

Assessing Insecticide Performance Failures



Insect Resistance in the Mid-South

- Aphids: **OP's, Neonics, Pyrethroids**
- Tarnished Plant Bug: **OP's, Carbamates, Pyrethroids**
- Bollworms: **Pyrethroids, OP's, Carbamates, Bt's**
- Tobacco Budworms: **Pyrethroids, OP's, Carbamates**
- Spider Mites: **OP's, Carbamates, Pyrethroids, Avermectins**
- Soybean Loopers: **Pyrethroids, OP's, Carbamates, Diamides**
- Bean Leaf Beetles: **Pyrethroids**
- Thrips: **Neonicotinoid**
- FAW: **Cry 1F**

What can go wrong with a spray?

Wind

Larvae too big

Crop is rank

Wrong nozzle

Resistance

Wrong GPA

Wrong pressure

Boom too high

Boom too low

Wrong rate

High expectations

Water pH

Insects protected

Poor timing

Human error

Off target movement

Wrong insecticide

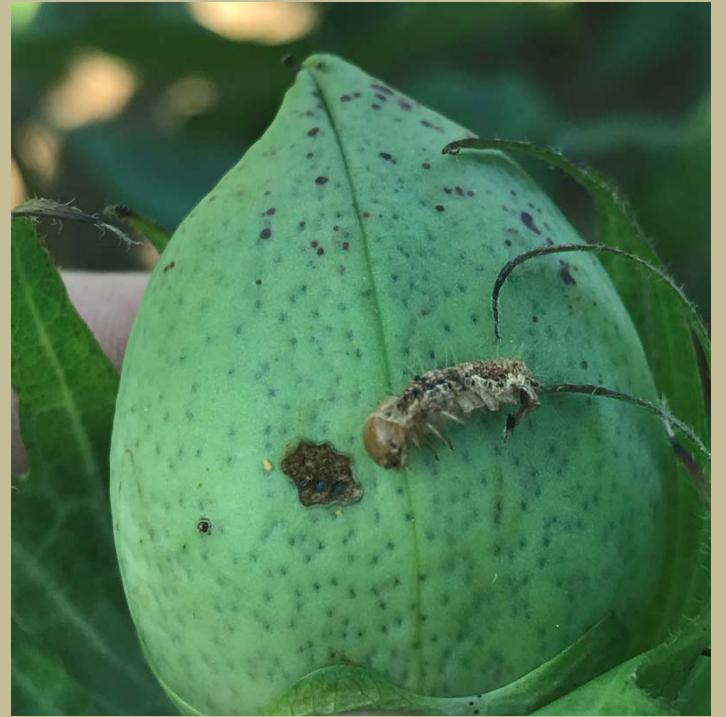
Rainfall

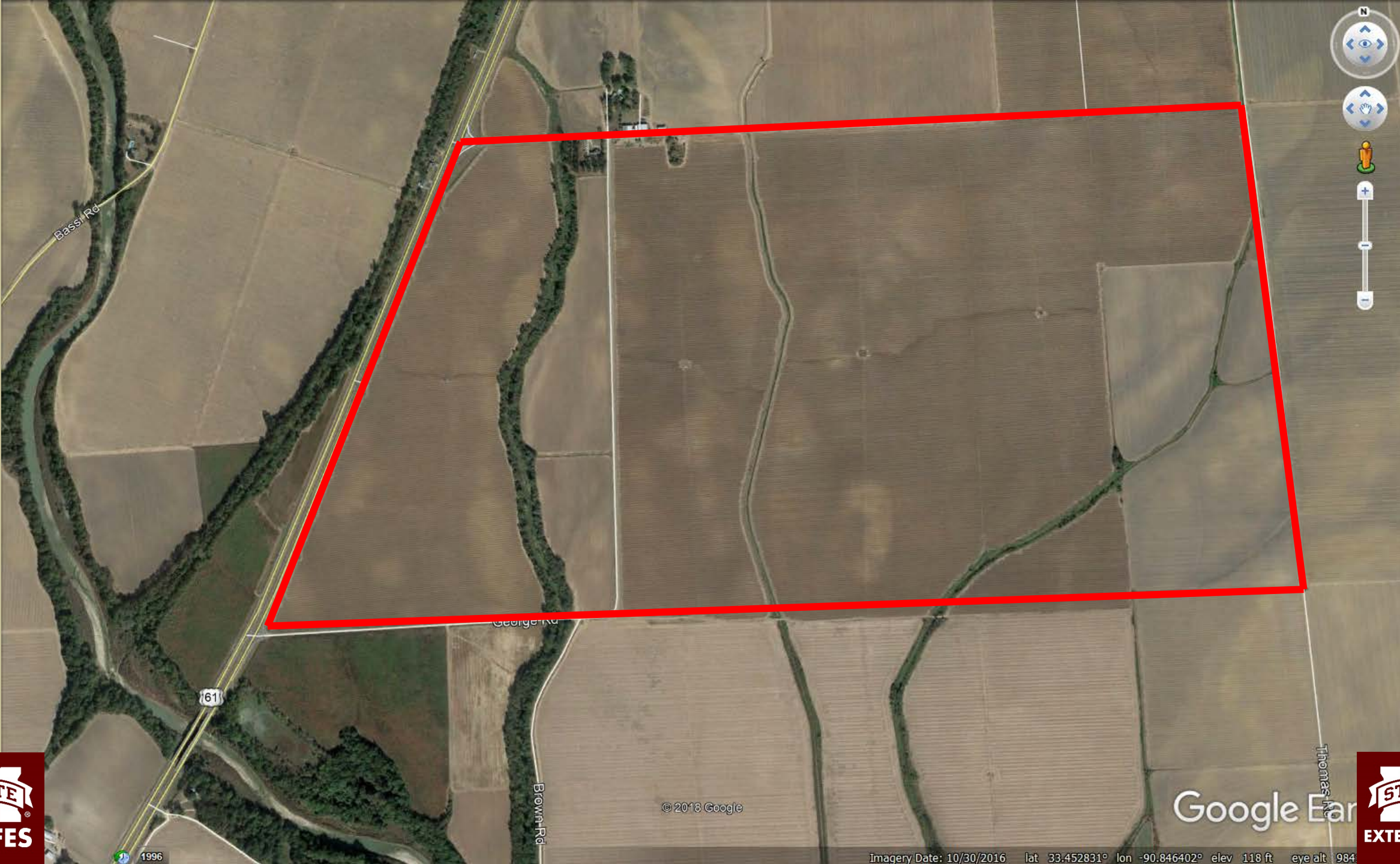
Expectation vs. Reality











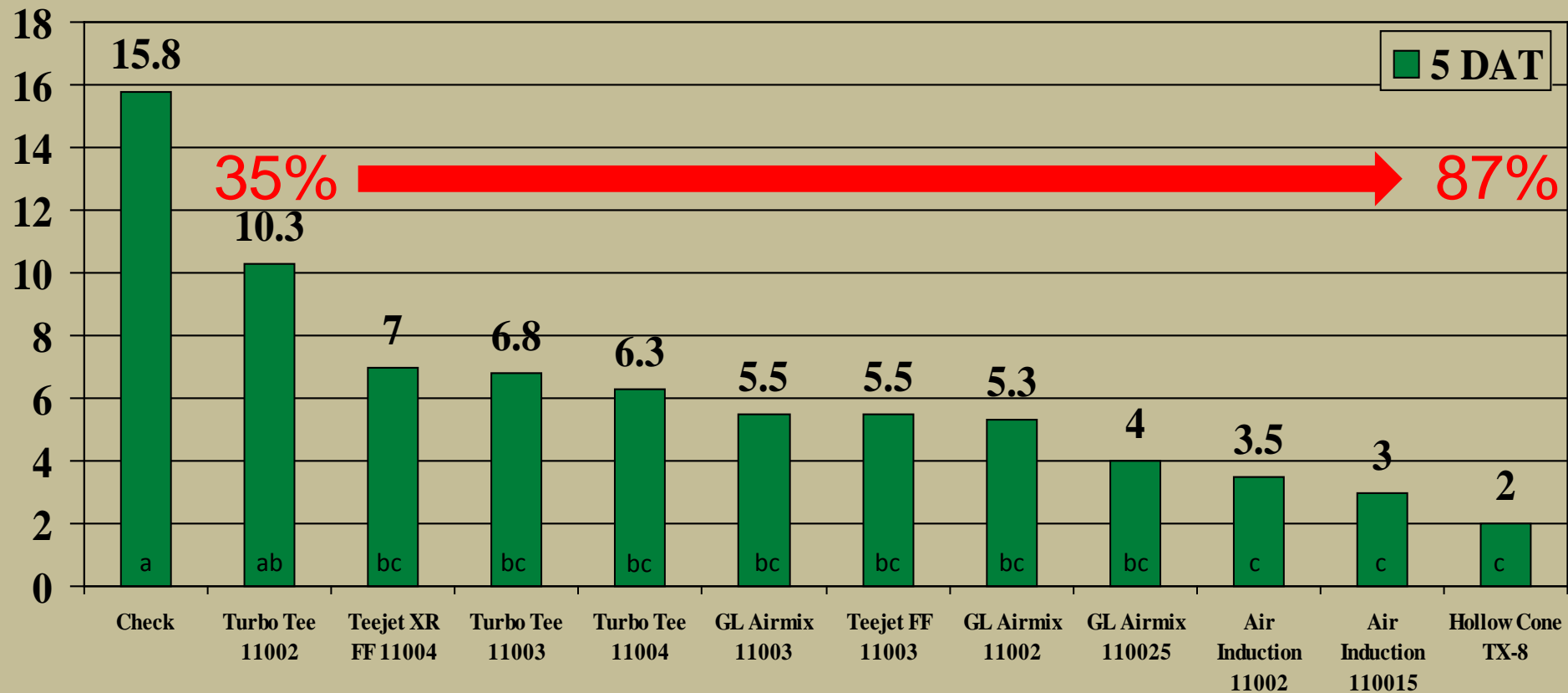
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Imagery Date: 10/30/2016 lat 33.452831° lon -90.846402° elev 118 ft eye alt 984

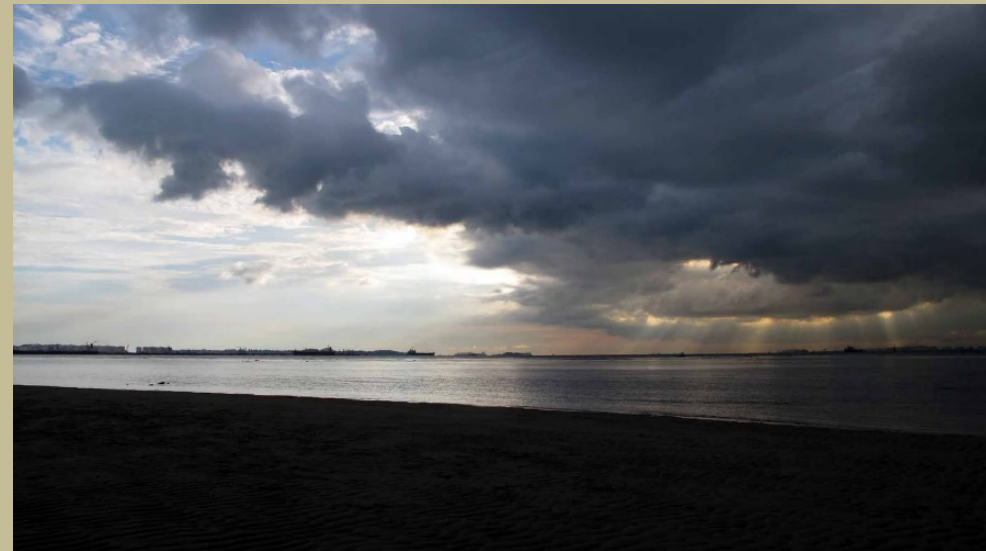
Nozzle Type Efficacy with Acephate Tarnished Plant Bug

Greenwood, MS 8/9/06 TPB Nymphs/10 row ft.



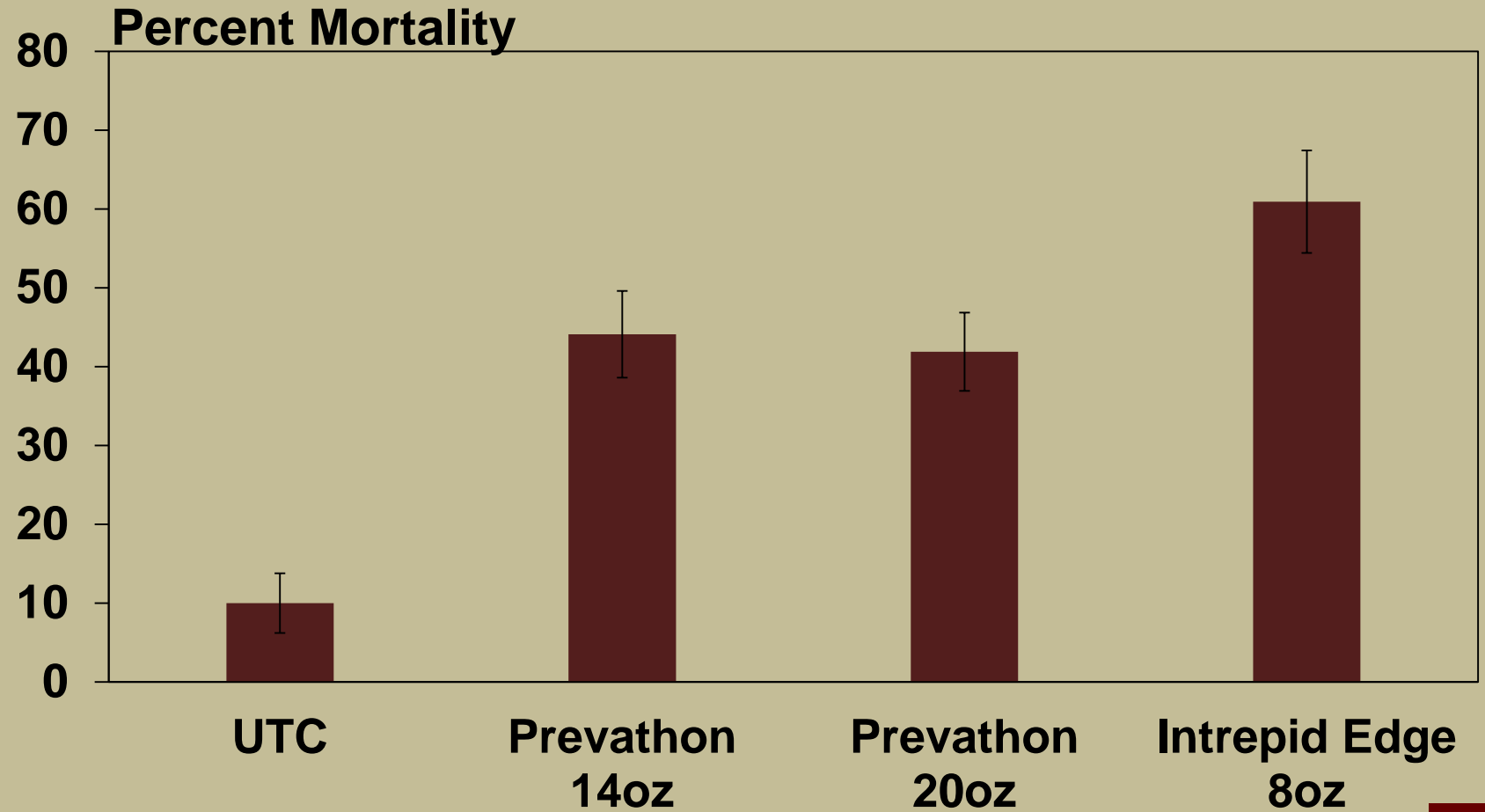
Impact of Rainfall on the Performance of Insecticides

Ms. Sara Barrett



Bollworms Under Bloomtags

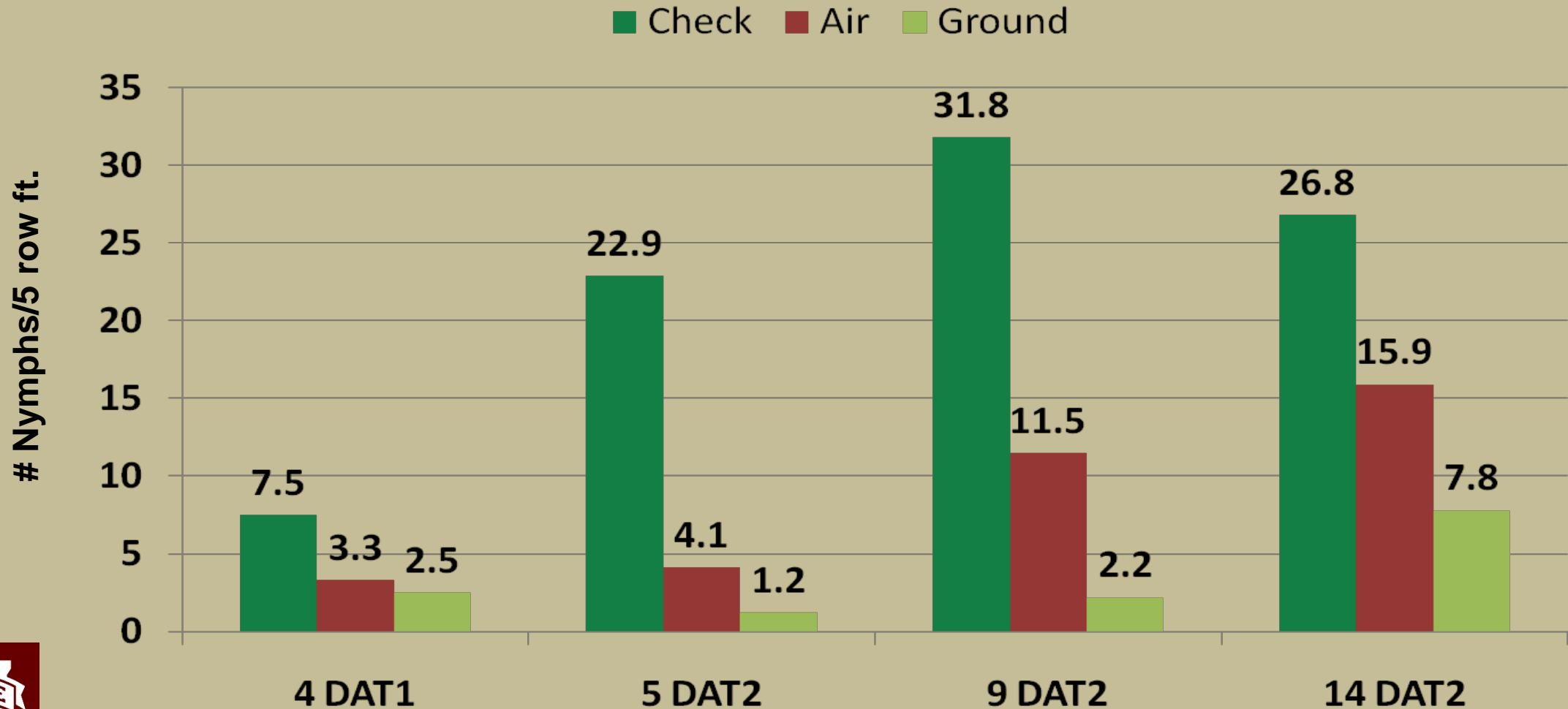
Mr. Russ Godbold



What can go wrong with a spray?

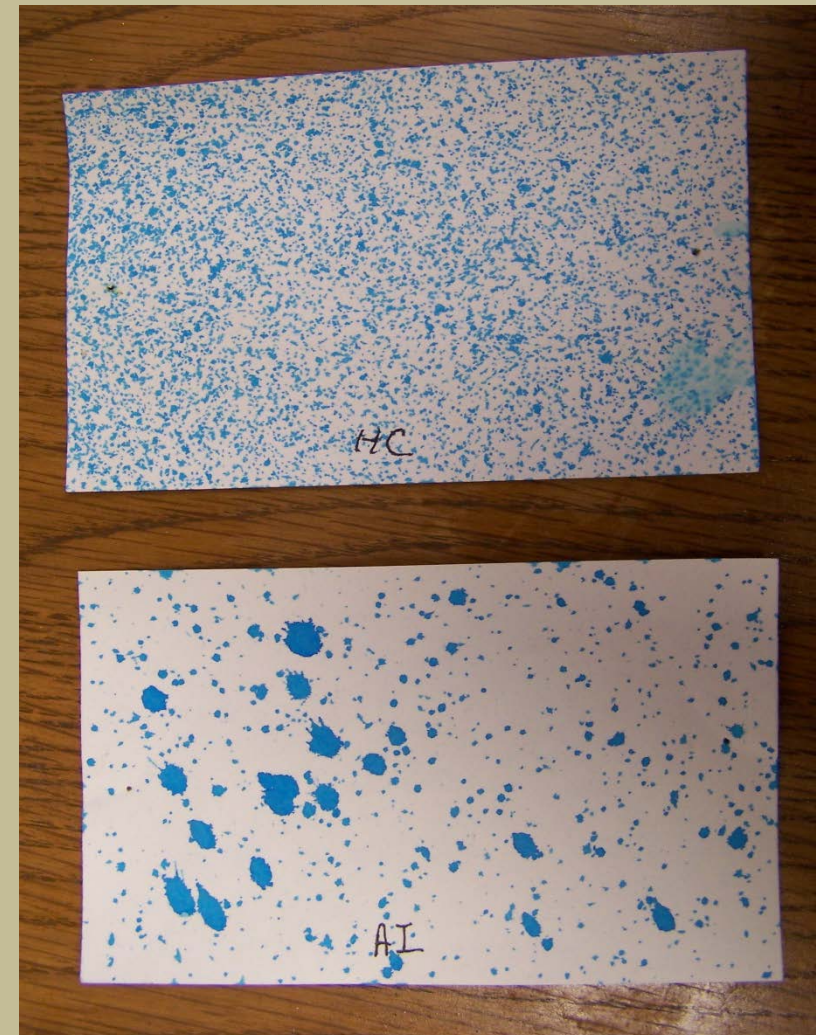


Air vs. Ground Transform WG Test Glendora, MS 2010



Main Causes of a Failure (In Order)

- 1) Poor Coverage
- 2) Poor Timing
- 3) Wrong Insecticide
- 4) Resistance



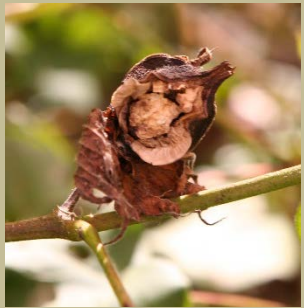
What about bollworms in Bt cotton?





What to do if you suspect a failure

SLOW DOWN!!!





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