



The University of Georgia
Tifton Campus

Pathology and Nematode Association of FOVs in the Southeast US

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Cotton Breeders Tour
September 24, 2017

Topics

1. Fusarium wilt survey in South GA
2. Goodman's Farm in Tift/Berrien County
3. Preliminary data on FOV and RKN interaction

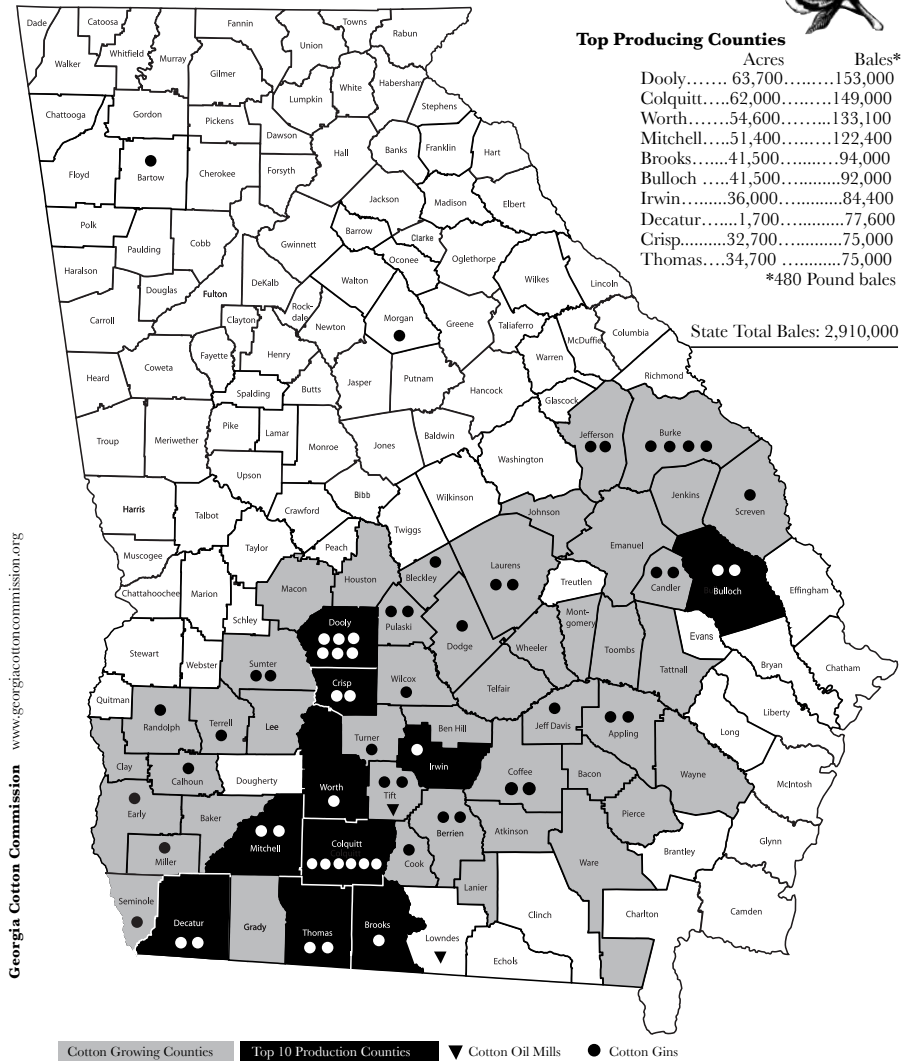
1. Fusarium wilt survey in South GA

Objective

Survey Georgia fields with Fusarium Wilt and observe correlation of Fusarium races and plant parasitic nematodes

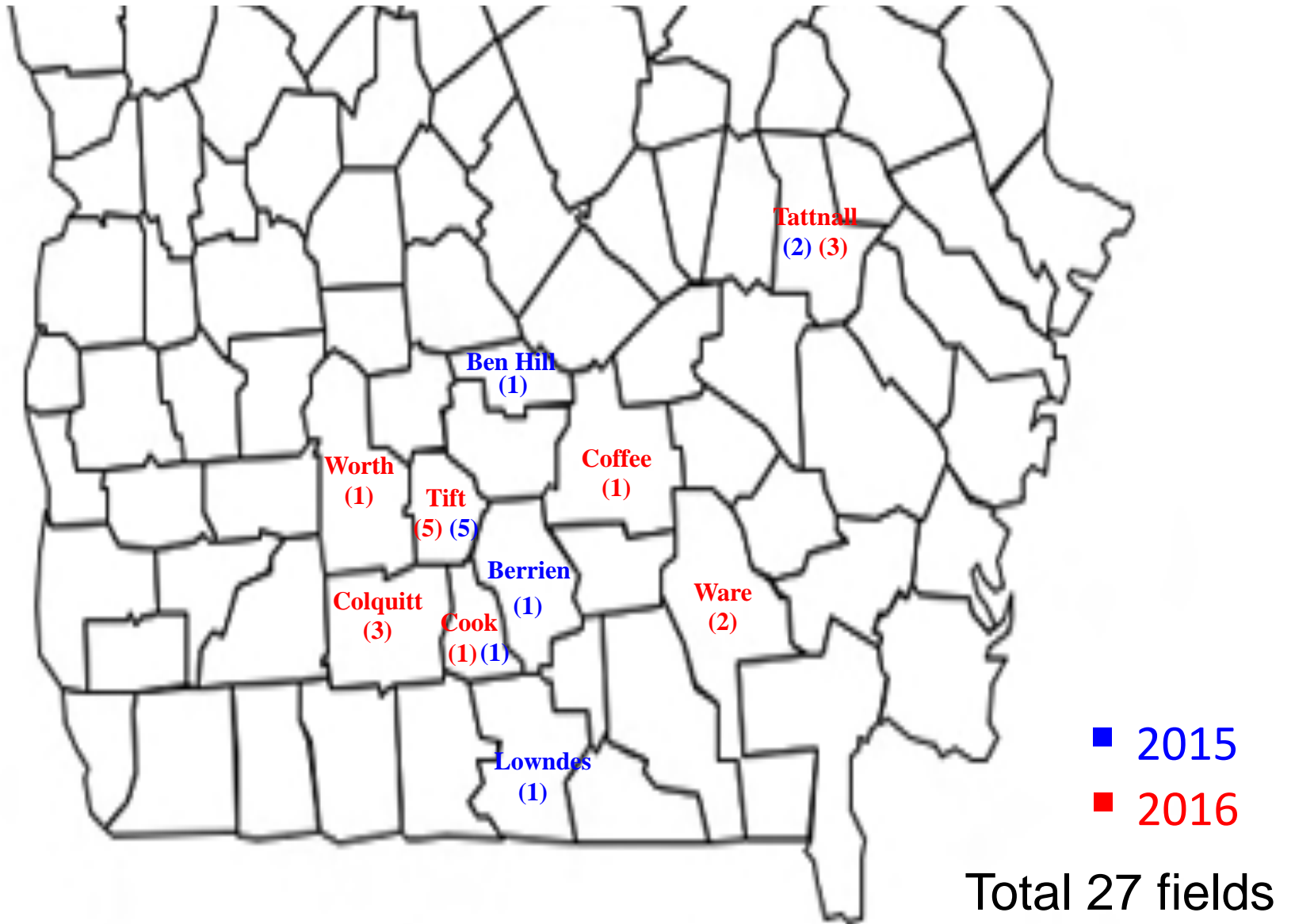
Georgia's 2012 Cotton Acreage: 1,290,000

Source: Georgia Agricultural Statistics Service

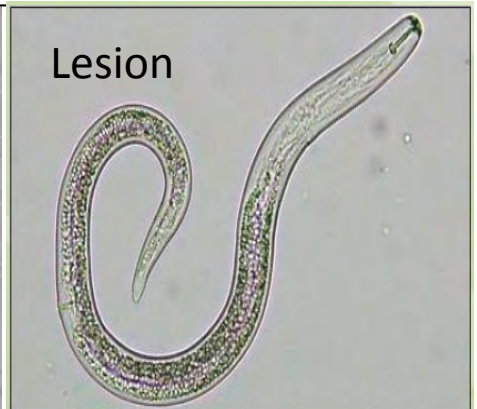
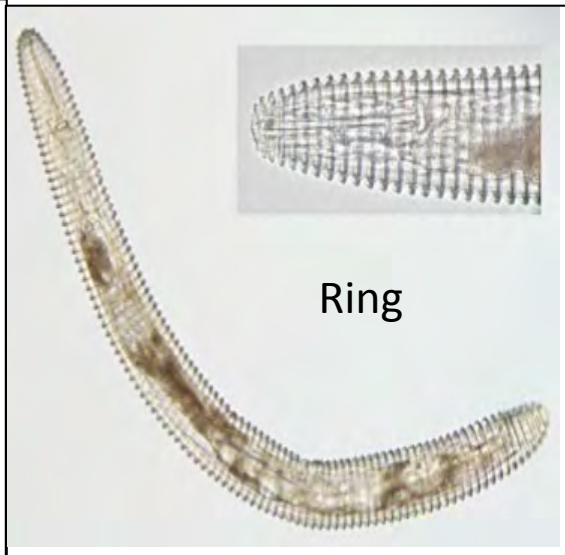
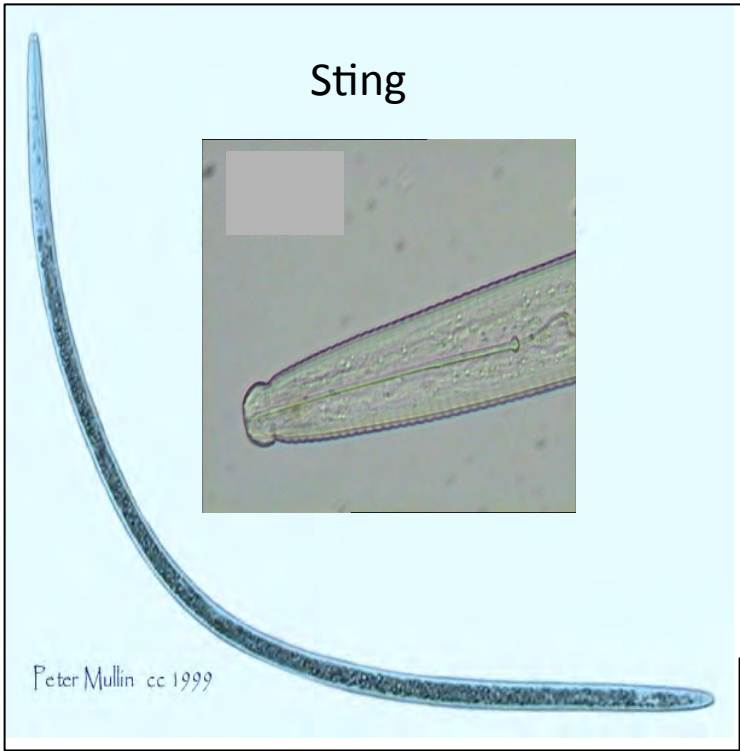


Source: GA cotton commission

Counties and number of fields collected



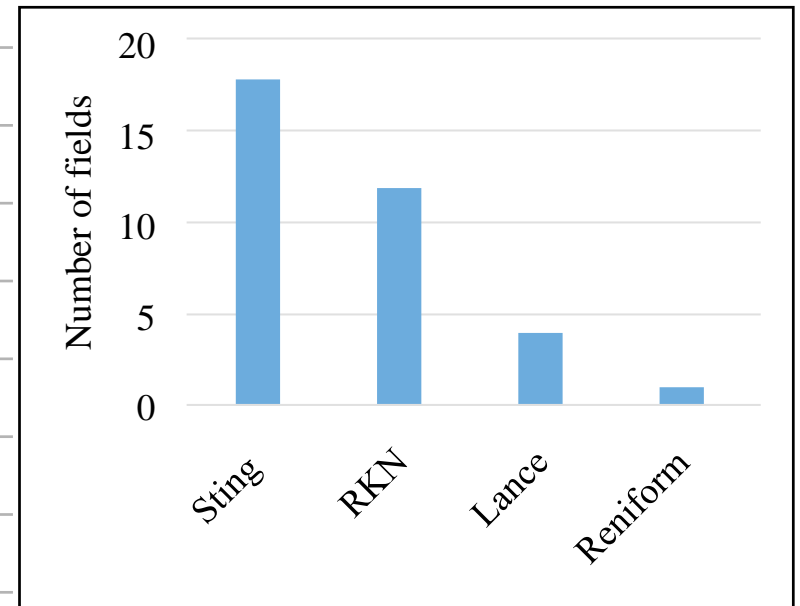




Summary

nematode spp. found in FOV cotton

County	Sting	RKN	Lance	Reniform
BenHill	×			
Berrien	×	×		
Cook	×			
Lowdes	×			
Tattnall	×	×	×	
Tift	×	×		
Colquitt	×	×		×
Ware		×		
Worth	×	×		
Coffee		×		
Threshold	10	100	200	750



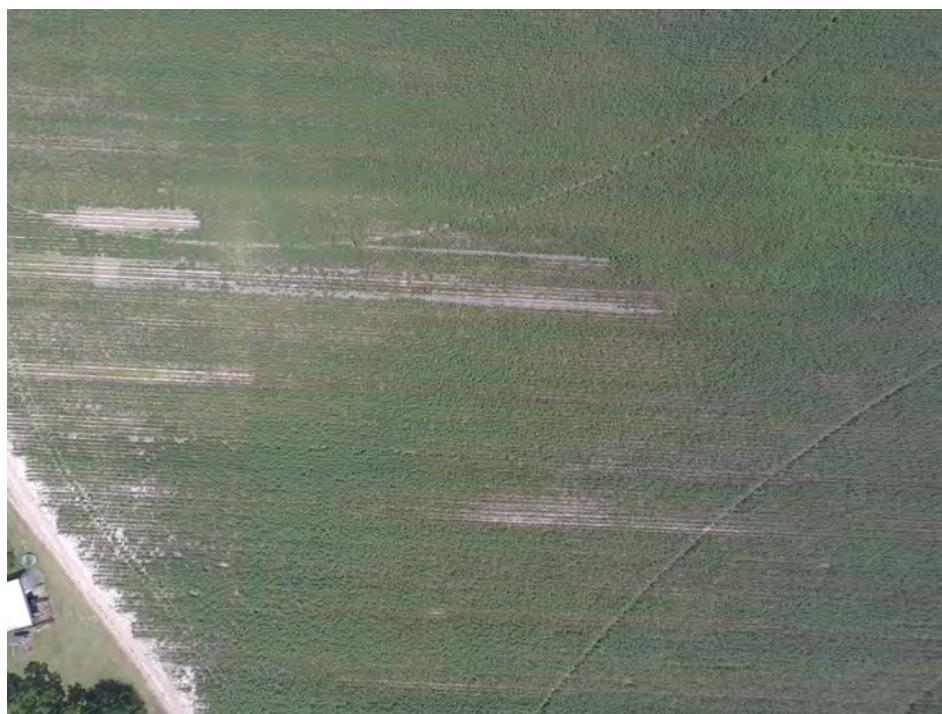
Summary

FOV race detected

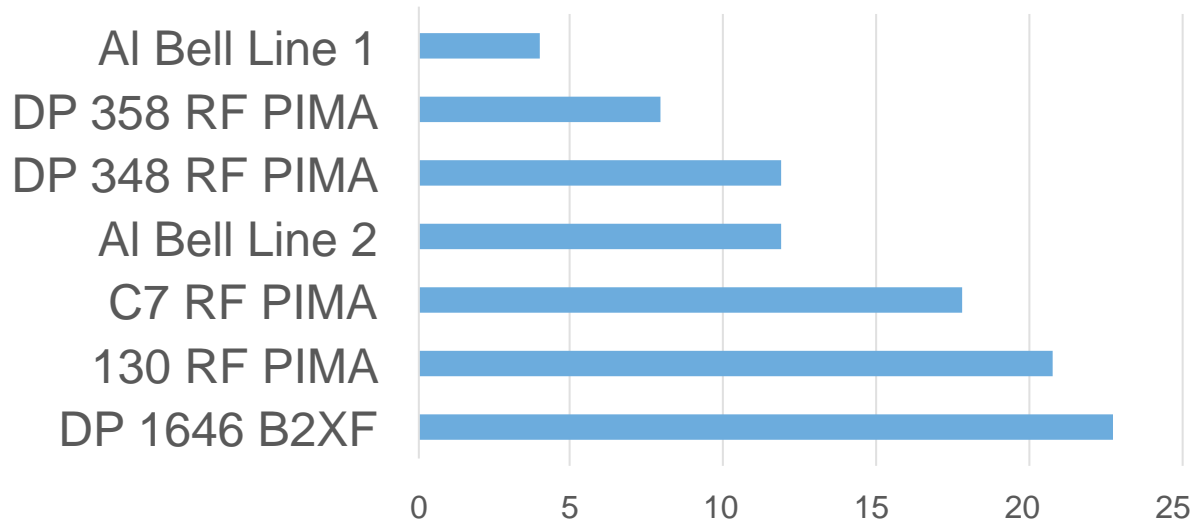
County	FOV Race							
	1	2	8	LA108	LA110	LA120	LA140	Race 4-like
BenHill	×							
Berrien	×							
Cook	×				×			
Lowdes	×	×	×	×	×			
Tattnall	×				×			
Tift	×		×	×	×	×	×	
Colquitt	×			×	×			×
Ware	×		×					
Worth	×				×			
Coffee	×	×			×			

RCBD with 6 replication

Genotype		no. plants
130 RF PIMA	FOV4 partially suscep.	100
C7 RF PIMA	FOV4 susceptible	124
DP 1646 B2XF	commercial variety	106
DP 348 RF PIMA	FOV4 tolerant	146
DP 358 RF PIMA	FOV4 tolerant	159
Al Bell Line 1	unknown	128
Al Bell Line 2	unknown	119



Total died as percent





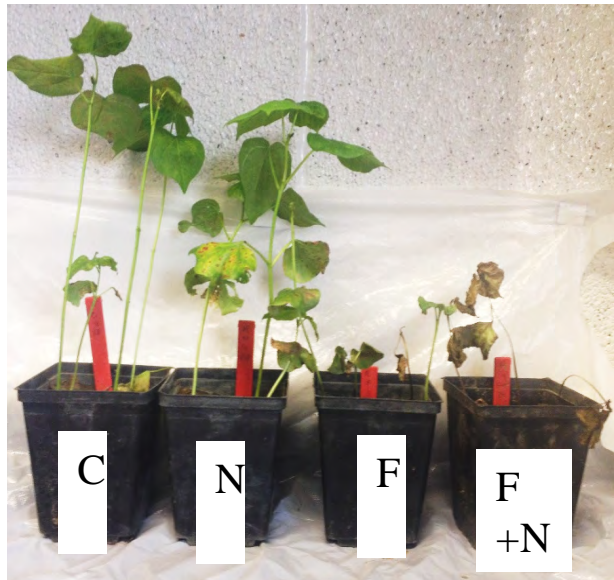
Aug. 9



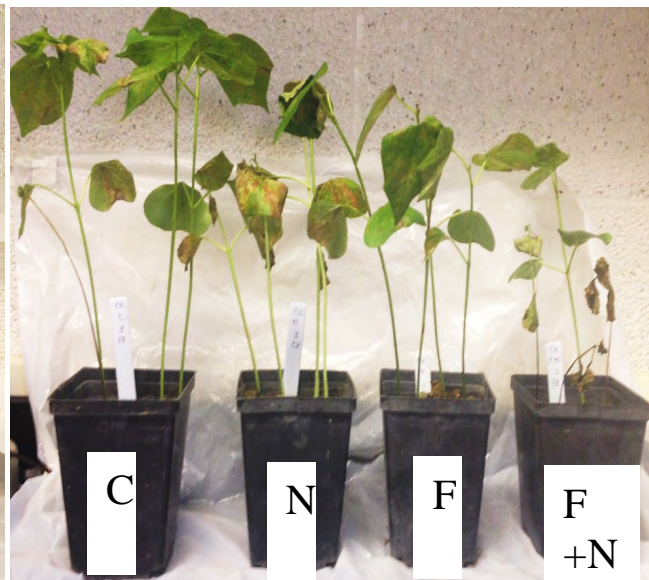
Aug. 23



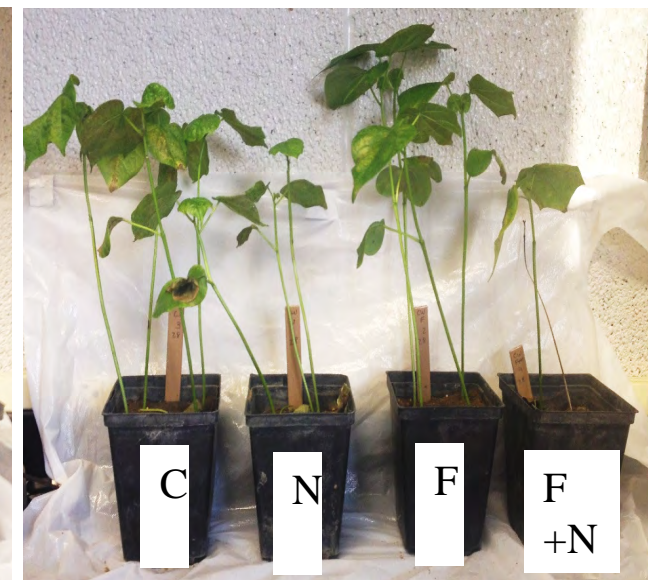
3. Preliminary data on FOV and RKN interaction



Rowden



Coker 201



Clewilt-6

Acknowledgements

- Marin Brewer
- Richard Davis
- Bob Kemeraït
- Jim Olvey
- Mychele da Silva



COTTON INCORPORATED