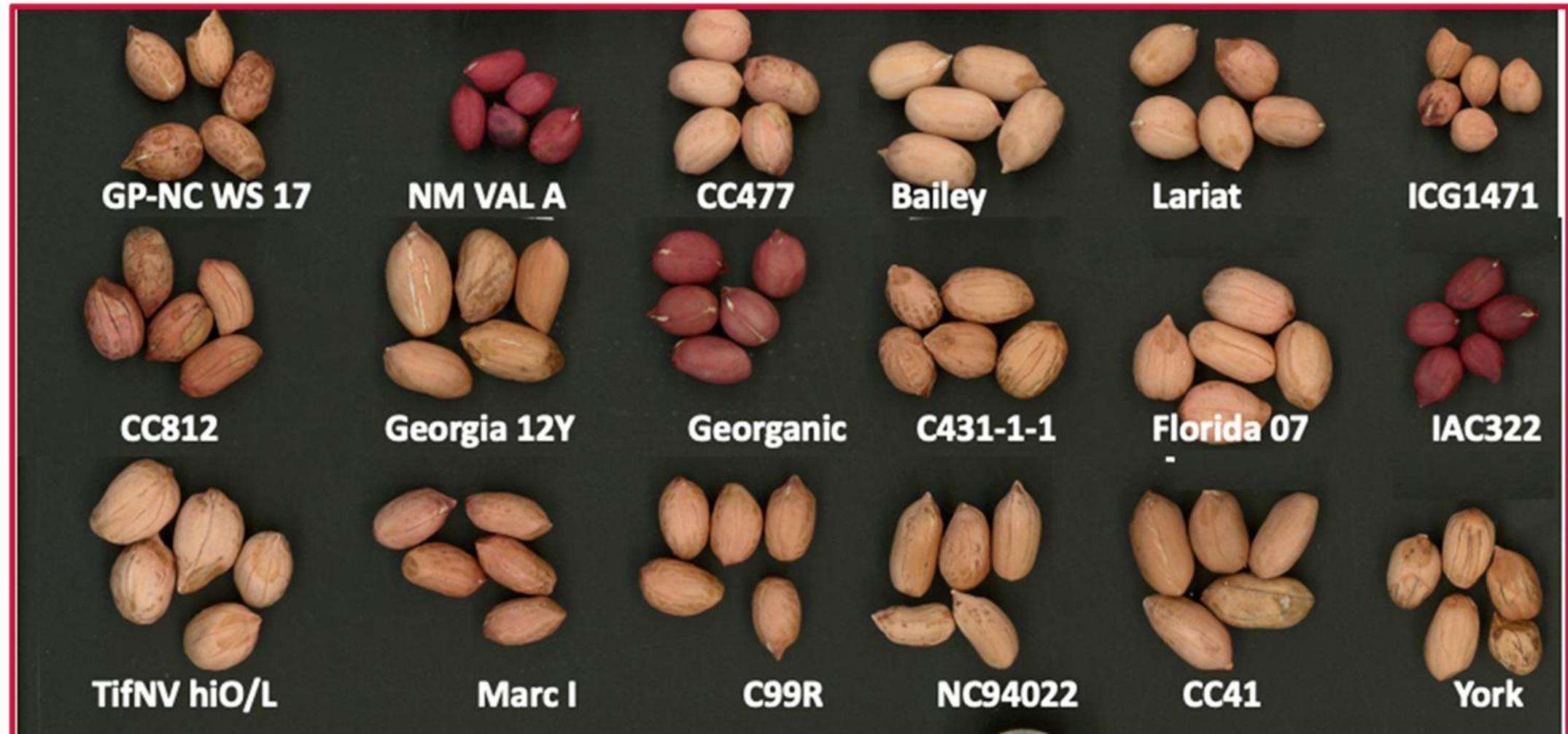
A Strategy To Breed For Drought- Tolerance in Peanuts

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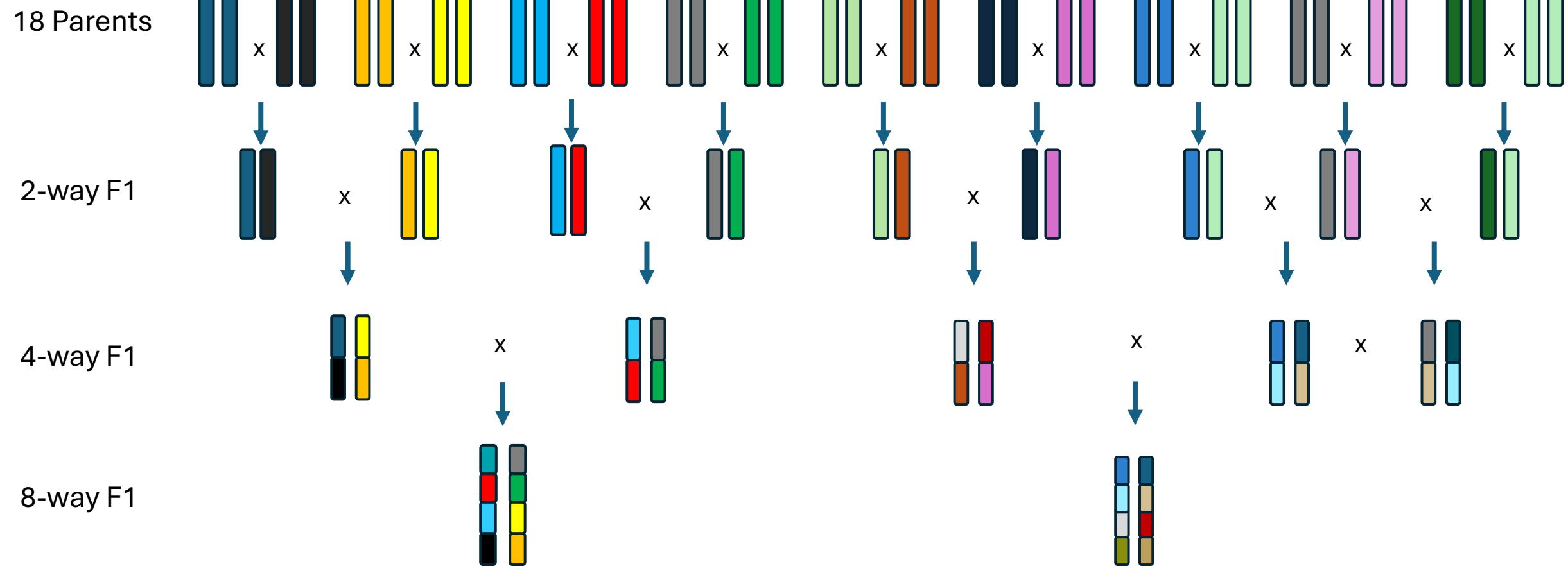
MAGIC Parental Lines for Crossing



MAGIC (Multi-Parent Advanced Generation InterCross) Founder lines



MAGIC Population Development



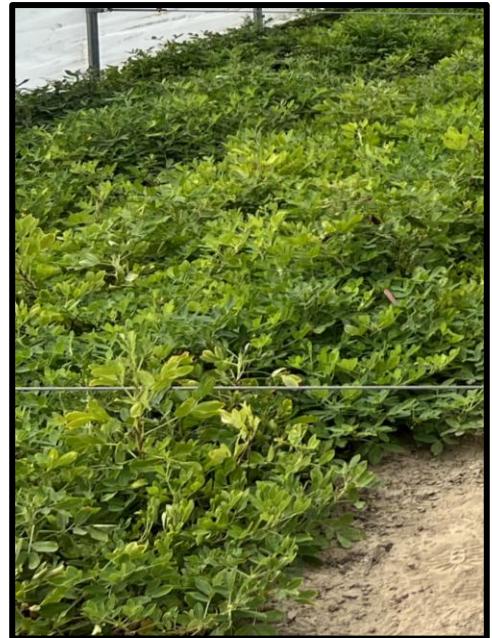
Field Planting



Rainout Shelter to Induce Drought Stress



Visual Stress Observation



1

2

3

4

5

Best

Worst

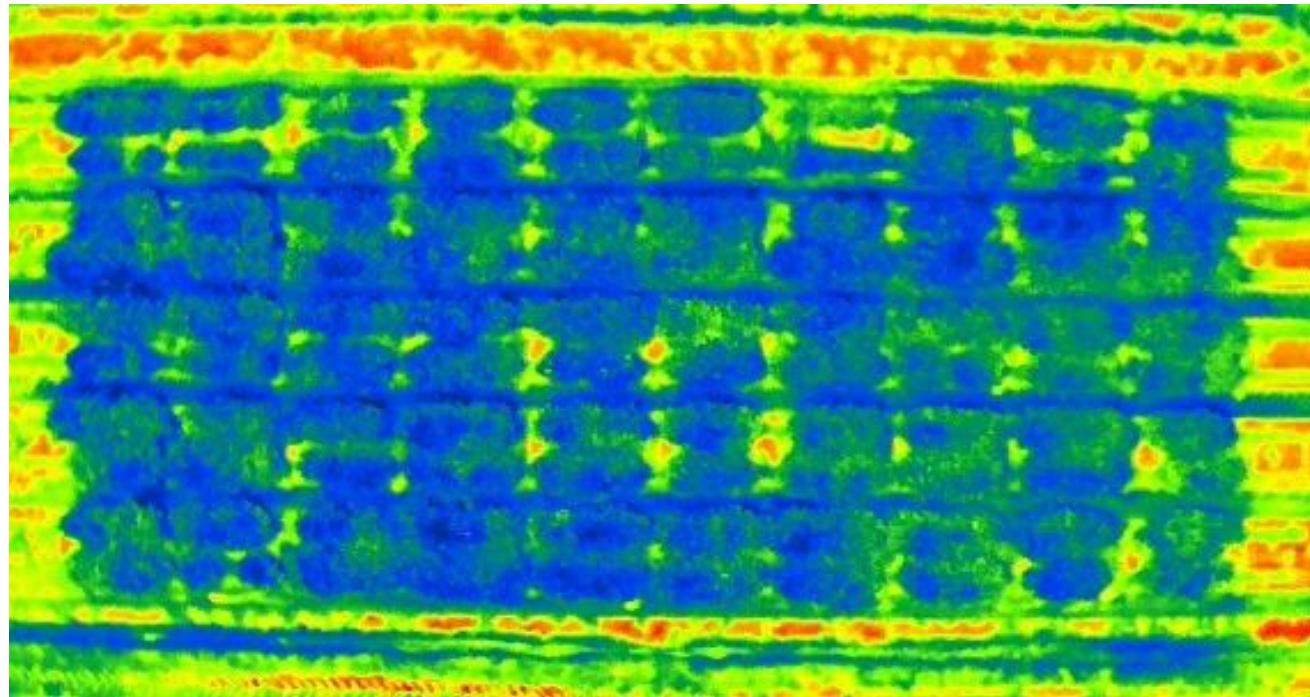
Canopy Temperature Evaluation



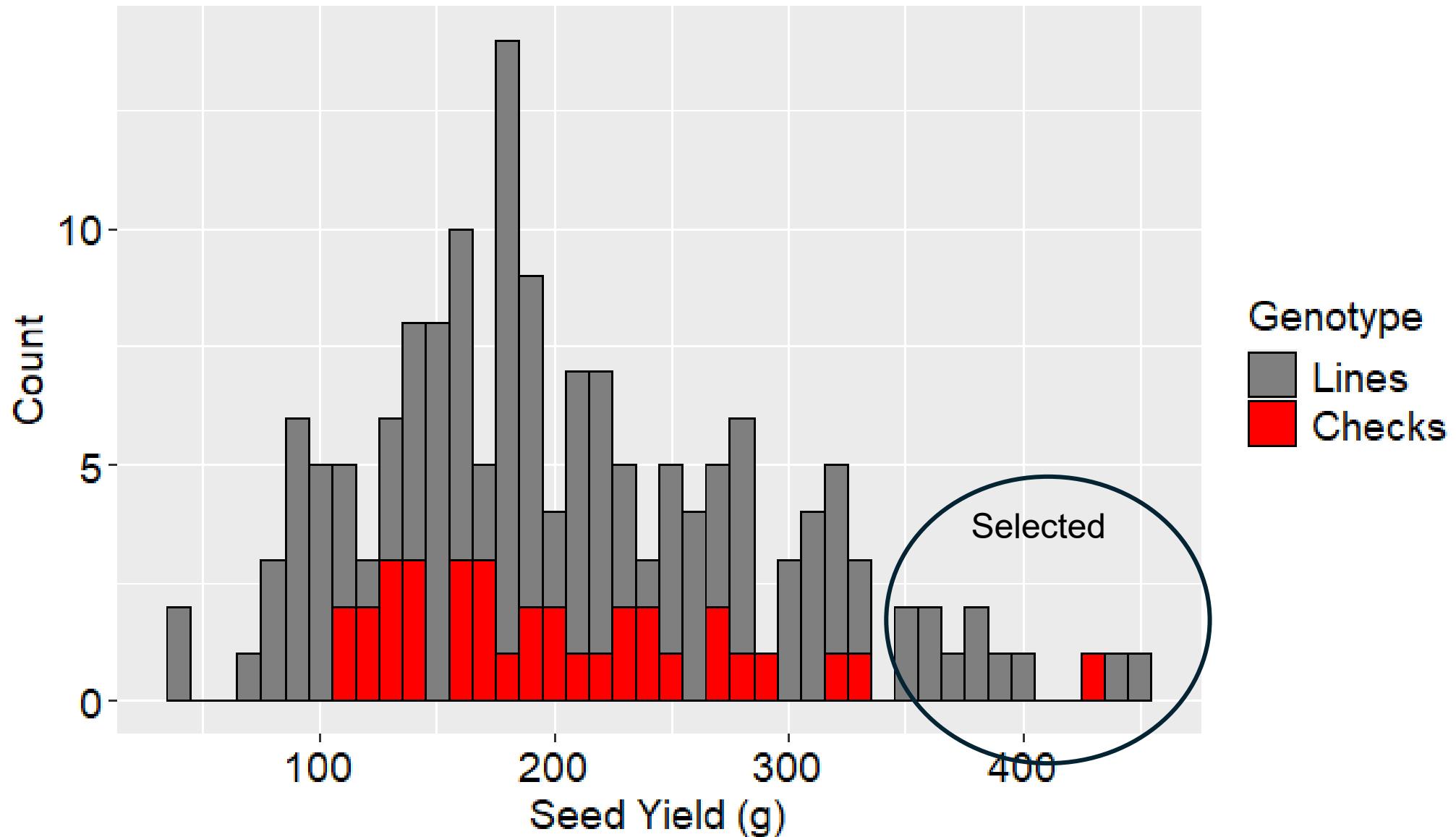
Ashbin Bhatt



DJI Mavic 3



Seed Yield

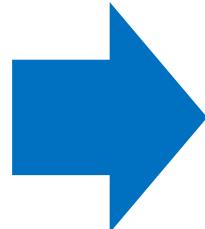


Progeny Selection



Second (F2) generational plant

10%
Selected



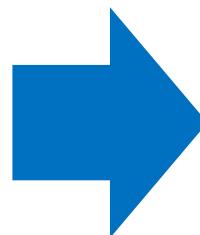
Third gen (F3) plants in Puerto Rico

Progeny Selection



F4 Plants

14%
Selected



F5 plants

Progeny Selection



F5 Plants



F6 plants (in Puerto Rico)

Ongoing Research Works



Seed quality evaluation by Qsorter



Lateral flow for Aflatoxin assay

Field Aflatoxin assay
by inoculation of
Aspergillus

Lab inoculation of
Aspergillus and
aflatoxin
quantification