

**Louisiana Agricultural Technology & Management Conference**

February 14, 2014

Marksville, LA

# **Insect Pest Management Update**

**Julien Beuzelin**

and

**Gene Reagan, Blake Wilson, Matt VanWeelden**



Dean Lee Research Station, Alexandria, LA

# Two Stem Borers Infest Sugarcane

**SCB**



T.E. Reagan

**MRB**

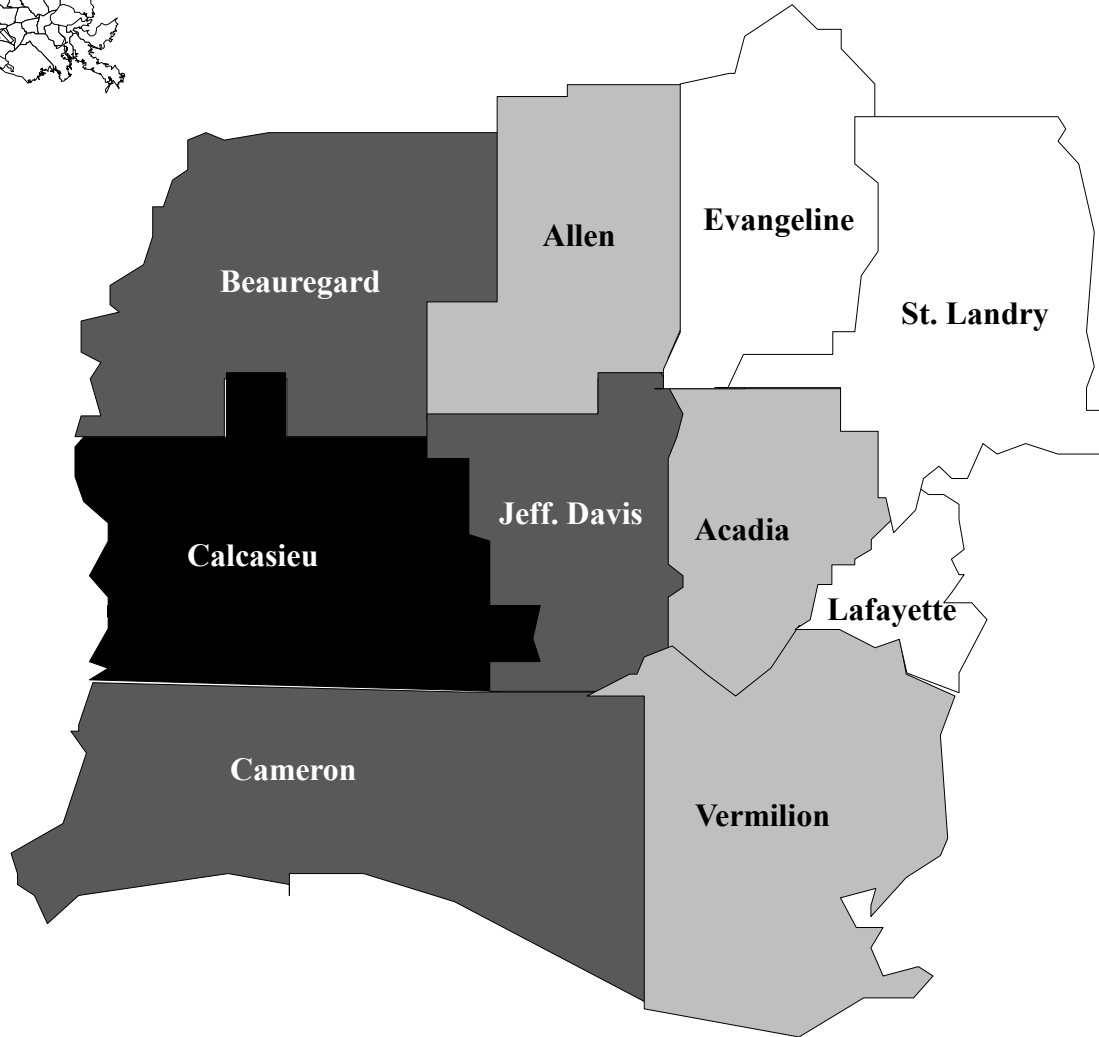
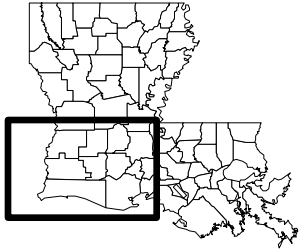






A. Mészáros

# MRB Adult Monitoring

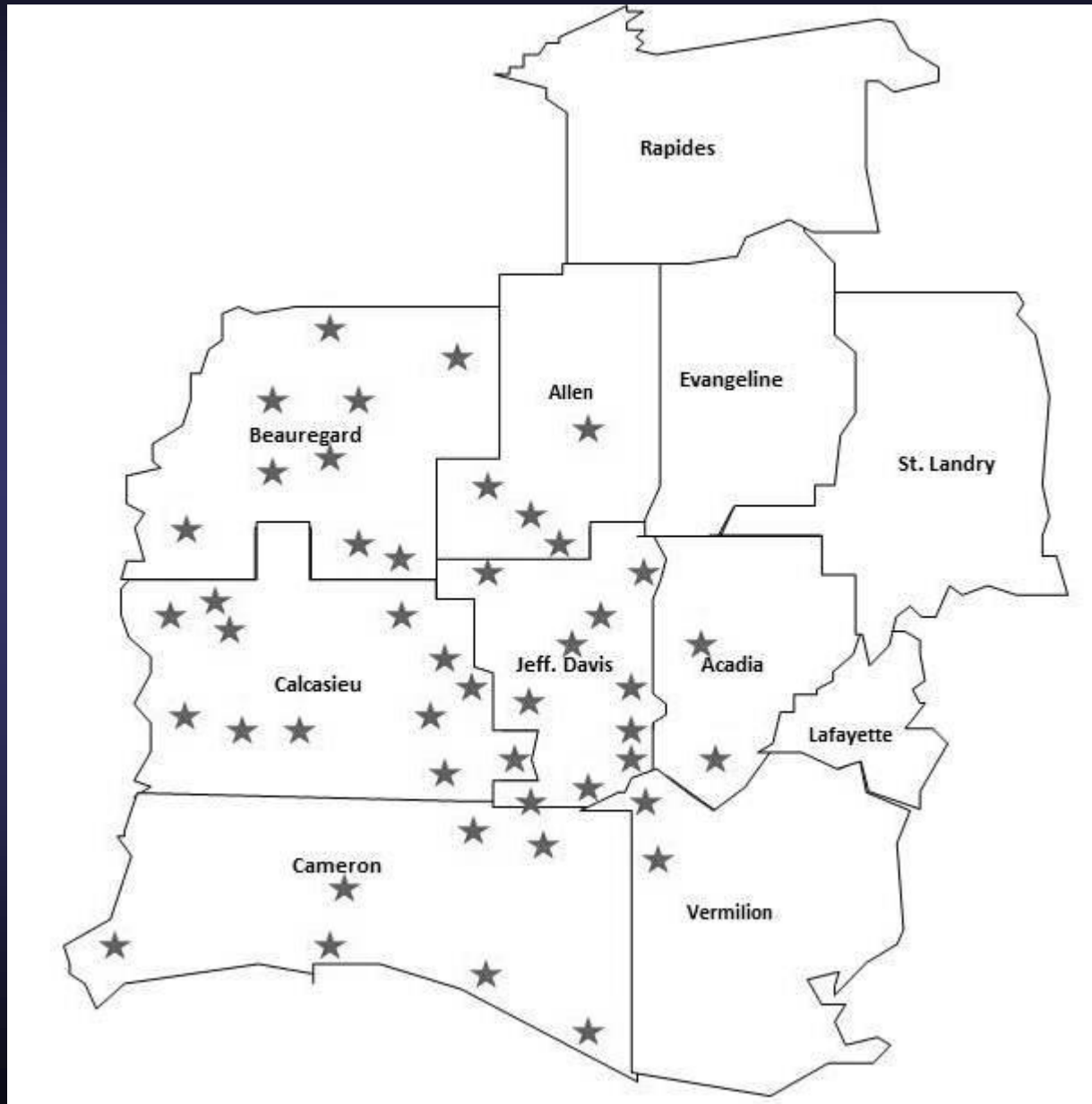


# MRB Range Expansion



-  2008-2009
-  2010-2011
-  2012-2013
-  Not yet detected

# MRB Pheromone Trap Catches, 2013

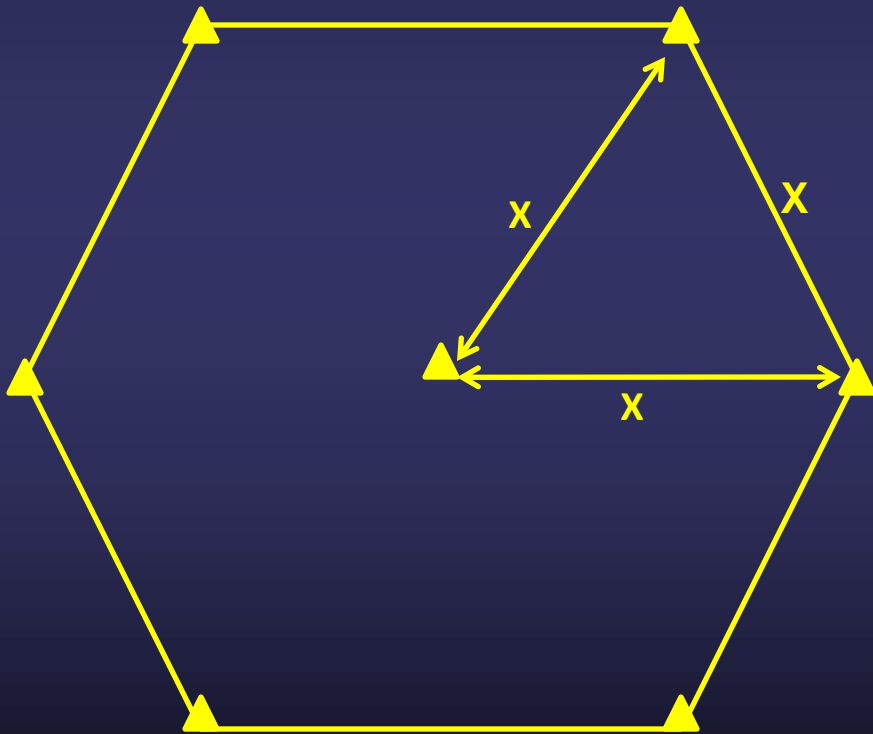


# MRB Pheromone Trapping



# MRB Pheromone Trap Radius of Attraction, 2011 and 2013

- Hexagonal arrays



▲ = Pheromone trap

- Intertrap distance ( $x$ ) is standard throughout each array
- Five distances  
 $x = 5, 25, 50, 100$  or  $250$  m
- Pheromone trap attraction  $< 250$  m

# Insecticides for Stem Borer Management

Trade Name	Company	MOA Group	Rate (fl oz/A)	
			SCB	MRB
Confirm	Gowan	18	6-8	16
Diamond	MANA	15	9-12	12
Belt	Bayer	28	3-4	3-4
Prevathon	Dupont		14-20	--
Karate	Syngenta	3A	1.6-2.6	1.6-2.6
Baythroid	Bayer		2.1	2.8
Besiege	Syngenta	28+3A	8-10	8-10



# Aerial Insecticidal Control of MRB Rio Grande Valley, TX, 2012

Treatment	Rate (fl oz/acre)	% Bored internodes
Confirm	16.0	7.8ab
Diamond	12.0	5.6ab
Belt	4.0	3.4b
Prevathon	20.0	3.6b
Untreated	--	12.6a

Cultivar CP 72-1210 (Plot size: 8-10 acres)

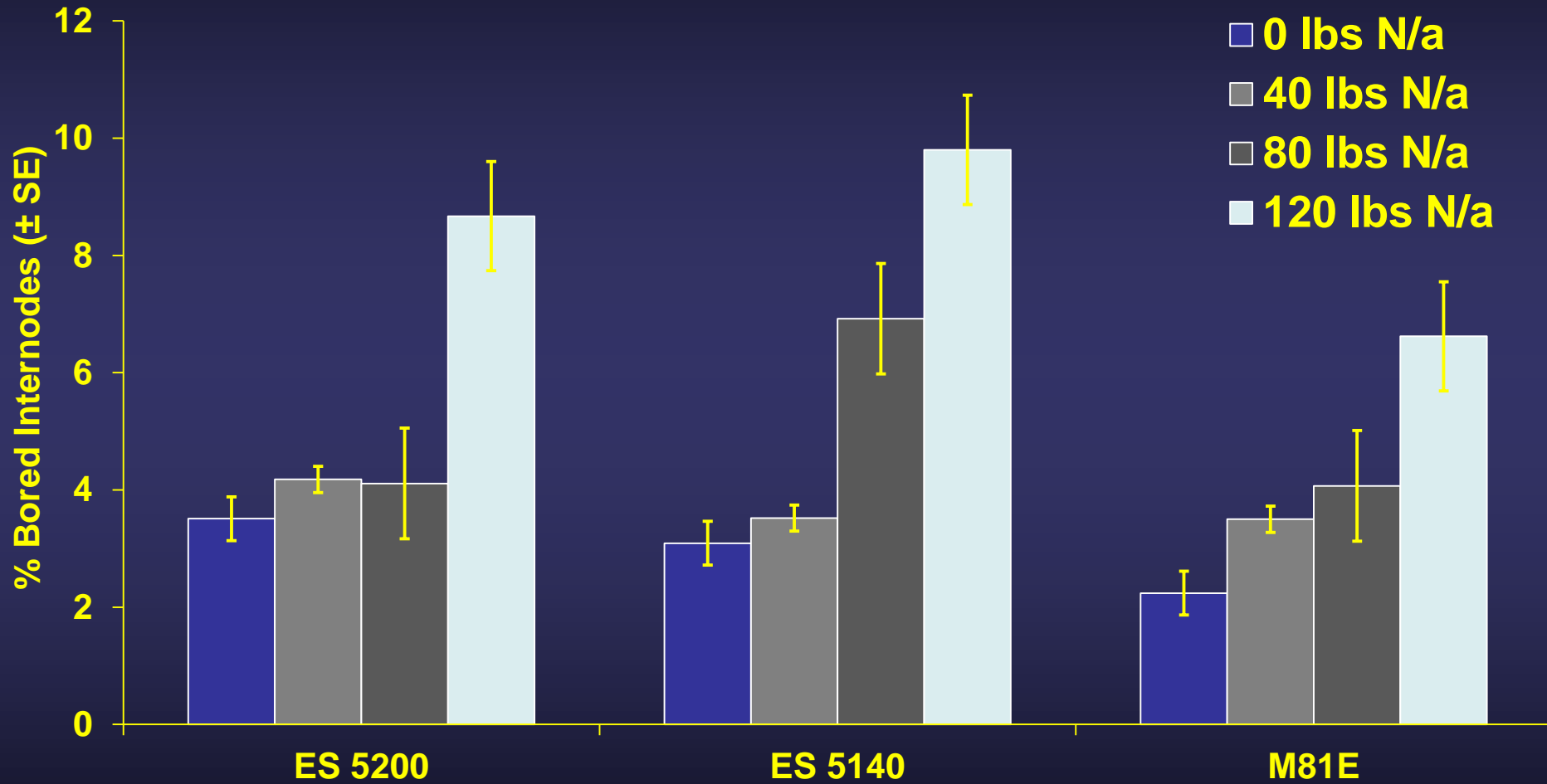
Treatments applied on 22 Aug, 2012 at **10 GPA**

Means sharing a letter are not significantly different (Tukey's HSD,  $\alpha = 0.05$ )

# **MRB Varietal Resistance, Beaumont, TX, 2012**

<b>Variety</b>	<b>% Bored internodes</b>
<b>L 08-090</b>	<b>26.5</b>
<b>Ho 08-717</b>	<b>18.3</b>
<b>HoCP 05-838</b>	<b>17.2</b>
<b>Ho 05-961</b>	<b>16.5</b>
<b>L 08-088</b>	<b>16.4</b>
<b>L 08-092</b>	<b>14.5</b>
<b>Ho 08-709</b>	<b>13.4</b>
<b>Ho 07-613</b>	<b>13.4</b>
<b>Ho 08-711</b>	<b>13.2</b>
<b>Ho 07-9014</b>	<b>12.9</b>
<b>L 79-1002</b>	<b>11.2</b>
<b>Ho 07-9017</b>	<b>11.1</b>
<b>Ho 07-9027</b>	<b>10.0</b>
<b>Ho 02-113</b>	<b>9.6</b>
<b>Ho 07-9076</b>	<b>9.0</b>
<b>HoCP 85-845</b>	<b>6.0</b>

# Bioenergy Sorghum: Impact of N Fertilization on MRB Injury, Beaumont, TX, 2014



Significant differences were detected among nitrogen levels  
( $P < 0.001$ ;  $F = 19.2$ )

# Two Stem Borers Infest Sugarcane

**SCB**



T.E. Reagan

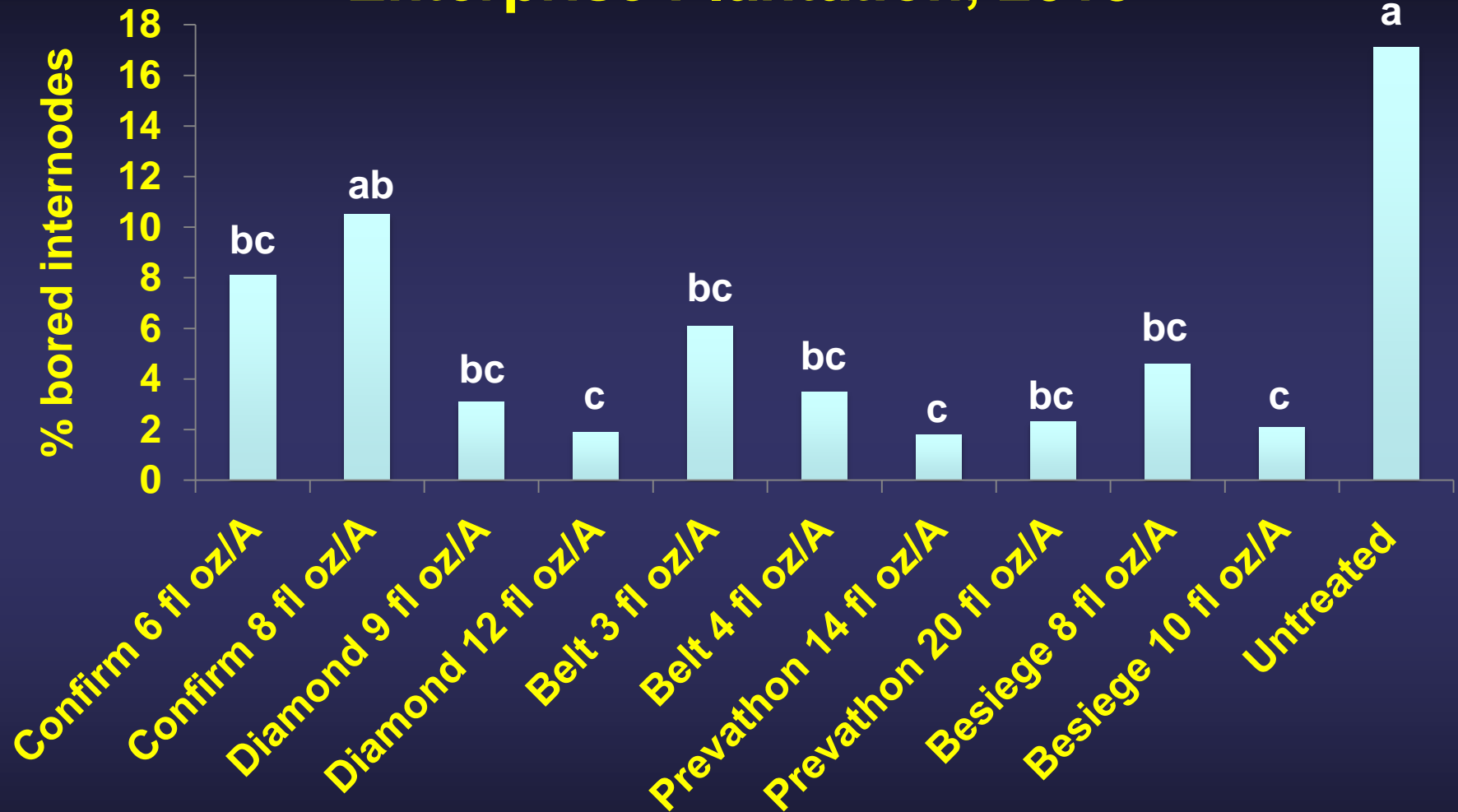
**MRB**



A. Mészáros

# Insecticides for SCB Control

## Enterprise Plantation, 2013



Cultivar HoCP 96-540 (Plot size: 4 rows, 25 ft)

Treatments applied on 1 July, 2013 at 10 GPA

Means sharing a letter are not significantly different (Tukey's HSD,  $\alpha = 0.05$ )

# Should We Worry About Efficacy Data For Confirm?

- **Not too much, because...**

- It's only one small plot test
- Slightly late timing of application
- Relatively shorter residual activity of Confirm (?)

- **Yes, because...**

- Possible reduced susceptibility to Confirm in SCB

# Insect Pest Management Update

Julien Beuzelin, Gene Reagan, Blake Wilson, Matt VanWeelden



**Julien Beuzelin**

**Phone: (337) 501-7087**

**E-mail: [jbeuzelin@agcenter.lsu.edu](mailto:jbeuzelin@agcenter.lsu.edu)**

