

Rice Stem Borers

Blake Wilson

Field Crops Entomologist

bwilson@agcenter.lsu.edu

985-373-6193



Rice stem borer complex



Sugarcane borer
Diatraea saccharalis



Mexican rice borer
Eoreuma loftini



Rice stalk borer
Chilo plejadellus

Rice stem borer complex

Lep.: Crambidae, Snout moths



Sugarcane borer
Diatraea saccharalis

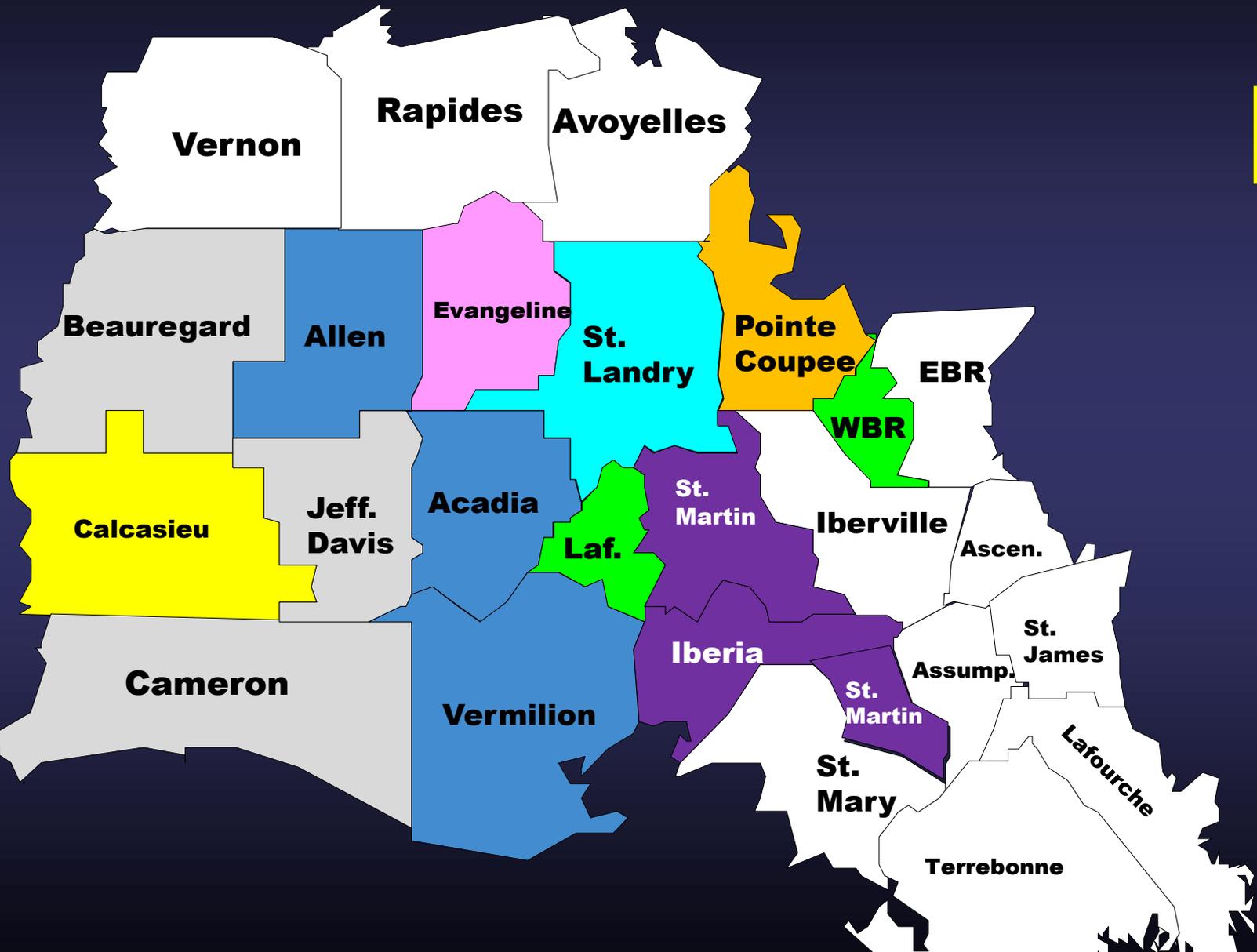


Mexican rice borer
Eoreuma loftini

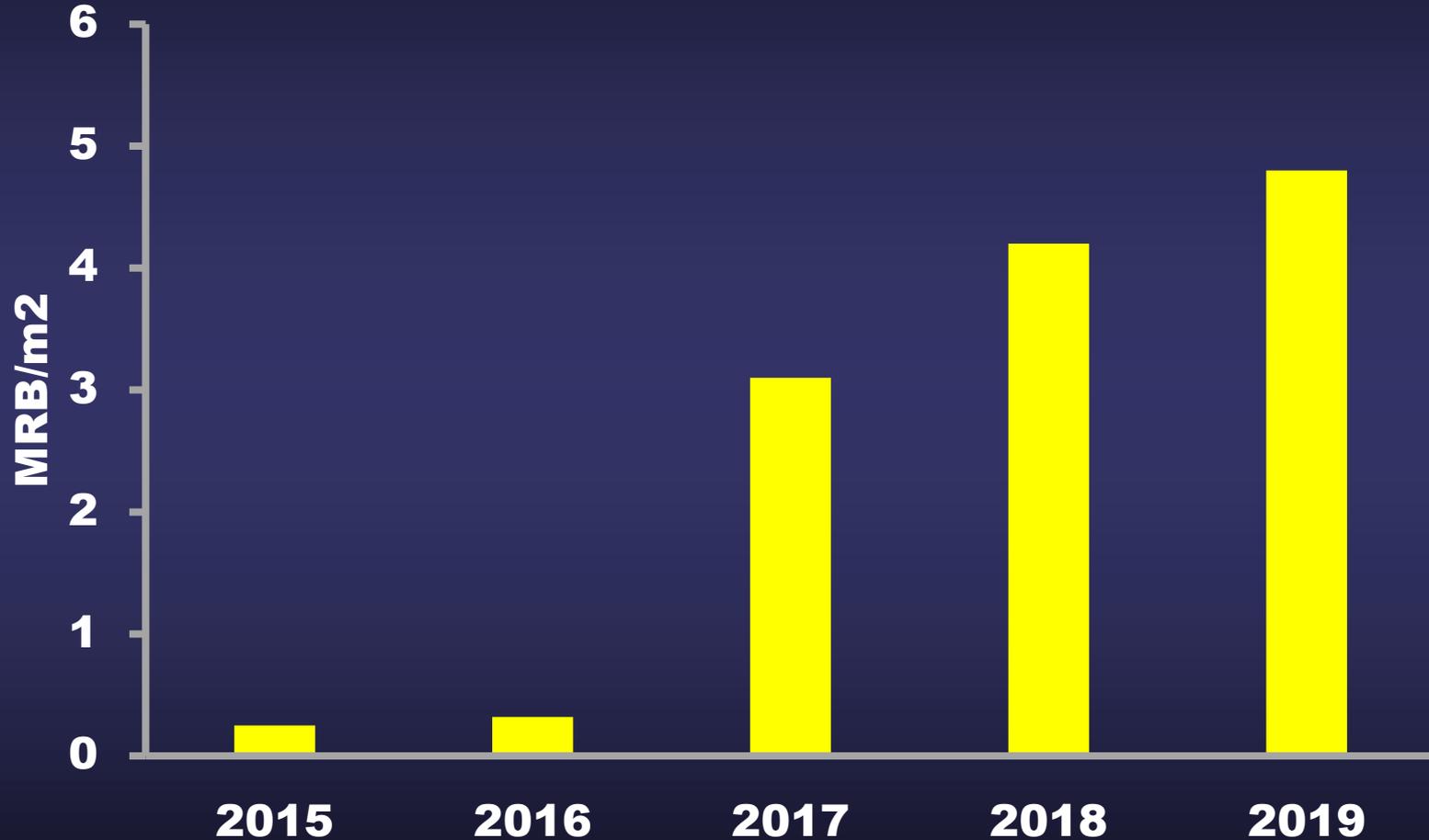


Rice stalk borer
Chilo plejadellus

MRB Range Expansion



Average whitehead density at Crowley Station 2015-2019



MRB is now most common

**Infests fields in high numbers
in southwest Louisiana**

**Need a management plan,
especially for later planted
rice**

Stem borer injury in rice

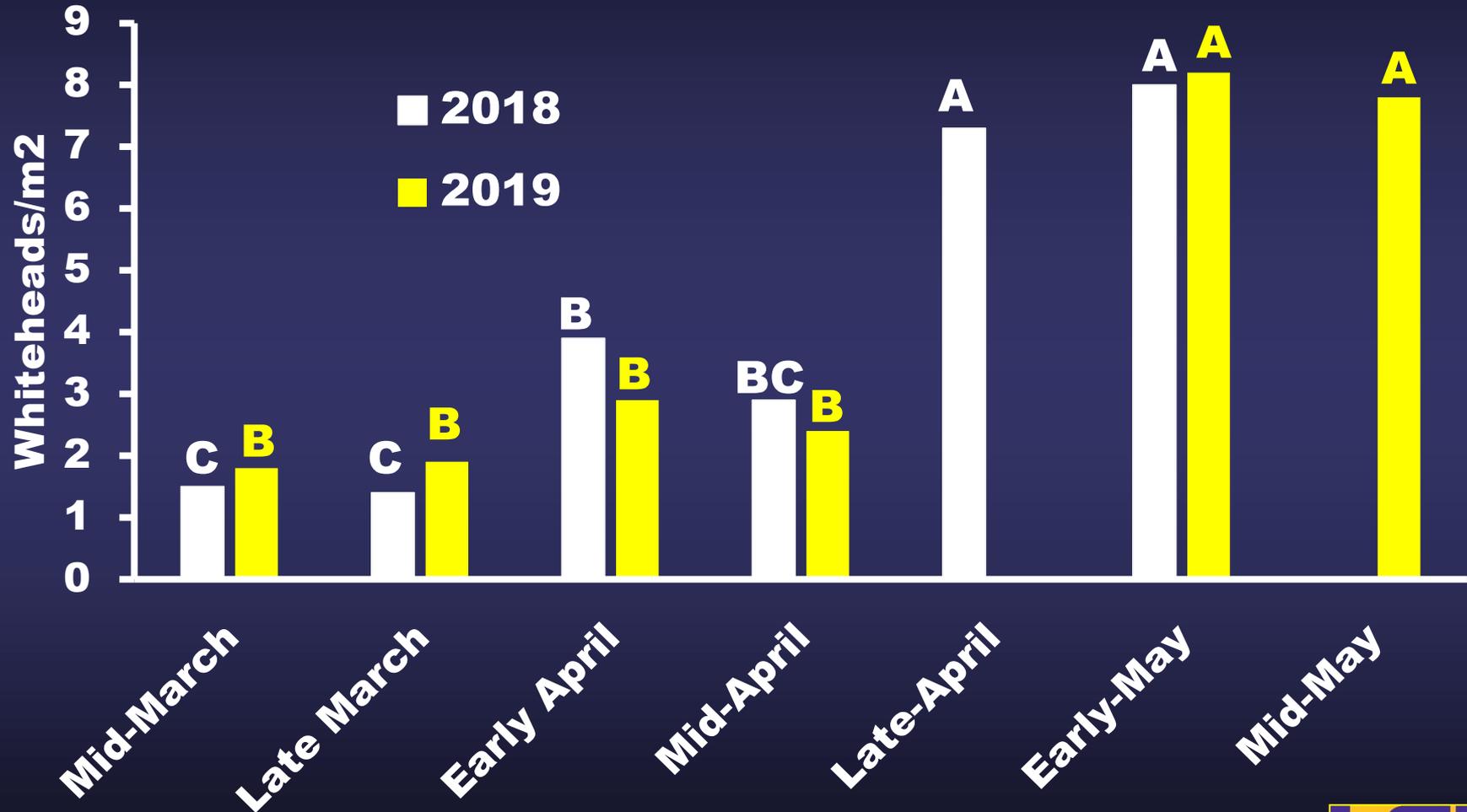
White heads



High whitehead density in Calcasieu Parish



Cultural Control: Early planting



2018: $F = 35.8$, $df = 3, 105$; $P < 0.001$

2019: $F = 33.8$, $df = 5, 105$; $P < 0.001$

Insecticidal seed treatments (ISTs)

–Dermacor X-100 (chlorantraniliprole)

–Only effective seed treatment for stem borers

–80% Control or better

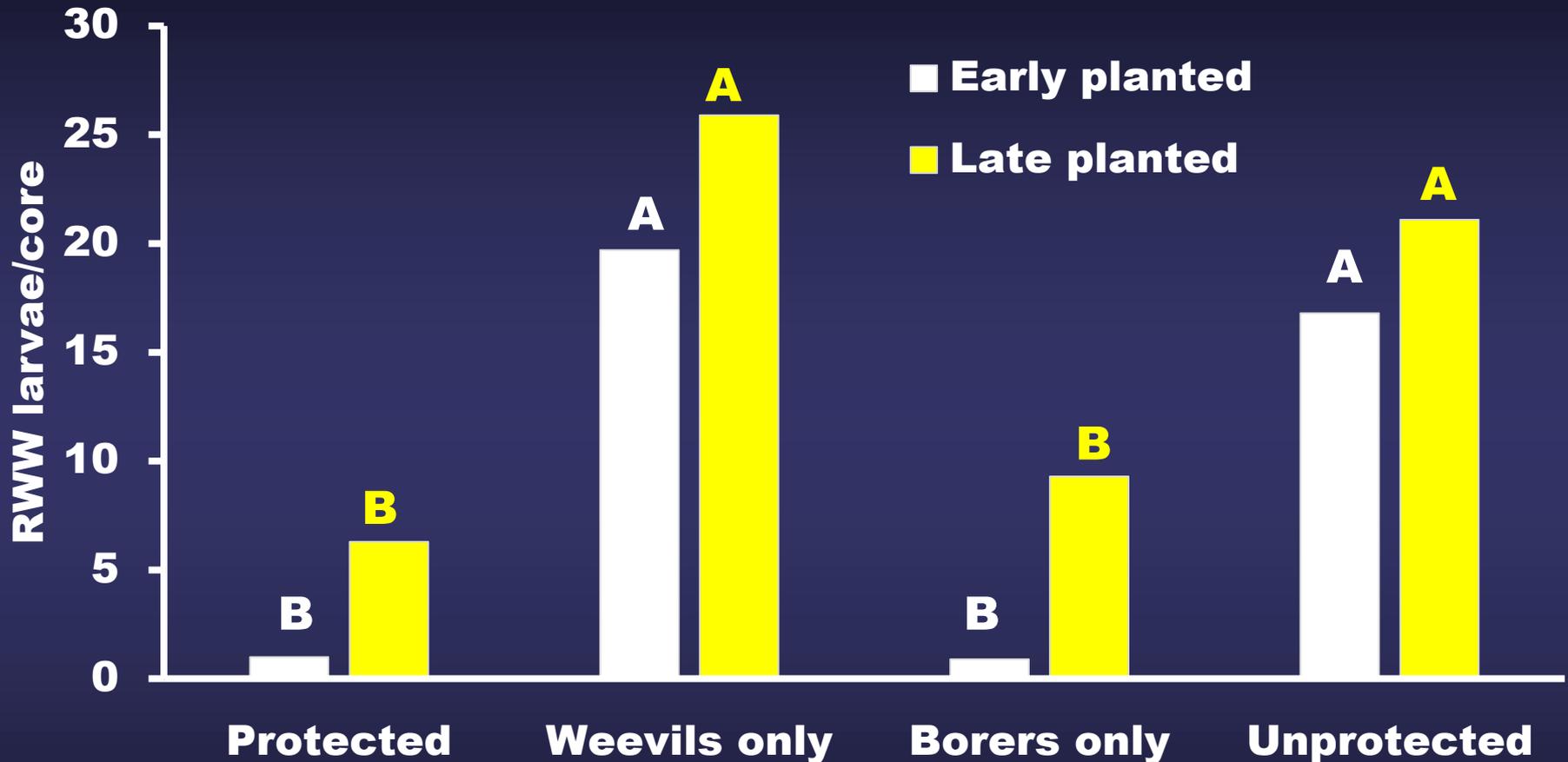
–Fortenza, CruiserMaxx, and NipsIt do not control borers.

Relative yield loss 2019

- Unprotected (RWW and borers)**
 - RWW only (Prevathon sprayed)**
 - Borers only (Fortenza + Cruiser)**
 - Protected (Dermacor X100)**
-
- Early planted (March 29) and late (May 17)**



Relative Yield Loss Trial 2019



Means from 3 corers per plot at two sampling dates

Early: $F = 57.8$, $df = 3, 12$; $P < 0.001$

Late: $F = 27.7$, $df = 3, 12$; $P < 0.001$

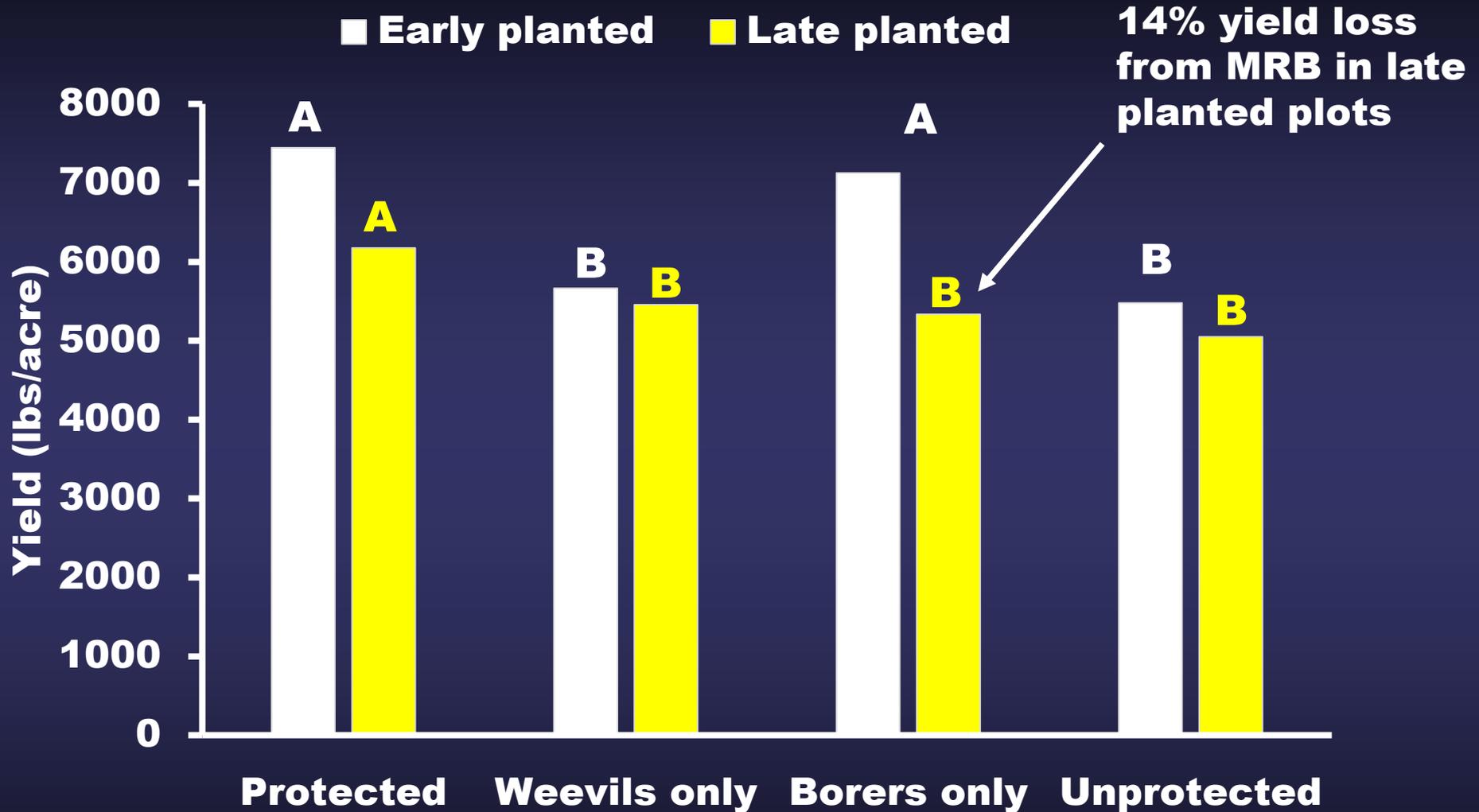
Relative Yield Loss Trial 2019



Early: $F = 57.8$, $df = 3, 12$; $P < 0.001$

Late: $F = 27.7$, $df = 3, 12$; $P < 0.001$

Relative Yield Loss Trial 2019



Early: $F = 15.4$, $df = 3, 12$; $P < 0.001$

Late: $F = 3.7$, $df = 3, 12$; $P < 0.044$

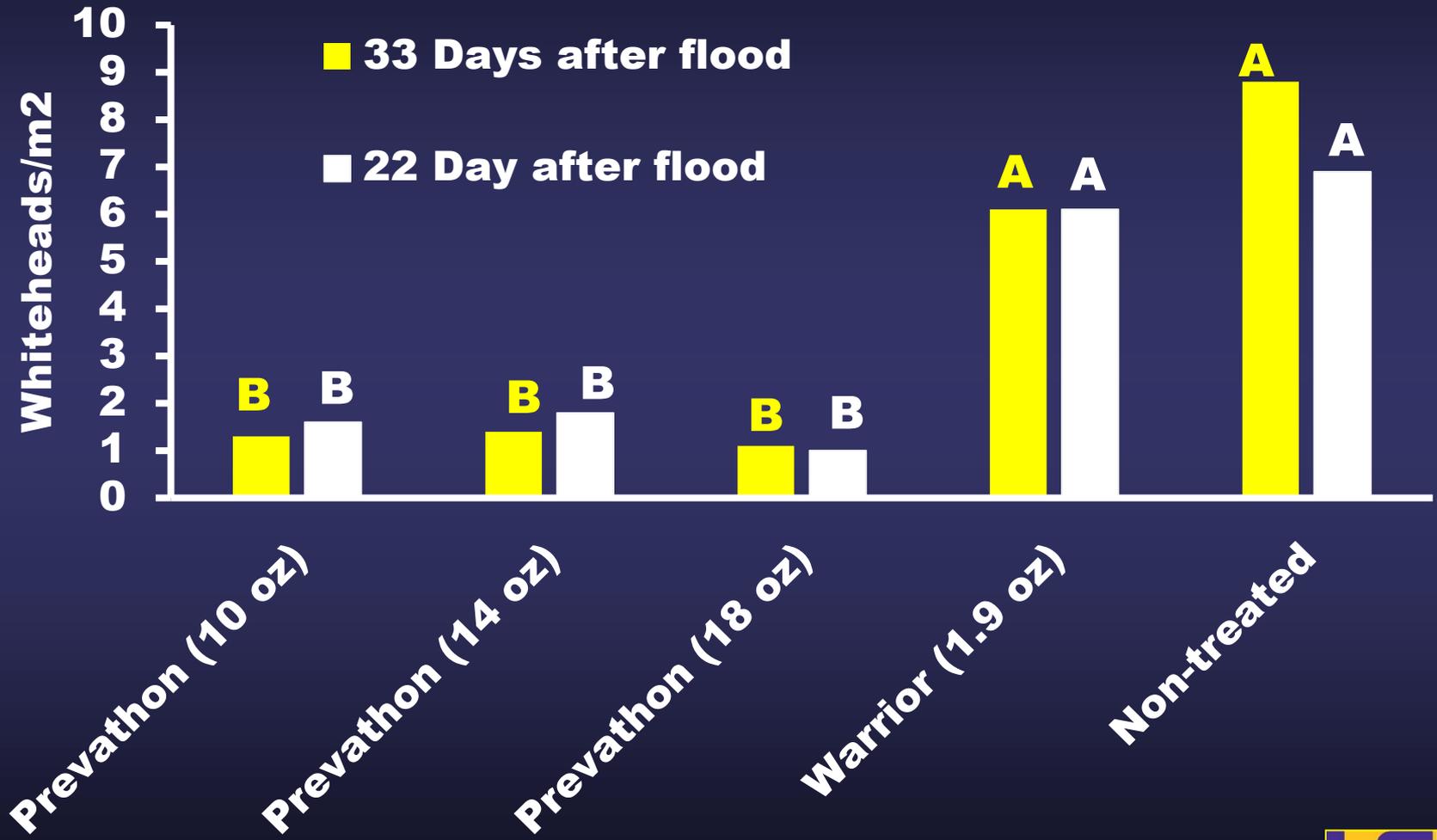
Stem Borer Management



Stem borer injury to leaf sheath

- **Begin scouting in late tillering**
- **Pyrethroids can be applied with fungicides for sheath blight**
- **Once white-heads are present, losses have already occurred**

Foliar insecticidal control - 2018



Prevathon registration in rice is pending