Sugarcane Insects Update: Mexican Rice Borer Blake Wilson Field Crops Entomologist

Louisiana Agricultural Technology and Management Conference

February 15, 2018





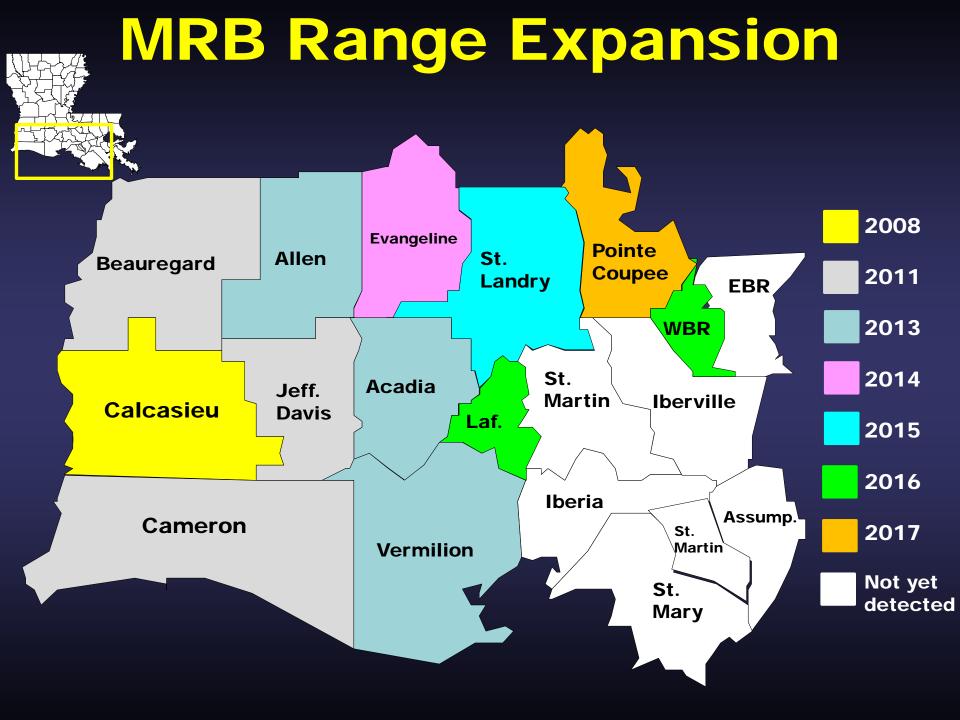
Stem Borers Attacking Sugarcane

Mexican Rice Borer (MRB) *Eoreuma loftini*



Sugarcane Borer (SCB) Diatraea saccharalis





Stem Borers IPM Resistant Varieties

Susceptible

- HoCP 00-950
- HoCP 96-540
- Ho 05-961
- HoCP 04-838 (MRB)

Intermediate

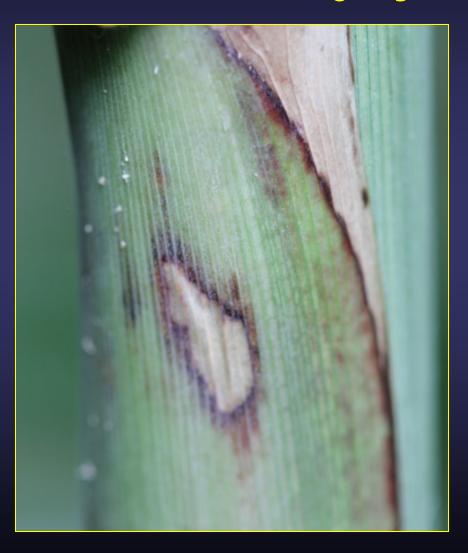
- HoCP 07-613
- L 01-283
- L 03-371

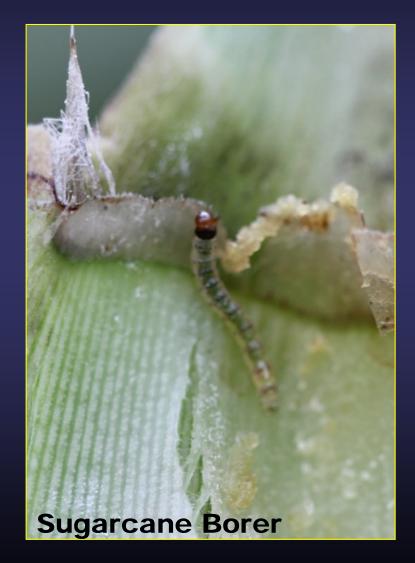
Resistant

- L 01-299
- HoCP 85-845
- HoCP 04-838 (SCB)

Susceptible cultivars are often >5X more injured than resistant varieties when not protected.

Scouting for Borers Leaf sheath injury "Treatable" larvae





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 varienes

Scouting research is ongoing



Scouting for Borers Mexican rice borer



Larvae enter into leaf mid-ribs.

Pheromone Trap Assisted Scouting

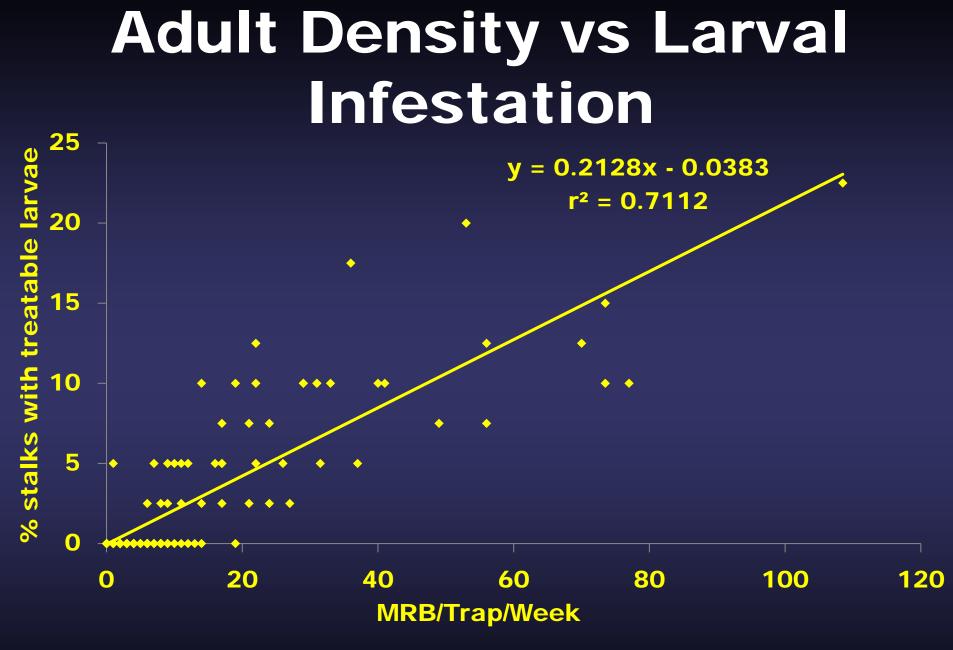




Attract male moths from ≈100 yards

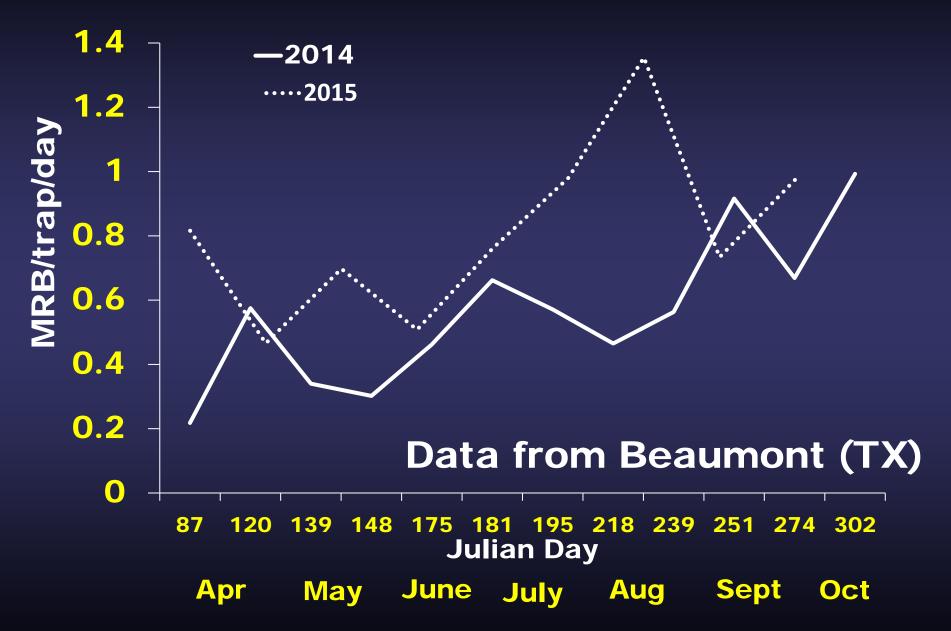
Pheromone Trap Assisted Scouting

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).

Seasonal Populations in Sugarcane



Pheromone Trap Assisted Scouting

Where will it fit in Louisiana?

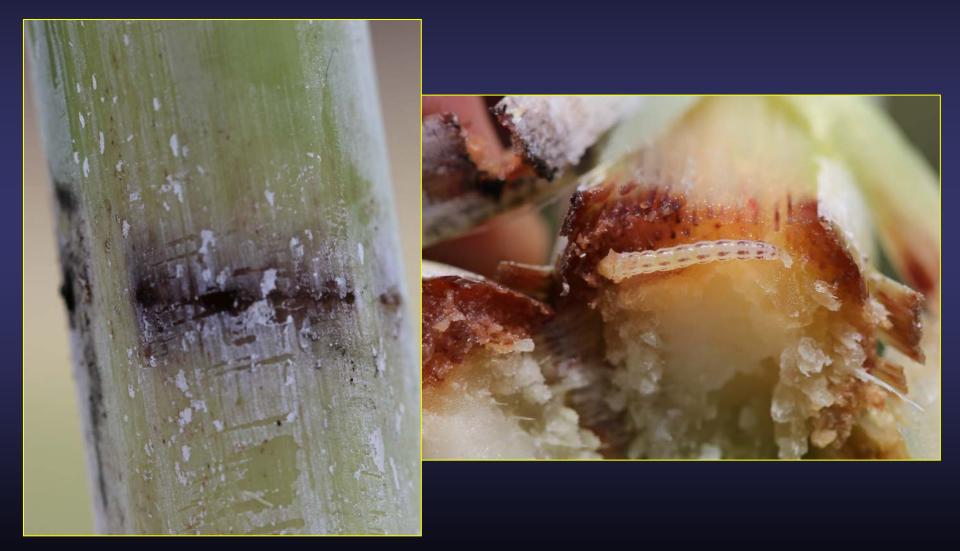
Can effectively detect spring emergence

Identify "Hot Spots"

Guide scouting frequency





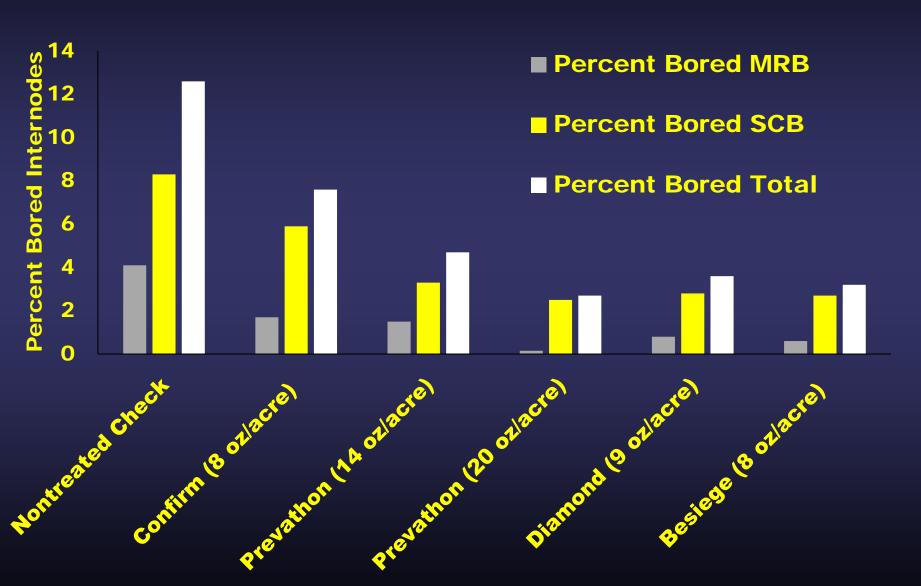






Small-plot Back Pack Trials

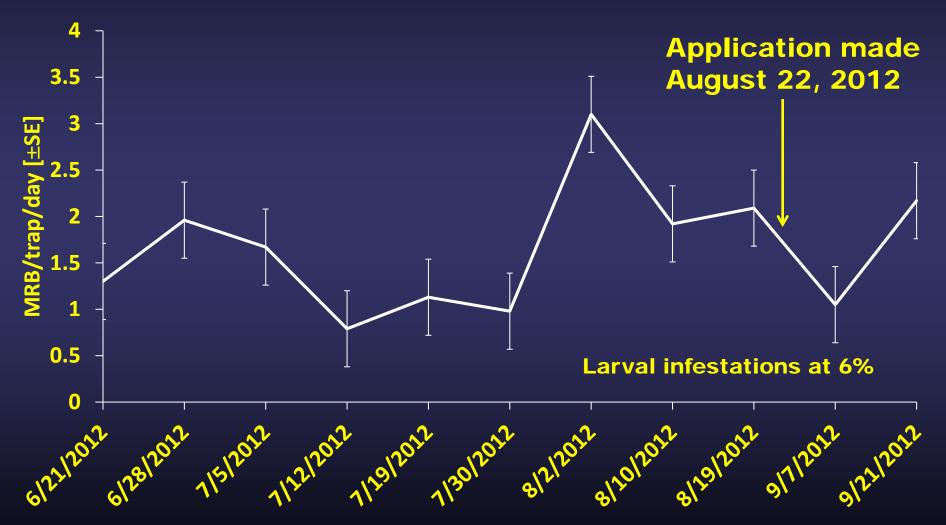
Insecticides for SCB+MRB Control Vermilion Parish, 2017



Aerial Insecticidal Control of MRB in the Rio Grande Valley

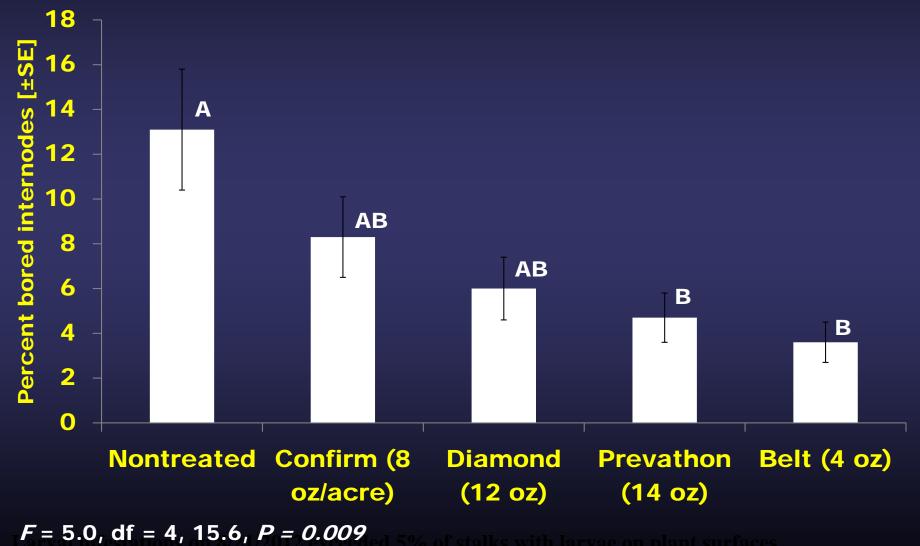


Insecticidal Management of MRB in the RGV



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

Insecticidal Management of MRB in the RGV



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

Acknowledgements

Funding from AMSCL and industry partners

Grower and consultant cooperators Lance Rodriguez Tony Prado Duda Farms

Julien Beuzelin and Matt VanWeelden Mo Way Megan Mulcahy and Luna Lama





Questions?



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