

Arthropod and Disease Update

Luis Espino

University of California Cooperative Extension

Contents

- Stem rot
- Armyworms (again)



Stem Rot







Stem Rot

- Resting structures (sclerotia)
- Survives in straw
- Germinates and penetrates tiller

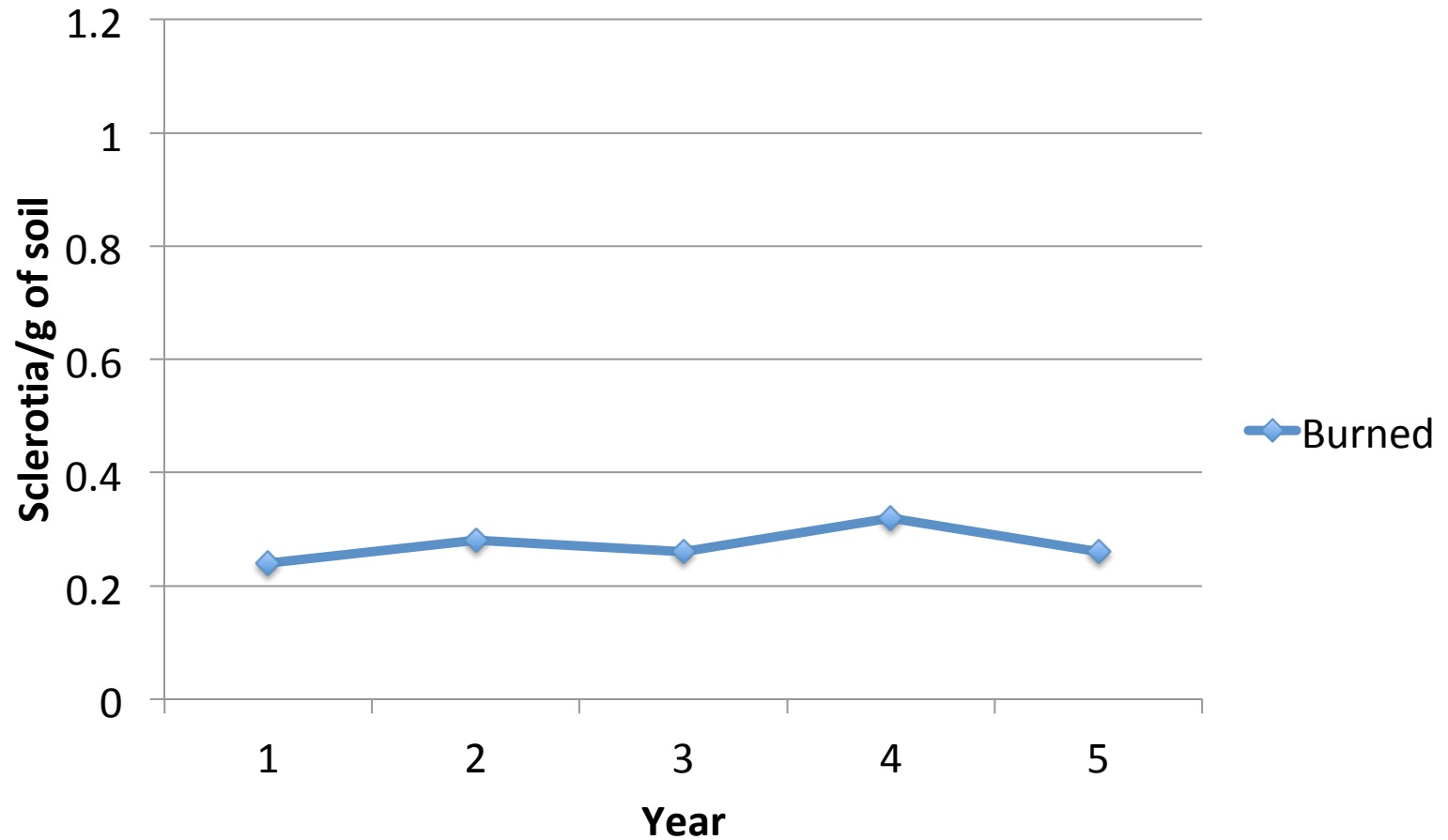


Stem Rot

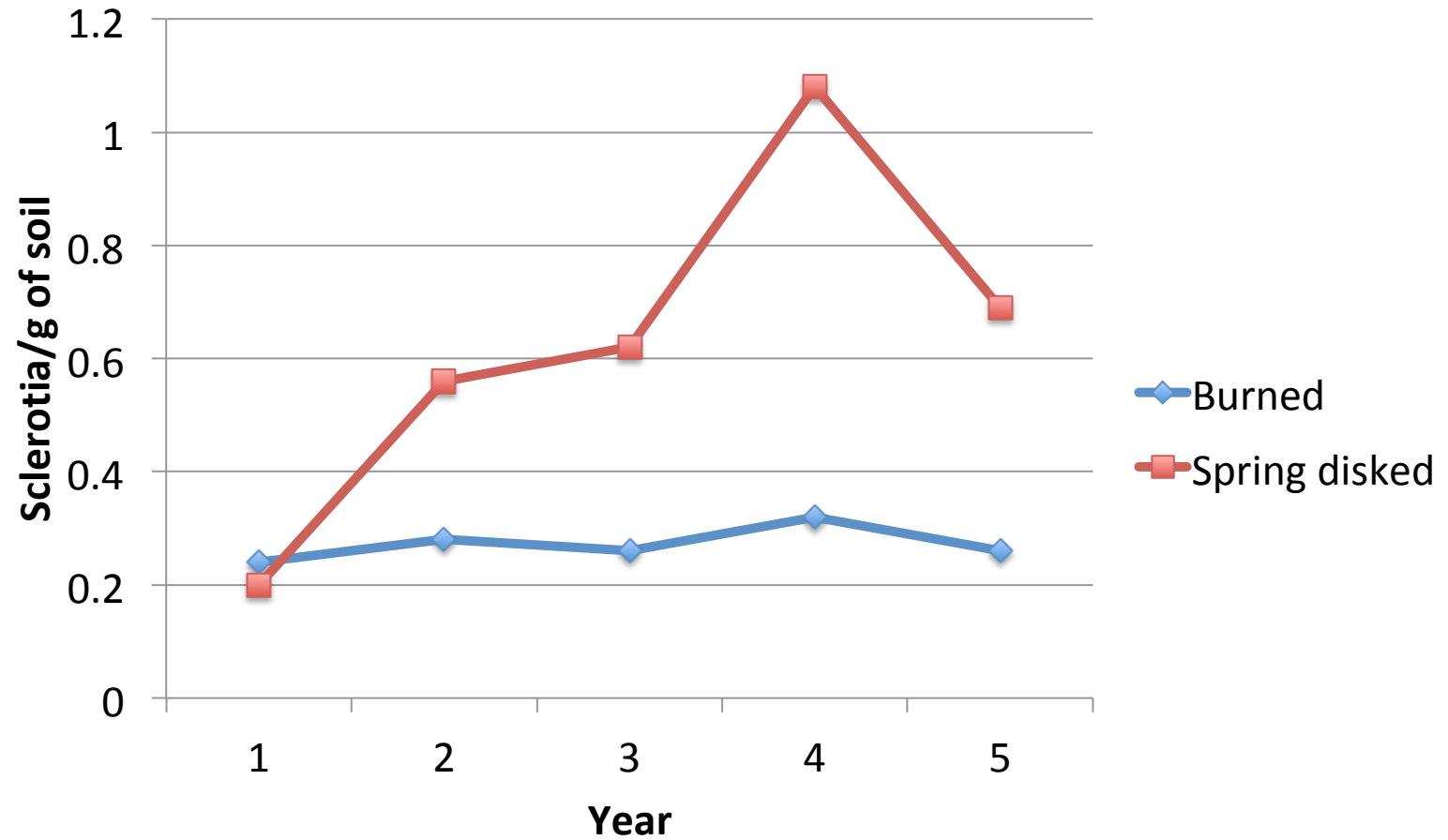
- Sclerotia
 - 2 year half life
 - Survives in straw
 - Severity directly related to number of sclerotia in soil
 - Burning kills sclerotia in straw, not in soil



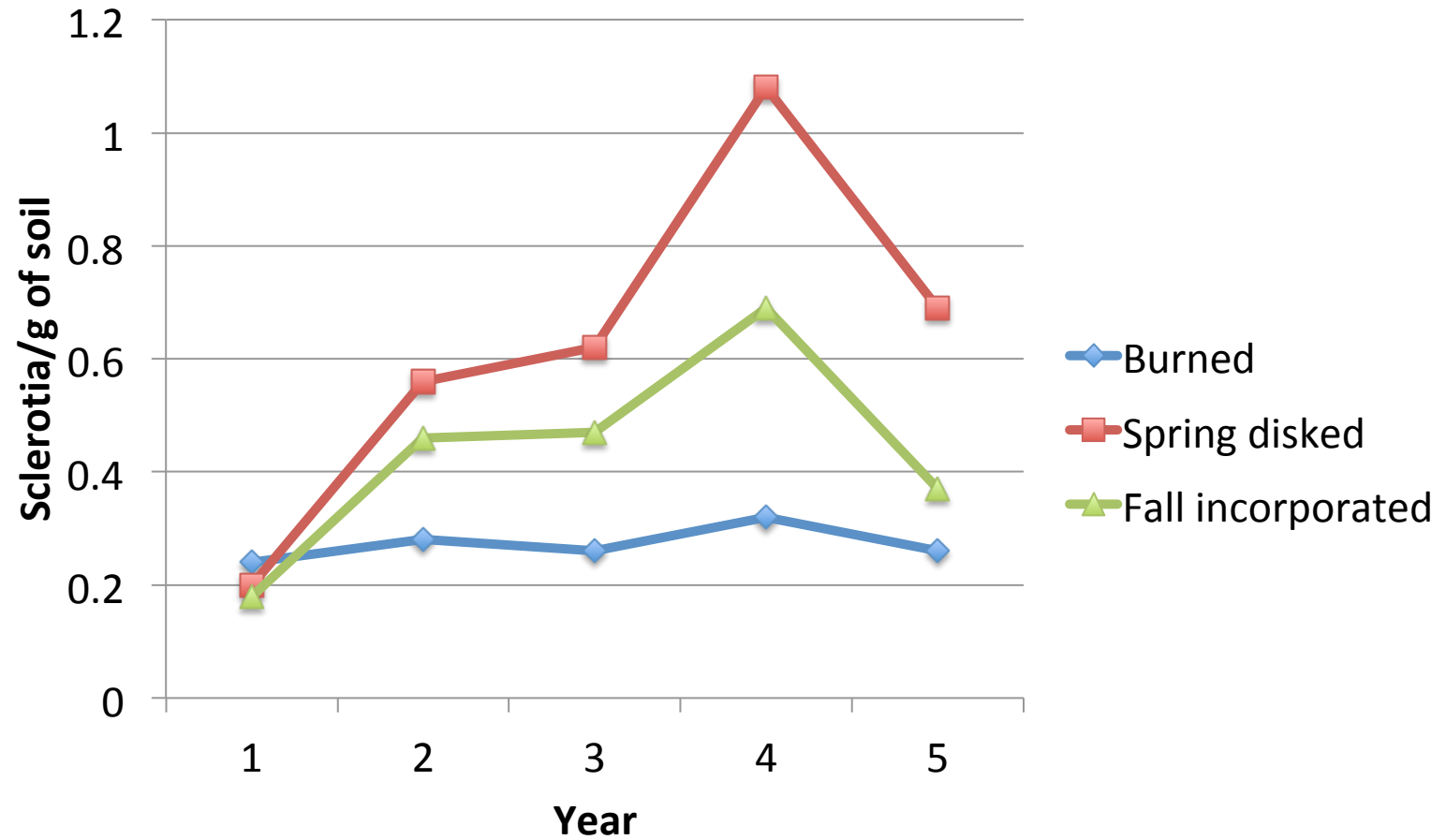
Stem Rot



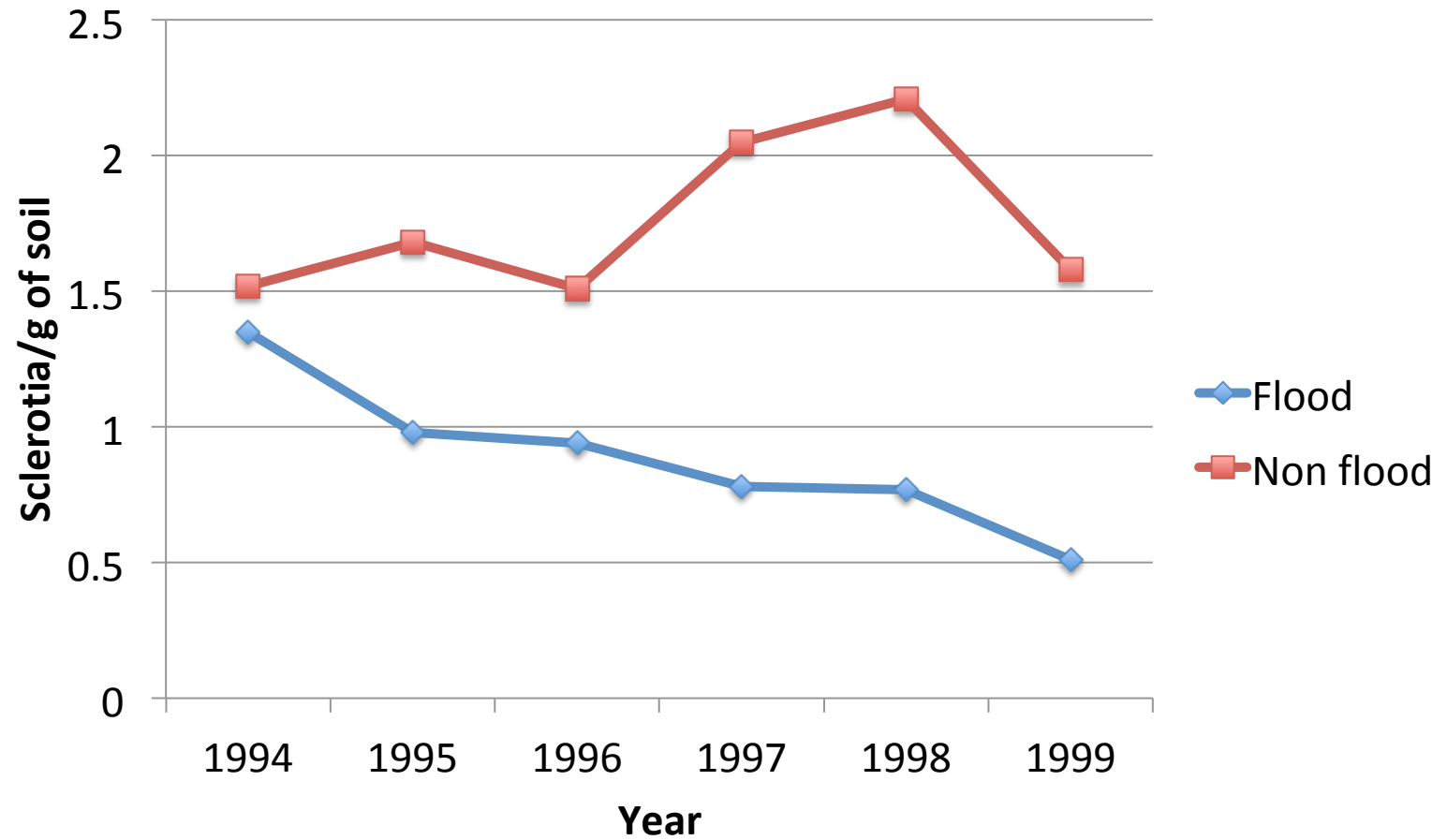
Stem Rot



Stem Rot



Stem Rot

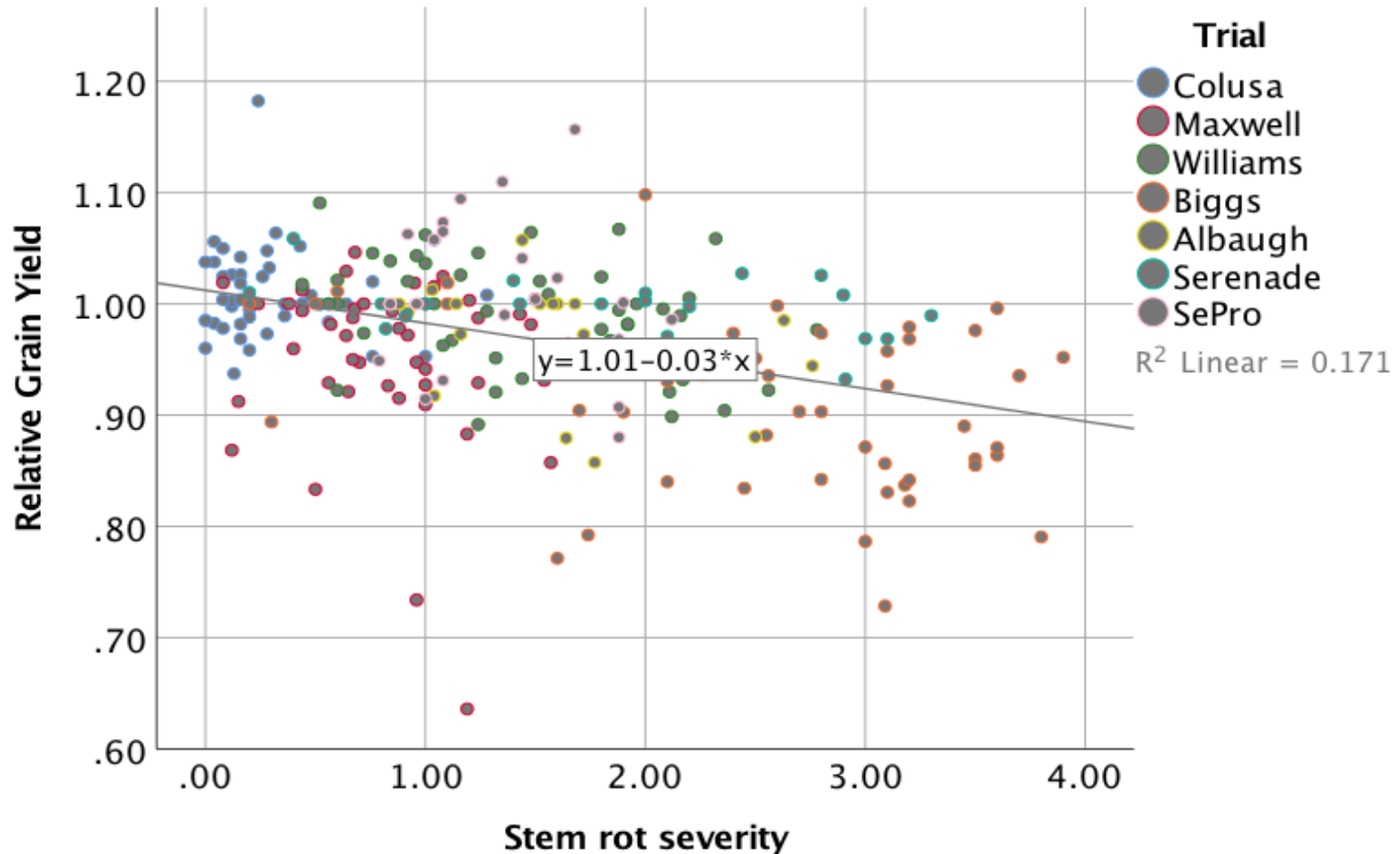


Stem Rot

Severity category	Stem rot symptoms
0	No disease
1	Disease lesions on outer leaf sheath
2	Disease lesions have penetrated into inner leaf sheaths
3	Disease lesions on culm
4	Culm is rotted through



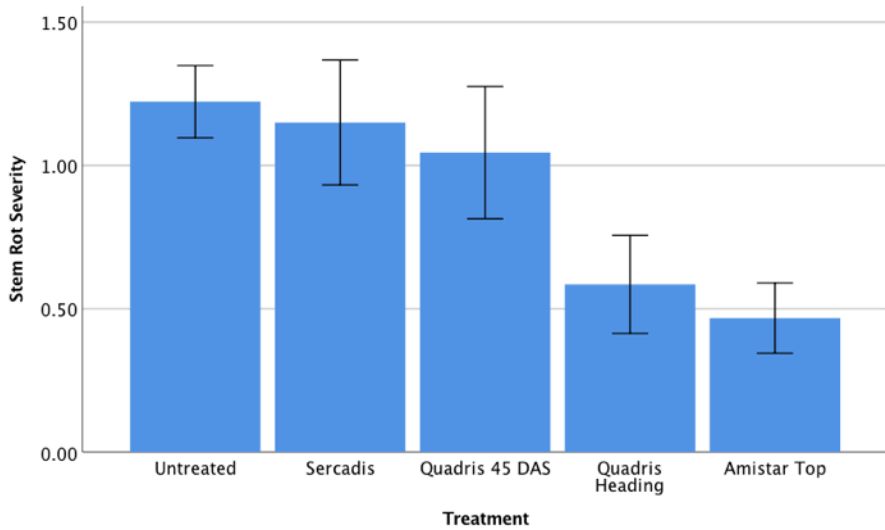
Fungicide Trials



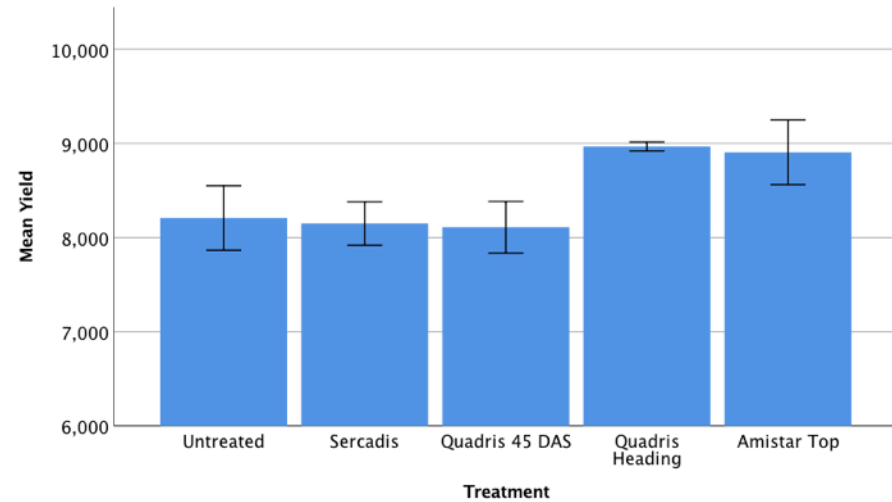
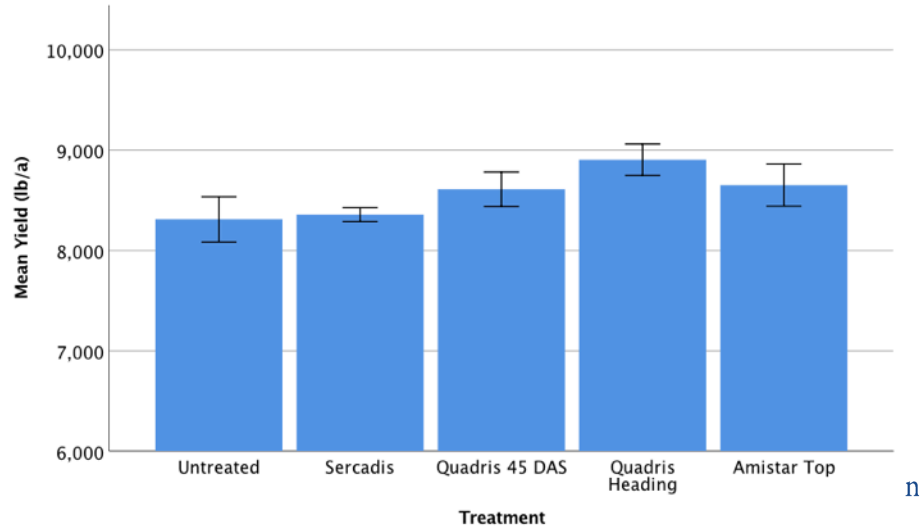
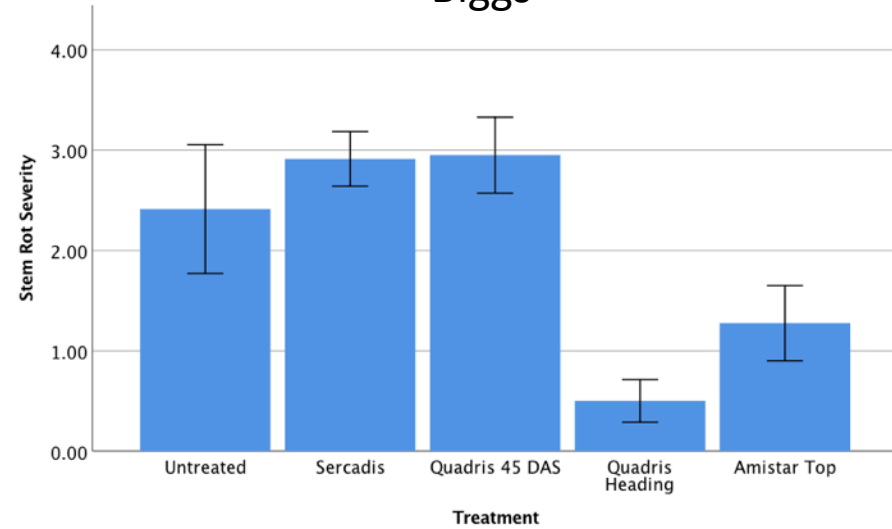
Yield reductions up to 20%, 10% average

Fungicide Trials

Maxwell



Biggs



Fungicide Trials

- Quadris applied at heading at 15.5 oz/a was effective in controlling stem rot
 - Reduced severity by 34 to 79%
- Yield increases due to disease control ranged from 250 to 700 lbs/a
- Some effects on milling quality
 - Milling yield increased by 2 points in one trial
 - Head rice yield increased by 3 points in one trial

Stem Rot Management

- Residue management
- Nitrogen rate
- Seeding rate
- Fungicides
- Variety

Armyworms



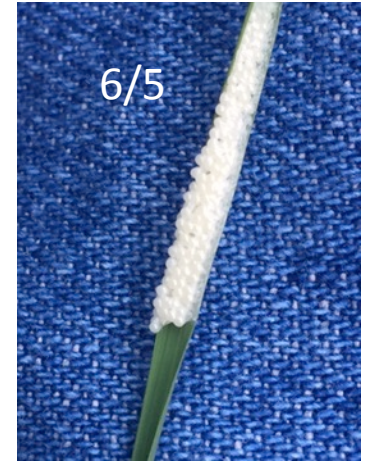
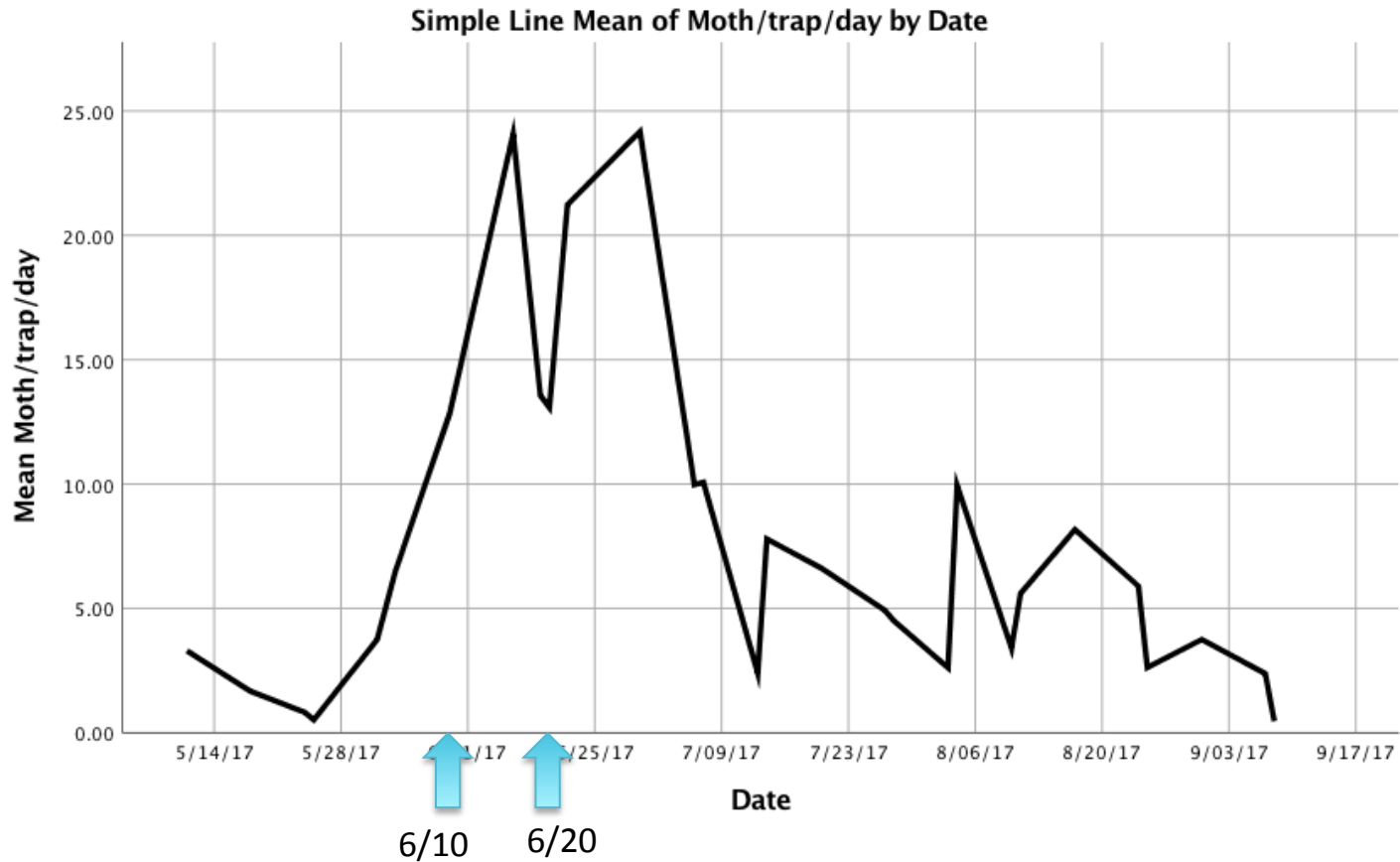
Armyworms

- 2015 – initial outbreak
- 2016 – not many problems
- 2017 – larger outbreak?

Treated Acres

Year	Intrepid	Dimilin	Lambda-cyhalothrin
2015	843	124	31,100
2016	16,000	0	13,600
2017	41,400	10,560	44,500

Pheromone Traps



Armyworms

- Problem is unrelated to drought
- Regional phenomena?

WE NEED YOUR HELP

- Intrepid Section 18 approved in 2015, 2016, and 2017
- CRC will need to submit a request again in 2018
- WE NEED YIELD LOSS DATA

WE NEED YOUR INPUT

ARMYWORM DAMAGE SURVEY

COUNTY where you farm _____

Year	2015		2016		2017	
Total acres grown						
Insecticide used	Intrepid	Check one: <input type="checkbox"/> Pyrethroid <input type="checkbox"/> Sevin <input type="checkbox"/> Dimilin	Intrepid	Check one: <input type="checkbox"/> Pyrethroid <input type="checkbox"/> Sevin <input type="checkbox"/> Dimilin	Intrepid	Check one: <input type="checkbox"/> Pyrethroid <input type="checkbox"/> Sevin <input type="checkbox"/> Dimilin
Acres TREATED						
Number of applications						
Yield (CWT/a)						
Your ESTIMATE of yield loss due to armyworm (CWT/a)						