

2015

Georgia - Florida Tobacco Tour



The University of Georgia

College of Agricultural & Environmental Sciences

**The University of Georgia
College of Agricultural and Environmental Sciences
Cooperative Extension
Tifton, Georgia**

EXTENSION OFFICES IN COUNTIES WITH TOBACCO PRODUCTION

<u>County</u>	<u>Phone No.</u>	<u>FAX No.</u>	<u>County</u>	<u>Phone No.</u>	<u>FAX No.</u>
Appling	912-367-8130	912-367-1184	Grady	229-377-1312	229-377-9026
Atkinson	912-422-3277	912-422-6223	Irwin	229-468-7409	229-468-9838
Bacon	912-632-5601	912-632-6910	Jeff Davis	912-375-6648	912-379-1091
Ben Hill	229-426-5175	229-426-5176	Lanier	229-482-3895	229-482-2654
Berrien	229-686-5431	229-686-7831	Lowndes	229-333-5185	229-333-5188
Brantley	912-462-5724	912-462-5464	Pierce	912-449-2034	912-449-8005
Brooks	229-263-4103	229-263-5607	Screven	912-564-2064	912-564-5815
Candler	912-685-2408	912-685-6614	Tattnell	912-557-6724	912-557-3332
Coffee	912-384-1402	912-389-4007	Thomas	229-225-4130	229-225-4183
Colquitt	229-616-7455	229-616-7033	Tift	229-391-7980	229-391-7999
Cook	229-896-7456	229-896-7457	Toombs	912-526-3101	912-526-1012
Echols	229-559-5562	229-559-9436	Treutlen	912-529-3766	912-529-3767
Evans	912-739-1292	912-739-7831	Wayne	912-427-5965	912-427-5967
Emanuel	478-237-1226	478-237-8451	Worth	229-776-8216	229-776-8216

UGA Tobacco Home Page

<http://www.georgiatobacco.com>

TOBACCO EXTENSION SCIENTISTS

(see web site for email addresses)

J. Michael Moore, Extension Agronomist - Tobacco, Editor	229-392-6424	229-386-7308
Paul Bertrand, Extension Pathologist (Retired)	229-386-7495	229-386-7308
Glendon H. Harris, Extension Agronomist - Environmental Soil and Fertilizer	229-386-3194	229-386-7308

TOBACCO RESEARCH SCIENTISTS

Alex Csinos, Plant Pathology, CPES, Tifton (Retired)	229-386-3373	229-386-7285
Rajagopalbabu "Babu" Srinivasan, CPES, Tifton	229-386-3374	229-386-3086
Steve LaHue, Bowen Farm Research Coordinator	229-388-6492	229-386-7293

Physical / Postal Address: 4604 Research Way / 2360 Rainwater Rd, Tifton, Georgia, 31793-5766, USA

THE GEORGIA EXTENSION TOBACCO TEAM EXPRESSES
APPRECIATION TO THE FOLLOWING FINANCIAL SUPPORTERS OF THE

2015 GEORGIA TOBACCO TOUR

**Agri Supply - Statesboro,
Tifton, Valdosta**

Ag South Farm Credit

Alliance One International

Altria Client Services

Arysta LifeScience

**B.F.D. Tobacco Equipment
Co., Inc.**

Bayer Crop Sciences

**Big Independent
Warehouse**

Carolina Soil Company

Catalytic Generators, LLC

Cross Creek Seed, Inc.

Cureco, Inc.

Dow AgroSciences LLC

Drexel Chemical Co.

Dupont

FMC

F W Rickard Seeds Inc

GoldLeaf Seed Co.

**Long Tobacco Barn
Company, LLC**

Perkins Warehouse

SQM North America Corp

Syngenta

Taylor Manufacturing, Inc.

Tytun Barns

Universal Leaf, N.A.

U.S. Flue Cured Tob. Coop

Valent

World Tobacco

YARA North America

GEORGIA - FLORIDA TOBACCO TOUR

RULES OF THE ROAD

- **Headlights should ALWAYS BE ON when participating in the tour.**
- **Follow close enough to the next vehicle to show that you are a part of the tour, but far enough back to avoid a collision.**
- **Be cautious at intersections but promptly follow the directions of law enforcement assisting the tour.**
- **Always “fuel-up” the night before. The Tour will depart as sheduled.**

Wait until the Tour has “left you” rather than trying to “leave the tour”. THOSE BEHIND YOU WILL FOLLOW YOU!!!



THE UNIVERSITY OF GEORGIA
COOPERATIVE EXTENSION

Colleges of Agricultural and Environmental Sciences & Family and Consumer Sciences

2360 Rainwater Rd., Tifton, GA 31793 PH: 229-386-3006 FAX: 229-386-7308 Cell: 229-392-6424

**SCHEDULE & DRIVING DIRECTIONS
 FOR THE 2015 GEORGIA-FLORIDA TOBACCO TOUR**

Monday, June 8, 2015

<http://www.GeorgiaTobacco.com>

Travel Mileage Directions

5:00 pm - Check-in Quality Inn & Holiday Inn Express & Suites - 1761 Memorial Drive
 Waycross, Georgia 31501
 PH: 912 548 0720

7:00 pm - Supper –Directions: From Quality Inn and Suites to Johnson’s Pond House,
 5395 Hacklebarney Rd
 Blackshear, GA

Travel

- * Right out of Quality Inn onto MEMORIAL DR/US-1 N toward US-82. Continue to follow MEMORIAL DR.
- 1.3 mi Turn right onto Plant Ave/US-84 E/US-1 N/US-23 N/GA-4/GA-38. Continue to follow US-84 E/GA-38
- 5.0 mi. Turn left onto Hacklebarney Rd. at traffic light
- 0.5 mi Stop, then cross Ware St.
- 0.2 mi Right on Hacklebarney Rd. at Hacklebarney Baptist Church
- 3.2 mi **5395 HACKLEBARNEY RD** is on the left. Your destination is 0.2 miles past Ridge Rd. If you reach Williamson Rd you've gone about 0.1 miles too far

Tuesday, June 9, 2015

Time/Mileage Directions

8:00 am - **Leave Quality Inn parking lot.**

- * Right out of Quality Inn onto MEMORIAL DR/US-1 N/US-23 N/GA-4 N toward US-82/GA-520/CORRIDOR Z/S GEORGIA PKWY. Continue to follow
- 1.3 mi Turn right onto Plant Ave/US-84 E/US-1 N/US-23 N/GA-4/GA-38. Continue to follow US-84 E/GA-38
- 5.0 mi. Turn left onto Hacklebarney Rd. at traffic light
- 0.5 mi Stop, then cross Ware St.
- 0.2 mi Right on Hacklebarney Rd. at Hacklebarney Baptist Church
- 3.9 mi Turn left onto Cason Rd.
- 1.0 mi Turn right on Clifford Loop
- 0.8 mi Right on Guest Rd
- 4.2 mi Right onto Radio Station Rd. bare left
- 0.25 mi Right into yard and behind tobacco field

8:35 am Arrive Scott Strickland Farm, Pierce County, GA 912-449-3179

**Plot: 3514 Old Alma Rd, Blackshear, GA 31516-5734
 31 23.330’N, 082 20.779’W,**



Notes

Directions from Waycross Holiday Inn Express to Johnson's Pond House for GA - FL Tobacco Tour

Trip to:


5395 Hacklebarney Rd



Blackshear, GA 31516-5990


11.40 miles / 18 minutes


A **Holiday Inn Express & Suites WAYCROSS**
 1761 Memorial Drive, Waycross, GA 31501
 (877) 410-6681


Download
Free App

- 

1. Start out going **northwest** on **Memorial Dr / US-1 N / US-23 N / GA-4** toward **US-82 W / US-82 E / GA-520 / Old Reynolds St.** [Map](#) 1.3 Mi
1.3 Mi Total
- 


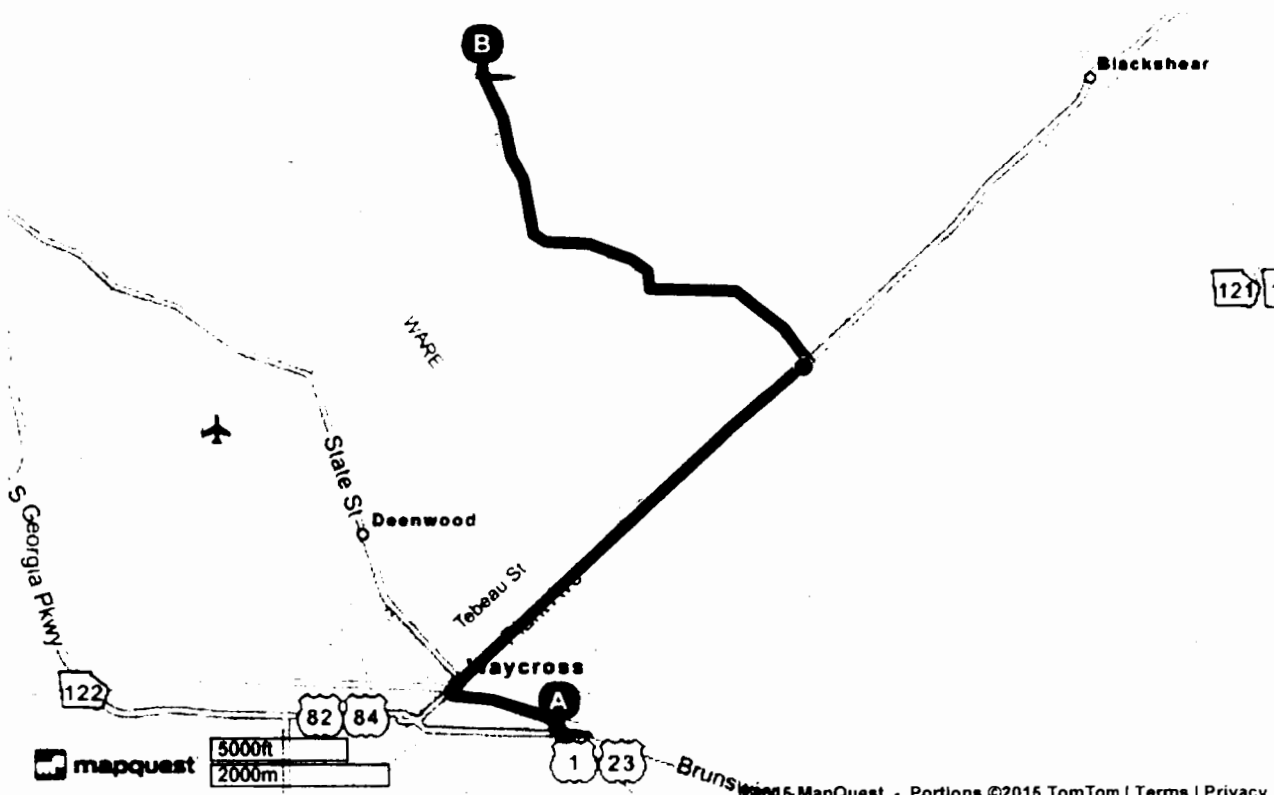
2. Turn **right** onto **Plant Ave / US-84 E / US-1 N / US-23 N / GA-4 / GA-38.** Continue to follow **US-84 E / GA-38.** [Map](#) 5.0 Mi
6.3 Mi Total
- 

3. Turn **left** onto **Hacklebarney Rd.** [Map](#) 1.9 Mi
8.3 Mi Total
- 

4. Turn **right** to stay on **Hacklebarney Rd.** [Map](#) 3.2 Mi
11.4 Mi Total
- 

5. **5395 HACKLEBARNEY RD** is on the left. [Map](#)

B **5395 Hacklebarney Rd, Blackshear, GA 31516-5990**



MapQuest - Portions ©2015 TomTom | [Terms](#) | [Privacy](#)

Tuesday, June 9, 2015

Mileage Directions (* - indicates traffic assistance needed)

Left onto Radio Station Rd.
4.75 mi Turn left onto Hwy 203
15 mi Left onto Hwy 32
0.15 mi Right onto Hwy 203
0.15 mi Left onto Hwy 203
7.0 mi Left onto Cameron Rd
1.0 mi Arrive Turner Farm

**9:30 am Arrive Danny & Jared Turner Farm, Appling County, GA (912) 367-3858
8896 GA Highway 121, SE Surrency, GA 31563-3406
31 36.354N, 082 17.417W**

**(Released Varieties Demonstration)
-Shane Curry, County Extension Agent**

Continue on Cameron Rd.
0.7 mi Turn left on Black Rd
1.0 mi Turn left onto Red Oak Rd
1.2 mi Turn right onto Hwy 203 and back to Hwy 32
5.5 mi Right at stop sign onto Scuffletown Hwy.
0.15 mi Turn right onto Hwy 32 and into Alma
5.5 mi Cross US 1
0.7 mi Left onto Hwy 32
9.5 mi Left onto Liberty St in Nichols
1.8 mi Right onto Andrew Tanner Rd
6.4 mi Right onto Hwy 158 at Wilsonville
2.8 mi Arrive Nathan Henderson Farm

**10:45 am Arrive Nathan Henderson Farm, Coffee County, GA (912) 327-1650 cell
Hwy 158, Nicholls, GA
Plot: 31 26.2148N, 082 42.5109W,**

**(Spotted Wilt Incidence of Treated Plants)
-Mark von Waldner, County Extension Agent**

Continue on Hwy 158 to Douglas
7.9 mi Turn left onto Hwy 135, Bowens Mill Rd.
1.5 mi Turn right onto S. Peterson Ave.
0.3 mi Arrive Ole Time Buffet – Lunch

**11:30 am Sponsored Lunch - Ole Time Buffet - 1208 Madison Ave S Douglas, GA 31533
912-206-1606.**

Right onto S. Madison Ave.
0.2 mi Left onto Pine St
0.1 mi Left onto S. Peterson Ave.
0.4 mi Right onto Bowens Mill Rd.
2.0 mi Left onto Thompson Drive
8.0 mi Sinkhole Rd merges with SR 59
2.0 mi Right onto Younge Fussell Rd.
0.1 mi Left onto Bessie Paulk Rd.
0.5 mi Arrive Ben Smith Farm

12:45 pm Arrive Ben Smith Farm – Coffee County, GA (912) 327-1913 cell
Bessie Paulk Rd, Ambrose, GA
Plot: 31 31.226N, 083 02.627W
(Black Shank Presidio Trial)
-Mark von Waldner, County Extension Agent

Tuesday, June 9, 2015

Mileage **Directions (* - indicates traffic assistance needed)**

0.6 mi Right onto SR 149
4.0 mi Left onto Hwy 32
1.7 mi Left onto Old Coffee Rd
1.0 mi Arrive Joey Anderson Farm

1:20 pm Arrive Joey Anderson Farm – Coffee County, GA (912) 389-0688 cell
Old Coffee Rd, Wray, GA 31798
Plot: 31 33.890N, 083 03.625W
(Spotted Wilt Incidence of Treated Plants)
-Mark von Waldner, County Extension Agent

Continue on Old Coffee Rd
6.0 mi Right on Hwy 158
1.0 mi Left onto Hwy 90 to Willacochee
10.5 mi Left onto Hwy 82
0.15 mi Right onto Peterson St. / Hwy 135
7.5 mi Left onto Riverside Rd
0.75 mi Right onto Rev. A.H. Hendley Rd
0.2 mi Left onto Clifton Hendley Rd.
0.45 mi Arrive Lance Hendley Farm

2:20 pm Arrive Lance Hendley Farm – Berrien County, GA (229) 445-1284 cell
Rev. A.H. Hendley Rd off Riverside Rd.
Plot: 31 13.823N, 083 03.739W
(Black Shank Variety Trial)
-Eddie Beasley, County Extension Agent

Continue around tobacco field and return to Hwy 135
1.4 mi Left onto Hwy 135
5.3 mi Right onto Hwy 168
1.5 mi Left onto Popular Springs Ch. Rd.
0.6 mi Right on Mudd Creek Rd.

3:00 pm Arrive Brian Lanier Farm – Berrien County, GA (229) 507-4042
Mudd Creek Rd X Poplar Springs Ch Rd off Hwy 76
Plot: 31 09.827 N, 83 06.899 W
(Released Varieties Demonstration)
-Eddie Beasley, County Extension Agent

Tuesday, June 9, 2015

Mileage Directions (* - indicates traffic assistance needed)

0.6 mi Continue on Mudd Creek Rd.
Right onto Mt Pleasant Church Rd.
0.7 mi Right onto Hwy 168
0.7 mi Left onto Popular Springs Ch. Rd.
1.5 mi Arrive Trent Hughes Farm

3:30 pm Arrive Trent Hughes Farm – Berrien County, GA
Poplar Springs Ch Rd X Radio Station Rd
Plot: 31 11.630N, 083 06.893W
(Black Shank Presidio Trial)
-Eddie Beasley, County Extension Agent

7.2 mi Turn left onto Radio Station Rd.
Merge onto Hwy 168
1.3 mi Right onto Hwy 168
0.1 mi Left onto Hwy 125
23.0 mi Left onto Southwell Blvd at Tifton Industrial Park
1.35 mi Cross Hwy 41 at Love’s Truck Stop
0.10 mi Right onto I-75 N
2.50 mi Right onto Exit 61. Hampton Inn on Right.

4:30 pm Right at light Hwy 82, Right at light Hwy 319, Right into Hampton Inn.
To Dinner at UGA Black Shank Farm Picnic Area. Social - 6:30 pm

Left out of Hamilton Inn
Left onto Hwy 82
1.2 mi Right onto Carpenter Rd.
1.0 mi Cross King Rd
0.6 mi Cross Whiddon Mill Rd
1.8 mi Cross Zion Hope Rd
0.5 mi Left into Black Shank Farm Picnic Area at UGA sign.
Follow around the left drive.

7:00 pm UGA Black Shank Farm Picnic Area, Tifton, GA



Map Not to Scale

Black Shank Picnic Area



Dairy Research Center

Veterinary Diagnostic Lab

I-75

Exit 66 Brighton Road

Zion Hope Road

Aquaculture

0.8 Miles

Moore Hwy

1 Mile

Hwy 41

I-75

Carpenter Road

0.8 Miles

Davis Road

ABAC

1 Mile

UGA Tifton Campus Conference Center

Bermuda Dr.

Exit 64

NESPAL



Ag Innovation Center

Engineering Dr.

Natural Products Lab



Plant Science Dr.



Rainwater Road

Physical Plant

Entomology Dr.

Coastal Plain Research Arboretum

I-75

Carpenter Rd. 1 Mile

Whiddon Mill Rd.

8th St.

LOWES Hwy 82

Hampton Inn 319

Wednesday, June 10, 2015

Mileage Directions (* - indicates traffic assistance needed)

8:00 am Exit Hampton Inn left onto Hwy 319
Right onto Hwy 82 E
Virginia Avenue
0.1 mi Magnolia Avenue
0.6 mi Ridge Avenue
0.2 mi Central Avenue
Cross RR
0.1 mi Commerce Avenue
0.2 mi Main Street
0.1 mi Tift Avenue
1.3 mi Left onto Hwy 319 N toward Ocilla(across from Dixie Station)
3.0 mi Right Goat Rd before Mile Marker 16 at UGA Tobacco Plot Sign
1.5 mi Left into Bowen Farm Drive.

8:15 UGA Tifton Campus Bowen Farm, 133 Goat Rd, Tifton, GA
N 31 28.41.1 W 83.26.26.4

8:20 am Welcome to UGA Bowen Farm - 133 Goat Rd, Tifton, GA

8:25 am Alex Csinos, Pathologist
Holly Hickey Anderson , UGA Plant Pathology Graduate Research Assistant
Nematode Variety Test
Nematicides for Control of Root Knot nematode in Tobacco

8:45 am Steve LaHue, Research Coordinator
Regional Variety Small Plot Test
Regional Variety Farm Test
Georgia Official Variety Test
Regional Sucker Control Test

9:00 am Paul Bertrand, Pathologist
Transplant Date X TSWV Treatment Trial

9:15 am J. Michael Moore, Extension Agronomist - Tobacco
Transplant Water Fertilizer Demonstration

9:30 am R. (Babu) Srinivasan, Entomologist
Tobacco Entomology Research Projects

Mileage Directions (* - indicates traffic assistance needed)

Right out of Bowen Farm
0.66 mi Left onto Hwy 319
1.0 mi Right onto Arnett Milling Rd
0.6 mi Cross at stop sign at new River Church Rd onto Kent Rd.
1.0 mi Left at traffic light onto Old Ocilla Rd
0.2 mi Right at traffic light onto 20th Street

Wednesday, June 10, 2015 (continued)

Mileage Directions (* - indicates traffic assistance needed)

0.9 mi Cross at light at Hwy 125/Tift Ave
0.5 mi Through light at Murray Ave
0.4 mi Cross at light at Hwy 41
0.2 mi Right onto Moore Hwy
0.1 mi Left onto Rainwater Rd
0.3 mi Left into Entomology Dr.
0.5 mi Arrive Black Shank Nursery

10:00 am University of Georgia Tifton Campus - Black Shank Nursery

Right onto Rainwater Rd
0.2 mi Left onto Moore Hwy
0.1 mi Cross thru light at Davis Drive
0.5 mi Turn left onto Zion Hope
1.5 mi Turn right onto Carpenter Rd
0.75 mi Turn left into Black Shank Farm

**10:40 am University of Georgia Tifton Campus - Black Shank Nursery
Alex Csinos, Pathologist
Holly Hickey Anderson , UGA Plant Pathology Graduate Res.Assist.
Black Shank Chemical Test**

Right out of Black Shank Farm onto Carpenter Rd.
0.75 mi Left onto Zion Hope Rd
2 mi Cross RR
0.25 mi Right onto Hwy 41
0.8 mi Right onto RDC Road
0.2 mi Left into University of Georgia Tifton Campus Conference Center

**11:30 am Sponsored Lunch-Compliments of The Georgia Tobacco Commission
Tifton Campus Conference Center, Tifton**

* After lunch Right out of RDC drive
0.2 mi * Right onto RDC Road
0.2 mi * Right onto Hwy 41
0.2 mi * Right onto I-75 S
68 mi Right on St Rd 143 in Jennings at first exit in FL
3.0 mi Cross through at caution light at CR 152
2.6 mi * Left onto CR 146
1.0 mi Right at stop sign on CR 146
1.0 mi Meet Deas Brothers

Wednesday, June 10, 2015 (continued)

Mileage Directions (* - indicates traffic assistance needed)

2:00 pm	Deas Brothers Farm, Hamilton County, Florida N 30 33.03.06 W 83 10.22.14
	Right on State Hwy 146 from field.
4.25 mi	Cross CR 141
3.0 mi	Left onto FL 6 at stop sign when State Hwy 146 ends at the S & S
	Right onto I-75 S
9.0 mi	Take Exit 451 (FL 51) toward Live Oak
11.5 mi	Down Main Street, Live Oak, Right on 51
0.5 mi	Around traffic circle and follow 51
11.5 mi	Left onto farm road
3:10 pm	Sidney & Jackson Lord Farm 30 12.23.67N, 83 05.20.64W
	Left out of farm on 51
0.6 mi	Left onto 165th Rd
2.5 mi	Left onto CR 252
1.5 mi	Cross 349
5.0 mi	Right on CR 252
1.2 mi	Left on CR 252
4.6 mi	Cross 49
3.9 mi	Right on CR 137
7.2 mi	Left on CR 216th Street / CR 240
1.7 mi	Cross 247 (flashing light)
5.8 mi	Cross SR 47
3.5 mi	Right on Tustenuggee Ave. (CR 131)
6.5 mi	Left into Dicks Farm
4:35 pm	Roosevelt & Travis Dicks Farm - Organic Tobacco Production N 29 58.41.79, W 82 38.35.11 5821 SW Tustenuggee Ave, Lake City, FL. - Elena Toro, County Extension Coordinator

**THIS IS THE END OF
THE 2015 GEORGIA-FLORIDA TOBACCO TOUR
HAVE A SAFE TRIP HOME !**

Learning for Life
Agriculture and Natural Resources * Family and Consumer Sciences * 4-H Youth
An Equal Opportunity /Affirmative Action Institution

2015 BLACK SHANK FUNGICIDE TRIAL

FUNGICIDE TRIALS COMPARING PRESIDIO AND RIDOMIL GOLD FOR CONTROL OF BLACK SHANK HAVE BEEN SET UP AT FOUR FARM LOCATIONS IN 2015. THE FARMS CHOSEN FOR THESE TRIALS ALL HAVE A RECENT HISTORY OF BLACK SHANK ON PH GENE VARIETIES SUGGESTING THE PRESENCE OF RACE 1 OF *Phytophthora nicotiana*.

EACH TRIAL INCLUDES TRANSPLANT WATER TREATMENTS AND LAYBY TREATMENTS IN COMBINATIONS. PRESIDIO WAS APPLIED AT 4 OUNCES PER ACRE IN THE TRANSPLANT WATER AND AT LAYBY AS A DIRECTED SPRAY ON THE ROW FOLLOWED BY INCORPORATION BY PLOWING. RIDIMIL GOLD WAS APPLIED IN THE SAME MANNER AT RATES OF 8 OUNCES PER ACRE IN THE TRANSPLANT WATER AND 16 OUNCES PER ACRE AT LAYBY. TOBACCO UNTREATED VIA TRANSPLANT WATER AND AT LAYBY SERVES AS A CONTROL. FIRST PLOWING TREATMENTS WERE NOT INCLUDED IN THESE TRIALS IN ORDER TO PLACE MAXIMUM PRESSURE ON THE TRANSPLANT WATER AND LAYBY TREATMENTS.

2015 TOBACCO BLACK SHANK CONTROL TRIALS:

GROWER	COUNTY	VARIETY	TRANSPLANT	LAYBY
SCOTT STRICKLAND	PIERCE	K-326	15 APRIL	29 JUNE
STANLEY CORBETT	ECHOLS	NC-196	10 APRIL	20 MAY
TRENT HUGHES	BERRIEN	NC-196	18 APRIL	29 MAY
BEN SMITH	COFFEE	NC-196	23 APRIL	28 MAY

THE BASIC DESIGN IS THE SAME FOR ALL FOUR LOCATIONS AND CAN BE SEEN IN THE PLOT MAP ON THE NEXT PAGE.

**Scott Strickland, Pierce County
James Jacobs, County Extension Coordinator**

PLOT MAP FOR 2015 BLACK SHANK FUNGICIDE TRIAL

PLOT IS 36 ROWS X ONE TRAY (200-230) SEEDLINGS

EACH ROW OF ++++++ = 4 ROWS OF TOBACCO

TRANSPLANT WATER TREATMENTS:

CHECK	+++++	+++++	+++++
PRESIDIO (4 ozs/acre)	#####	#####	#####
RIDOMIL (8 ozs/acre)	@@@@@	@@@@@	@@@@@
RIDOMIL (8 ozs/acre)	@@@@@	@@@@@	@@@@@
CHECK	+++++	+++++	+++++
PRESIDIO (4ozs/acre)	#####	#####	#####
PRESIDIO (4ozs/acre)	#####	#####	#####
RIDOMIL (8ozs/acre)	@@@@@	@@@@@	@@@@@
CHECK	+++++=++++	+++++	+++++

LAYBY TREATMENTS:

TPW:	RIDOMIL @ 32 oz/a	PRESIDIO @ 8 oz/a	UNTREATED
CHECK	@@@@@	#####	+++++
PRESIDIO (4 ozs/acre)	@@@@@	#####	+++++
RIDOMIL (8 ozs/acre)	@@@@@	#####	+++++
	PRESIDIO @ 8 oz/a	UNTREATED	RIDOMIL @ 32 oz/a
RIDOMIL (8 ozs/acre)	#####	+++++	@@@@@
CHECK	#####	+++++	@@@@@
PRESIDIO (4ozs/acre)	#####	+++++	@@@@@
	UNTREATED	RIDOMIL @ 32 oz/a	PRESIDIO @ 8 oz/a
PRESIDIO (4ozs/acre)	+++++	@@@@@	#####
RIDOMIL (8ozs/acre)	+++++	@@@@@	#####
CHECK	+++++=++++	@@@@@	#####

TRANSPLANT WATER TREATMENTS FORM A RANDOMIZED COMPLETE BLOCK WITH THE LAYBY TREATMENTS OVERLAID IN A LATIN SQUARE

Table 1. Variety, Pedigree, Sponsor and Disease Resistance of the 2015 Released Variety Test (commercially available varieties), Danny and Jared Turner Farm, Appling County, GA. 31 36.354N, 082 17.417W, Cameron Rd off Hwy 203, Baxley, GA 31513, Shane Curry, County Extension Agent.

Trt	VARIETY	PEDIGREE	SPONSOR	Disease Resistance					
				BS	GW	FW	RK	BSp	Virus
0.	CC 143	F1 Hybrid	Cross Creek Seed	R	R		R		
1.	GF 318	F1 Hybrid	Raynor	R	M		R		
2.	GL 338	F1 Hybrid	Gold Leaf Seed Co	R	R				
3.	GL 395	F1 Hybrid	Gold Leaf Seed Co	H	M		R		
4.	NC 925	F1 Hybrid	GL, RI, CC	R	R		R		
5.	NC 71	F1 Hybrid	F.W. Rickard	H	L		R		
6.	PVH 1452	F1 Hybrid	F.W. Rickard	R	M		R		
7.	PVH 2275	F1 Hybrid	F.W. Rickard	H	L		M.in M.a		TMV PVY
8.	PVH 2310	F1 Hybrid	F.W. Rickard	R		L	M.in M.a		TMV PVY
9.	CC 13	F1 Hybrid	Cross Creek Seed	R	R		M.j		
10.	CC 35	F1 Hybrid	Cross Creek Seed	H	L		M.j		
11.	Spt 220	(K 346 X SP 117) (SP 116 X K 346) Cross Creek Seed	Cross Creek Seed	R	R	R	R		
12.	Spt 236	(SP 168 X SP 196) (SP 179 X SP 177) Cross Creek Seed	Cross Creek Seed	R	R	R	R		
13	CC 143	F1 Hybrid	Cross Creek Seed	R	R		R		

¹Resistance: H - High; M - Moderate; L - Low; R - Resistant; T - Tolerant; SU - Susceptible Diseases:
 BS - Black shank; GW - Granville Wilt; FW - Fusarium Wilt; RK - Root Knot; R1&3-*Meloidogyne Incognita* Race1 & Race3; Bn. Sp. - Brown spot; TMV - Tobacco Mosaic Virus; PVY - Potato Virus 'Y';
 TSWV - Tomato Spotted Wilt Virus; TCN - Tobacco Cyst Nematode; TEV - Tobacco Etch Virus;
 Sponsor: AOI-Alliance One; Clemson-Clemson University; CC-Cross Creek Seed Co; GL-Gold Leaf Seed Company; Gwynn Farms; NCSU-NC State University; RJR- RJ Reynolds Tobacco Company; Rickard-F.W. Rickard Seed Co; SPT-Speight Seed Farms; ULT-Universal Leaf Tobacco Co

Seeded: 1/23/14; Transplanted 4/24/15 1200 lbs 6-6-18, 7 oz Coragen TPW, 2.8 oz Black Hawk

2015 SPOTTED WILT MANAGEMENT

RECOMMENDED TREATMENTS FOR SPOTTED WILT MANAGEMENT ARE BEING EVALUATED AT 23 LOCATIONS IN GEORGIA. EACH TEST CONSISTS OF 4 TRAYS OF UNTREATED SEEDLINGS PLANTED AMONG TREATED SEEDLINGS ON 23 FARMS. TREATMENT MAY BE ACTIGARD +IMIDACLOPRID OR IMIDACLOPRID ALONE AS EACH COOPERATOR CHOOSES. SPOTTED WILT EVALUATIONS ARE DONE ON THE CONTENTS OF EACH UNTREATED TRAY AND AN ADJACENT TREATED TRAY EVERY TWO WEEKS FOR 12 WEEKS.

TEST FARMS AND COOPERATING COUNTY AGENTS ARE LOCATED AS FOLLOWS:

LOWNDES CO. (4)	J. PRICE AND J. DAWSON	
BERRIEN CO. (3)	E. BEASLEY	
APPLING CO. (3)	S. CURRY	
COFFEE CO. (7)	M. von WALDNER	Tour visits Nathan Henderson & Joey Anderson
JEFF DAVIS CO. (2)	T. VANEDORE	
CANDLER CO. (1)	C. EARLS	
EVANS CO. (1)	J. LANIER	
TATNALL CO. (2)	C.TYSON AND B. GRIFFIN	

Spotted Wilt Incidence and Treatment Efficacy		
Grower	Treatment	Spotted Wilt Incidence - 8 WAT (%)
Nathan Henderson	Untreated	21
	ACTIGARD + ADMIRE PRO	9
Joey Anderson	Untreated	28
	ACTIGARD + ADMIRE PRO	12

ACTIGARD + ADMIRE PRO (1.0 oz/ 100,000) + ADMIRE PRO (0.8oz/1,000)

**Ben Smith, Coffee County
Mark von Waldner, County Extension Agent**

**PLOT MAP FOR 2015 BLACK SHANK FUNGICIDE TRIAL
PLOT IS 36 ROWS X ONE TRAY (200-230) SEEDLINGS
EACH ROW OF ++++++ = 4 ROWS OF TOBACCO**

TRANSPLANT WATER TREATMENTS:

CHECK	+++++	+++++	+++++
PRESIDIO (4 ozs/acre)	#####	#####	#####
RIDOMIL (8 ozs/acre)	@@@@@	@@@@@	@@@@@
RIDOMIL (8 ozs/acre)	@@@@@	@@@@@	@@@@@
CHECK	+++++	+++++	+++++
PRESIDIO (4ozs/acre)	#####	#####	#####
PRESIDIO (4ozs/acre)	#####	#####	#####
RIDOMIL (8ozs/acre)	@@@@@	@@@@@	@@@@@
CHECK	+++++=++++	+++++	+++++

LAYBY TREATMENTS:

TPW:	RIDOMIL @ 16 oz/a	PRESIDIO @ 4 oz/a	UNTREATED
CHECK	@@@@@	#####	+++++
PRESIDIO (4 ozs/acre)	@@@@@	#####	+++++
RIDOMIL (8 ozs/acre)	@@@@@	#####	+++++
RIDOMIL (8 ozs/acre)	PRESIDIO @ 4 oz/a	UNTREATED	RIDOMIL @ 16 oz/a
CHECK	#####	+++++	@@@@@
PRESIDIO (4ozs/acre)	#####	+++++	@@@@@
PRESIDIO (4ozs/acre)	UNTREATED	RIDOMIL @ 16 oz/a	PRESIDIO @ 4 oz/a
CHECK	+++++=++++	@@@@@	#####
RIDOMIL (8ozs/acre)	+++++	@@@@@	#####
CHECK	+++++=++++	@@@@@	#####

TRANSPLANT WATER TREATMENTS FORM A RANDOMIZED COMPLETE BLOCK WITH THE LAYBY TREATMENTS OVERLAID IN A LATIN SQUARE

Treatment	Incidence of Black Shank – 6 WAT (before layby treatments) (%)
Untreated	5
Ridomil Gold	2.5
Presidio	1

2015 SPOTTED WILT MANAGEMENT

RECOMMENDED TREATMENTS FOR SPOTTED WILT MANAGEMENT ARE BEING EVALUATED AT 23 LOCATIONS IN GEORGIA. EACH TEST CONSISTS OF 4 TRAYS OF UNTREATED SEEDLINGS PLANTED AMONG TREATED SEEDLINGS ON 23 FARMS. TREATMENT MAY BE ACTIGARD +IMIDACLOPRID OR IMIDACLOPRID ALONE AS EACH COOPERATOR CHOOSES. SPOTTED WILT EVALUATIONS ARE DONE ON THE CONTENTS OF EACH UNTREATED TRAY AND AN ADJACENT TREATED TRAY EVERY TWO WEEKS FOR 12 WEEKS.

TEST FARMS AND COOPERATING COUNTY AGENTS ARE LOCATED AS FOLLOWS:

LOWNDES CO. (4)	J. PRICE AND J. DAWSON	
BERRIEN CO. (3)	E. BEASLEY	
APPLING CO. (3)	S. CURRY	
COFFEE CO. (7)	M. von WALDNER	Tour visits Nathan Henderson & Joey Anderson
JEFF DAVIS CO. (2)	T. VANEDORE	
CANDLER CO. (1)	C. EARLS	
EVANS CO. (1)	J. LANIER	
TATNALL CO. (2)	C.TYSON AND B. GRIFFIN	

Spotted Wilt Incidence and Treatment Efficacy		
Grower	Treatment	Spotted Wilt Incidence - 8 WAT (%)
Nathan Henderson	Untreated	21
	ACTIGARD + ADMIRE PRO	9
Joey Anderson	Untreated	28
	ACTIGARD + ADMIRE PRO	12

ACTIGARD + ADMIRE PRO (1.0 oz/ 100,000) + ADMIRE PRO (0.8oz/1,000)

2015 BLACK SHANK VARIETY TRIALS

VARIETY TRIALS WERE SET UP AT EIGHT FARM LOCATIONS WITH A RECENT HISTORY OF BLACK SHANK. EACH TRIAL CONSISTED OF FOUR REPS OF EIGHT VARIETIES. THE VARIETIES K-326 (LOW RESISTANCE) AND NC-196 (MODERATE RESISTANCE) WERE USED AT ALL LOCATIONS FOR STANDARDS OF COMPARISON. THE CHART BELOW LISTS THE TEST FARMS AND VARIETIES PLANTED THERE.

W. ROBINSON J. DAVIS S. CORBETT R. COOK L. HENDLEY J. CORBITT B. GRIFFIN B. KIRKLAND

VARIETY	BROOKS	PIERCE	ECHOLS	LANIER	BERRIEN	ATKINSON	COFFEE	COFFEE
K-326	X	X	X	X	X	X	X	X
K-346		X		X				X
NC-196	X	X	X	X	X	X	X	X
NC-471	X				X	X	X	
NC-606	X			X			X	
NC-925	X					X	X	
NC-938		X		X	X	X		X
GL-395			X	X	X			
CC-143	X	X		X				
CC-1063		X	X			X		X
SPT-220		X	X			X		X
SPT-236	X				X		X	
PVH-16	X			X		X	X	
PVH-1452			X		X		X	
PVH-1600			X		X			X
PVH2275		X	X					X

Table 1. Variety, Pedigree, Sponsor and Disease Resistance of the 2015 Released Variety Test (commercially available varieties), Brian Lanier Farm, Berrien County, GA. (31 09.827 N, 83 06.899 W), 5361 Mudd Creek Rd, Nashville, GA – home/plot, Eddie Beasley, County Extension Agent

Trt	VARIETY	PEDIGREE	SPONSOR	Disease Resistance					
				BS	GW	FW	RK	BSp	Virus
0.	K 326	McNair 225 (McNair 30 X NC95) Gold Leaf Seed Co		L	L		R		
1.	GF 318	F1 Hybrid	Raynor	R	M		R		
2.	GL 338	F1 Hybrid	Gold Leaf Seed Co	R	R				
3.	GL 395	F1 Hybrid	Gold Leaf Seed Co	H	M		R		
4.	NC 925	F1 Hybrid	GL, RI, CC	R	R		R		
5.	NC 71	F1 Hybrid	F.W. Rickard	H	L		R		
6.	PVH 1452	F1 Hybrid	F.W. Rickard	R	M		R		
7.	PVH 2275	F1 Hybrid	F.W. Rickard	H	L		M.in M.a		TMV PVY
8.	PVH 2310	F1 Hybrid	F.W. Rickard	R		L	M.in M.a		TMV PVY
9.	CC 13	F1 Hybrid	Cross Creek Seed	R	R		M.j		
10.	CC 35	F1 Hybrid	Cross Creek Seed	H	L		M.j		
11.	Spt 220	(K 346 X SP 117) (SP 116 X K 346) Cross Creek Seed		R	R	R	R		
12.	Spt 236	(SP 168 X SP 196) (SP 179 X SP 177) Cross Creek Seed		R	R	R	R		
13	CC 143	F1 Hybrid	Cross Creek Seed	H	R		R		

¹Resistance: H - High; M - Moderate; L - Low; R- Resistant; T - Tolerant; SU – Susceptible Diseases:
BS - Black shank; GW - Granville Wilt; FW - Fusarium Wilt; RK - Root Knot; R1&3-*Meloidogyne Incognita* Race1 & Race3; Bn. Sp. - Brown spot; TMV - Tobacco Mosaic Virus; PVY - Potato Virus 'Y'; TSWV – Tomato Spotted Wilt Virus; TCN - Tobacco Cyst Nematode; TEV - Tobacco Etch Virus;
Sponsor: AOI-Alliance One; Clemson-Clemson University; CC-Cross Creek Seed Co; GL-Gold Leaf Seed Company; Gwynn Farms; NCSU-NC State University; RJR- RJ Reynolds Tobacco Company; Rickard-F.W. Rickard Seed Co; SPT-Speight Seed Farms; ULT-Universal Leaf Tobacco Co

Seeded: 1/16/15; Transplanted 4/13/15; Prowl 1qt ppi; Lorsban 2 qt ppi; Spartan 7 oz pre; Coragen 7 oz tpw; Admire Pro 1 oz drench GH, 1 oz/1000 plts TPW; 1250 lb 6-6-18; Coragen 3 oz foliar 5/25/15; Rainfall 6"; Irrigation 2.5";

**Trent Hughes, Berrien County
Eddie Beasley, County Extension Agent**

PLOT MAP FOR 2015 BLACK SHANK FUNGICIDE TRIAL

PLOT IS 36 ROWS X ONE TRAY (200-230) SEEDLINGS

EACH ROW OF ++++++ = 4 ROWS OF TOBACCO

TRANSPLANT WATER TREATMENTS:

CHECK	+++++	+++++	+++++
PRESIDIO (4 ozs/acre)	#####	#####	#####
RIDOMIL (8 ozs/acre)	@@@@@	@@@@@	@@@@@
RIDOMIL (8 ozs/acre)	@@@@@	@@@@@	@@@@@
CHECK	+++++	+++++	+++++
PRESIDIO (4ozs/acre)	#####	#####	#####
PRESIDIO (4ozs/acre)	#####	#####	#####
RIDOMIL (8ozs/acre)	@@@@@	@@@@@	@@@@@
CHECK	+++++	+++++	+++++

LAYBY TREATMENTS:

TPW:	RIDOMIL @ 16 oz/a	PRESIDIO @ 4 oz/a	UNTREATED
CHECK	@@@@@	#####	+++++
PRESIDIO (4 ozs/acre)	@@@@@	#####	+++++
RIDOMIL (8 ozs/acre)	@@@@@	#####	+++++
RIDOMIL (8 ozs/acre)	PRESIDIO @ 4 oz/a	UNTREATED	RIDOMIL @ 16 oz/a
CHECK	#####	+++++	@@@@@
PRESIDIO (4ozs/acre)	#####	+++++	@@@@@
PRESIDIO (4ozs/acre)	UNTREATED	RIDOMIL @ 16 oz/a	PRESIDIO @ 4 oz/a
CHECK	+++++	@@@@@	#####
RIDOMIL (8ozs/acre)	+++++	@@@@@	#####
CHECK	+++++	@@@@@	#####

TRANSPLANT WATER TREATMENTS FORM A RANDOMIZED COMPLETE BLOCK WITH THE LAYBY TREATMENTS OVERLAID IN A LATIN SQUARE

2015 BOWEN FARM TRANSPLANT DATE X TSWV TREATMENT TRIAL

TOBACCO WAS TRANSPLANTED WEEKLY FOR FIVE WEEKS IN A RANDOMIZED COMPLETE BLOCK WITH FOUR REPS. EACH REP OF EACH DATE WAS SPLIT WITH ONE ROW BEING UNTREATED SEEDLINGS AND THE ADJACENT ROW BEING SEEDLINGS TREATED WITH ACTIGARD + ADMIRE PRO (1.0 oz/ 100,000) + ADMIRE PRO (0.8oz/1,000).

TRANSPLANT DATES WERE:

23 MARCH

30 MARCH

07 APRIL

13 APRIL

20 APRIL

Evaluation of Tobacco Cultivars and Nematicides for Root Knot Nematode Management

603A	603B	604A	604B	606A	606B	601A	601B	608A	608B	607A	607B	605A	605B
505A	505B	506A	506B	508A	508B	504A	504B	507A	507B	501A	501B	503A	503B
408A	408B	403A	403B	405A	405B	407A	407B	401A	401B	404A	404B	406A	406B
304A	304B	307A	307B	303A	303B	308A	308B	306A	306B	305A	305B	301A	301B
201A	201B	205A	205B	207A	207B	206A	206B	204A	204B	208A	208B	203A	203B
107A	107B	101A	101B	104A	104B	105A	105B	103A	103B	106A	106B	108A	108B

Treatment	Rate	Application	
1A. CC 35	-----	-----	
3A. CC 13	-----	-----	
4A. SP 225	-----	-----	
5A. NC 196	-----	-----	
6A. K 326	-----	-----	
7A. NC 297	-----	-----	
8A. GF 318	-----	-----	
1B. CC 35 + Nimitz	1.25pt/A	in 12" band	7 day PPI
3B. CC 13 + Nimitz	1.25pt/A	in 12" band	7 day PPI
4B. SP 225 + Nimitz	1.25pt/A	in 12" band	7 day PPI
5B. NC 196 + Nimitz	1.25pt/A	in 12" band	7 day PPI
6B. K 326 + Nimitz	1.25pt/A	in 12" band	7 day PPI
7B. NC 297 + Nimitz	1.25pt/A	in 12" band	7 day PPI
8B. GF 318 + Nimitz	1.25pt/A	in 12" band	7 day PPI

Entry A= Non Treated

Entry B= Chemical Treatment with Nimitz *Applied in a 12 inch band directly onto the bed and rototilled in.

Date: 3/31/2015

Evaluation of Nimitz For Management of Root Knot Nematode on Tobacco

A. S. Csinos, Holly Hickey, Steve LaHue, and Unessee Hargett
University of Georgia Coastal Plain Experiment Station, Tifton, GA

Introduction

Three species of root knot nematode, *Meloidogyne incognita*, *M. arenaria*, and *M. javanica*, are major pathogens of tobacco in the Coastal Plain of Georgia. Most tobacco cultivars of tobacco have resistance to *M. incognita*, the Southern root knot nematode. However, their resistance to *M. arenaria* and *M. javanica* are not incorporated in or are not available for tobacco. Several of the cross creek cultivars have good tolerance to *M. arenaria* and reduced infection occurs. These cultivars are not as popular with growers as are the NC 71 and K 326 cultivars, primarily because of agronomic characteristics.

Nematicides for management of root knot nematodes are currently non-existent, except for the Telone II fumigant. Telone II is recommended at the rate of 6 gal/A chiseled in row several weeks prior to transplanting. Although Telone II is the only nematicide recognized to be effective on nematodes of tobacco, the application of a fumigant in the spring months of the year can be complicated with weather events.

Nimitz (fluensulfone) is a nematicide being developed by ADAMA. Fluensulfone belongs to a new class of chemistry with favorable toxicological and ecotoxicological profiles. No other plant protection product has the same mode of action or classification. Nimitz is a contact nematicide and does not have the complex procedures required of fumigant materials.

This trial evaluates the efficacy of Nimitz on flue cured tobacco in fields heavily infested with *M. arenaria*, the peanut root knot nematode.

Materials and Methods

The test was established at the Bowen Farm (Ocilla Loamy Sand) in an area heavily infested with *M. arenaria* root knot nematode. Plots were 35 feet long, 44 inches wide single rows in a randomized complete block design and 6 replications.

Treatments 1, 2, 3, 4, 5, and 6 were applied as a pre-plant incorporated (PPI) with a 3-point hitch mounted sprayer-rototiller in a 12-16 inch band, using three 8002 nozzles, and incorporated to a depth of 6 inches. Treatment 7, Temik, was also applied as a PPI by pre-weighing the Temik, spreading it on a 16 inch band and rototilling to a depth of 6 inches.

Plot maintenance for insects, weeds, suckers, and fertilization followed the University of Georgia Cooperative Extension recommendations.

Data

Vigor ratings were made on a scale of 0-10, where 10 is the most vigorous, on 4-9-14, 4-16-14, 4-22-14, 5-2-14, and 5-7-14.

Mid-season root gall ratings were made on 5-20-14, using the 0-10 Zeck's scale, where 0 = no galls and 10 = plants killed by nematodes. Plant heights were taken on 10 plants per plot on 6-4-14, by measuring the plant from the soil surface to the tip of the longest leaf in cm.

A second mid-season root gall rating was made on 6-25-14 using the 0-10 Zeck's scale. Tobacco harvests were made on 7-3-14, 7-17-14, and 7-31-14 by removing 1/3 of the leaves at a time, starting at the bottom and moving up the stalk for each successive harvest. Leaves were weighed for each plot, and total weight per plot converted to lb/A dry weight.

Summary

Plant vigor was very good in the early part of the season and no phytotoxicity from any of the treatments was observed. In addition, plant height measurements made at mid-season indicated that no phytotoxicity was present with any of the treatments. All of the treatments were taller than the non-treated control for both cultivars.

TSWV ranged from a high of 5.5% to a low of 0% across both cultivars and even though significant differences in TSWV were detected, disease levels were low and did not severely affect the outcome of the trial.

Root gall indices started out low in the end of May (Table 2) and gradually increased over time. Even at the earliest rating (May 20), all of the treatments had significantly less RGI's than the non-treated control for both tobacco cultivars.

By the June 25 RGI, both the Temik standard and the non-treated control had at least 2X-3X higher RGI's than the Nimitz treated plots. By final harvest the non-treated control plots had 6.5 and 9.4 RGI's for CC 35 and NC 71, respectively.

No significant differences in yield among treatments were detected in CC 35. However, in NC 71 all of the treatments except Temik increased yield over the non-treated control. Yields were increased from 635 lb/A to 3215 lb/A for the 3 pt/A rate. Interestingly, the 3 pt/A rate in CC 35 was also numerically the highest yield in that cultivar. This may suggest that the rate of 3 pt/A may be the optimum rate for root knot nematode management on tobacco.

Soil nematode populations at harvest ranged from 225 to 8 larval/150 cc for CC 35 with no significant difference among treatments. In NC 71, treatment 1 and 2 had the highest nematode population, with treatment 5 having the lowest.

Acknowledgment

Authors thank ADAMA and the Georgia Agricultural Commodity Commission for Tobacco for financial aid to complete this trial.

(continued on next page)

Table 1. Vigor, Plant Height, and TSWV on Tobacco Treated with Nimitz for Management of Root Knot Nematode, 2014

Treatment	Vigor (0-10 Scale)		Plant Height (cm)		TSWV (%)	
	CC 35	NC 71	CC 35	NC 71	CC 35	NC 71
1. Nimitz, 2 pt/A	8.3 ^a	8.8 ^{ab}	60 ^a	46 ^a	3.7 ^a	3.0 ^{ac}
2. Nimitz, 3 pt/A	8.3 ^a	8.5 ^{bc}	61 ^a	47 ^a	0.0 ^a	0.0 ^a
3. Nimitz, 4 pt/A	7.3 ^{bc}	8.7 ^{bc}	59 ^a	48 ^a	3.7 ^a	2.8 ^{ac}
4. Nimitz, 5 pt/A	7.3 ^{bc}	8.8 ^{bc}	62 ^a	48 ^a	2.4 ^a	0.7 ^a
5. Nimitz, 6 pt/A	7.7 ^{abc}	9.2 ^a	62 ^a	48 ^a	2.9 ^a	3.5 ^{ac}
6. Nimitz, 7 pt/A	8.1 ^{bc}	8.8 ^{bc}	63 ^a	44 ^{bc}	0.7 ^a	0.0 ^a
7. Temik 15G, 20 lb/A	7.5 ^{bc}	8.3 ^a	62 ^a	40 ^b	3.9 ^a	5.5 ^a
8. Non-treated	6.8 ^c	8.5 ^{bc}	54 ^b	30 ^c	4.2 ^a	5.2 ^a

Means followed by the same letter are not significantly different from each other at P = 0.05
 Vigor scale is 0-10, where 10 is most vigorous, plant height is in cm from ground to tip of longest leaf
 TSWV is % of plants infected

Table 2. Root Gall Indices of Tobacco Treated with Nimitz for Management of Root Knot Nematode 2014

Treatment	Root Gall Index (0-10) 5-20-2014		Root Gall Index (0-10) 6-25-2014		Root Gall Index (0-10) 8-7-2014	
	CC 35	NC 71	CC 35	NC 71	CC 35	NC 71
1. Nimitz, 2 pt/A	0.2 ^b	0.7 ^a	1.2 ^a	3.3 ^a	3.6 ^a	4.7 ^a
2. Nimitz, 3 pt/A	0.2 ^b	0.3 ^a	1.2 ^a	3.1 ^a	3.9 ^a	4.0 ^a
3. Nimitz, 4 pt/A	0.1 ^b	0.3 ^a	1.4 ^a	3.1 ^a	3.2 ^a	4.0 ^a
4. Nimitz, 5 pt/A	0.2 ^b	0.2 ^a	1.3 ^a	3.7 ^a	3.5 ^a	4.2 ^a
5. Nimitz, 6 pt/A	0.2 ^b	0.4 ^a	1.7 ^a	2.6 ^a	3.6 ^a	3.3 ^a
6. Nimitz, 7 pt/A	0.3 ^b	0.4 ^a	1.2 ^a	2.4 ^a	4.0 ^a	3.4 ^a
7. Temik 15G, 20 lb/A	0.5 ^b	1.9 ^b	3.1 ^a	7.0 ^b	5.7 ^a	8.3 ^a
8. Non-treated	1.2 ^a	3.6 ^a	4.3 ^a	8.5 ^a	6.5 ^a	9.4 ^a

Means followed by the same letter are not significantly different from each other at P = 0.05
 RGI are root gall indices based on a scale of 0-10 where 0 is no damage and 10 is plants killed by nematodes
 NC 71 has no resistance to *M. arenaria* and CC 35 has tolerance to *M. arenaria* nematode

Table 3. Yield and Nematode Numbers of Tobacco Treated with Nimitz for Management of Root Knot Nematode Larval Counts.

Treatment	Yield (lb/A)		No./150 cc soil @ final harvest	
	CC 35	NC 71	CC 35	NC 71
1. Nimitz, 2 pt/A	2981 ^a	2360 ^b	122 ^a	528 ^a
2. Nimitz, 3 pt/A	3411 ^a	3215 ^a	15 ^a	516 ^a
3. Nimitz, 4 pt/A	2903 ^a	2881 ^{bc}	10 ^a	163 ^{bc}
4. Nimitz, 5 pt/A	3044 ^a	2862 ^{bc}	225 ^a	117 ^{bc}
5. Nimitz, 6 pt/A	2814 ^a	2784 ^{bc}	93 ^a	67 ^b
6. Nimitz, 7 pt/A	3399 ^a	2953 ^{bc}	58 ^a	160 ^{bc}
7. Temik 15G, 20 lb/A	2912 ^a	1283 ^b	40 ^a	232 ^{bc}
8. Non-treated	3080 ^a	635 ^c	8 ^a	145 ^{bc}

Means followed by the same letter are not significantly different from each other at P = 0.05
 RGI are root gall indices based on a scale of 0-10 where 0 is no damage and 10 is plants killed by nematodes
 NC 71 has no resistance to *M. arenaria* and CC 35 has tolerance to *M. arenaria* nematode

2015 Tobacco Variety Tests
Field 6611

Official Variety Test

- | | | |
|--------------|--------------|------------|
| 1. K 346 | 2. K 730 | 29. GL 338 |
| 3. NC 72 | 4. NC 196 | 30. GL 368 |
| 5. NC 297 | 6. NC 471 | 31. GL 395 |
| 7. NC 606 | 8. NC 925 | 32. GL 398 |
| 9. NC 938 | 10. NC 960 | 33. GL 939 |
| 11. CC 13 | 12. CC 27 | 34. XHN 64 |
| 13. CC 33 | 14. CC 35 | |
| 15. CC 37 | 16. CC 143 | |
| 17. CC 700 | 18. CC 1063 | |
| 19. PVH 1452 | 20. PVH 1600 | |
| 21. PVH 2110 | 22. PVH 2254 | |
| 23. PVH 2275 | 24. PVH 2310 | |
| 25. PVH 1920 | 26. SP 168 | |
| 27. SP 225 | 28. GF 318 | |

Regional Small Plot Test

- | | |
|--------------|--------------|
| 1. NC 2326 | 2. NC 95 |
| 3. K 326 | 4. ITB 354 |
| 5. CU 218 | 6. NCEX 76 |
| 7. CU 213 | 8. CU 219 |
| 9. NCEX 77 | 10. GLEX 365 |
| 11. NCEX 73 | 12. NCEX 78 |
| 13. GLEX 374 | 14. XHN 67 |
| 15. NCEX 74 | 16. CU 214 |
| 17. CU 215 | 18. XHN 58 |
| 19. NCEX 75 | 20. XHN 64 |
| 21. XHN 54 | 22. NC 71 |

17

Rep 3	14	31	22	10	24	13	33	9	27	16	2	8	21	3	23	1	19	3	19	21	7	16	14	20	9	4	12	1
	6	17	5	28	30	32	11	34	20	4	18	12	15	26	7	29	25	10	15	5	8	11	13	18	2	22	6	17
Rep 2	23	29	16	20	33	27	19	30	25	1	34	24	18	31	12	3	14	21	7	9	14	17	19	3	12	6	13	18
	11	8	2	5	17	21	13	7	32	15	10	4	26	6	28	9	22	8	5	2	11	15	4	10	1	20	22	16
Rep 1	34	33	32	31	30	29	28	27	26	25	24	23	22	21	20	19	18	22	21	20	19	18	17	16	15	14	13	12
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	1	2	3	4	5	6	7	8	9	10	11

Road

**2015 Regional Farm Test
Field 6611**

- 1. NC 2326
- 2. NC 95
- 3. K 326
- 4. GLEX 328
- 5. NCEX 72
- 6. CCEX 5
- 7. CU 201
- 8. NCEX 70

- 9. CU 183
- 10. XHN 52
- 11. CU 181
- 12. GLEX 976
- 13. CCEX 4
- 14. NCEX 71
- 15. CU 156
- 16. XHN 60

Rep 3&6	312	612	310	610	304	604	316	616	308	608	303	603	306	606	311	611
	314	614	309	609	301	601	307	607	313	613	302	602	315	615	305	605
Rep 2&5	206	506	204	504	215	515	210	510	216	516	208	508	212	512	203	503
	213	513	207	507	205	505	209	509	202	502	214	514	211	511	201	501
Rep 1&4	116	416	115	415	114	414	113	413	112	412	111	411	110	410	109	409
	101	401	102	402	103	403	104	404	105	405	106	406	107	407	108	408
Road																

2015 FLUED-CURED REGIONAL SMALL PLOT TEST										
GEORGIA, SOUTH CAROLINA, NORTH CAROLINA, AND VIRGINIA										
Trt. No	Variety or Line	Generation or Year of Release	Pedigree	BS	GW	FW	RK	Bn. Sp.	Virus	Sponsor
1	NC 2326	1965	(Hicks X 9102)(Hicks)Hicks)Hicks)	L	SU	M				NC
2	NC 95	1961	(C-139XBel.4-30)x(C-139XHicks)	L	H	M	R			NC
3	K 326	1981	McNair 225 (McNair 30 X NC95)	L	L		R			GL
4	ITB 354	F10	92PHD03 x TYR92-09 12**						PVY	SEITA
5	CU 218	F1	Hybrid							SC
6	NCEX76	F1	Hybrid							NC
7	CU 213	F1	Hybrid							SC
8	CU 219	F1	Hybrid							SC
9	NCEX77	F1	Hybrid							NC
10	GLEX 365	F1	Hybrid							GL
11	NCEX73	F1	Hybrid							NC
12	NCEX78	F1	Hybrid							NC
13	GLEX 374	F1	Hybrid							GL
14	XHN 67	F1	Hybrid	R		M	M.IncogM.aren		PVY/TMV	Rickard
15	NCEX74	F1	Hybrid							NC
16	CU 214	F1	Hybrid							SC
17	CU 215	F1	Hybrid							SC
18	XHN 58	F1	Hybrid	R		H	M.IncogM.aren		PVY/TMV	Rickard
19	NCEX75	F1	Hybrid							NC
20	XHN 64	F1	Hybrid	R		M	M.IncogM.aren		PVY/TMV	Rickard
21	XHN 54	F1	Hybrid	R		M	M.IncogM.aren		PVY/TMV	Rickard
¹ Resistance; H - High; M - Moderate; L - Low; R - Resistance; T - Tolerant; Su - Susceptible Diseases: BS - Black Shank; GW - Granville Wilt; FW - Fusarium Wilt; RK - Root Knot; Bn. Sp. - Brown Spot; TMV - Tobacco Mosaic Virus; PVY - Potato Virus Y; TSMV - Tomato Spotted Wilt Virus; TCN - Tobacco Cyst Nematode; TEV - Tobacco Etch Virus; M.j. - Meloidogyne javanica										

2015 NORTH CAROLINA FLUE-CURED TOBACCO OFFICIAL VARIETY TEST										
Commercial Varieties										
Trt. No	Variety or Line	Generation or Year of Release	Pedigree	BS	GW	FW	RK	Bn. Sp.	Virus	Sponsor
1	NC 471	2003	Hybrid	R	R				TMV	Raynor
2	GL 309	2014	Hybrid							GL
3	CC 700	2005	Hybrid	R	R		TCN/R			CC
4	NC 71	1995	Hybrid	H	L		M.incog/R			Rickard
5	CU 186	2013	Hybrid							SC
6	CU 185	2014	Hybrid							SC
7	CU 204	2014	Hybrid							SC
8	PVH 1920	2014	Hybrid	R	R		M.incog/R			Rickard
9	GF 318	2008	Hybrid	R	R		R			Raynor
10	NC 960	2013	Hybrid							NC
11	K 346	1988	McNair 926x80241	H	M		R			GL
12	CU 171	2013	Hybrid							SC
13	K 326	1981	McNair 225 (McNair 30 x NC 95)	L	L		R			GL,RI,CC
14	PVH 1600	2013	Hybrid	R	H		M.incog/R			Rickard
15	PVH 2254	2011	Hybrid		H		M.incog/R		TMV	Rickard
16	CU 208	2014	Hybrid							SC
17	NC 297	1998	Hybrid	H	M		R		TMV	GL
18	PVH 2275	2010	Hybrid	R		M	M.ico	M.a	PVY/TMV	Rickard
19	CC 13	2005	Hybrid	R	R		M.j/R			CC
20	K 730	1989	McNair 926 x80241	H	M		R			GL
21	CC 27	2003	Hybrid	R	R		TCN/R		TMV	CC
22	NC 938	2012	Hybrid	R	R		R		TMV	NC
23	PVH 2110	2005	Hybrid		M		M.incog/R			Rickard
24	NC 925	2010	N/A	H	M		R			GL,RI,CC
25	NC 936	2014	Hybrid							NC
26	CU 159	2013	Hybrid							SC
27	NC 196	2002	Hybrid	H	M		R			GL
28	CC 1063	2011	Hybrid	R	R		R			CC
29	NC 940	2014	Hybrid							NC
30	CU 144	2012	Hybrid							SC
31	GL 398	2013	Hybrid	R	R		R			GL
32	NC 806	1998	NC 729 X NC 82	R	R		R			Raynor
33	GL 395	2010	Hybrid	M	M		R			GL
34	GL 394	2014	Hybrid							GL
35	PVH 1118	2004	Hybrid	R	M		M.incog/R			Rickard
36	CC 37	2006	Hybrid	R	R		TCN/R	M.j/R	TMV	CC
37	CC 35	2007	Hybrid	R	R		M.j/R			CC
38	PVH 1452	2006	Hybrid	R	M		M.incog/R			Rickard
39	PVH 1015	2014	Hybrid	R	M		M.incog/R		TMV	Rickard
40	PVH 2281	2013	Hybrid	R	L		M.incog/R			Rickard
41	CC 33	2008	Hybrid	R	R		M.j/R			CC
42	NC 299	2001	Hybrid	R	R		TCN/R			CC
43	CC 143	2012	Hybrid	R	R		R			CC
44	GL 939	1992	McN 926 X 80241	M	M		R			GL
45	PVH 2310	2013	Hybrid	R		L	M.inco	M.ar	PVY/TMV	Rickard
46	CC 67	2008	Hybrid	R	R		TCN/R		TMV	CC

¹Resistance: H - High; M - Moderate; L - Low; R - Resistance; T - Tolerant; Su - Susceptable
Diseases: BS - Black Shank; GW - Granville Wilt; FW - Fusarium Wilt; RK - Root Knot; Bn. Sp. - Brown Spot;
TMV - Tobacco Mosaic Virus; PVY - Potato Virus 'y'; TSMV - Tomato Spotted Wilt Virus;
TCN - Tobacco Cyst Nematode; TEV - Tobacco Etch Virus; M.j. - Meloidogyne javanica

2015 FLUED-CURED REGIONAL FARM TEST										
GEORGIA, SOUTH CAROLINA, NORTH CAROLINA, AND VIRGINIA										
Trt. No	Variety or Line	Generation or Year of Release	Pedigree	BS	GW	FW	RK	Bn. Sp.	Virus	Sponsor
1	NC 2326	1965	(Hicks X 9102)(Hicks)(Hicks)Hicks)	L	Su	M				NC
2	NC 95	1961	(C-139 X Bel. 4-30)X(C-139 X Hicks)	L	H	M	R			NC
3	K 326	1981	McNair 225(McNair 30 X NC 95)	L	L		R			GL
4	GLEX 328	F1	Hybrid						TMV	GL
5	NCEX72	F1	Hybrid							NC
6	CC Exp. 5	F1	Hybrid	R	R		R			CC
7	CU 201	F1	Hybrid							SC
8	NCEX70	F1	Hybrid							NC
9	CU 183	F1	Hybrid							SC
10	XHN 52	F1	Hybrid	R		R	M.inco	M.ar	PVY/TMV	Rickard
11	CU 181	F1	Hybrid							SC
12	GLEX 976	F1	Hybrid							GL
13	CC Exp. 4	F1	Hybrid	R	R	R	R			CC
14	NCEX71	F1	Hybrid							NC
15	CU 156	F1	Hybrid							SC
16	XHN 60	F1	Hybrid	R	R	R	M.inco	M.ar	TMV	Rickard

¹Resistance; H - High; M - Moderate; L - Low; R - Resistance; T - Tolerant; Su - Susceptable
Diseases: BS - Black Shank; GW - Granville Wilt; FW - Fusarium Wilt; RK - Root Know; Bn. Sp. - Brown Spot;
TMV - Tobacco Mosaic Virus; PVY - Potato Virus 'y'; TSMV - Tomato Spotted Wilt Virus;
TCN - Tobacco Cyst Nematode; TEV - Tobacco Etch Virus; M.j. - Meloidogyne javanica

Variety Fertilizer Rates for Quality

Field 6611

409	408	407	406	405	404	403	402	401
305	306	302	309	303	307	301	308	304
203	207	206	208	201	204	209	205	202
101	102	103	104	105	106	107	108	109

Treatments:

1. K326 1000lb 6-6-18 240lb 15.5-0-0 (Recommended N + 20lb)
2. K326 1000lb 6-6-18 120lb 15.5-0-0 (Recommended N)
3. K326 1000lb 6-6-18 0lb 15.5-0-0 (Recommended N - 20lb)
4. Sp. 225 1000lb 6-6-18 240lb 15.5-0-0 (Recommended N + 20lb)
5. Sp. 225 1000lb 6-6-18 120lb 15.5-0-0 (Recommended N)
6. Sp. 225 1000lb 6-6-18 0lb 15.5-0-0 (Recommended N - 20lb)
7. CC 35 1000lb 6-6-18 240lb 15.5-0-0 (Recommended N + 20lb)
8. CC 35 1000lb 6-6-18 120lb 15.5-0-0 (Recommended N)
9. CC 35 1000lb 6-6-18 0lb 15.5-0-0 (Recommended N - 20lb)

Plots: 59' long by 2 rows each replicated 4 times. Test = 18 rows.

Bowen Farm Transplant Water Fertilizer Test - 2015

J. Michael Moore, Extension Agronomist - Tobacco

Steve LaHue, Research Coordinator

Trt No.	Treatment	Per 212 gal TPW / A	Per 10 gal mix	Visual Ratings 1-5, 5 = best		
				4/17/2015	4/27/2015	5/3/2015
1	Non-Treated			2	2	2
2	Ultrasol 9-45-15	8 lb	165 g	3.5	3.25	3.5
3	Ultrasol 9-45-15	12 lb	248 g	3.75	4.5	4.75
4	Chem-Start 7-20-0	1.5 gal/A	258 ml	4.25	4	3
5	Chem-Start 7-20-0	2.0 gal/A	343 ml	4	4.25	4.5
6	Quick Kicker Plus 6-21	1.5 gal/A	258 ml	3.75	3.5	3
7	Quick Kicker Plus 6-21	2.0 gal/A	343 ml	4.25	4.25	3.5
8	Black Label 6 20 0	1.5 gal/A	258 ml	4	4.25	4.5
9	Black Label 6 20 0	2.0 gal/A	343 ml	4.5	4	4
10	10 34 0	1.18 gal/A	203 ml	4.75	4.5	4
11	10 34 0	1.77 gal/A	305	4.75	4.75	4.75
12	Monty's Carbon	1.0 gal/A	178 ml	2	2	2

Plot stake is in the left row.

Plot Numbers: First digit = rep. number, Third digit = treatment number

Row Length: 59' (30 plants) X 2 rows X 4 reps = 0.396 A/Trt

Tranplanted: 4/6/15

Variety: K 326; Transplant water: 220 gpa

Admire Pro 1.0 oz/1000 plts

Visual Ratings: 1- 5; lowest - greatest

last updated: 6/7/15

2015 Bowen Farm Transplant Water Fertilizer Test

	412	411	410	409	408	407	406	405	404	403	402	401					
	307	303	312	302	311	301	304	309	305	310	308	306					
	206	205	208	201	210	212	203	202	211	207	209	204					
	101	102	103	104	105	106	107	108	109	110	111	112					

B	T	B	T	B	T	B	T	B	T	B	T	B	T	B	T	B	T	B	T	B	T
---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

First row on North is next to first treated row of variety test.

N <-> S

Tyton BioEnergy Systems – 2015

Variety: 1. Kutsaga Mammoth 10 (uncoated – provided by Tyton);
2. CCT 8

Replications: Four

Plant spacing: 12 inches

Row spacing: Standard

Weed and pest control: Standard

Topping: Standard with NO sucker control application

Plot configuration: Double row plots (2 rows/plot)

Other: No sampling with two biomass harvests with yield determination

402	401
301	302
202	201
101	102

Seeding Date: 2/17/15

Transplanting Date: 4/17/15

Fertilization Dates and Amounts:

Topping Date:

Integrated management of thrips and *Tomato spotted wilt virus* in Tobacco

R. Srinivasan¹, S. Diffie¹, and A. Csinos²

¹Department of Entomology, ¹Department of Plant Pathology, University of Georgia,
Tifton Campus

Thrips-transmitted *Tomato spotted wilt virus* (TSWV) is still a serious production constraint for tobacco growers in Georgia and in the Southeastern United States. Cultivated tobacco has no genetic resistance against thrips and/or TSWV. This has made management of thrips and/or TSWV extremely difficult. With tobacco foliage being very valuable, symptoms of TSWV on tobacco foliage are undesirable. The vector biology team, over the last four years, has focused on developing an integrated management strategy that encompassed multiple options such as plant defense inducer –Actigard[®], insecticides to manage thrips, and planting date alterations.

Actigard is often used regularly in conjunction with an insecticide as a float treatment in the greenhouse prior to planting. No other insecticide besides imidacloprid is predominantly used. Thrips have an extraordinary ability to develop resistance against insecticides. In fact, the western flower thrips has already developed resistance to several insecticides. Our program has concentrated on identifying alternatives to imidacloprid usage. In this study, potential alternatives such as Movento (spirotetramat) and Radiant (spinetoram) were evaluated

Besides insecticides, we also evaluated different planting dates and their impact on thrips populations as well as TSWV incidence. We used a split plot design with planting dates (March 25 (E), April 8 (M), and April 22 (L)) representing main plots and the insecticide treatments representing sub-plots. The trial is currently in progress at Bowen Farm, University of Georgia, Tifton Campus. But some preliminary findings are provided below.

Thrips were monitored using yellow sticky cards present in each treatment plot as well as outside in non-treated areas to assess the population dynamics over time. Thrips counts were taken in two-week intervals. The sticky cards were removed and taken to the vector biology laboratory in Tifton, counted, and identified to species. The treatment thrips counts have not been estimated yet, but counts from outside the trial plots are included in this report. Plants showing TSWV symptoms were counted in three rows in each plot at three time intervals are included in this report. TSWV counts were also monitored in other areas around the trial plot that did not receive any Actigard treatment to assess the impact of Actigard application alone.

In addition, we have been investigating the effect of cropping system on thrips and TSWV incidence in tobacco. Presence of peanut volunteers and their impact on thrips and TSWV incidence is currently being evaluated. The trial is on going and only preliminary results will be discussed.

Plot plan

402	203	104	801	503	604	1101	1002	1204	
401	303	404	501	702	704	1001	902	903	
301	102	204	601	502	603	901	1202	1203	904
Center Pivot									
201	302	103	701	802	703	804	1102	1103	1004
101	202	403	304	602	803	504	1201	1003	1104

March 25 100 Actigard float

200 Actigard float + Movento float and spray

300 Actigard float + Radiant float and spray

400 Actigard float + Admire Pro float and spray

April 8 500 Actigard

600 Actigard float + Movento float and spray

700 Actigard float + Radiant float and spray

800 Actigard float + Admire Pro float and spray

April 22 900 Actigard float

1000 Actigard float + Movento float and spray

1100 Actigard float + Radiant float and spray

1200 Actigard float + Admire Pro float and spray

All seedling trays were treated with 0.07g Actigard in 80ml water (each). Each plot has three rows and is approximately 40 ft in length.

Thrips counts:

Thrips counts based on treatment plots are currently being enumerated in the laboratory and identified. However, sticky cards placed around the plot have been counted and identified. Though no treatment effects could be inferred from these data at this point, the data provide an idea of how the thrips population fluctuated with time in the 2015 season. The results are included in a graph below. Results indicated that thrips populations increased from the second week of May onwards. Surprisingly, tobacco thrips populations formed only a small fraction of the total population of thrips that were trapped in sticky cards. The predominant species trapped include *Frankliniella occidentalis*, *F. bispinosa*, and *F. tritici*.

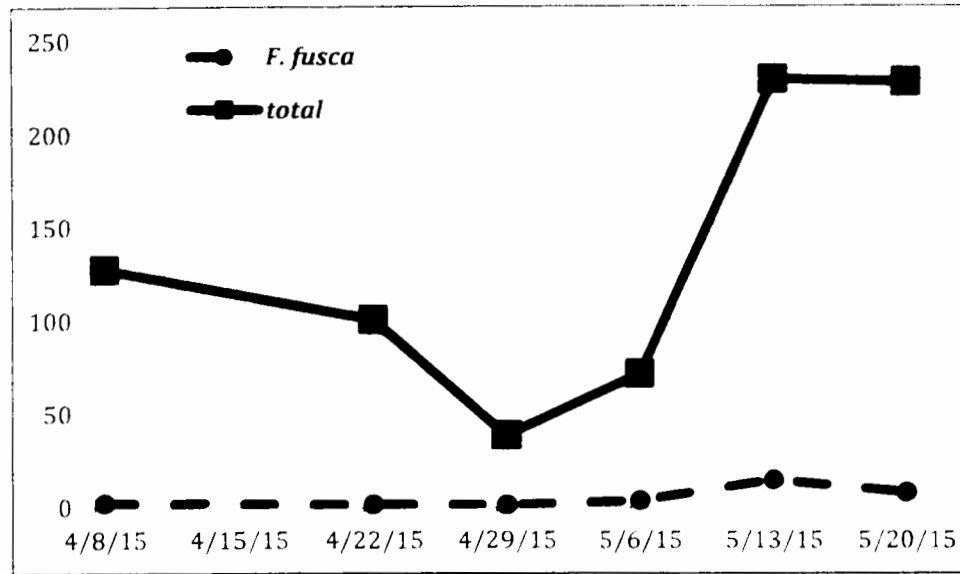


Fig. 1. Average thrips counts obtained per sticky cards placed in the perimeter of the tobacco field. Six sticky cards were placed in total.

TSWV incidence

TSWV incidence in Actigard treated plants was up to 15%. The incidence of TSWV in non-Actigard treated plants ranged from 5 to 15%. The incidence of TSWV in insecticide treated plants ranged from 7 to 10%, with Radiant treated plots had the least amount of TSWV infection. Actigard and/or insecticide treatment did not seem to significantly influence TSWV incidence in tobacco this season. On the other hand, planting date seems to affect TSWV incidence. TSWV incidence in late-planted tobacco (April 22) was less than TSWV incidence in plants that were planted earlier (April 08 and 22). The results of TSWV incidence are explained below in figure 2.

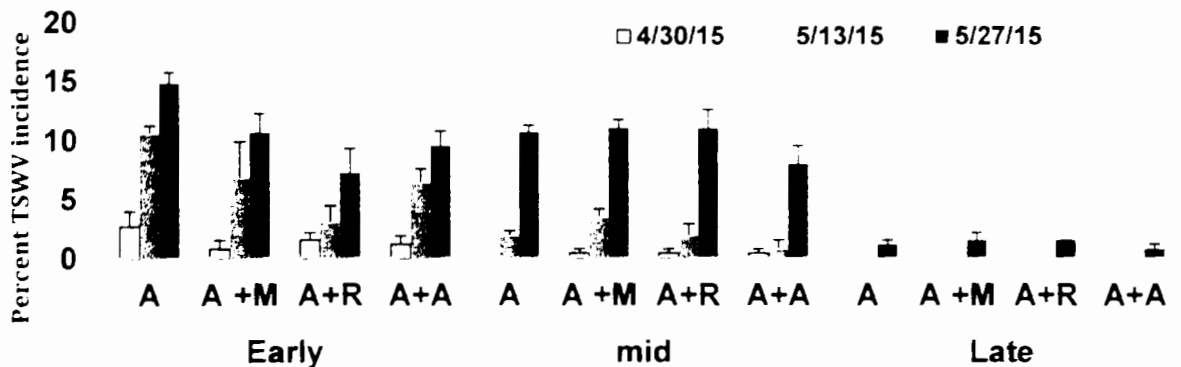


Fig. 2. Percent TSWV incidence in plots planted at various dates and treated with Actigard and insecticides. Horizontal axis: A- represents Actigard, M- represents Movento, and R- Represents Movento, A + A – represents Actigard + AdmirePro. The dates above bars represent three sampling dates. Early, mid, and late planting was conducted on March 25, April 08th, and April 22nd, respectively.

These results suggest that planting date could have a bigger impact than applications of Actigard either alone or in combinations with insecticides. Similar results were also observed in the last field season (2014). It is not clear why the TSWV incidence was higher on early-planted plants when the pest pressure was less. More data analyses and interpretation would help comprehend this information better. Also, assessing the impact of peanuts in the cropping system and its effect on thrips and TSWV incidence will help understand this complex situation better.

Evaluation of Tobacco Cultivars and Chemical Control for Black Shank Management

607A	607B	604A	604B	606A	606B	601A	601B	602A	602B	605A	605B	608A	608B	603A	603B
505A	505B	502A	502B	508A	508B	503A	503B	507A	507B	504A	504B	506A	506B	501A	501B
406A	406B	403A	403B	407A	407B	404A	404B	401A	401B	408A	408B	405A	405B	402A	402B
304A	304B	306A	306B	303A	303B	308A	308B	305A	305B	302A	302B	301A	301B	307A	307B
201A	201B	205A	205B	202A	202B	206A	206B	204A	204B	207A	207B	203A	203B	208A	208B
102A	102B	108A	108B	101A	101B	107A	107B	103A	103B	106A	106B	104A	104B	105A	105B

Treatment	Rate	Application
1A. SP 225	-----	-----
2A. CC 143	-----	-----
3A. K346	-----	-----
4A. NC 925	-----	-----
5A. NC 196	-----	-----
6A. K 326	-----	-----
7A. NC 297	-----	-----
8A. GL 395	-----	-----
1B. SP 225 + Presidio	4 fl oz	Transplant Water
	4 fl oz	Directed Spray 1 st Cultivation
	4 fl oz	Layby
2B. CC143 + Presidio	4 fl oz	Transplant Water
	4 fl oz	Directed Spray 1st Cultivation
	4 fl oz	Layby
3B. K346 + Presidio	4 fl oz	Transplant Water
	4 fl oz	Directed Spray 1st Cultivation
	4 fl oz	Layby
4B. NC 925 + Presidio	4 fl oz	Transplant Water
	4 fl oz	Directed Spray 1st Cultivation
	4 fl oz	Layby
5B. NC 196 + Presidio	4 fl oz	Transplant Water
	4 fl oz	Directed Spray 1st Cultivation
	4 fl oz	Layby
6B. K 326 + Presidio	4 fl oz	Transplant Water
	4 fl oz	Directed Spray 1st Cultivation
	4 fl oz	Layby
7B. NC 297 + Presidio	4 fl oz	Transplant Water
	4 fl oz	Directed Spray 1st Cultivation
	4 fl oz	Layby
8B. GL 395 + Presidio	4 fl oz	Transplant Water
	4 fl oz	Directed Spray 1st Cultivation
	4 fl oz	Layby

Entry A = Non-Treated

Entry B= Chemical Treatment with Presidio

Date 2/12/2015

Evaluation of Fluopicolide for Tobacco Black Shank Management

A. S. Csinos, Jeff Smith*, Holly Hickey, and Unessee Hargett
*Valent, USA

Introduction

Tobacco Black Shank incited by *Phytophthora nicotianae* continues to be a serious soil borne disease in Georgia. Although cultural practices such as use of resistance in tobacco cultivars and crop rotations are being used, the use of fungicides may be required for adequate disease management. Ridomil Gold has been the standard fungicide for Black Shank management since the early 1980s, but poor control of the disease and some failures along with high cost have contributed to its unpopularity. Georgia has two races of *P. nicotianae*, Race 0 and Race 1, likely as mixtures in Georgia fields. The use of *Nicotiana glauca* resistance found in NC 71 has allowed the shift from Race 0 to Race 1, and thus NC 71 (although a very good agronomic cultivar) is susceptible to Black Shank generally in all fields in Georgia.

A relatively new fungicide, Fluopicolide (Presidio, Valent, USA) has been evaluated for management of several Oomycete incited diseases and has been labeled for disease management in vegetables.

This study evaluates the use of Fluopicolide (Presidio) for management of Tobacco Black Shank in a heavily infested disease nursery of K 326 (not resistant to Black Shank) and SP 225 (resistance to Race 0, tolerance to Race 1). Both cultivars are commercially available in Georgia and have good agronomic characteristics.

Materials and Methods

The trial was two tests using a randomized complete block design with five replications. One trial used K 326, which has no resistance to Race 0 or Race 1 of *P. nicotianae*, and SP 225, which has resistance to Race 0, but is only tolerance to Race 1. Each trial consisted of four treatments: 1. Non-treated control; 2. Presidio 4 SL applied at 4 oz/A in the transplant water on April 23, 4 oz/A at first cultivation as a directed spray May 14, and 4 oz/A again as a directed spray at layby June 4; 3. Presidio 4 SL applied at 4 oz/A April 23, QUG 42 (experimental) at 19 oz/A as a directed spray at first cultivation on May 14, and another application of Presidio 4 SL at 4 oz/A at layby on June 4; and 4. Ridomil Gold 4 SL in the transplant water at 0.5 pt/A on April 23, Ridomil Gold 4 SL at 1 pt/A as a directed spray at first cultivation on May 14, and again at 1 pt/A at layby on June 4.

The University of Georgia Cooperative Extension recommendations for crop fertilization and other pest control were followed.

Results and Discussion

All of the treatments showed good vigor and height measurements on all dates for both K 326 and SP 225 (Table 1, Table 4). No separation among treatments or between cultivars was noted.

Black Shank for cultivar SP 225 first occurred on June 17 and resulted in 50.8% disease in the non-treated plots by the end of the season. Treatment 2, Presidio alone, had only 0.8% disease as compared to Ridomil Gold which had 28% disease.

in K 326. Black Shank was detected by May 28 and by the end of the season the non-treated control had 97.3% disease. Treatment 2, Presidio alone, had 53.6% disease as compared to Ridomil Gold which had 87.2%, statistically the same as the non-treated.

TSWV levels ranged from a high of 10.7% to a low of 1.6% across all treatments and both cultivars. Generally, a level of 10% or less does not greatly affect yields.

This trial demonstrated the superiority of Presidio in the management of Tobacco Black Shank over Ridomil Gold and also the advantage of using a cultivar with both Race 0 resistance and Race 1 tolerance to *P. nicotianae* under Georgia conditions.

Acknowledgment

The authors would like to thank Valent, USA, and the Georgia Agricultural Commodity Commission for Tobacco for financial support.

Table 1. Evaluation of Fluopicolide for Tobacco Black Shank Management: Vigor

Treatment	SP 225	K 326	SP 225	K 326	SP 225	K 326
	Vigor	Vigor	Vigor	Vigor	Vigor	Vigor
	5/5/2014	5/5/2014	5/14/2014	5/14/2014	6/2/2014	6/2/2014
1 Non-treated	8.8 ^a	9.0 ^a	8.8 ^a	8.6 ^a	9.8 ^a	9.2 ^a
2 Presidio 4 SC (4 oz/A x 3)	8.4 ^a	9.0 ^a	8.4 ^a	8.8 ^a	9.6 ^a	9.6 ^a
3 Presidio 4 SC (4 oz/A), QUG 42 (19 oz/A), Presidio 4 SC (4 oz/A)	9.8 ^a	9.0 ^a	7.4 ^a	9.0 ^a	9.4 ^a	9.6 ^a
4 Ridomil Gold 4 SC	8.8 ^a	9.0 ^a	7.8 ^a	8.4 ^a	9.8 ^a	9.4 ^a

Means followed by the same letter are not significantly different from each other at P = 0.05
Vigor is based on a scale of 0-10 where 10 is the most vigorous

Table 2. Evaluation of Fluopicolide for Tobacco Black Shank Management: Percent Black Shank Over Time for Cultivar SP 225

Treatment Number	Percent Black Shank (%)					
	6/17/2014	6/25/2014	7/7/2014	7/21/2014	8/8/2014	8/13/2014
1	0.8 ^a	5.7 ^a	19.8 ^a	32.6 ^a	41.0 ^a	50.8 ^a
2	0 ^a	0.8 ^a	0.8 ^a	0.8 ^a	3.0 ^a	5.8 ^a
3	0 ^a	0.0 ^a	0.0 ^a	0.0 ^a	0.0 ^a	0.9 ^a
4	0 ^a	0.0 ^a	1.7 ^a	10.6 ^a	21.4 ^a	28.1 ^a

Means followed by the same letter are not significantly different from each other at P = 0.05
Black Shank is expressed as a % of the plants killed by *P. nicotianae* in each plot

(continued on next page)

Table 3. Evaluation of Fluopicolide for Tobacco Black Shank Management. Percent Black Shank Over Time for Cultivar K 326

Treatment Number	Percent Black Shank (%)								
	5/28/14	6/4/14	6/11/14	6/17/14	6/25/14	7/6/14	7/26/14	8/4/14	8/13/14
1	0.8 ^a	10.6 ^a	21.9 ^a	41.6 ^a	70.3 ^a	88.3 ^a	95.8 ^a	97.3 ^a	97.3 ^a
2	0 ^a	1.6 ^b	2.3 ^b	7.4 ^b	10.2 ^b	19.3 ^b	33.3 ^b	43.6 ^b	53.6 ^b
3	0 ^a	4.0 ^{bc}	5.6 ^b	7.1 ^b	9.5 ^b	18.8 ^b	22.9 ^b	40.5 ^b	46.0 ^b
4	0 ^a	0.0 ^b	0.0 ^c	0.0 ^c	7.2 ^b	53.8 ^b	74.2 ^b	85.5 ^b	87.2 ^b

Means followed by the same letter are not significantly different from each other at $P = 0.05$. Black Shank is expressed as a % of the plants killed by *P. nicotianae* in each plot.

Table 4. Evaluation of Fluopicolide for Tobacco Black Shank Management. TSWV and Plant Height for K326 and SP 225

Treatment Number	TSWV % Total		Plant Height (cm) on 6/3/2014	
	K 326	SP 225	K 326	SP 225
1	5.9 ^a	3.3 ^a	63.2 ^a	70.7 ^a
2	10.7 ^a	2.6 ^b	65.2 ^a	67.8 ^a
3	3.2 ^b	3.5 ^a	64.2 ^a	66.8 ^a
4	1.6 ^b	5.9 ^a	66.2 ^a	70.1 ^a

Means followed by the same letter are not significantly different from each other at $P = 0.05$.

Syngenta Oxathiapiprolin Tobacco Black Shank Program- Black Shank Farm Tifton, Ga 2015

505	507	502	504	506	501	503	508
406	408	407	402	401	404	405	403
302	301	303	305	307	306	308	304
208	203	205	206	204	202	207	201
104	105	108	101	103	107	102	106

Treatment	Rate	Application
1. Untreated Check		
2. Presidio 4 SC	4.0 fl oz/a	At Transplant
Ridomil Gold 480 SL	8.0 fl oz/a	At Layby
3. Ridomil Gold 480 SL	4.0 fl oz/a	At Transplant
Presidio 4 SC	4.0 fl oz/a	At Layby
4. Ridomil Gold 480 SL	4.0 fl oz/a	At Transplant
A20941	9.6 fl oz/a	At Layby
5. A20941	4.8 fl oz/a	At Transplant
Ridomils Gold 480 SL	8.0 fl oz/a	At Layby
6. A20941	9.6 fl oz/a	At Transplant
Ridomil Gold 480 SL	8.0 fl oz/a	At Layby
7. A20941	4.8 fl oz/a	At Transplant
Ridomil Gold 480 SL	4.0 fl oz/a	At Layby
8. Ridomil Gold 480 SL	4.0 fl oz/a	At Transplant
A20941	4.8 fl oz/a	At Layby

Date 3/30/2015

Table 1. Variety, Pedigree, Sponsor and Disease Resistance of the 2015 Released Variety Test (commercially available varieties), Sidney and Jackson Lord Farm, Suwannee County, FL, (30°12'23.67"N, 83°05'20.64"W), 165th Rd, Live Oak, FL 32060, Elena Toro, County Extension Agent

Trt	VARIETY	PEDIGREE	SPONSOR	Disease Resistance					
				BS	GW	FW	RK	BSp	Virus
0.	NC 196	F1 Hybrid	Gold Leaf Seed Co	H	M		R		
1.	GF 318	F1 Hybrid	Raynor	R	M		R		
2.	GL 338	F1 Hybrid	Gold Leaf Seed Co	R	R				
3.	GL 395	F1 Hybrid	Gold Leaf Seed Co	H	M		R		
4.	NC 925	F1 Hybrid	GL, RI, CC	R	R		R		
5.	NC 71	F1 Hybrid	F.W. Rickard	H	L		R		
6.	PVH 1452	F1 Hybrid	F.W. Rickard	R	M		R		
7.	PVH 2310	F1 Hybrid	F.W. Rickard	R		L	M.in M.a		TMV PVY
8.	PVH 2275	F1 Hybrid	F.W. Rickard	H	L		M.in M.a		TMV PVY
9.	CC 13	F1 Hybrid	Cross Creek Seed	R	R		M.j		
10.	CC 35	F1 Hybrid	Cross Creek Seed	H	L		M.j		
11.	Spt 220	(K 346 X SP 117) (SP 116 X K 346) Cross Creek Seed		R	R	R	R		
12.	Spt 236	(SP 168 X SP 196) (SP 179 X SP 177) Cross Creek Seed		R	R	R	R		

¹Resistance: H - High; M - Moderate; L - Low; R- Resistant; T - Tolerant; SU – Susceptible Diseases:
 BS - Black shank; GW - Granville Wilt; FW - Fusarium Wilt; RK - Root Knot; R1&3-*Meloidogyne Incognita* Race1 & Race3; Bn. Sp. - Brown spot; TMV - Tobacco Mosaic Virus; PVY - Potato Virus 'Y';
 TSWV – Tomato Spotted Wilt Virus; TCN - Tobacco Cyst Nematode; TEV - Tobacco Etch Virus;
 Sponsor: AOI-Alliance One; Clemson-Clemson University; CC-Cross Creek Seed Co; GL-Gold Leaf Seed Company; Gwynn Farms; NCSU-NC State University; RJR- RJ Reynolds Tobacco Company; Rickard-F.W. Rickard Seed Co; SPT-Speight Seed Farms; ULT-Universal Leaf Tobacco Co

Seeded: 1/16/15

Transplanted 3/30/15 1.4 oz/A Admire Pro in Transplanter water;. 7 oz/A Coragen; 100 gal/A

GEORGIA COUNTY ESTIMATES

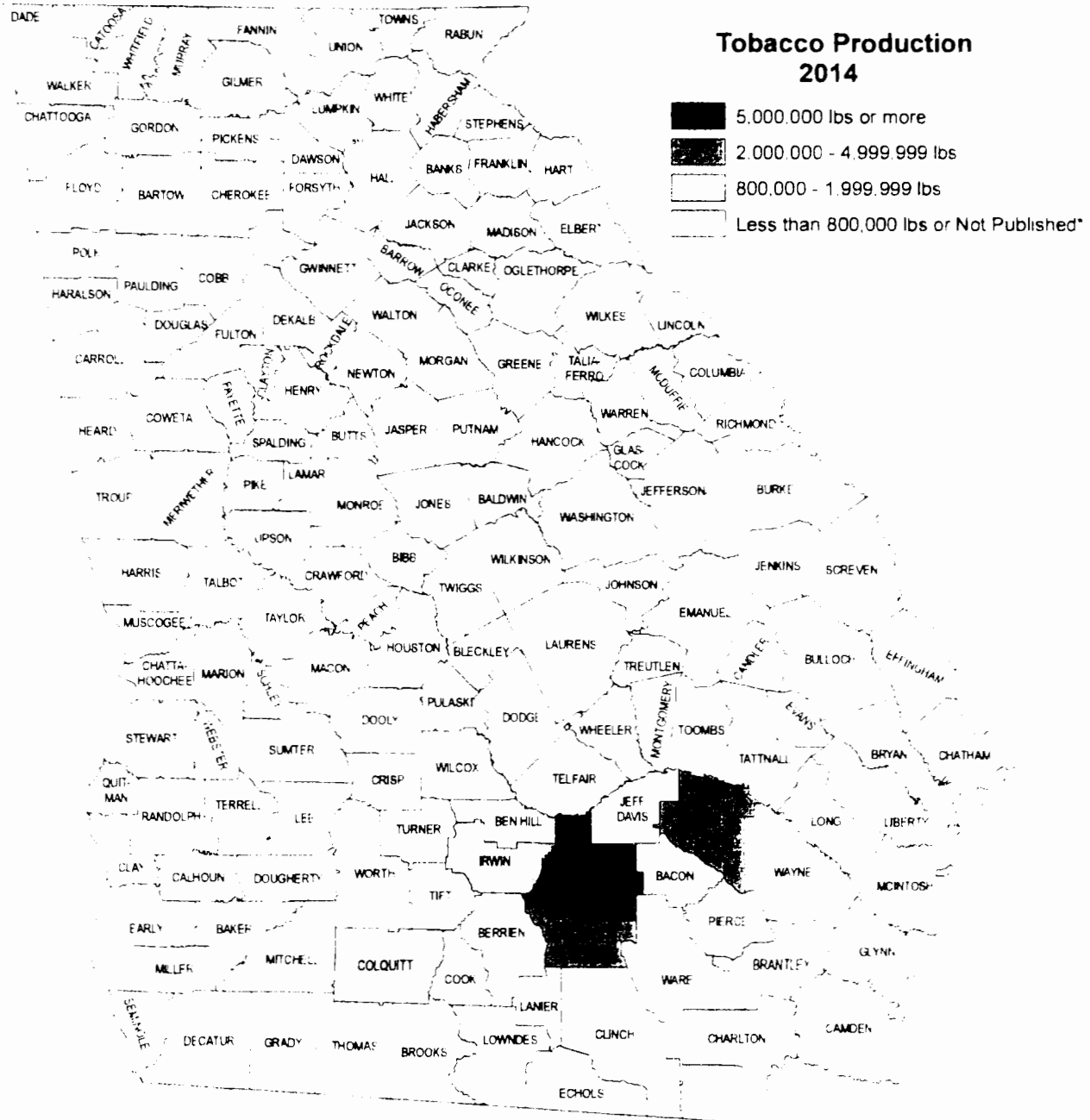
**USDA, NASS
SOUTHERN
REGION**



Tobacco 2013-2014

Stephens Federal
Building, Suite 320
Athens, Georgia 30601
Phone: (706) 546-2236
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Released: May 2015



* Counties not published due to insufficient data or to avoid disclosure of individual operations

Jim Ewing, Regional Director

USDA/NASS COOPERATING WITH THE GEORGIA DEPARTMENT OF AGRICULTURE

Tobacco Area Harvested, Yield, and Production by County — Georgia: 2013 and 2014

County	2013			2014		
	Harvested	Yield per acre	Production	Harvested	Yield per acre	Production
	(acres)	(pounds)	(pounds)	(acres)	(pounds)	(pounds)
D10 Northwest	(D)	(D)	(D)	(D)	(D)	(D)
D20 North Central	(D)	(D)	(D)	(D)	(D)	(D)
D30 Northeast	(D)	(D)	(D)	(D)	(D)	(D)
D40 West Central	(D)	(D)	(D)	(D)	(D)	(D)
D50 Central	(D)	(D)	(D)	(D)	(D)	(D)
D60 East Central	(D)	(D)	(D)	(D)	(D)	(D)
D70 Southwest	(D)	(D)	(D)	(D)	(D)	(D)
Atkinson.....	690	1,810	1,110,000	1,030	2,310	2,380,000
Berrien.....	1,250	1,265	1,580,000	(D)	(D)	(D)
Coffee.....	1,830	1,550	2,840,000	2,370	2,385	5,650,000
Colquitt.....	490	2,060	1,010,000	740	2,365	1,750,000
Irwin.....	370	1,955	723,000	410	2,415	990,000
Jeff Davis.....	390	2,210	861,000	(D)	(D)	(D)
Lanier.....	720	1,750	1,260,000	(D)	(D)	(D)
Tift.....	890	1,190	1,060,000	(D)	(D)	(D)
D80 Other counties	2,030	2,355	4,776,000	5,350	2,250	12,030,000
D80 South Central	8,660	1,760	15,220,000	9,900	2,305	22,600,000
Appling.....	1,000	1,810	1,810,000	1,100	2,755	3,030,000
Pierce.....	1,130	1,885	2,130,000	(D)	(D)	(D)
D90 Other counties	1,120	1,820	2,040,000	2,800	2,010	5,630,000
D90 Southeast	3,250	1,840	5,980,000	3,900	2,220	8,660,000
Other districts total.....	890	1,350	1,200,000	1,200	2,535	3,040,000
State total	12,800	1,750	22,400,000	16,000	2,300	34,600,000

(D) Counties not listed are not published due to insufficient data or to avoid disclosure of individual operations.

Crop Area Planted — States and United States: 2013-2015

Crop and State	Area planted			Percent of previous year (percent)
	2013 (1,000 acres)	2014 (1,000 acres)	2015 ¹ (1,000 acres)	
Com				
Alabama.....	320	300	270	90
Florida.....	115	75	80	107
Georgia.....	510	350	305	87
South Carolina.....	350	295	290	98
United States.....	95,365	90,597	89,199	98
Cotton, all				
Alabama.....	365.0	350.0	300.0	86
Florida.....	131.0	107.0	90.0	84
Georgia.....	1,370.0	1,380.0	1,100.0	80
South Carolina.....	258.0	280.0	235.0	84
United States.....	10,407.0	11,037.0	9,549.0	87
Hay, all ²				
Alabama.....	790	750	710	95
Florida.....	300	320	300	94
Georgia.....	580	580	560	97
South Carolina.....	290	270	270	100
United States.....	57,897	57,092	57,093	100
Oats ³				
Alabama.....	60	50	60	120
Georgia.....	50	60	70	117
South Carolina.....	20	21	22	105
United States.....	2,980	2,723	2,931	108
Peanuts				
Alabama.....	140.0	175.0	185.0	108
Florida.....	140.0	175.0	160.0	91
Georgia.....	430.0	600.0	720.0	120
South Carolina.....	81.0	112.0	115.0	103
United States.....	1,067.0	1,354.0	1,481.0	109
Potatoes, spring				
Florida.....	30.9	30.5	27.0	89
United States.....	75.9	73.8	73.0	99
Soybeans				
Alabama.....	440	485	490	101
Florida.....	32	39	37	95
Georgia.....	235	300	370	123
South Carolina.....	320	450	430	96
United States.....	76,840	83,701	84,635	101
Tobacco ²				
Georgia.....	12.8	15.0	12.5	83
South Carolina.....	14.5	15.8	13.0	82
United States.....	355.7	378.4	345.3	91
Wheat, winter ³				
Alabama.....	310	255	210	32
Florida.....	25	15	25	167
Georgia.....	430	300	330	110
South Carolina.....	280	230	185	80
United States.....	43,230	42,399	40,751	96

¹ Intended plantings in 2015 as indicated by reports from farmers.

² Intended area harvested in 2015 as indicated by farmers.

³ Includes area planted in preceding fall.

Source: USDA National Agricultural Statistics Service - *Prospective Plantings*, March 2015.

**THANK YOU FOR YOUR INTEREST IN THE
2015 GEORGIA - FLORIDA TOBACCO TOUR**

**PLAN TO JOIN US FOR THE
2016 GEORGIA - FLORIDA TOBACCO TOUR**

JUNE 13-15, 2016



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ATTENTION! PESTICIDE PRECAUTIONS

1. Observe all directions, restrictions and precautions on pesticide labels. It is dangerous, wasteful and illegal to do otherwise.
2. Store all pesticides in original containers with labels intact and behind locked doors. "KEEP PESTICIDES OUT OF THE REACH OF CHILDREN."
3. Use pesticides at correct label dosage and intervals to avoid illegal residues or injury to plants and animals.
4. Apply pesticides carefully to avoid drift or contamination of non-target areas.
5. Surplus pesticides and containers should be disposed of in accordance with label instructions so that contamination of water and other hazards will not result.
6. Follow directions on the pesticide label regarding restrictions as required by State or Federal Laws and Regulations.
7. Avoid any action that may threaten an Endangered Species or its habitat. Your county Extension agent can inform you of Endangered Species in your area, help you identify them, and through the Fish and Wildlife Service Field Office identify actions that may threaten Endangered Species or their habitat.

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CSS-15-1115

June 2015

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Dr. Scott Angle, Dean and Director
The University of Georgia College of Agricultural and Environmental Sciences