

Mexican Rice Borer Scouting

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Conference**

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Stem Borers Attacking Sugarcane

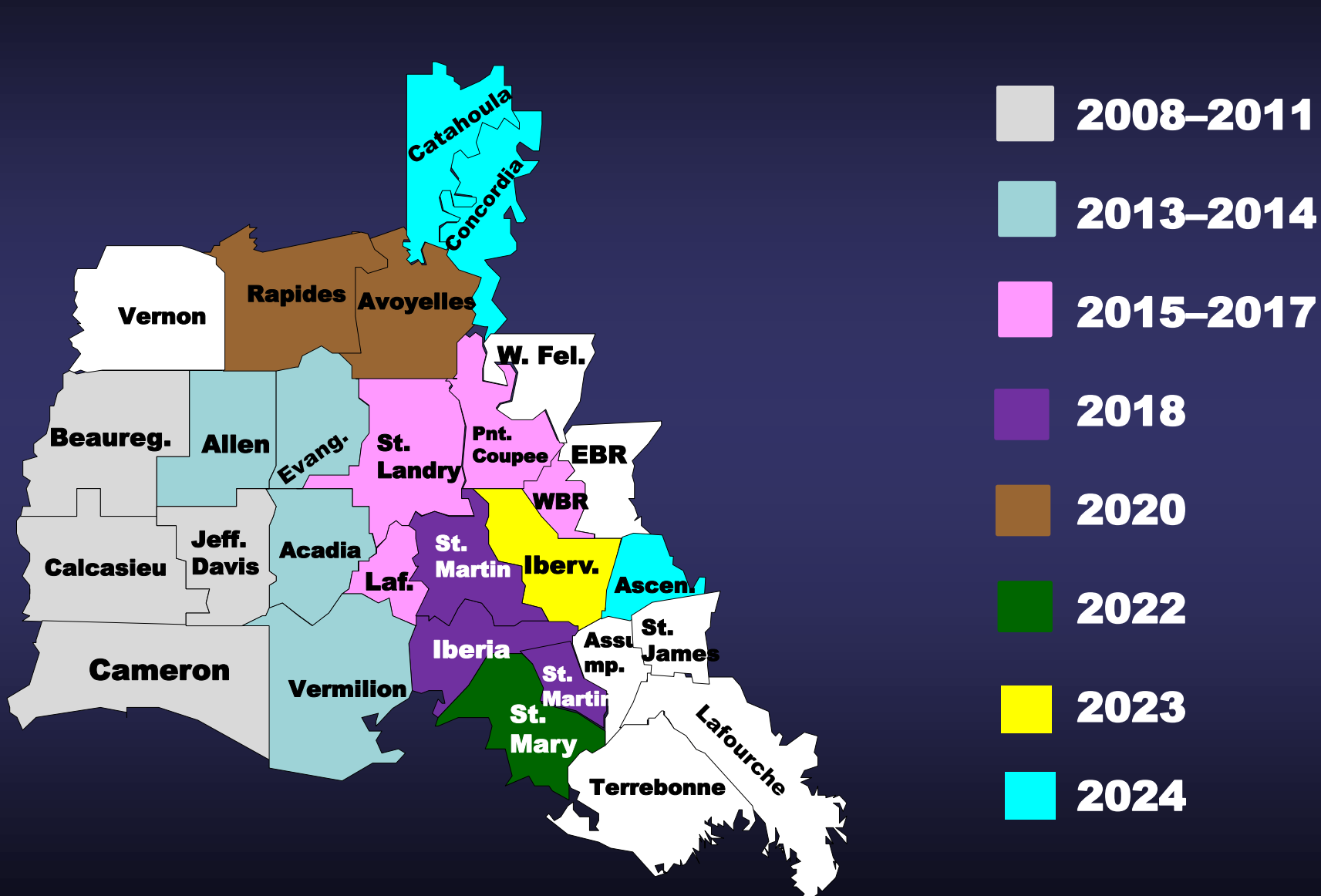
Mexican Rice Borer (MRB)
Eoreuma loftini



Sugarcane Borer (SCB)
Diatraea saccharalis



MRB Range Expansion



Scouting for Borers

MRB \neq SCB

Larvae often feed lower in the canopy

Eggs laid on dry leaves

Larvae move up

Enter into leaf tissues

More rapid stalk entry

Scouting research is ongoing

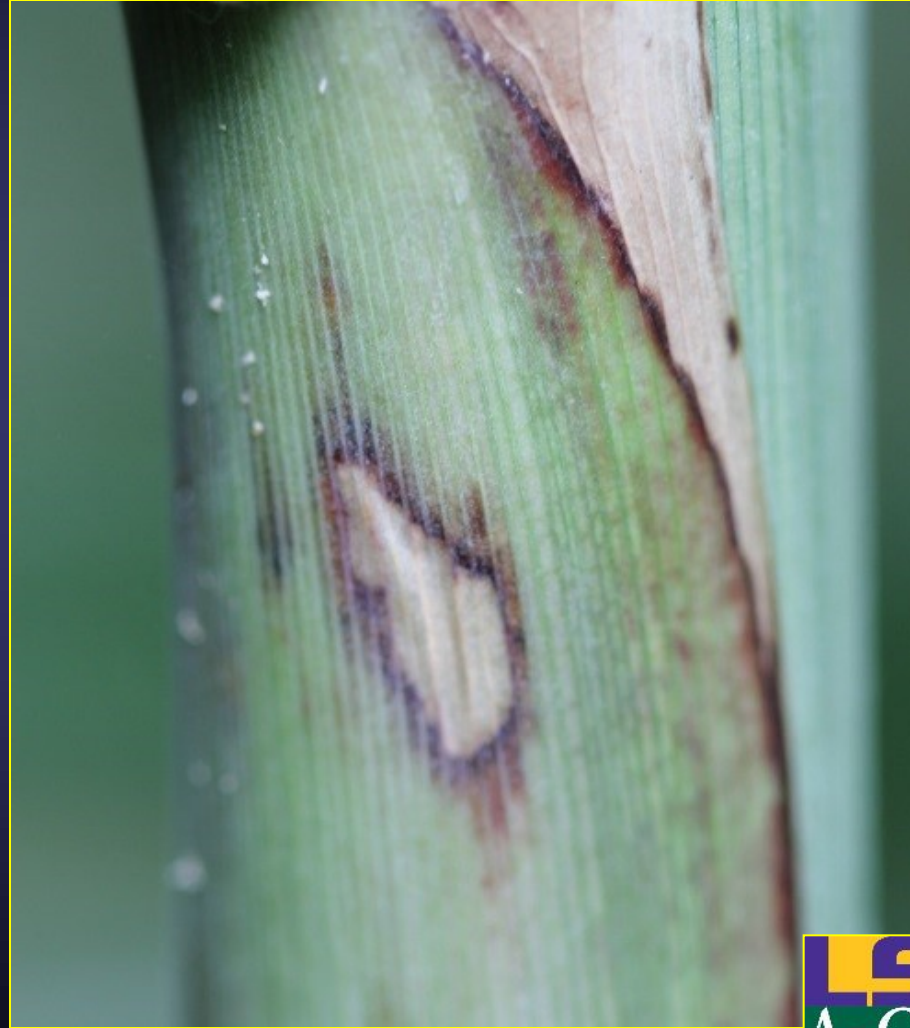


Scouting for Borers

Mexican Rice Borer Injury



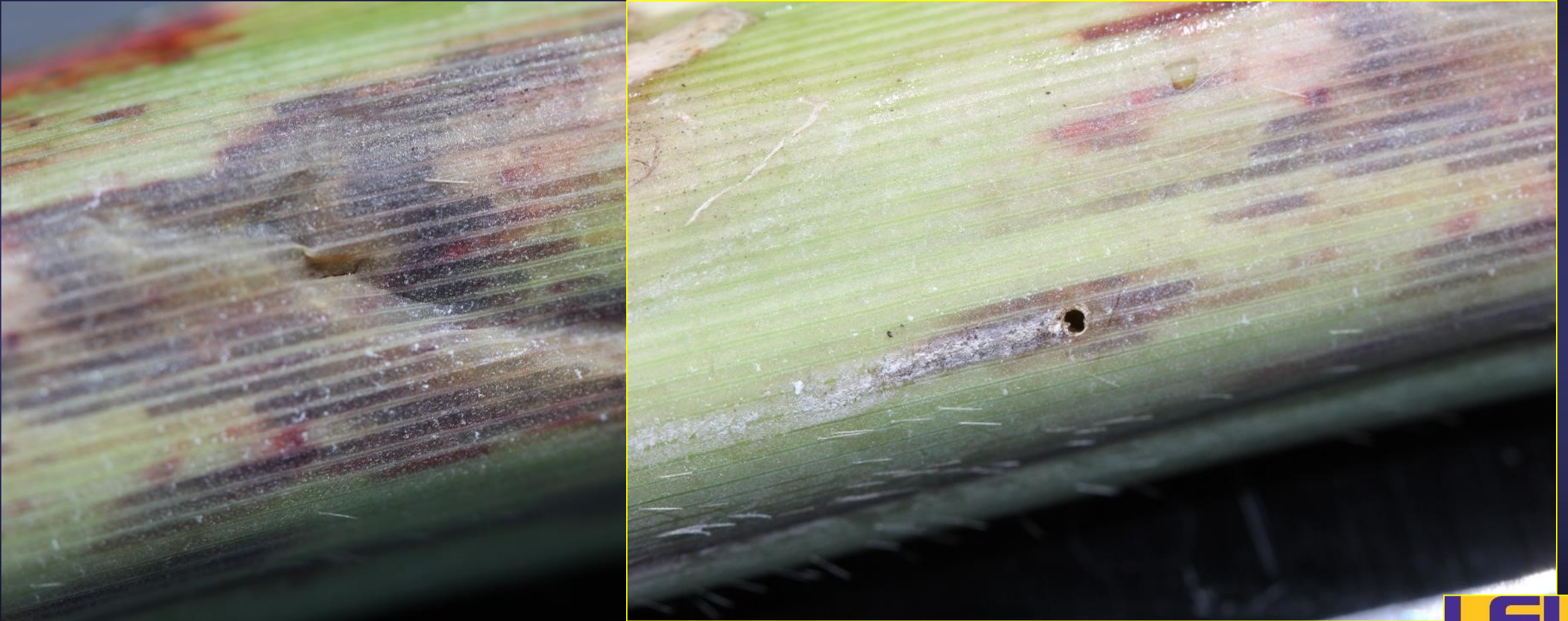
MRB



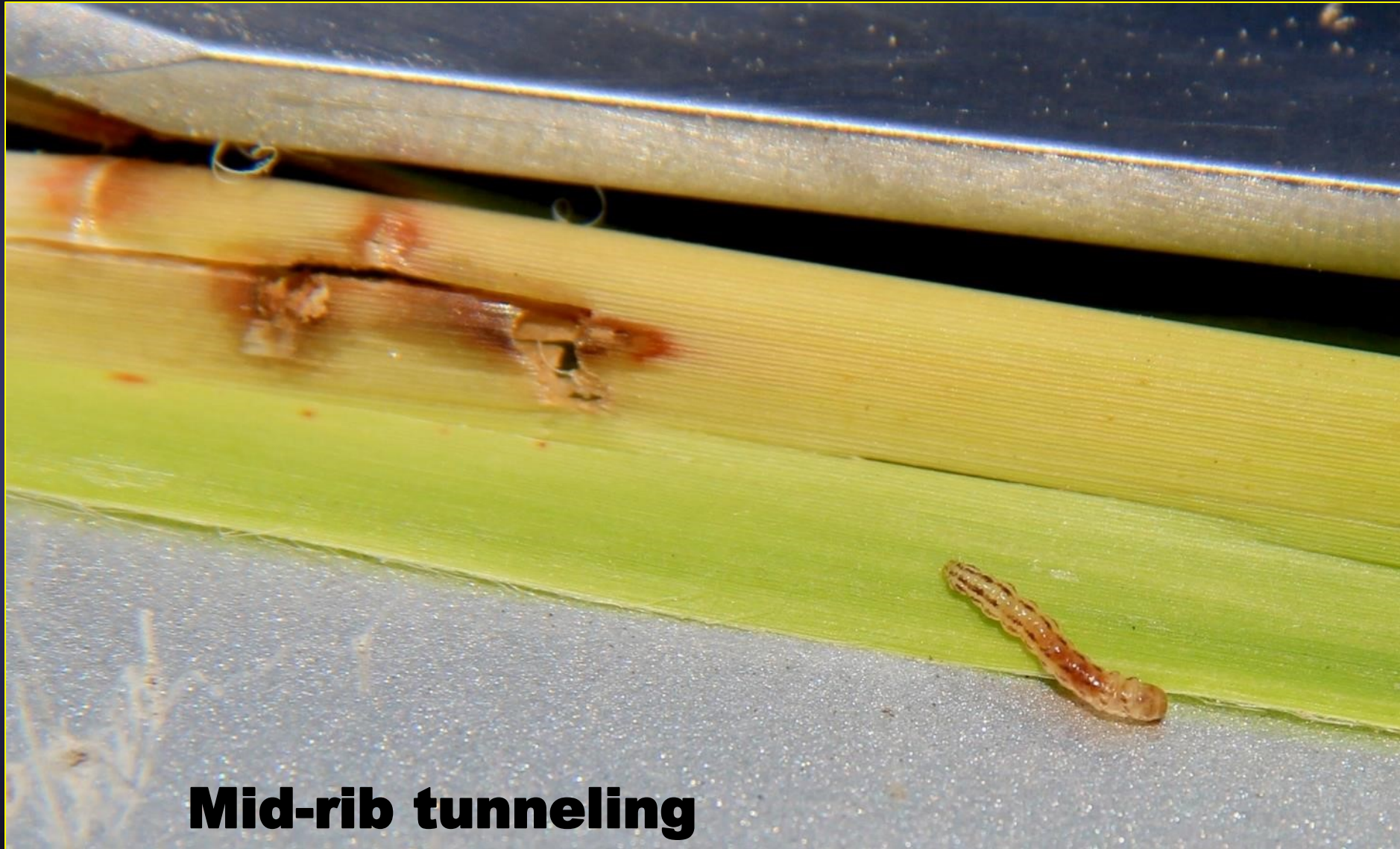
SCB

Scouting for Borers

Mexican Rice Borer Injury



Scouting for Borers



Mid-rib tunneling

Scouting for Borers

Mexican Rice Borer Injury



Photos by Nick Daigle

Scouting for Borers

Mexican Rice Borer Injury



Scouting for Borers

Mexican Rice Borer Injury



Scouting for Borers

Mexican Rice Borer Injury



Scouting for Borers

Mexican Rice Borer Injury



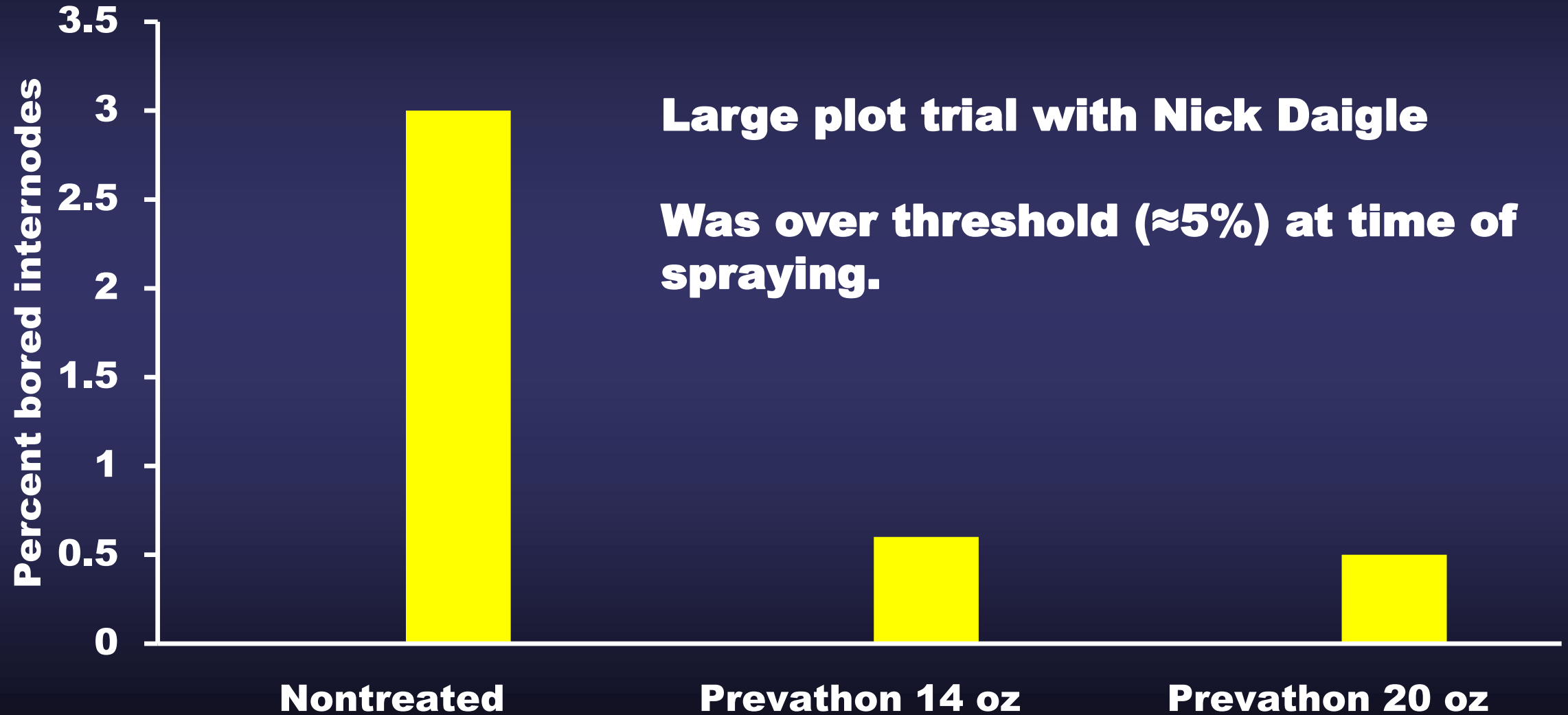
Scouting for Borers

Mexican Rice Borer Injury



Photo by Schyler Thibodaux

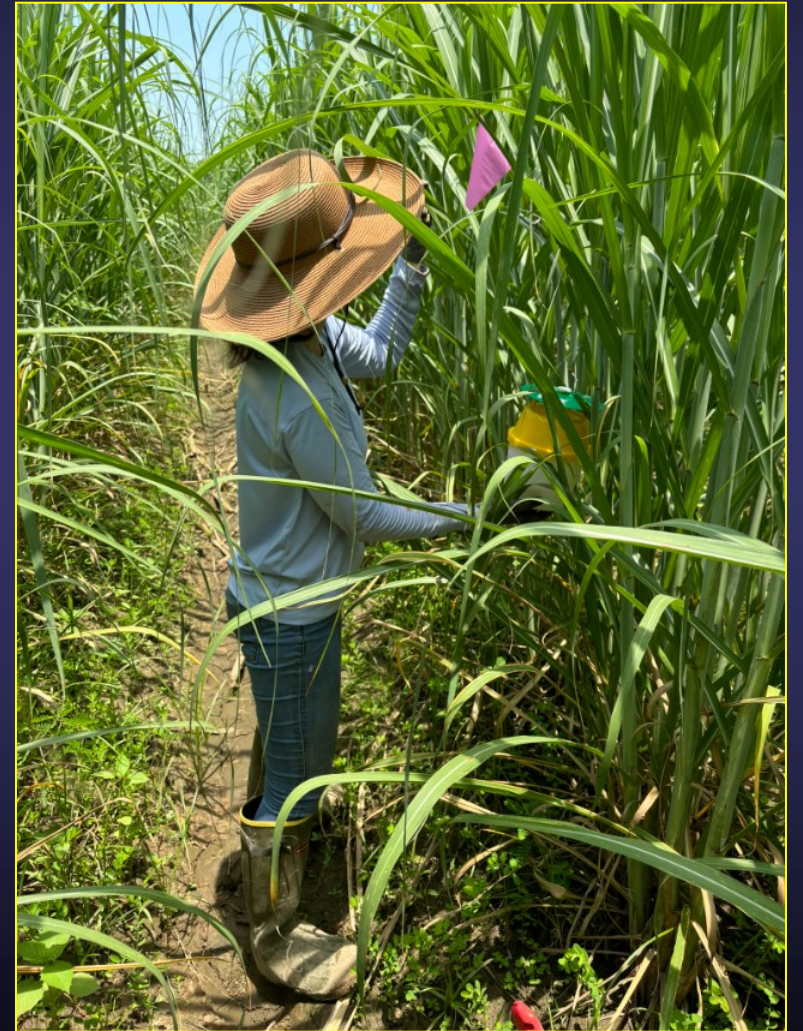
On-farm insecticide trial, 2020, Vermilion Par. (L 01-299)



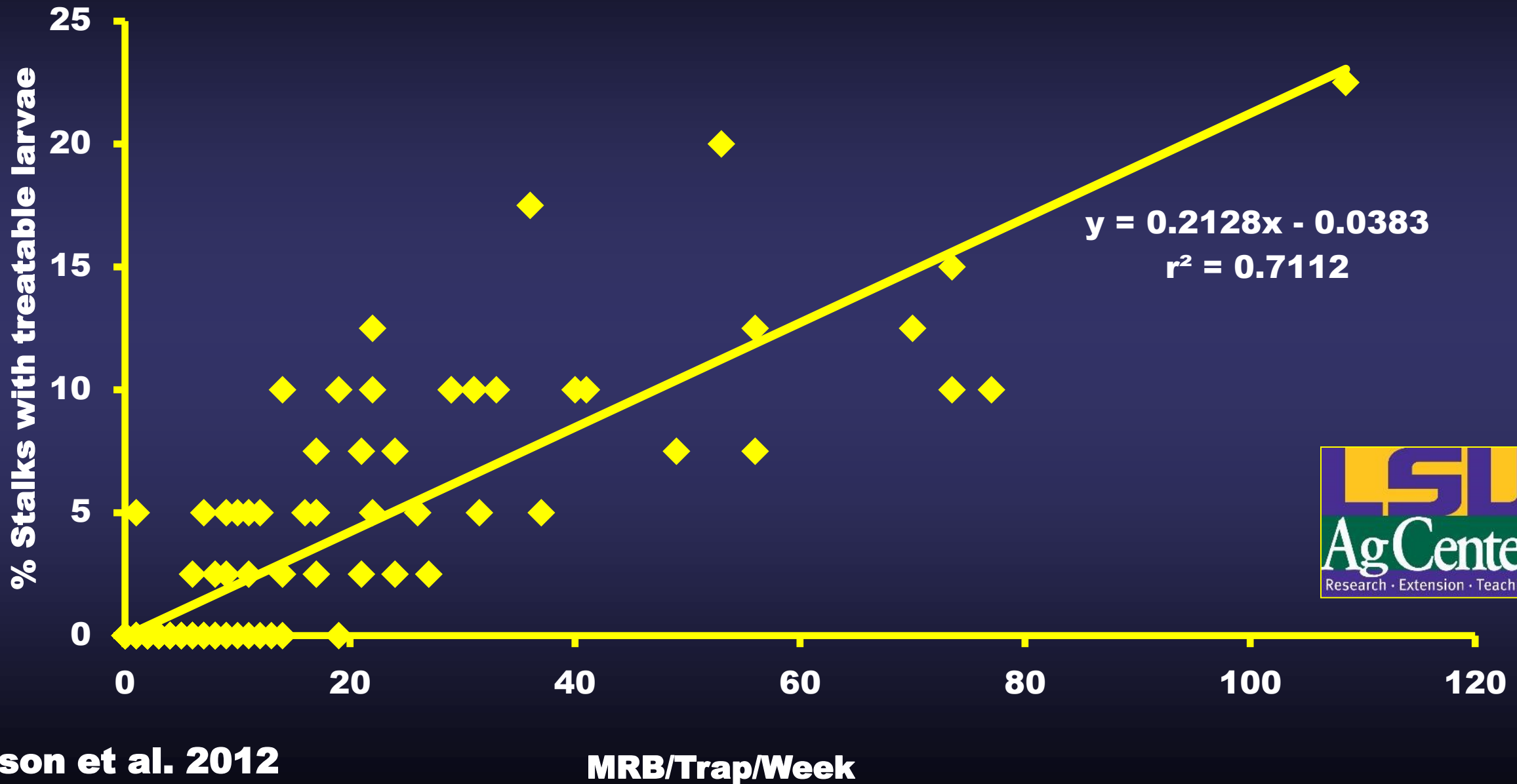
Pheromone Trap Monitoring



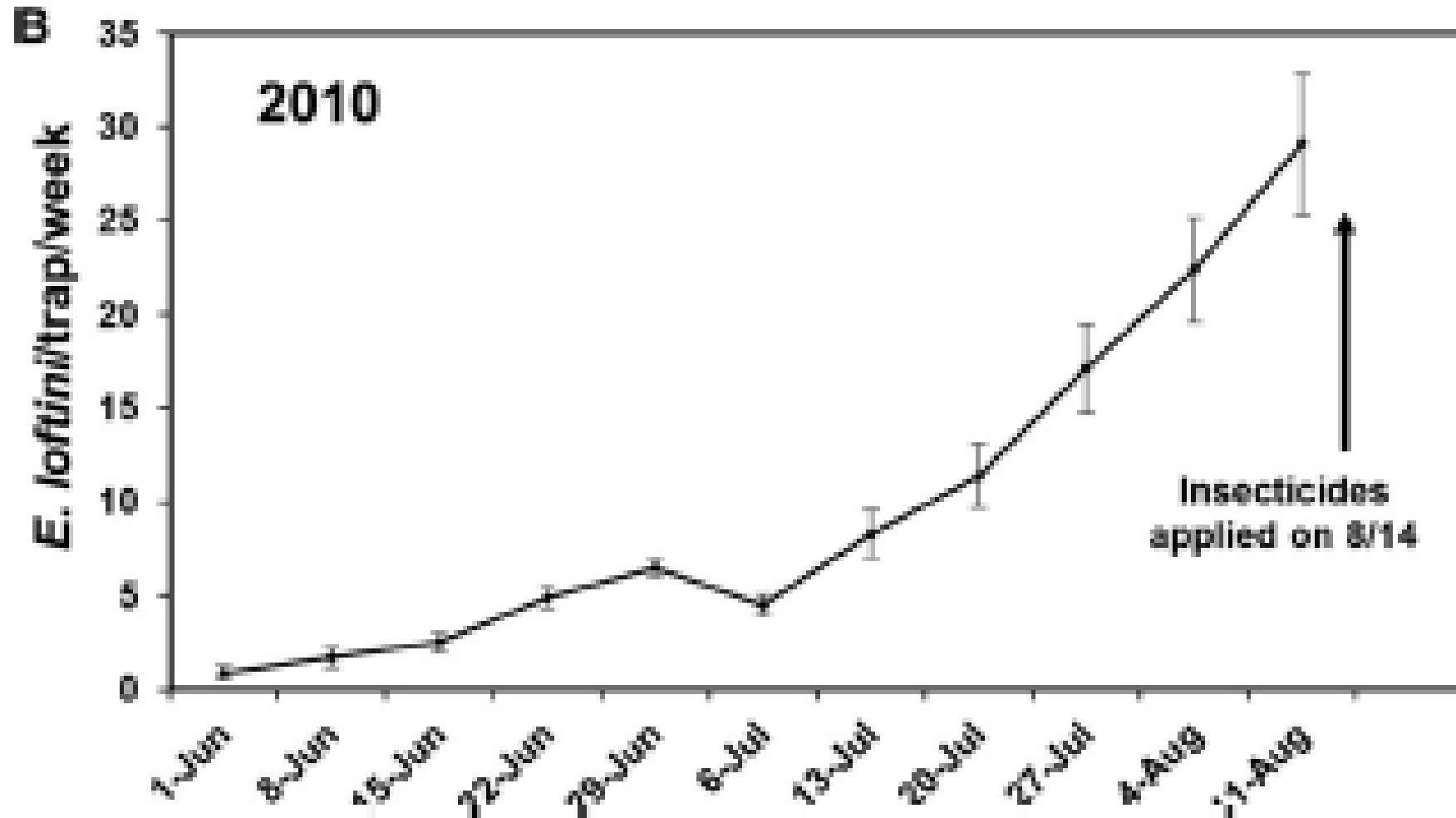
Pheromone trap-assisted scouting



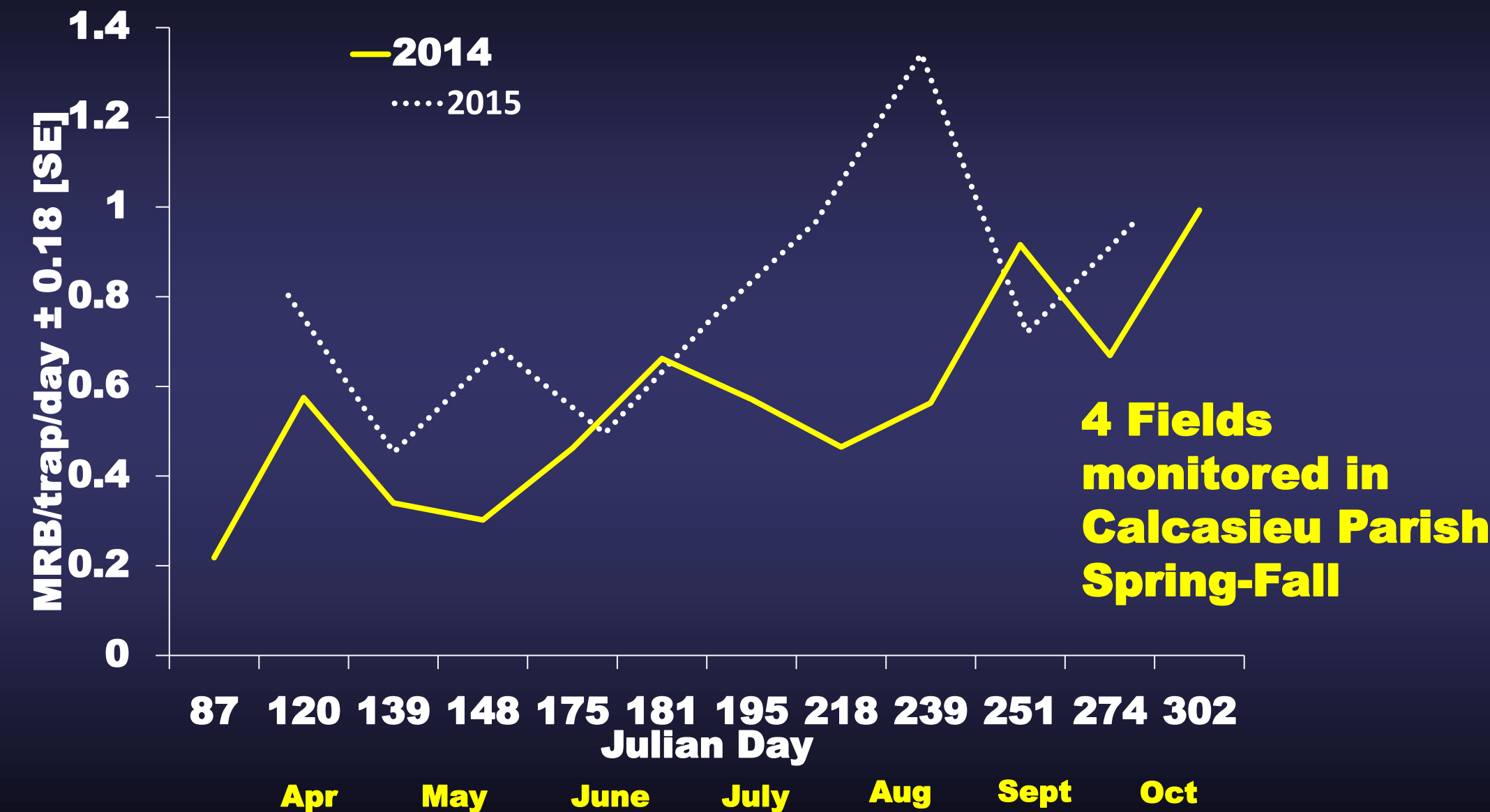
MRB Sampling Rio Grande Valley 2010



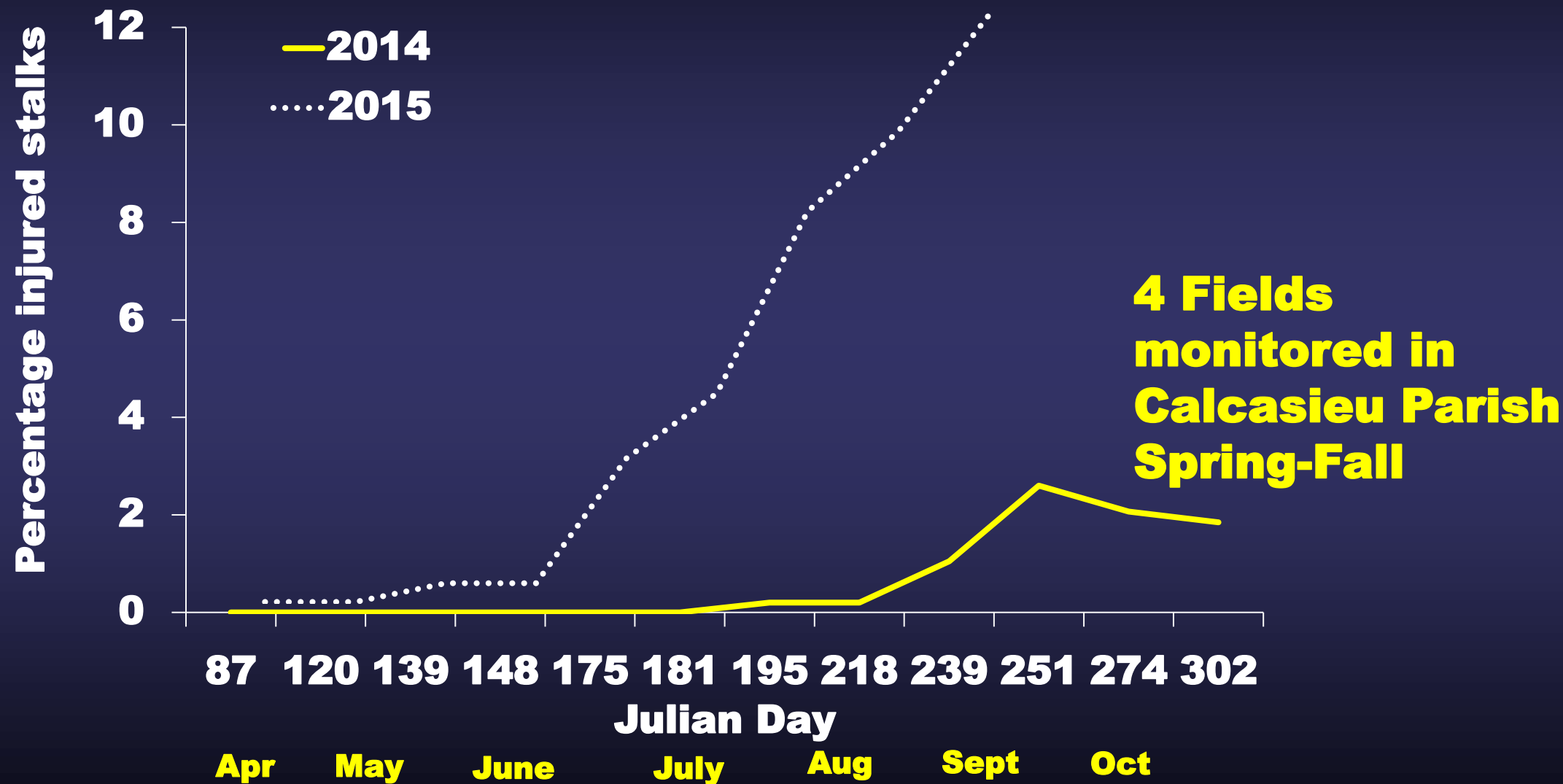
MRB Sampling Rio Grande Valley 2010



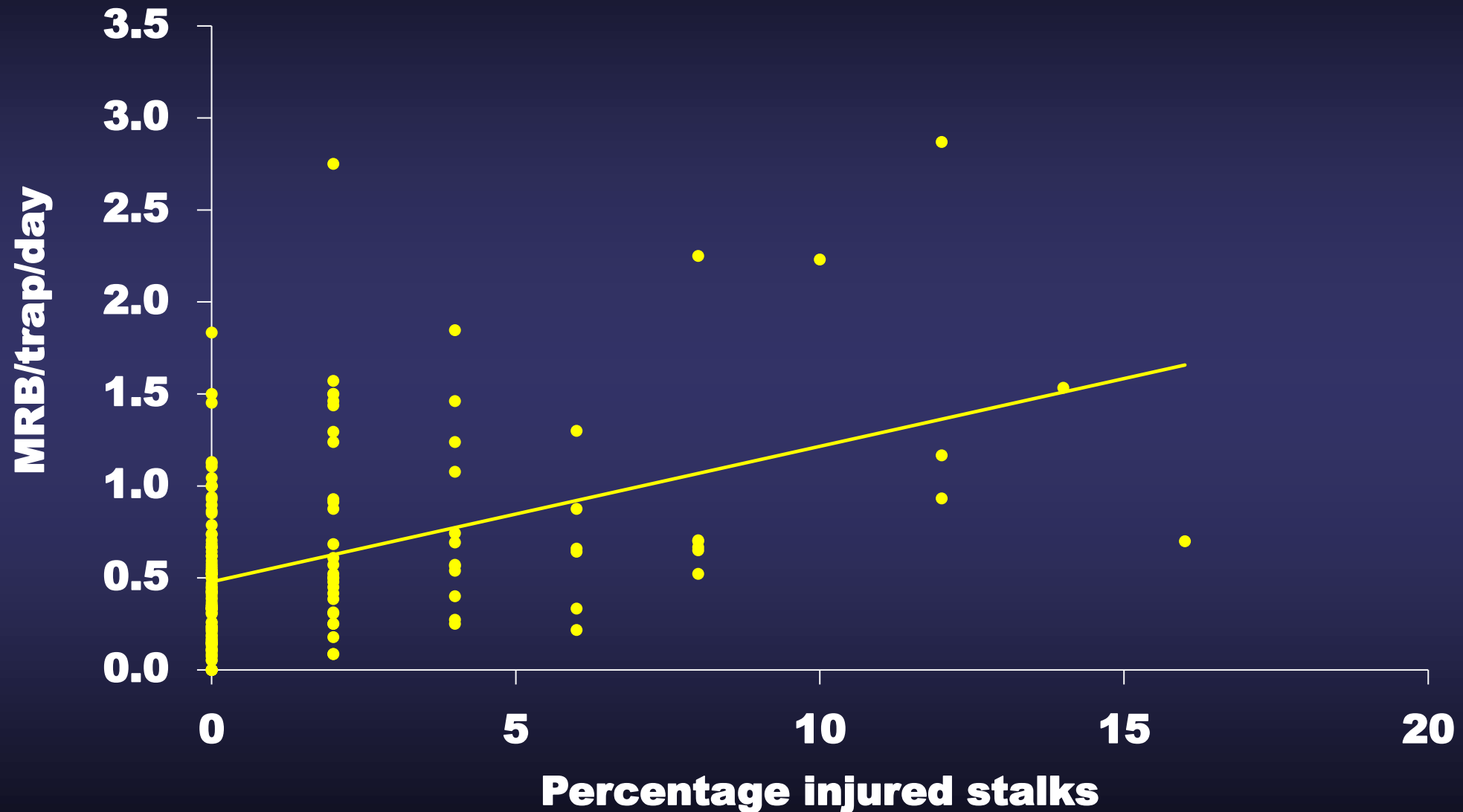
Pheromone trap-assisted scouting in sugarcane



Pheromone trap-assisted scouting in sugarcane



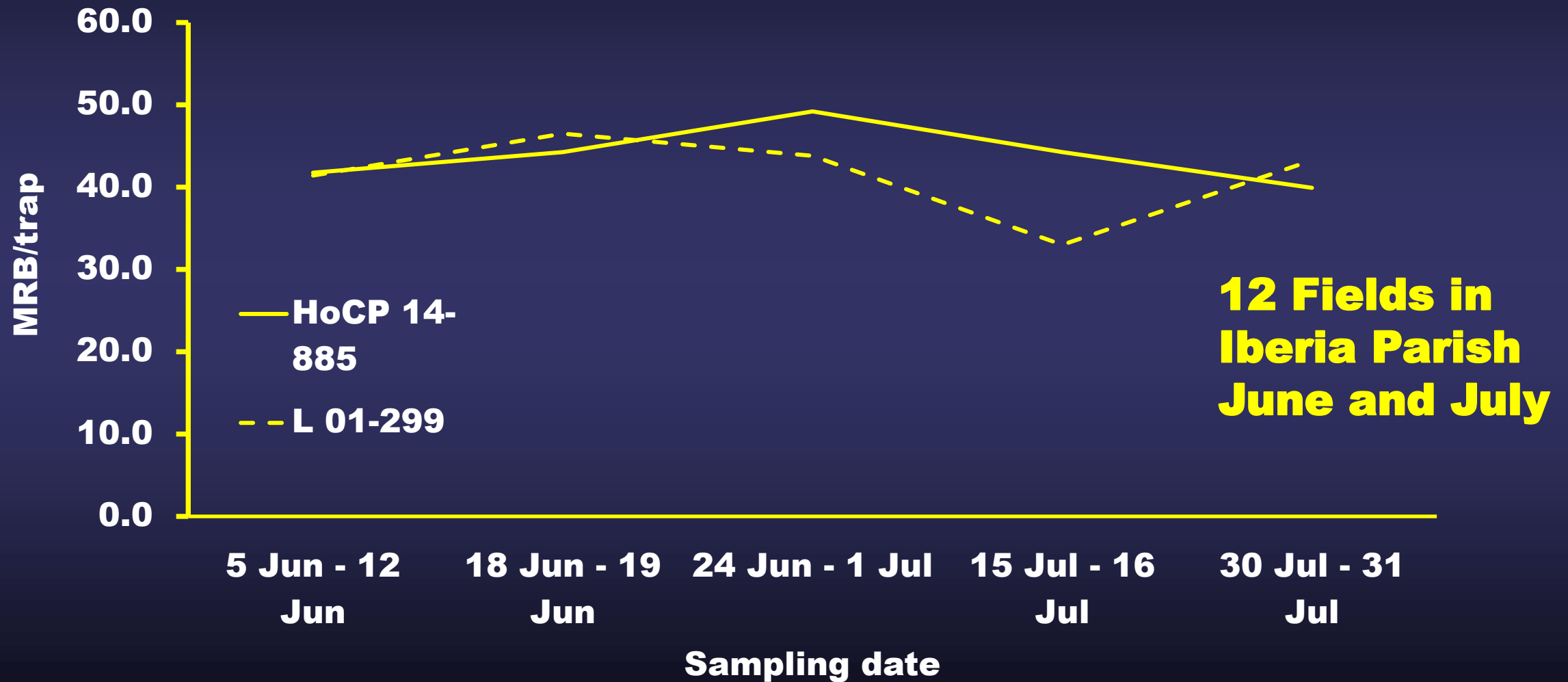
Pheromone trap-assisted scouting in sugarcane



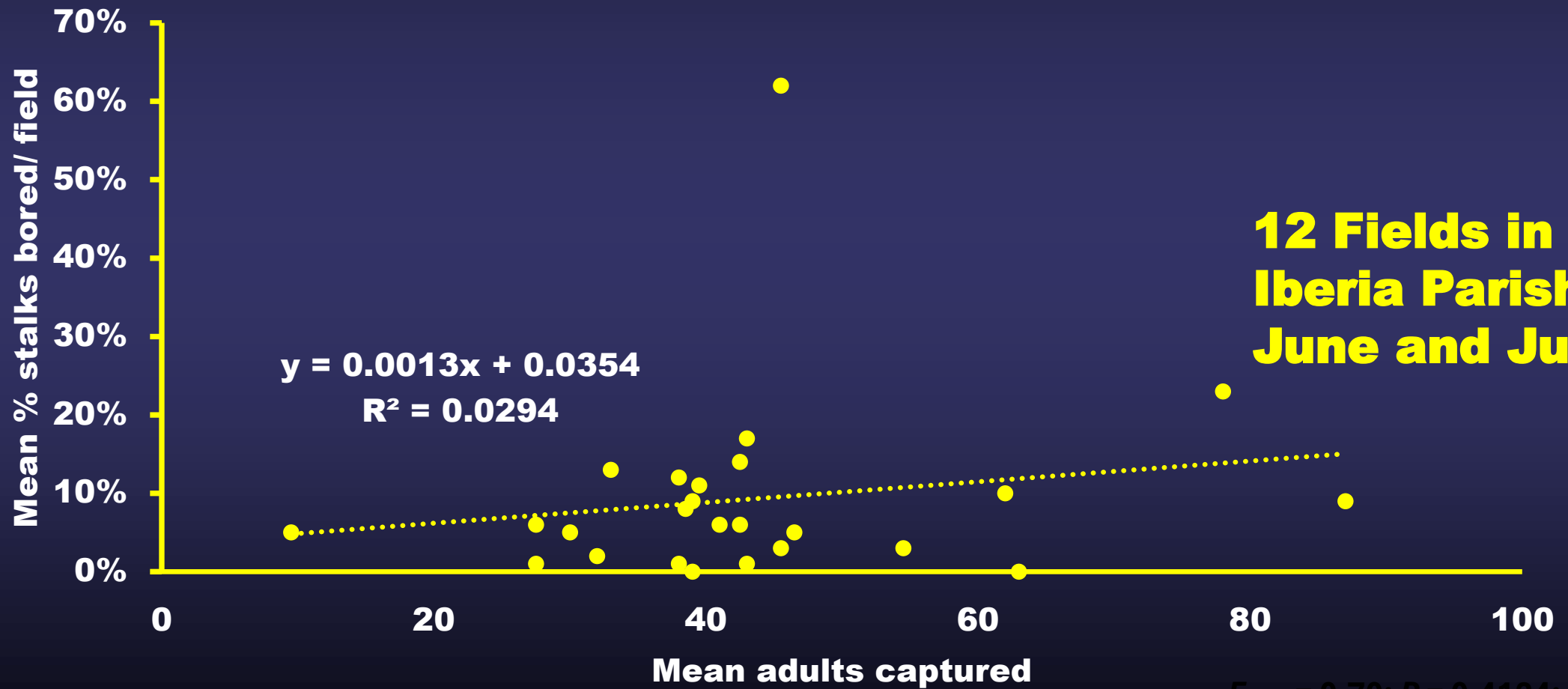
A linear relationship occurred ($F = 37.00$, $df = 1, 160$, $P < 0.001$, $R^2 = 0.183$, $\text{adj MSE} = 0.46$) between the percentage of injured stalks and daily trap capture

Wilson et al. 2017

MRB Trapping Teche Region - 2024

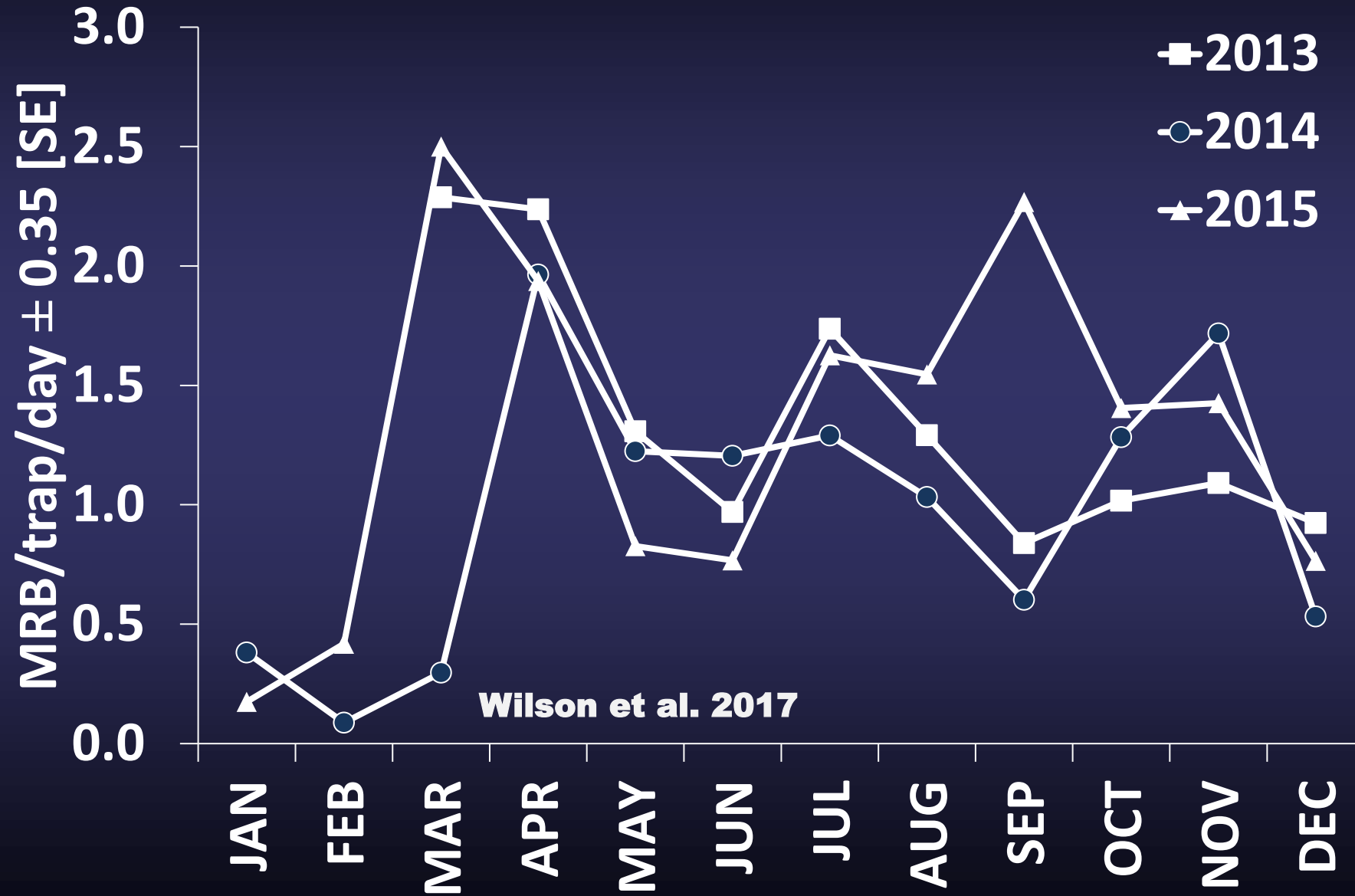


No correlation between adults captured and larval infestations



$$F_{1,23} = 0.70; P = 0.4124; R^2 = 0.0294$$

Pheromone Trap Monitoring



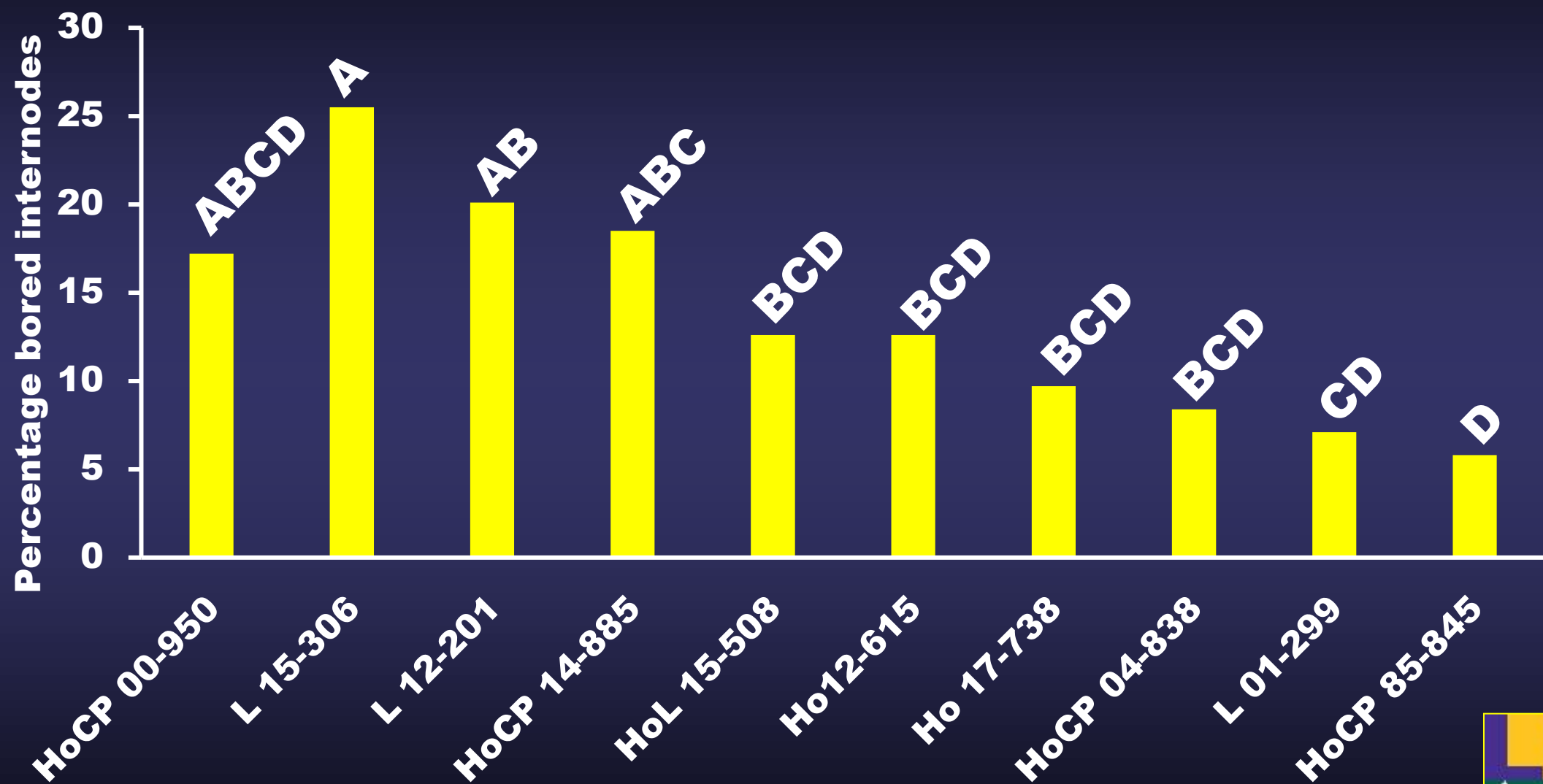
**Can be used
early in the
season to
identify
“Hot spots”**

Can pheromone traps help MRB scouting?



- **Useful for regional/seasonal monitoring**
- **Can't replace/reduce larval scouting**
- **More research needed**

MRB Variety Trial – Iberia Station 2024



P < 0.05



Conclusions

- **MRB in LA is manageable**
 - **Little evidence to suggest it's worse than SCB**
- **SCB IPM tactics are effective**
 - **Resistant varieties**
 - **Insecticides**
- **Scouting and threshold research is on-going**
- **Spread to remaining sugarcane regions inevitable**
- **MRB may be adapting to LA sugarcane ecosystems**

Acknowledgements

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Questions?

