Stem Borers Attacking Sugarcane

Mexican Rice Borer (MRB)  
*Eoreuma loftini*

Sugarcane Borer (SCB)  
*Diatraea saccharalis*
Susceptible cultivars are often >5X more injured than resistant varieties when not protected.
Scouting for Borers

Leaf sheath injury

“Treatable” larvae

Sugarcane Borer
Scouting for Borers

MRB ≠ SCB

Larvae often feed lower in the canopy
Eggs laid on dry leaves
Larvae move up

Enter into leaf tissues

More rapid stalk entry

Feeding behavior differs between varieties

Scouting research is ongoing
Scouting for Borers

Mexican Rice Borer Injury
Scouting for Borers

Mexican rice borer

Larvae enter into leaf mid-ribs.
Pheromone Trap Assisted Scouting

Attract male moths from ≈100 yards
Pheromone Trap Assisted Scouting

Efficiently detect population spikes
Linear regression shows a direct correlation between adult population density and larval infestation ($F = 280.7$, $df = 1, 114$, $P < 0.0001$).

\[ y = 0.2128x - 0.0383 \]

$\text{r}^2 = 0.7112$
Seasonal Populations in Sugarcane

Data from Beaumont (TX)
Pheromone Trap Assisted Scouting

Where will it fit in Louisiana?

• Can effectively detect spring emergence
• Identify “Hot Spots”
• Guide scouting frequency
Scouting for Borers

Mexican Rice Borer Injury
Scouting for Borers

Mexican Rice Borer Injury
Scouting for Borers

Mexican Rice Borer Injury
Small-plot Back Pack Pack Trials
Insecticides for SCB+MRB Control
Vermilion Parish, 2017

Percent Bored Internodes

Percent Bored MRB

Percent Bored SCB

Percent Bored Total

Nontreated Check
Confirm (8 oz/acre)
Prevathon (14 oz/acre)
Prevathon (20 oz/acre)
Diamond (9 oz/acre)
Besiege (8 oz/acre)
Aerial Insecticidal Control of MRB in the Rio Grande Valley
Insecticidal Management of MRB in the RGV

Larval infestations on 8/21/2012 exceeded 5% of stalks with larvae on plant surfaces.
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Conclusions and Ongoing Work

Situation is developing
Currently appears manageable

Management of mixed infestations as a complex should be effective

Pheromone traps can provide useful data

Scouting research needed

Variety research in Louisiana
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