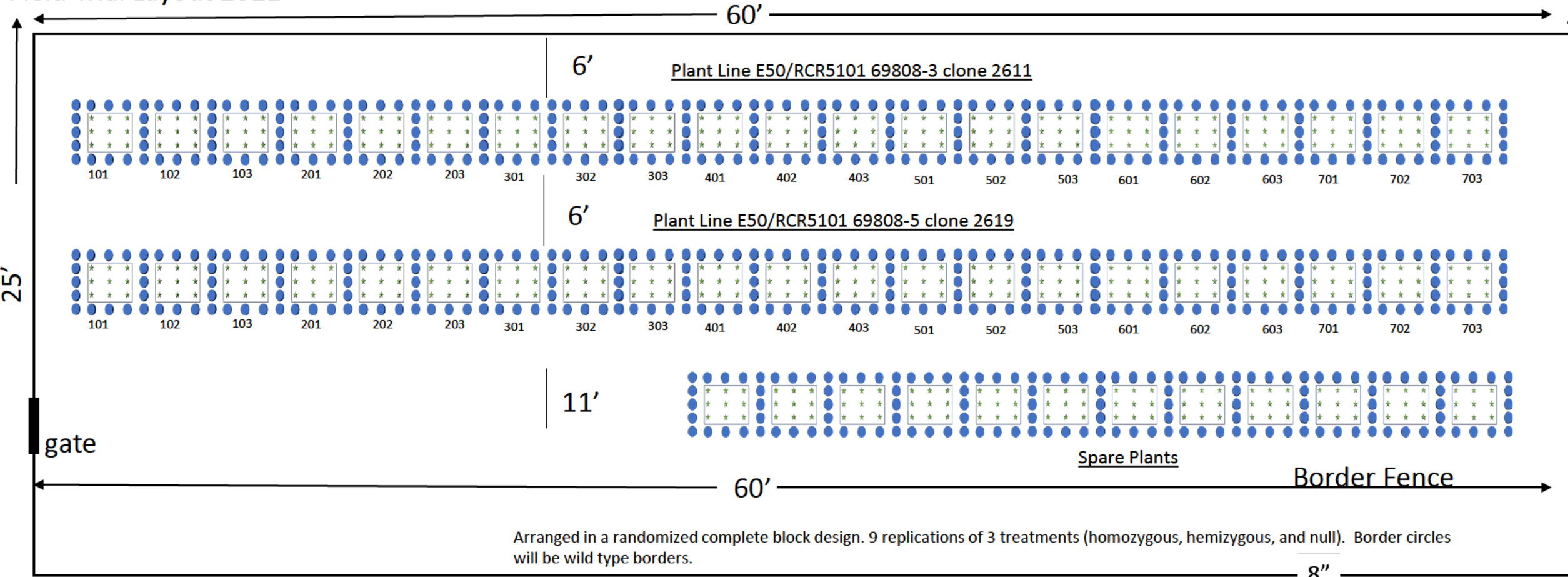


Science Update

- Field Trial Update + Nutritional Composition
- s9(2)(i)

Field Trial Update

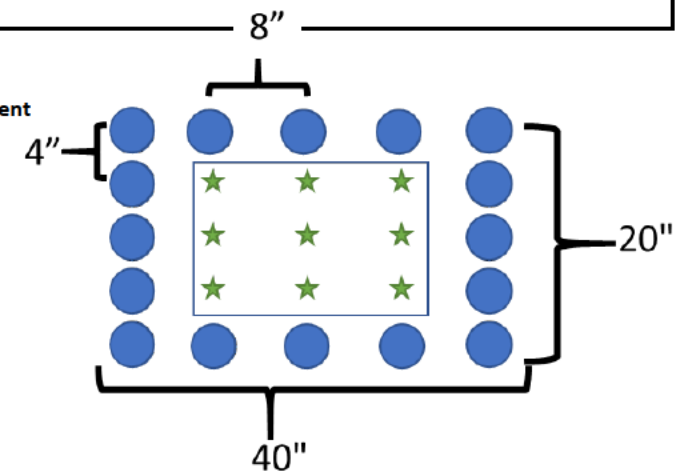
Field Trial Layout 2021



● = WT
 ★ = null or transgenic in a mini-sward arrangement

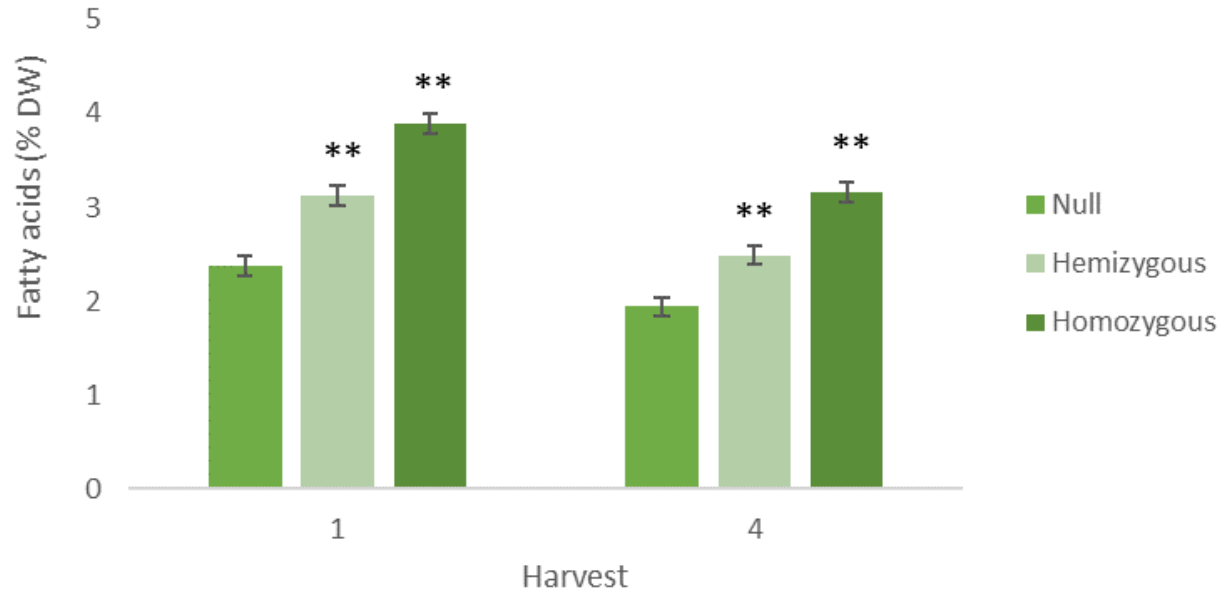
Line	Null GH FA (%DW)	Hemi GH FA (%DW)	Homo GH FA (%DW)
E50/RCR5101 2611	4.4	5.6	6.8
E50/RCR5101 2619	4.4	5.4	6.6

+ 0.5 kJ gDW⁻¹ GE GE increase tbc. Estimated up to 1 kJ gDW⁻¹



2021 Field Trial Fatty Acids

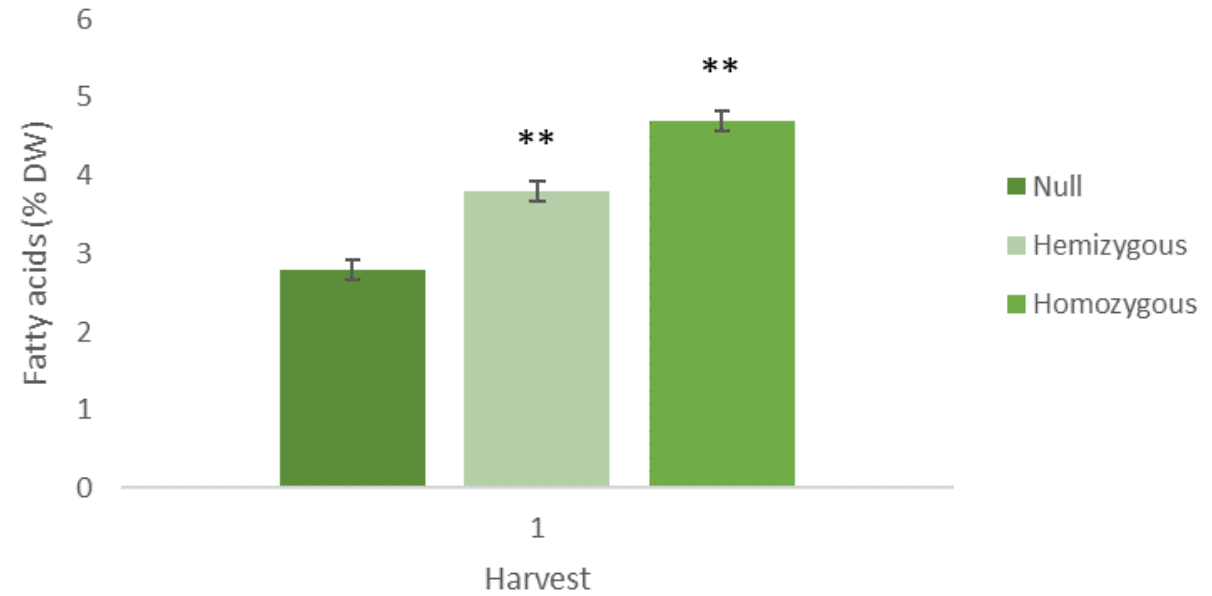
2611



	Harvest	FA
Null	1	2.4 (± 0.1)
Hemizygous	1	3.1 (± 0.1)
Homozygous	1	3.9 (± 0.1)
Null	4	1.9 (± 0.1)
Hemizygous	4	2.5 (± 0.1)
Homozygous	4	3.2 (± 0.1)

Hemi 29% increase = 0.7 point delta
 Homo 62% increase = 1.5 point delta

2619

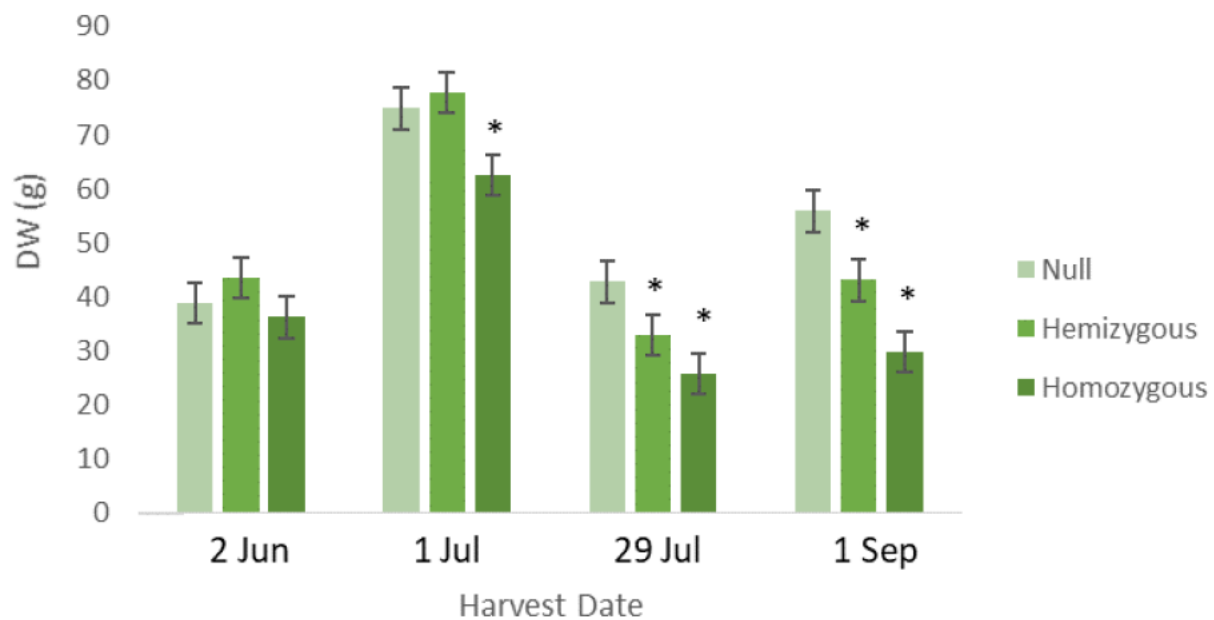


	Harvest	FA
Null	1	2.8 (± 0.1)
Hemizygous	1	3.8 (± 0.1)
Homozygous	1	4.7 (± 0.1)

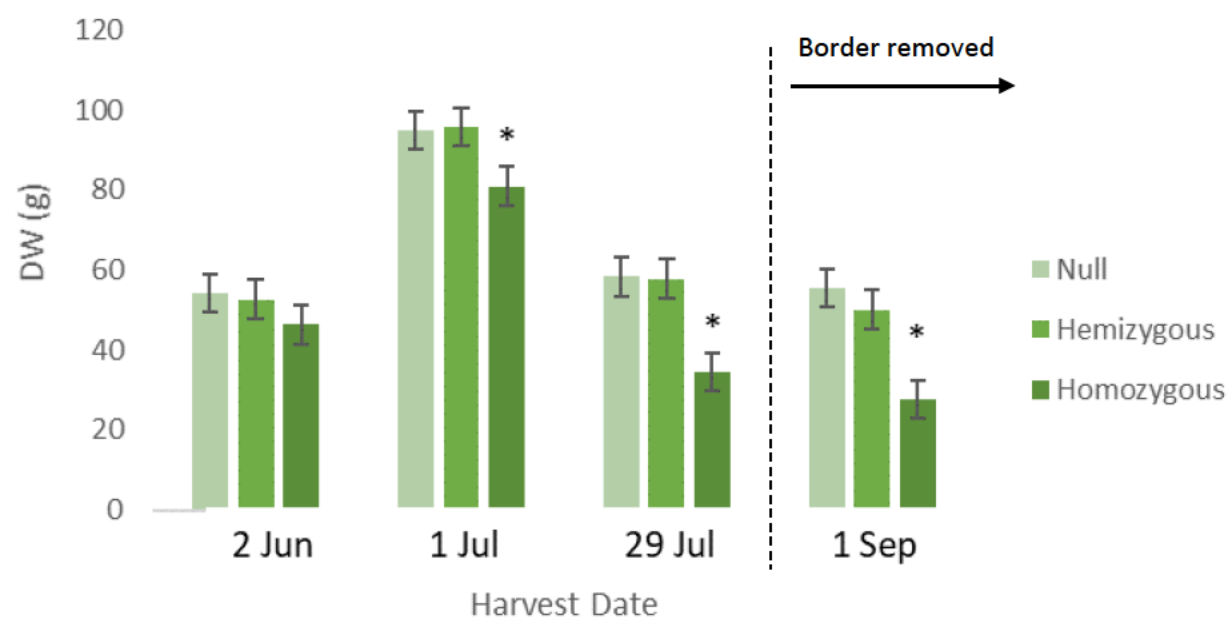
Hemi 36% increase = 1 point delta
 Homo 68% increase = 1.9 point delta

2021 Field Trial Yield

2611 Yield

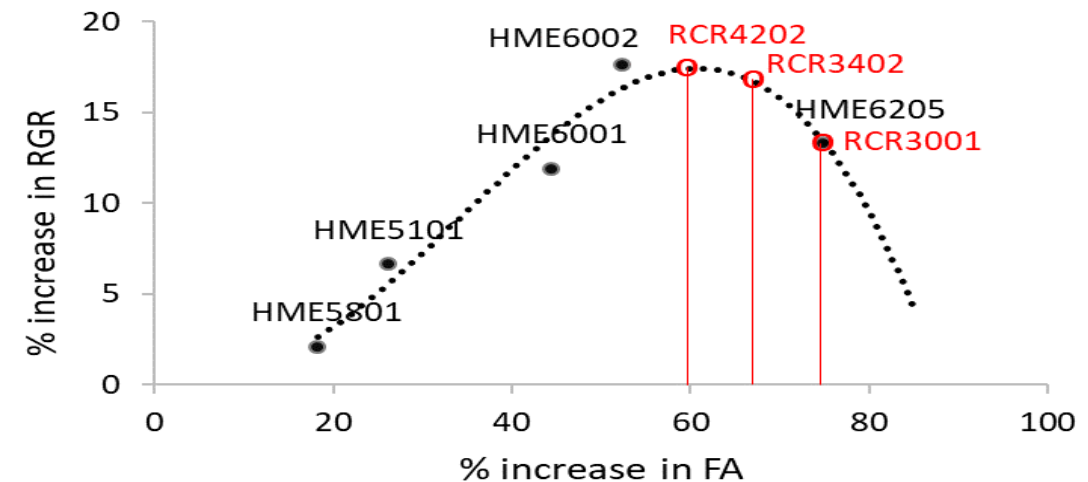


2619 Yield

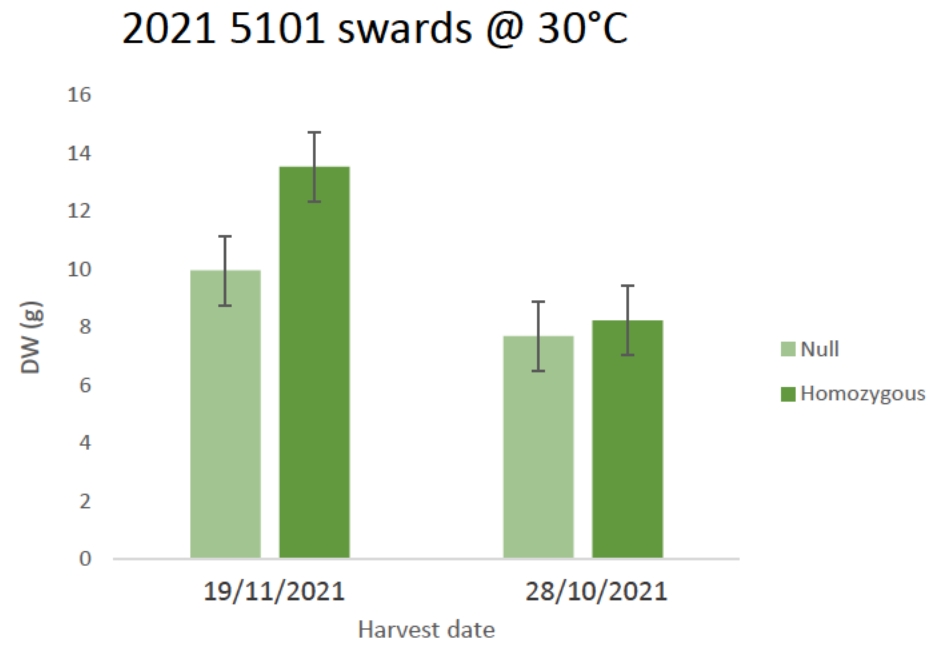


Possible Causes of Yield Penalty

- RCR5101 Event causes gene disruption?
- Overshoot ideal expression window?
- E50 background – genetic background?
- Border Effect x/?
- Heat Effect x



Heat Stress Experiment in Controlled Environment



Nutritional Composition

- Harvest
- Perform Digestible Energy Analysis
- Planning meeting next week

Four pages removed under s9(2)(i)