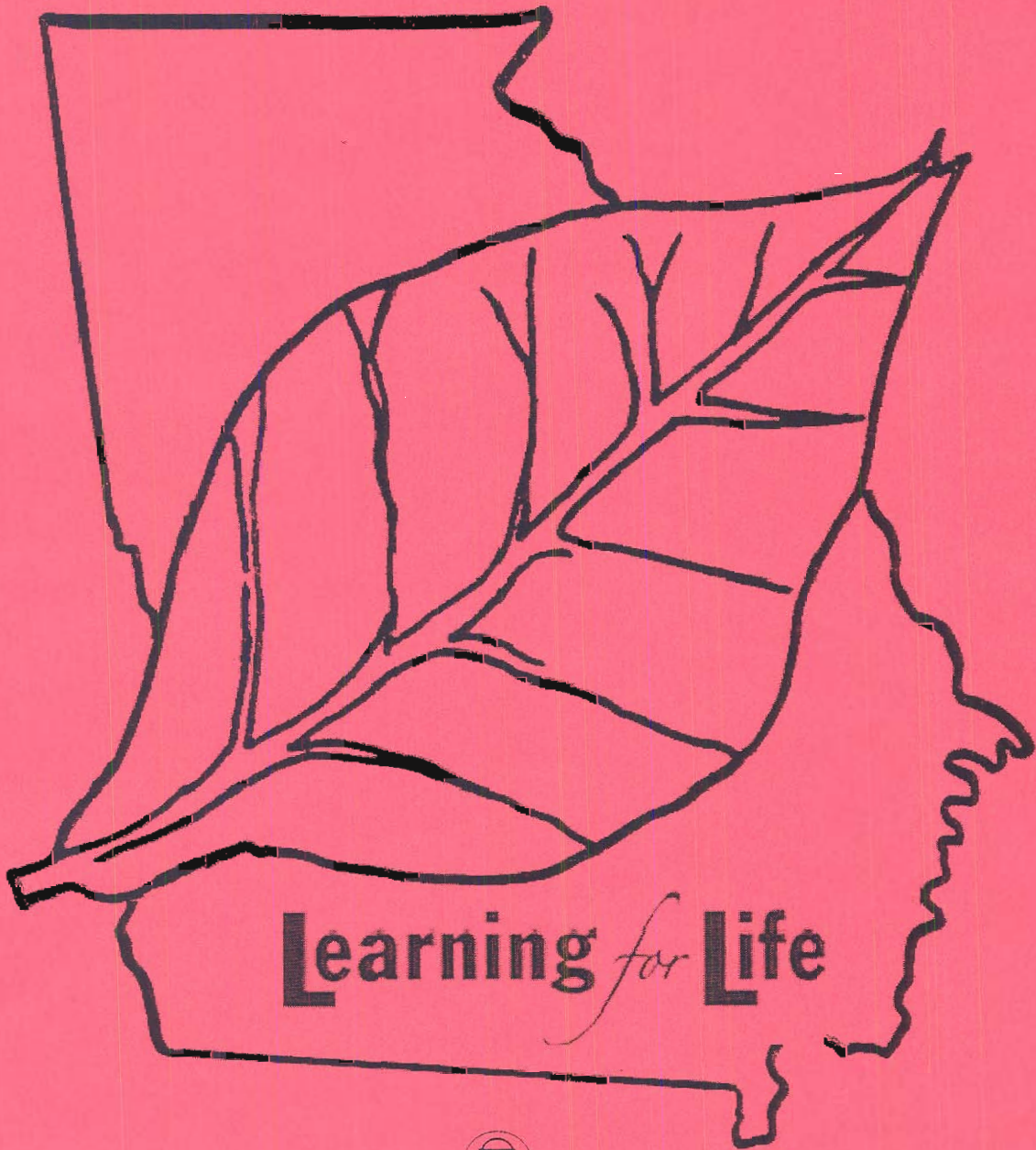


2010

# 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	Evans	912-739-1292	912-739-7831
Atkinson	912-422-3277	912-422-6223	Grady	229-377-1312	229-377-9026
Bacon	912-632-5601	912-632-6910	Irwin	229-468-7409	229-468-9838
Ben Hill	229-426-5175	229-426-5176	Jeff Davis	912-375-6648	912-379-1091
Berrien	229-686-5431	229-686-7831	Lanier	229-482-3895	229-482-2654
Brantley	912-462-5724	912-462-5464	Laurens	478-272-2277	478-277-2930
Brooks	229-263-4103	229-263-5607	Lowndes	229-333-5185	229-333-5188
Bulloch	912-871-6130	912-871-6955	Mitchell	229-336-2066	229-336-2068
Candler	912-685-2408	912-685-6614	Pierce	912-449-2034	912-449-8005
Coffee	912-384-1402	912-389-4007	Tattnall, Reidsville	912-557-6724	912-557-3332
Colquitt	229-616-7455	229-616-7033	Thomas	229-225-4130	229-225-4183
Cook	229-896-7456	229-896-7457	Tift	229-391-7980	229-391-7999
Dodge	478-374-8137	478-374-8139	Toombs	912-526-3101	912-526-1012
Echols	229-559-5562	229-559-9436	Treutlen	912-529-3766	912-529-3767
Effingham	912-754-2134	912-754-7632	Ware	912-287-2456	912-287-2499
Emanuel	478-237-1226	478-237-8451	Wayne	912-427-5965	912-427-5967
			Worth	229-776-8216	229-776-8239

UGA Tobacco Home Page

<http://www.georgiatobacco.com>

**TOBACCO EXTENSION SCIENTISTS**

(see web site for email addresses)

J. Michael Moore, Extension Agronomist - Tobacco, Editor	229-386-3006	229-386-7308
Paul Bertrand, Extension Pathologist (Retired)	229-386-7495	229-386-7415
David Jones, Extension Entomologist (Retired)	912-681-5639	912-681-0376
William D. Givan, Extension Agricultural Economist (Retired)	706-542-2632	706-542-4131
Keith D. Kightlinger, Extension Economist - Farm Management	229-386-3512	229-386-3440
Paul Sumner, Extension Engineer (Retired)	229-386-3442	229-386-3448
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
Bob McPherson, Entomology, CPES, Tifton (Retired)	229-386-7141	229-386-3086
Steve LaHue, Bowen Farm Research Coordinator	229-386-3602	229-386-7293
Stephen Mullis, Plant Pathology, CPES, Tifton	229-386-7479	229-386-7285
Lara Lee Hickman, Plant Pathology, CPES, Tifton	229 386 3163	229-386-7285
Ed Troxell, Bowen Farm Supervisor	229-386-3167	229-386-7293
CPES, Bowen Farm	229-386-7053	

Physical / Postal Address: 4604 Research Way, UGA Tifton Campus / P. O.Box 748, Tifton, Georgia, 31793, USA

**THE GEORGIA EXTENSION TOBACCO TEAM EXPRESSES  
APPRECIATION TO THE FOLLOWING FINANCIAL SUPPORTERS OF THE  
2010 GEORGIA TOBACCO TOUR**

**AgGeorgia Farm Credit  
Jimmy Dockery**

**Georgia Tobacco  
Commission**

**Alliance One International**

**Helena Chemical Co.**

**Bayer Crop Science**

**Gold Leaf Seed Co.**

**Berrien County Farm  
Bureau**

**Granville Equipment**

**Leasing Unlimited**

**Cardinal Chemicals, Inc.**

**McLean Ag Chem, Inc.**

**Carolina Soil Company, Inc.**

**Mosaic USA Inc - KMag**

**Chemtura Corporation**

**Plant Health Care Inc.**

**Cross Creek Seed, Inc.**

**R.J. Reynolds Tobacco  
Company**

**Cureco Inc.**

**SQM**

**Dow AgroSciences**

**Sheppard Equipment**

**Drexel Chemical Company**

**Syngenta**

**FMC**

**YARA North America**

**F.W. Rickard Seeds, Inc.**

## **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

P.O. Box 748, Tifton, GA 31793 PH: 229-386-3006 FAX: 229-386-7308 Cell: 229-392-6424

## **SCHEDULE - 2010 GEORGIA-FLORIDA TOBACCO TOUR**

### **Monday, June 14, 2010**

5:00 pm - Check-in Holiday Inn, Lake City, FL      213 S.W. Commerce Drive Blvd  
PH: 386-754-1411

6:30 pm - Social - Columbia County Extension Office - Lake City, FL

7:00 pm - Supper - Columbia County Extension Office, Lake City, FL

#### **Directions: Columbia County Extension Office, Lake City, FL**

From I-75, take the exit for Highway 90. Go east on 90 to the fourth traffic light (Walgreens will be on the right). Turn right at this intersection onto Highway 247 (Branford Highway). Go approximately 1/4 of a mile and turn right onto Mary Ethel Lane (first road on the right). Turn into the second gate on the left to enter the Columbia County Fairgrounds. The Extension Service office is the long concrete block building on the right as you enter the parking lot. Phone: (386) 752-5384

### **Tuesday, June 15, 2010**

7:30 am - Leave Holiday Inn parking lot.

7:50 am - Arrive Roosevelt & Travis Dicks Farm - Columbia County  
(Released Varieties Demonstration)  
- Bill Thomas, County Extension Agent

9:40 pm - Arrive Paul Folsom Plot - Lanier County  
(Regional Variety Farm Test)  
- Elvin Andrews, County Extension Coordinator

10:15 pm - Arrive Brian Lanier Farm - Berrien County  
(Released Variety Test)  
- Tim Flanders, County Extension Coordinator

10:50 pm - Arrive David Hendley Farm - Berrien County  
(Budworm Control Plot)  
- Tim Flanders, County Extension Coordinator

**Tuesday, June 15, 2010**

**12:15 am -SPONSORED LUNCH -  
Rural Development Center  
Tifton Campus Conference Center  
University of Georgia, Tifton, GA**

- lunch Courtesy of: Georgia Tobacco Commission

**1:30 pm - Leave Tifton Campus Conference Center**

**1:45 pm - Arrive Bowen Farm - Coastal Plain Experiment Station**

Bob McPherson, Entomologist  
Tobacco Entomology Research Projects

J. Michael Moore, Extension Agronomist - Tobacco  
Sidedress Nitrogen Fertilizer Source Demonstration  
Employ Foliar Application Trial  
Nutri-Phite / Rescue Foliar Fertilizer Trial  
Fertilizer Chlorine Rate Test  
Actigard Stress Reduction Trial

Paul Bertrand, Pathologist  
Strip-Till Effects on TSWV Incidence  
Timing Actigard Field Sprays

Steve LaHue, Research Coordinator  
Regional Variety Small Plot Test  
Georgia Official Variety Test

Alex Csinos, Pathologist  
Lara Lee Hickman - Research Professional  
-Nematicide Trials  
-TSWV Management  
- Plant Age and TSWV

Steve LaHue, Research Coordinator  
Albert Johnson Breeding Lines Evaluation for TSWV

**5:00 pm - Check-in Holiday Inn, Waycross PH: 912-283-4490**

**6:30 pm - Social - Mixon's Pond - Hwy. 82, Waresboro, Ware Co.**

**7:00 pm - Supper - Mixon's Pond - Hwy. 82, Waresboro, Ware Co.**

**Wednesday, June 16, 2010**

7:30 am - Leave Holiday Inn parking lot.

8:10 am - Arrive Jay Davis Farm - Pierce County  
(Black Shank Tobacco Variety)

- James Jacobs, Pierce County Extension Coordinator
- J. Michael Moore, Extension Agronomist - Tobacco

8:35 am - Arrive Daniel Johnson Farm - Pierce County  
(Tobacco Fertilization and Sucker Control Discussion)

- James Jacobs, Pierce County Extension Coordinator
- J. Michael Moore, Extension Agronomist - Tobacco

9:30 am - - Arrive Franklin Burch Farm - Wayne County  
(Regional Tobacco Variety Farm Test &  
Post Harvest and Post Curing Leaf Handling Equipment)

- Mark Frye, Wayne County Extension Coordinator
- J. Michael Moore, Extension Agronomist - Tobacco

11:05 pm - Arrive Kenneth Williams Farm - Jeff Davis County  
(Actigard Stress Reduction Test & Budworm Control & Nutri-Phite/Rescue)

- Tim Varnedore, Jeff Davis County Extension Coordinator
- David Jones, Extension Entomologist Tobacco - Retired

11:55 pm - Arrive Jerry Wooten Farm - Jeff Davis County  
(Budworm Control)

- Tim Varnedore, Jeff Davis County Extension Coordinator
- David Jones, Extension Entomologist Tobacco - Retired

**THIS IS THE END OF  
THE 2010 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



THE UNIVERSITY OF GEORGIA

# COOPERATIVE EXTENSION

Colleges of Agricultural and Environmental Sciences & Family and Consumer Sciences

P.O. Box 748, Tifton, GA 31793 PH: 229-386-3006 FAX: 229-386-7308 Cell: 229-392-6424

## DIRECTIONS FOR 2010 GEORGIA-FLORIDA TOBACCO TOUR

### Monday, June 14

#### Mileage

#### Directions (\* - indicates traffic assistance needed)

#### **Directions: Columbia County Extension Office, Lake City, FL**

From I-75, take the exit for Highway 90. Go east on 90 to the fourth traffic light (Walgreens will be on the right). Turn right at this intersection onto Highway 247 (Branford Highway). Go approximately 1/4 of a mile and turn right onto Mary Ethel Lane (first road on the right). Turn into the second gate on the left to enter the Columbia County Fairgrounds. The Extension Service office is the long concrete block building on the right as you enter the parking lot.

Phone: (386) 752-5384

### Tuesday, June 15

#### Mileage

#### Directions (\* - indicates traffic assistance needed)

- \* Right out of Holiday Inn onto Commerce Blvd.
- 0.1 Left on US 90 ( stay in Left lane)
- Left onto I-75 South
- 4.7 Right at Exit 423
- Left at bottom of exit on 47
- 0.2 Right onto 242
- 1.2 Right onto 131
- 4.5 Left into Dicks Farm
- Roosevelt & Travis Dicks Farm – (Released Varieties Demonstration)**
- Right out of Dicks Farm on 131
- 4.5 Left onto 242
- 0.5 Left onto 131
- 0.1 Right onto I-75 north
- 44 Right on Exit 467
- Right onto Hwy 143 to Jennings  
(St Rd 143 changes to St Rd 135 in Jennings)
- 2.0 \* Cross Hwy 41 in Jennings, FL
- \* Cross RR Tracks in Jennings, FL
- 12.7 \* Cross Hwy 94
- 14.3 \* Cross Hwy 84 / Hwy 38 at Naylor
- 9.4 \* Left at stop sign in Lakeland on onto 37 / 129
- 0.3 Right on Hwy 11 ByPass
- Cross Church Street
- 2.3 Right into field road at UGA Tobacco Plot Sign



**Tuesday, June 15 (continued)**

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

**Paul Folsom Farm (Regional Variety Farm Test)**

- 4.1 Right out of field road onto State Hwy 150
- 1.4 Straight across S.R. 64 at Teeterville
- 1.1 Right onto Empire Church Road
- 1.1 Left onto Irene Church Road
- 1.5 Right into field

**Brian Lanier Farm – (Released Variety Test)**

- 1.5 Left out of field onto Irene Church Road
- 1.5 Left onto Empire Church Road
- Roger Odum/Trent Hughes Strip-Till Plot 1.
- 1.3 Left onto Popular Springs Road
- 1.9 Cross at stop sign on Hwy 168 on Popular Springs Church Road
- 1.9 Roger Odum/Trent Hughes Strip-Till Plot 2. on right

**Odum/Hughes – (Strip-till Test)**

- Exit Hughes Farm Right onto Radio Station Road
- 1.8 Left on 135 at stop sign
- 5.6 Right onto Canopy Road (dirt)
- 0.6 Left at stop sign

**0.2 David & Wayne Hendley Farm – (Sheppard Equipment Box Loading  
Equipment & Tobacco Budworm Control Plot)**

- Left from Hendley Farm
- 0.2 Right onto Canopy Rd
- 0.6 Right onto Hwy 135
- 5.6 Left onto Hwy 82 West in Willacoochee

- 30 Left onto I-75 north
- 2.0 Right Exit 64 onto Hwy 41
- Left onto Hwy 41
- 0.2 Left onto RDC Road
- Left into **RDC (Tifton Campus Conference Center) (Lunch)**

- Right out of RDC
- 0.1 Right onto RDC Road
- 0.1 Right onto Hwy 41
- 0.6 Left onto 20<sup>th</sup> Street at light
- 0.9 Cross Tift Avenue at light
- 0.9 Left at stop light onto Old Omega Road
- 0.2 Right at light onto Kent Road
- 1.1 Cross New River Church Road at stop sign onto Arnett Mill Road
- 0.6 Left onto Hwy 319 toward Omega at the stop sign
- 1.1 Right onto Goat Road
- 0.6 Left into UGA Bowen Farm
- (Bowen Farm)**

**Tuesday, June 15 (continued)**

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

0.6            Right out of Bowen Farm  
Left onto Hwy 319  
1.9            Left onto New River Church Road  
1.2            Left onto Hwy 82  
70            Hwy 82 X US 1, Holiday Inn - Waycross

**To Social and Dinner at Mixon's Pond**

\*            Left out of Holiday Inn onto Hwy 82 West and through Waycross  
8.2            Right onto Harley Mixon Road into Mixon's Pond Drive

**Wednesday, June 16**

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

\*            Left out of Holiday Inn onto Hwy 82 West and bare right on  
MEMORIAL DR/US-1 N/US-23 N/GA-4 N toward US-82/GA-520/  
CORRIDOR Z/S GEORGIA PKWY.  
Continue to follow MEMORIAL DR.  
1.3            Turn RIGHT onto PLANT AVE/US-1 BR/US-84/GA-38. Continue to follow US-84/GA-38.  
9.4            Turn LEFT onto GA-121/GA-15/GORDON ST. in Blackshear  
0.1            Turn LEFT onto GA-203/BLACKSHEAR HWY  
0.4            Turn RIGHT onto GA-203/BLACKSHEAR HWY/HENDRY ST.  
Start out going NORTHWEST on GA-203/BLACKSHEAR HWY/HENDRY ST  
toward MARION ST.  
3.3            Bear LEFT at Jot'em Down Store  
Continue to follow BLACKSHEAR HWY.  
5.2            Turn RIGHT to stay on BLACKSHEAR HWY at stop sign.  
1.9            Turn LEFT onto MILLBRANCH RD.  
0.8            1357 MILLBRANCH RD is on the LEFT.  
**Jay Davis Farm – (Black Shank Variety Test)**  
  
Start out going EAST on MILLBRANCH RD toward BLACKSHEAR HWY.  
0.8            Turn LEFT onto BLACKSHEAR HWY.  
0.5            **Daniel Johnson Tobacco Field on Left**  
  
Continue on BLACKSHEAR HWY  
1.4            BLACKSHEAR HWY becomes RADIO STATION RD.  
1.8            Turn RIGHT onto TEN MILE CHURCH RD.  
3.1            Turn LEFT onto GA-203.  
3.9            Turn SLIGHT LEFT onto GA-203/GA-32.  
0.2            Turn RIGHT onto GA-203/SCUFFLETOWN HWY  
0.1            Turn LEFT onto GA-203.  
11.5          Turn LEFT onto GA-121/GA-203.  
0.3            Turn RIGHT onto GA-203.  
5.9            Turn RIGHT onto NINE RUN RD.  
5.0            3163 NINE RUN RD is on the RIGHT  
**Franklin Burch Farm–(Granville Equipment Co Cured Leaf Cleaning & Baling)**

**Wednesday, June 16 (continued)**

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

- 0.75      Leave Burch Farm  
1.25      Left onto NINE RUN RD  
            Right on O'Quinn Church Road  
            Travel to **Regional Tobacco Variety Farm Test** on left at pivot point.  
            **Franklin Burch Farm – (Regional Tobacco Variety Farm Test)**
- 1.25      Leave Burch plot  
5.0        Right onto Nine Run Road  
5.9        Left onto 203  
0.3        Turn LEFT onto GA-121/GA-203  
1.2        Turn RIGHT onto GA-203  
14.5      Turn SLIGHT RIGHT onto S MAIN ST/US-1/GA-15/GA-4.  
0.8        Turn LEFT onto BAY ST.  
1.1        BAY ST becomes ZOAR RD.  
11.0      Turn RIGHT onto ALMA HWY/US-23/GA-19/GOLDEN ISLES HWY.  
0.0        Turn LEFT onto CR-121/IRA GRAHAM RD.  
3.1        Turn LEFT on Bell Road.  
1.0        **Kenneth Williams Plot on LEFT (Actigard Stress Reduction,  
   Tobacco Budworm Control, Nutri-Phite & Rescue Fertilizer Trial)**
- 1.0        Leave plot and return to CR-121/IRA GRAHAM RD.  
2.1        Turn Left on CR-121/IRA GRAHAM RD.  
1.6        Straight ahead onto IRA GRAHAM RD at Bridgeford Church of God  
2.2        Turn RIGHT onto BELL TELEPHONE RD.  
3.0        Turn LEFT onto ELIZABETH CHURCH RD/CR-65.  
4.1        Turn LEFT onto US-221/DOUGLAS HWY/GA-135.  
3.7        Turn RIGHT onto GA-107/DENTON-FITZGERALD RD.  
3.8        Turn SLIGHT LEFT onto BROXTON HWY/GA-268  
1.9        Turn RIGHT onto MT PLEASANT CHURCH RD.  
            Tobacco Budworm Control Plot on LEFT on MOUNT PLEASANT CHURCH RD.  
            **Jerry Wooten Farm – (Evaluation of Coragen, Durivo, Belt, Denim and Tracer  
   for worm control in flue-cured tobacco)**

**THIS IS THE END OF  
THE 2010 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



**Table 1. Disease Resistance of the 2010 Released Variety Demonstration (commercially available varieties), Roosevelt & Travis Dieks Farm, Columbia County, Florida.**

Trt	VARIETY	PEDIGREE	Disease Resistance				
			BS	GW	FW	RK	BSp
1.	CC 27	F1 Hybrid Cross Creek Seed	R	R		TCN /R	TMV
2.	CC 37	F1 Hybrid Cross Creek Seed	R	R		TCN /M.j. /R	TMV
3.	CC 67	F1 Hybrid Cross Creek Seed	R	R		TCN /R	TMV
4.	CC 700	F1 Hybrid Cross Creek Seed	R	M		R	
5.	K 326	McNair 225(McNair 30 X NC 95) Gold Leaf Seed Co.	L	L		R	
6.	NC 71	F1 Hybrid Gold Leaf Seed Co.	H	M		R	
7.	NC 196	F1 Hybrid Gold Leaf Seed Co.	R	L		R	
8.	PVH 1452	F1 Hybrid Profigen	R	R		TCN /R	
9.	Spt 225	(SP 168 X K 346) (SPA 95 X SP 168) Spt.	R	R		R	
10.	Spt 227	(SP 151 X K 346) (SP 202 X K 346) Spt.	R	R		R	
11.	Spt 234	(SP 168 X K 346) Speight Seed Farm	R	R		R	
12.	Spt 236	(SP 168 X SP 196) (SP 179 X SP 177) Speight Seed Farm	R	R		R	



**Table 1. Disease Resistance of the 2010 Regional Farm Test (lines in their last year of testing before approval for release), Paul Folsom Farm, Lanier County, Georgia.**

Trt	VARIETY	PEDIGREE	Disease Resistance					
			BS	GW	FW	RK	BSp	Virus
1.	NC 2326	(Hicks X 9102)(Hicks)Hicks)Hicks) NC	L	SU	M			
2.	NC 95	(C-139XBel.4-30)X(C-139XHicks) NC	L	H	M	R		
3.	GLEX 328	F1 Hybrid						GL
4.	CC 304	F1 Hybrid						CC
5.	GL 395	F1 Hybrid						GL
6.	AOV 911	F1 Hybrid						Alliance One International
7.	NC EX 25	F1 Hybrid						NC
8.	NC EX 10	F1 Hybrid						NC
9.	XP 248	F1 Hybrid						Profigen
10.	CU 110	F1 Hybrid						Clemson University
11.	NC EX 24	F1 Hybrid						NC
12.	XP 275	F1 Hybrid						Profigen
13.	CU 75	F1 Hybrid						Clemson University
14.	ULT 142	F1 Hybrid						Universal Leaf Tobacco Co.
15.	ULT 112	F1 Hybrid						Universal Leaf Tobacco Co.

<sup>1</sup>Resistance; 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; 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; M.j - Meloidogyne javanica





**Table 1. Disease Resistance of the 2010 Released Variety Demonstration (commercially available varieties), Brian Lanier Farm, Berrien County, Georgia.**

Trt	VARIETY	PEDIGREE	Disease Resistance					
			BS	GW	FW	RK	BSp	Virus
1.	CC 27	F1 Hybrid Cross Creek Seed	R	R		TCN /R	TMV	
2.	CC 37	F1 Hybrid Cross Creek Seed	R	R		TCN /M.j. /R	TMV	
3.	CC 67	F1 Hybrid Cross Creek Seed	R	R		TCN /R	TMV	
4.	CC 700	F1 Hybrid Cross Creek Seed	R	M		R		
5.	K 326	McNair 225(McNair 30 X NC 95) Gold Leaf Seed Co.	L	L		R		
6.	NC 71	F1 Hybrid Gold Leaf Seed Co.	H	M		R		
7.	NC 196	F1 Hybrid Gold Leaf Seed Co.	R	L		R		
8.	PVH 1452	F1 Hybrid Profigen	R	R		TCN /R		
9.	Spt 225	(SP 168 X K 346) (SPA 95 X SP 168) Spt.	R	R		R		
10.	Spt 227	(SP 151 X K 346) (SP 202 X K 346) Spt.	R	R		R		
11.	Spt 234	(SP 168 X K 346) Speight Seed Farm	R	R		R		
12.	Spt 236	(SP 168 X SP 196) (SP 179 X SP 177) Speight Seed Farm	R	R		R		

2010

Influence of Employ Foliar Application on Flue-Cured Tobacco Yield and Quality

Brian Lanier Farm  
50 Lanier Lane,  
Nashville, GA 31639-8067  
229 356 0710

Tim Flanders, Berrien County Extension Coordinator: 229 445 5962  
J. Michael Moore, UGA Extension Tobacco Specialist  
Chris Chammoun, UGA Technician

<i>Trt No.</i>	<i>Treatment Name</i>	<i>Use Rate Oz/acre</i>	<i>Timings / DAP</i>
<b>A</b>	Untreated		
<b>B</b>	EMPLOY	2	Pre-Layby / 21-28 DAP 6/1/10
<b>B</b>	EMPLOY	2	Topping / 60-65 DAP
<b>B</b>	EMPLOY	2	First Prime / 75-90 DAP
<b>C</b>	EMPLOY	2	Topping / 60-65 DAP
<b>C</b>	EMPLOY	2	First Prime / 75-90 DAP

Band = Banded rate, calculated to apply only to plants.  
Applied with 3 nozzle arrangement of TX – 18 nozzles.  
Starts at far left nearest woods in short rows.  
Each plot is 2 rows closest to skip row

1 A
2 B
3 C
4 C
5 A
6 B
7 A
8 C
9 B
10 B
11 A
12 C
13 C
14 A
15 B
16 C
17 B
18 A

2010  
University of Georgia Tobacco  
Insect Management Demonstration

David C. Jones, University of Georgia, Rehired  
J. Michael Moore, University of Georgia  
Tim Flanders, University of Georgia 229.686.5431  
David & Wayne Hendley, Farmer, Berrien County N 31o 16.098, W 83o 3.580  
(take Canopy Rd off Hwy 135, left at stop sign to field north of curing barns)

Treatment	Chemical	Formulation	Rate (oz/A)	Timing	Budworm				
					<u>Infestation</u> /	<u>Control (%)</u> /		<u>Infestation</u>	
					5/18/	5/21/	5/24/	6/2/	6/8
1	Belt	SC 4.0	2.0	Foliar	8.4	76.7	97.2	96.7	14.7
2	Coragen	SC 1.67	5.0	Tray drench	0.0	0.9	2.8	7.3	15.7
3	Coragen #	SC 1.67	7.0	Transplant Water, fb	0.0	0.2	0.3	3.3	7.7
			5.0	foliar					
4	Coragen	SC 1.67	5.0	Foliar	10.4	85.4	91.7	100	14.7

All plants to be treated with Actigard (1 oz / 100,000 cells) and imidacloprid (0.8 oz Admire Pro / 1,000 cells) in the greenhouse unless otherwise noted.

# = 7.0 fl oz Coragen in transplant water followed by 5.0 fl oz post topping as a foliar spray

Target Pests: splitworm, cutworm, budworm, hornworm or looper.

Application at threshold of 10% of plants infested.

Evaluations at 14 days after transplanting and weekly or until the residual control plays out.

- 30 gal/A; 36 psi; TX 18 nozzles; 1 oz = 29.57 milliliters

Treatments:	1 *	2	3	4 *	2	4	3	1 *	3	2	4 *	1
Plots →	101	102	103	104	201	202	203	204	301	302	303	304

Read plot plan with back to dirt road and facing east toward tobacco. Stakes are in the left of four rows per plot.

(\*) = one tray of plants with no imidacloprid and no Actigard treatment from the front of the plot until all plants were planted and a flag at both ends identifies the ends of each tray of plants.

Transplanted April 12, 2010, Sprayed 5/18/10

2010 STRIP TILL TRIALS

Trent Hughes Farm, Berrien County  
Roger Odum Farm, Berrien County  
UGA Bowen Farm, Tift County

ST-CK \*\*\*\*\*  
ST-AA \*\*\*\*\*  
CT-AA \*\*\*\*\*  
CT-CK \*\*\*\*\*

CT-AA \*\*\*\*\*  
CT-CK \*\*\*\*\*  
ST-CK \*\*\*\*\*  
ST-AA \*\*\*\*\*

ST-AA \*\*\*\*\*  
ST-CK \*\*\*\*\*  
CT-CK \*\*\*\*\*  
CT-AA \*\*\*\*\*

ST-AA \*\*\*\*\*  
ST-CK \*\*\*\*\*  
CT-CK \*\*\*\*\*  
CT-AA \*\*\*\*\*

EACH ROW OF \*\*\*\*\* = 4 ROWS OF TOBACCO  
ST = Strip-till  
CT = Conventional till  
AA = Actigard + Admire Pro  
CK = Non-treated Check

**2010**  
**% SPOTTED WILT IN STRIP-TILL PLOTS AT LAYBY**  
**(6 WEEKS AFTER TRANSPLANT)**

TREATMENT	BOWEN FARM	HUGHES FARM	ODOM FARM
<b>CT-CK</b>	<b>4.7</b>	<b>5.9</b>	<b>4.7</b>
<b>ST-CK</b>	<b>3.4</b>	<b>3.3</b>	<b>3.2</b>
<b>CT-AA</b>	<b>1.2</b>	<b>2.9</b>	<b>1.9</b>
<b>ST-AA</b>	<b>1.4</b>	<b>1.4</b>	<b>1.3</b>
LSD (0.05)	1.9	1.2	1.3

**2010  
PREDICTING SPOTTED WILT**

Research work in North Carolina suggests spotted wilt incidence can be predicted.

Annual variation in mean disease incidence in untreated plants in UGA trials from 1999 – 2009 was correlated with January degree days (base 51<sup>o</sup>F), mean winter temperature and number of rainy days (>0.04 cm) in March;  $R^2=0.90$ .

January degree days alone accounted for most of the annual variation in spotted wilt ( $R^2=0.64$ ).

Sentinel plots of 4 trays/row of untreated and Actigard + imidacloprid treated plants are being monitored at 17 locations to continue this work.

**MEAN SPOTTED WILT INCIDENCE AT  
14 GEORGIA LOCATIONS IN 2010  
SIX WEEKS AFTER TRANSPLANT**

<b>LOCATION</b>	<b>UNTREATED</b>	<b>TREATED (AC+ID)</b>
1	3.4	1.8
2	4.7	1.2
3	5.9	2.9
4	4.7	1.9
5	9.7	2.4
6	3.4	1.3
7	7.0	2.9
8	3.2	1.6
9	14.5	4.1
10	9.1	2.8
11	8.7	3.4
12	4.1	1.0
13	2.3	0.6
14	2.8	0.9
<b>MEAN</b>	<b>6.0</b>	<b>2.0</b>

2010 UNIVERSITY OF GEORGIA  
 COOPERATIVE EXTENSION SERVICE  
 TOBACCO ON-FARM DEMONSTRATIONS

Title: SIDEDRESS NITROGEN FERTILIZER SOURCE DEMONSTRATION

Farmer Name/Address: CPES - BOWEN FARM                      County: TIFT

Extension Specialist Responsible: J. MICHAEL MOORE

Plot Size: 2 (44") ROWS X 58.5', 10' Alleys

Variety: NC 71                      Soil Type: SL                      Date Transplanted: (4-21-10)

Crop History: 2008; Peanuts                      2009; Fallow

Herbicide/Rate: PPI; PROWL 3.3: 2 pt (3-11-10)                      Post Plant;  
 SPARTAN SURFACE APPLIED PRIOR TO TRANSPLANTING 6 OZ/A (3-11-10)

Fungicides/Rate:                      Nematicides/Rate: Telone II, 10 gals (fall 09)

Soil Insecticide/Rate: LORSBAN 1 QT/A (3-11-10)

Foliar Insecticide/Rate:

Fertility Program: AS PER TREATMENTS                      Date: 5/5/10, 5/19/10

Rainfall:                      March;                      April;                      May;                      June;                      July;                      August;

Topping: Date;                      Average No. Leaves Per Plant;

Sucker Control:

Material;                      Rate/Acre;                      Date;

31	32	33	34	35	36	37	38	39	40	58.5'
J	I	H	G	F	E	D	C	B	A	
21	22	23	24	25	26	27	28	29	30	58.5'
D	H	F	A	G	I	B	E	J	C	
11	12	13	14	15	16	17	18	19	20	58.5'
F	D	1	G	B	J	C	A	H	E	
1	2	3	4	5	6	7	8	9	10	58.5'
A	B	C	D	E	F	G	H	I	J	



Trt								
Trt	Analysis	lb/A	lb/row	(N-P-K)	Analysis	lb/A	lb/row	(N-P-K)
A.	6-6-18	667	3.28	(40-40-120)	15.5-0-0	226	1.1	(75-40-180)
					0-0-22	272	1.3	
B.	6-6-18	667	3.28	(40-40-120)	13-0-44	269	1.3	(75-40-238)
C.	6-6-18	667	3.28	(40-40-120)	NH4NO3	103	0.50	(75-40-180)
					0-0-22	272	1.3	
D.	15.5-0-0	156	0.77	(24.3-0-0)	15.5-0-0	226	1.1	(75-40-180)
	0-0-22	545	2.7	(0-0-120)	0-0-22	272	1.3	
	ME S15 (13-33-0-15S)	121	0.6	(15.7-40-0) [40-40-120]				
E.	15.5-0-0	180	0.89	(28-0-0)	15.5-0-0	226	1.1	(75-40-180)
	0-0-22	545	2.7	(0-0-120)	0-0-22	272	1.3	
	ME SZ (12-40-0-10S-1Zn)	100	0.49	(12-40-0) [40-40-120]				
F.	15.5-0-0	186	0.89	(28-0-0)	15.5-0-0	226	1.1	(75-40-180)
	0-0-22	520	2.6	(0-0-114.4)	0-0-22	272	1.3	
	SC 918 (ACT 62E) (9.6-32-4.4-2.2Mg- 12.45S)	125	0.61	(12-40-5.5- 2.75Mg- 15.56S) [40-40-120]				
G.	15.5-0-0	186	0.92	(28-0-0)	15.5-0-0	226	1.1	(75-40-180)
	0-0-22	520	2.7	(0-0-120)	0-0-22	272	1.3	
	S10 (12-40-0-10S)	100	0.49	(12-40-0-10S) [40-40-120]				
H.	13-0-44	307	1.5	(40-0-135)	14-0-14	250	1.23	(75-40-180)
					0-0-22	113	0.57	
I.	6-6-18	334	1.6	(20-20-180)	15.5-0-0	354	1.7	(75-20-180)
	0-0-22 Kmag	550	2.7					
J.	6-6-18	334	1.6	(20-20-180)	UCAN 17	27.5	519 ml	(75-20-180)
	0-0-22 Kmag	550	2.7		gal			

UCAN 17 = UAN-32 - 37%; CN-9 - 63% by volume

2010 UNIVERSITY OF GEORGIA  
COOPERATIVE EXTENSION SERVICE  
TOBACCO ON-FARM DEMONSTRATIONS

Title of Demonstration: Chlorine Content FERTILIZER DEMONSTRATION

Farmer Name/Address: CPES - BOWEN FARM

Extension Specialist Responsible: J. MICHAEL MOORE

Plot Size: 1 (44") ROWS X 58.5', 10' Alleys

Variety: K 326 Soil Type: SL Date Transplanted: (4/09/10)

Crop History: 2009: Tobacco 2008: Fallow

Herbicide/Rate: PPI; PROWL 3.3: 2 pt (03-11-09)  
SPARTAN SURFACE APPLIED PRIOR TO TRANSPLANTING 8 OZ/A (03-11-10)

Fungicides/Rate: Nematicides/Rate: TELONE II 10 GAL (FALL '09)

Soil Insecticide/Rate:

Foliar Insecticide/Rate:

Date: Fertility Program: AS PER TREATMENTS (04-19-10)

Rainfall: March; April; May; June; July; August;

Topping: Date; Average No. Leaves Per Plant;

Sucker Control:

Material; Rate/Acre; Date;

Material; Rate/Acre; Date;

Material; Rate/Acre; Date;

41H	42G	43F	44E	45D	46C	47B	48A	39'
33F	34A	35G	36B	37H	38D	39C	40E	39'
25H	26G	27F	28E	29D	30C	31B	32A	39'
17D	18F	19H	20A	21C	22B	23E	24G	39'
9E	10D	11A	12G	13B	14H	15F	16C	39'
1A	2B	3C	4D	5E	6F	7G	8H	39'

K-Mag at 21 dat      21 dat

N needed	34-0-0	g/34-0-0 row	# Cl A	# Cl/ A	# KCl	g KCl/ row	K20 provi ded	K20 lb needed	# 0-0-22/ A	g 0-0-22/ row	N need ed	15.5-0-0	g/15.5-0-0 row
A	40	117.6	0	0.47	0	0.0	0.6	0	180.0	818.2	40	258.1	384.3
B	40	117.6	15	0.47	31.9	47.5	0.6	19.1	160.9	731.1	40	258.1	384.3
C	40	117.6	30	0.47	63.8	95	0.6	38.3	141.7	644.1	40	258.1	384.3
D	40	117.6	45	0.47	95.7	142.5	0.6	57.4	122.6	557.1	40	258.1	384.3
E	40	117.6	60	0.47	127.7	190.1	0.6	76.6	103.4	470.0	40	258.1	384.3
F	40	117.6	75	0.47	159.6	237.6	0.6	95.7	84.3	383.0	40	258.1	384.3
G	40	117.6	90	0.47	191.5	285.4	0.6	114.9	65.1	295.9	40	258.1	384.3
H	40	117.6	120	0.47	255.3	380.5	0.6	153.2	26.8	121.9	40	258.1	384.3

16

0.0032828 A / row

2010

Influence of Nutri-Phite and Rescue Foliar Applications on Flue-Cured Tobacco Yield and Quality

UGA Tifton Campus, Bowen Farm  
 J. Michael Moore, UGA Extension Tobacco Specialist 229 392 6424  
 Chris Chammoun, UGA Technician

<i>Trt No.</i>	<i>Treatment Name</i>	<i>Use Rate Oz/acre</i>	<i>Timings / DAP</i>
<b>A</b>	Untreated		
<b>B</b>	NUTRI-PHITE ULTRA	16 (Banded) 1%	Layby 6/5/10
<b>B</b>	NUTRI-PHITE ULTRA	16 (Banded) 1%	Topping
<b>B</b>	NUTRI-PHITE ULTRA	16 (Banded) 1%	First Prime
<b>C</b>	NUTRI-PHITE ULTRA	32 (Broadcast) 1%	Layby 6/5/10
<b>C</b>	NUTRI-PHITE ULTRA	32 (Broadcast) 1%	Topping
<b>C</b>	NUTRI-PHITE ULTRA	32 (Broadcast) 1%	First Prime
<b>D</b>	TRICARD RESCUE	16 (Banded) 1%	Layby 6/5/10
<b>D</b>	TRICARD RESCUE	16 (Banded) 1%	Topping
<b>D</b>	TRICARD RESCUE	16 (Banded) 1%	First Prime

Band = Banded rate, calculated to apply only to plants.  
 Applied with 3 nozzle arrangement of TX – 18 nozzles.  
 Plots are 2 rows x 42' long.  
 Layby application sprayed 6/5/10

16 A	17 B	18 D
13 D	14 C	15 B
10 C	11 D	12 A
7 B	8 C	9 B
4 D	5 A	6 D
1 A	2 B	3 C

2010 Tobacco Entomology Test 1  
 Tray drench (TD) and transplant water insecticide (TPW)  
 treatments for early-season insect pest control

Treatment and amount of product per acre

1. Coragen 1.67 SC	5.0 oz	TPW
2. Coragen 1.67 SC	7.0 oz	TPW
3. HGW 86 20 SC	10.3 oz	TPW
4. Coragen 1.67 SC	3.57oz	TD (0.51 oz/1000 plants)
5. Coragen 1.67 SC	4.76oz	TD (0.68 oz/1000 plants)
6. HGW 86 20 SC	9.45oz	TD (1.35 oz/1000 plants)
7. Admire Pro	3.15oz	TD (0.45 oz/1000 plants)
8. Durivo 2.5 SC	10.0 oz	TD (1.43 oz/1000 plants)
9. Durivo 2.5 SC	10.0 oz	TPW
10. Coragen 1.67 SC	5.0 oz	Foliar
11. Belt 4 SC	2.0 oz	Foliar
12. Durivo 2.5 SC	10.0 oz	Foliar
13. Untreated	-----	

Variety K-326 flue-cured tobacco was transplanted on 14 April. Plots were replicated 3 times and were 3 rows wide (spaced 3.7 feet apart) by 30 feet long, with an untreated border row on each side and a 6 feet wide fallow alley on each end. TPW treatments were applied at transplanting in 2 oz of water per transplant (109 gpa) and the TD treatments were applied in the greenhouse 48 hours prior to transplanting in 200 ml of water per 242-cell tray (826 ml per 1000 cells). The transplanting rate was 7000 plants per acre. The foliar sprays were applied on May 18 and June 3 with a CO<sub>2</sub>-powered backpack sprayer delivering 22.8 gpa at 40 psi with 3 TX-12 nozzles per row.

2010 Tobacco Entomology Trials 1 & 2  
Bowen Farm, Tift County Georgia

XX <sub>327A</sub>	325	320	317	323
321	316	324	326	319
318	327	315	322	314
227	223	222	225	XX <sub>227A</sub>
217	226	219	215	221
214	220	216	218	224
XX <sub>127A</sub>	125	117	123	120
115	124	127	126	116
122	118	114	121	119
XX	313	306	302	307
309	311	304	310	305
213	312	301	303	308
210	206	212	205	211
203	208	207	209	204
201	202	108	113	109
104	107	105	112	110
102	103	111	106	101

2010  
Tobacco Entomology Trial 1  
Bowen Farm, Tift County Georgia

XXX	313	306	302	307
309	311	304	310	305
213	312	301	303	308
210	206	212	205	211
203	208	207	209	204
201	202	108	113	109
104	107	105	112	110
102	103	111	106	101

**Tobacco Entomology Test 1.**

**Table 1. Effects of selected tray drench, transplant water and foliar spray insecticide treatments on the abundance of insect pests and TSWV symptomatic plants in flue- tobacco, Tift County Georgia, 2010.**

Treatment and formulation/ acre	6 May FB	13 May Thr-Aph-FB	18 May Thr-Aph-HW-BW	25 May Thr-Aph-HW-BW
Coragen 5.0 oz TPW	4.3	25.3- 0.0- 0.7	54.3- 0.0- 0.0- 0.0	35.0- 63.7- 0.0- 0.0
Coragen 7.0 oz TPW	10.5	15.3- 2.3- 3.0	29.0- 0.0- 0.0- 0.0	9.7- 2.0- 0.0- 0.7
HGW 86SC10.3oz TPW	4.0	27.3- 0.3- 1.3	42.7- 0.0- 0.0- 0.0	6.7- 0.0- 0.0- 1.0
Coragen 3.57oz TD	2.7	31.0- 1.0- 0.0	35.0- 0.3- 0.0- 0.0	22.3- 4.7- 0.0- 0.7
Coragen 4.76oz TD	5.0	39.3- 7.6- 0.7	65.3- 0.0- 0.0- 0.0	12.0- 61.7- 1.0- 0.0
HGW 86SC 9.45oz TD	2.7	43.7- 0.0- 1.7	30.3- 0.0- 0.0- 0.0	17.3- 0.0- 0.0- 1.3
Admire Pro 3.15oz TD	4.0	45.7- 0.0- 0.0	16.7- 0.0- 0.0- 1.7	6.7- 0.0- 1.7- 4.3
Durivo 10.0 oz TD	3.3	53.7- 0.0- 0.0	14.3- 0.7- 0.0- 0.0	14.3- 0.0- 0.3- 1.0
Durivo 10.0 oz TPW	2.3	53.3- 0.0- 0.0	62.3- 0.0- 0.0- 0.0	10.7- 0.0- 0.0- 0.0
Coragen 5.0 oz Foliar	8.7	22.3- 0.0- 0.3	24.0- 0.7- 2.3- 1.3	12.0- 1.3- 0.0- 0.3
Belt 4SC 2.0 oz Foliar	5.7	57.0- 0.0- 1.0	29.0- 0.7- 1.7- 2.0	8.7- 0.7- 0.0- 0.0
Durivo 10.0 0zFoliar	3.3	17.0- 0.3- 0.3	21.0- 0.7- 2.0- 1.0	9.7- 0.0- 0.0- 0.3
Untreated	3.3	34.7- 6.3- 1.7	73.0-82.7-1.3- 2.0	38.0-430.0- 2.7- 4.0

K-326 flue-cured tobacco transplanted on April 14. Foliar sprays applied on May 18 and June 3 with a CO<sub>2</sub> powered backpack sprayer that delivered 22.8 gpa at 40 psi. FB is flea beetles per four plants, Thr is thrips per four plants, Aph is aphids per four plants, HW is hornworms per plot (54 plants), and BW is budworms per plot.



**Tobacco Entomology Test 1. Table 2. Effects of selected tray drench, transplant water and foliar spray insecticide treatments on the abundance of insect pests and TSWV symptomatic plants in flue- tobacco, Tift County Georgia, 2010.**

Treatment and formulation/ acre	1 June			10 June			Total plants	Plants with TSWV			
	Aph-	HW-	BW	Aph-	HW-	BW		5/24	6/02	6/09	6/16
Coragen 5.0 oz TPW	126.0-	0.3-	0.3				160	3	3	2	
Coragen 7.0 oz TPW	8.3-	0.0-	0.0				152	6	1	0	
HGW 86SC 10.3 oz TPW	0.0-	0.0-	2.3				168	4	4	2	
Coragen 3.57oz TD	18.7-	0.7-	0.3				164	4	2	1	
Coragen 4.76oz TD	187.3-	0.3-	0.3				166	7	3	0	
HGW 86SC 9.45oz TD	0.0-	0.3-	2.0				170	9	3	Ø	Ø
Admire Pro 3.15oz TD	0.0-	1.0-	2.7				165	4	2	2	
Durivo 10.0 oz TD	0.0-	0.3-	0.7				165	2	3	1	
Durivo 10.0 oz TPW	0.0-	0.0-	0.3				169	5	3	2	
Coragen 5.0 oz Foliar	70.0-	0.0-	0.3				168	4	7	1	
Belt 4SC 2.0 oz Foliar	106.3-	0.3-	0.7				165	5	5	4	
Durivo 10.0 OzFoliar	0.0-	0.0-	0.7				165	8	4	2	
Untreated	720.3-	2.0-	2.7				167	7	3	6	

K-326 flue-cured tobacco transplanted on April 14. Foliar sprays applied on May 18 and June 3 with a CO<sub>2</sub> powered backpack sprayer that delivered 22.8 gpa at 40 psi. Aph is aphids per four plants, HW is hornworms per plot (54 plants), and BW is budworms per plot.

## 2010 Tobacco Entomology Test 2

### Foliar insecticide treatments for worm control

#### Treatment and amount of product per acre

14. Coragen 1.67 SC	3.5 oz
15. Coragen 1.67 SC	5.0 oz
16. HGW 86 10 OD	6.75 oz
17. HGW 86 10 OD	13.5 oz
18. Belt 4 SC	2.0 oz
19. Belt 4 SC	3.0 oz
20. Voliam Flexi 40 WG	2.5 oz (wt)
21. Voliam Flexi 40 WG	4.0 oz (wt)
22. Voliam Xpress 1.25 ZC	5.0 oz
23. Voliam Xpress 1.25 ZC	7.0 oz
24. Voliam Xpress 1.25 ZC	9.0 oz
25. Tracer 4 SC	2.5 oz
26. Brigade 2 EC	4.0 oz
27. Untreated	----
27A. Brigadier 2EC	5.0 oz

Variety K-326 flue-cured tobacco was transplanted on 14 April. Plots were replicated 3 times and were 3 rows wide (spaced 3.7 feet apart) by 30 feet long with an untreated border row on each side and a 6 feet wide fallow alley on each end. Foliar sprays were applied on 18 May and 3 June with a CO<sub>2</sub>-powered backpack sprayer delivering 22.8 gpa at 40 psi with 3 TX-12 nozzles per row.

2010 Tobacco Entomology Trial 2  
Bowen Farm, Tift County Georgia

XX <sub>327A</sub>	325	320	317	323
321	316	324	326	319
318	327	315	322	314
227	223	222	225	XX <sub>227A</sub>
217	226	219	215	221
214	220	216	218	224
XX <sub>127A</sub>	125	117	123	120
115	124	127	126	116
122	118	114	121	119

**Tobacco Entomology Test 2.**

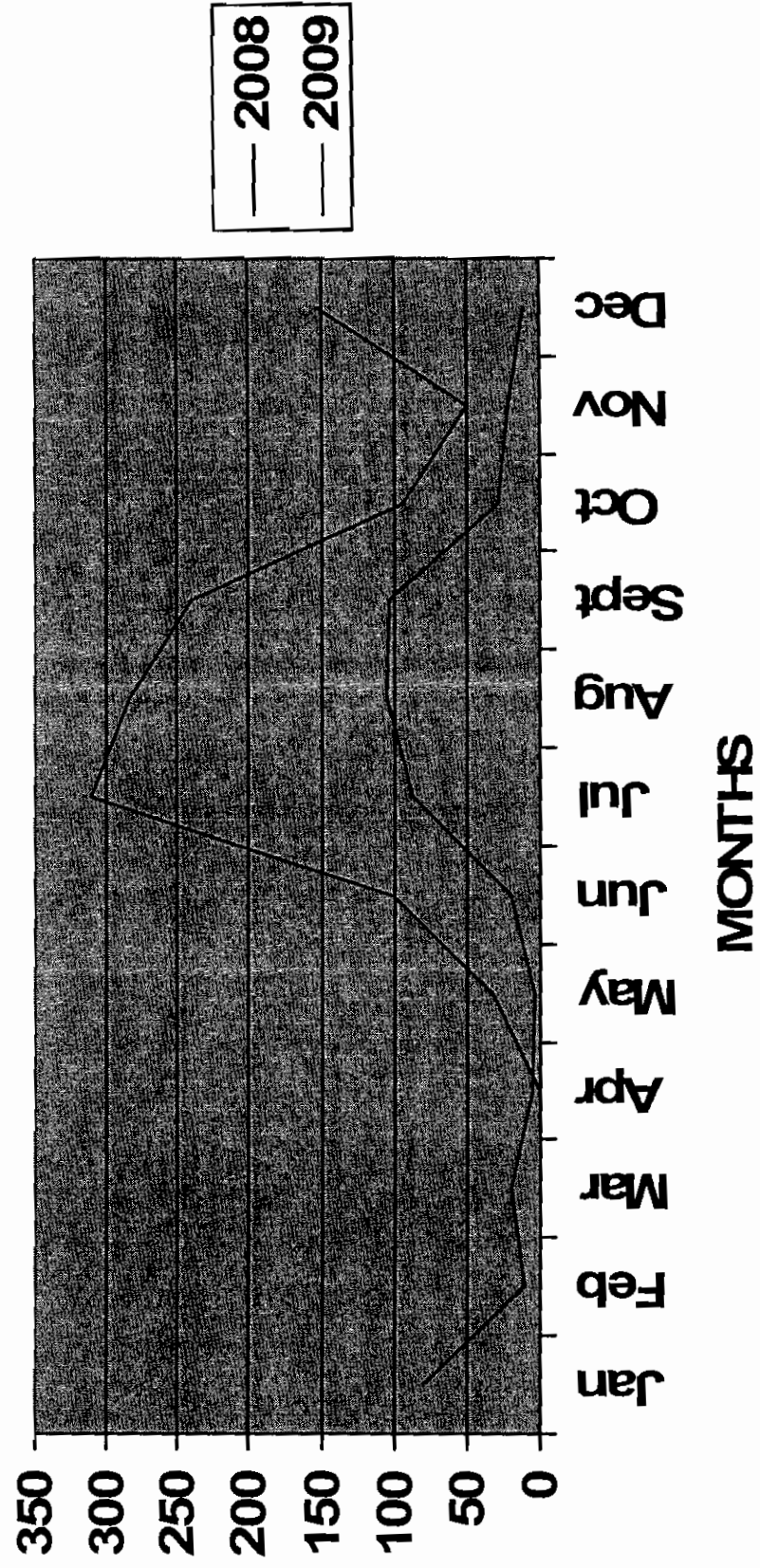
**Table 3. Effects of selected foliar insecticide treatments on controlling budworms, hornworms, and thrips on flue-cured tobacco, Tift County Georgia, 2010.**

Treatment and formulation/ acre	17 May Thr-HW-BW	21 May Thr-HW-BW	25 May Thr-HW-BW	1 June HW- BW
Coragen 3.5 oz	18.0- 2.0- 1.0	25.0- 0.0- 1.3	3.3- 0.0- 1.7	0.3- 0.0
Coragen 5.0 oz	13.0- 2.7- 1.3	15.0- 0.0- 0.3	3.7- 0.0- 0.3	0.0- 0.0
HGW 86 OD 6.75 oz	21.7- 1.0- 1.7	57.0- 0.3- 1.0	2.3- 1.0- 0.3	0.0- 0.3
HGW 86 OD13.5 oz	22.3- 3.0- 2.3	11.0- 0.0- 0.7	1.0- 0.0- 0.0	0.0- 0.0
Belt 4 SC 2.0 oz	23.0- 2.7- 1.7	25.0- 0.7- 1.0	1.7- 0.0- 0.3	0.7- 1.0
Belt 4 SC 3.0 oz	12.7- 1.0- 1.7	14.0- 0.3- 0.7	4.7- 0.0- 0.3	0.3- 0.0
Voliam Flexi 2.5 oz	9.3- 1.7- 1.3	27.0- 1.3- 0.7	8.7- 0.3- 1.7	0.3- 0.7
Voliam Flexi 4.0 oz	26.7- 1.7- 1.3	15.0- 0.3- 0.0	2.0- 0.3- 0.7	0.0- 0.3
Voliam Xpress 5.0 oz	16.7- 2.7- 1.7	15.0- 0.0- 0.0	0.3- 0.0- 0.0	0.0- 0.0
Voliam Xpress 7.0 oz	24.0- 2.0- 2.0	26.0- 0.3- 0.7	1.0- 0.0- 1.0	0.7- 1.0
Voliam Xpress 9.0 oz	10.7- 1.7- 1.3	19.0- 0.0- 0.3	3.3- 0.0- 1.0	0.7- 0.3
Tracer 4 SC 2.5 oz	38.3- 0.7- 2.0	12.0- 0.3- 1.0	1.7- 0.0- 0.0	0.0- 0.3
Brigade 2 EC 4.0oz	15.7- 1.7- 1.0	28.0- 0.0- 0.7	3.0- 0.0- 1.3	0.0- 2.0
Untreated	32.0- 1.3- 2.0	29.0-2.0- 2.7	7.3- 2.0- 4.0	1.0- 1.3
Brigadier 2EC 5.0 oz	6.6- 2.0- 0.7	12.0- 0.0- 0.3	4.3- 0.3- 0.0	0.0- 0.0

K-326 flu-cured tobacco transplanted on 14 April. Foliar sprays applied on 18 May and 3 June with a CO<sub>2</sub> powered backpack sprayer delivering 22.8 gpa at 40 psi. Thr is thrips per four plants, HW is hornworms per plot (54 plants), and BW is budworms per plot.

# Splitworm moths per trap per week

## Tift County, GA 2008- 2009



# New Insecticides Evaluated

Product	Chemical name	Manufacturer
HGW86 10 OD	Cyazypyr- chlorantraniliprole	DuPont
Coragen 1.67 SC	Rynoxypyr- chlorantraniliprole	DuPont
Durivo 2.5 SC	Chlorantraniliprole + Thiamethoxam	Syngenta
Voliam Flexi 40WG	Chlorantraniliprole + Thiamethoxam	Syngenta
Voliam Express 1.25ZC	Chlorantraniliprole + L-cyhalothrin	Syngenta
Belt 480 SC	Flubendiamide	Bayer



# New Insecticides Evaluated

Product	Chemical name	Manufacturer
Rimon 0.83 EC	Novaluron	Chentura
Brigade 2 EC	Benzoylphenyl urea IGA	FMC
Brigadier 2 EC	Bifenthrin	FMC
Assail 30 WP	Bifenthrin + imidacloprid	UPI
Belay 16 WSG	Acetamiprid	Valent
Denim 0.16 EC	Clothianidin	Syngenta
Steward 1.25 EC	Emamectin benzoate	DuPont
	Indoxacarb	



2010  
Bowen Farm Employ Trial

31 F	32 E	33 D	34 C	35 B	36 A	39'
25 C	26 B	27 F	28 E	29 A	30 D	39'
19 F	20 C	21 A	22 D	23 B	24 E	39'
13 E	14 D	15 F	16 C	17 A	18 B	39'
7 D	8 A	9 E	10 B	11 F	12 C	39'
1 A	2 B	3 C	4 D	5 E	6 F	39'

- A. Untreated Check
- B. Employ - Layby (5/28/10)
- C. Employ - Topping
- D. Employ - First Priming
- E. Employ - Layby. Topping, First Priming
- F. Employ - Topping, First Priming



## 2010 TIMING ACTIGARD FIELD SPRAYS

**SEEDLING TREATMENT:**

AA = ACTIGARD + ADMIRE PRO  
CK = UNTREATED

**FIELD SPRAY TREATMENT:**

**WHITE** = UNSPRAYED

**BLUE** = ACTIGARD @ 0.5 OZ/ACRE EVERY 7 DAYS BEGINNING AT TRANSPLANT (6 APPLICATIONS)

**YELLOW** = ACTIGARD @ 0.5 OZ/ACRE WHEN TSWV FIRST SEEN IN UNTREATED PLANTS (2 APPLICATIONS)

**GREEN** = ACTIGARD @ 0.5 OZ/ACRE WHEN ACCUMULATED DEGREE DAYS FROM 1 NOV. 2009 REACHES 1300 (2 APPLICATIONS)

EACH ROW OF ..... = 4 ROWS OF TOBACCO

AA	***** W *****	***** B *****	***** Y *****	***** G *****
CK	***** W *****	***** B *****	***** Y *****	***** G *****
AA	***** B *****	***** G *****	***** W *****	***** Y *****
CK	***** B *****	***** G *****	***** W *****	***** Y *****
AA	***** Y *****	***** W *****	***** G *****	***** B *****
CK	***** Y *****	***** W *****	***** G *****	***** B *****
AA	***** G *****	***** Y *****	***** B *****	***** W *****
CK	***** G *****	***** Y *****	***** B *****	***** W *****

**2010 MANA Nematicide Trial  
Bowen Farm, Tifton, GA**

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

Plot size: 35' by 44"  
Replications: six

Tobacco variety: K394  
Randomized complete block design (RCB)

<b><u>Treatment</u></b>	<b><u>Rate</u></b>	<b><u>Application Schedule</u></b>
1. Non-treated	N/A	N/A
2. Telone II	6 gal/A	2-3 wks pre-plant, chisel in
3. Nematicur	2 gal/A	Pre-plant incorporated
4. Temik	20 lb/A	Pre-plant incorporated
5. MCW	1.69 liters/A	Pre-plant incorporated , apply to full bed width and incorporate
6. MCW	2.54 liters/A	Pre-plant incorporated , apply to full bed width and incorporate
7. MCW	3.38 liters/A	Pre-plant incorporated , apply to full bed width and incorporate
8. MCW	6.76 liters/A	Pre-plant incorporated , apply to full bed width and incorporate

**Data Collection:**

- Stand Counts
- Plant height at 6 weeks
- Soil samples before plant and pre-treatment, and at final harvest
- Vigor ratings at 2 weeks and 6 weeks
- Root gall ratings mid-season (4 -6 weeks post plant- rate 5 plants per plot) and at harvest (Evaluate using Zeck's Scale)
- Yield

**2010 Tobacco Commission Nematicide Trial on Tobacco  
Bowen Farm- Tifton, GA**

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

Plot Size: 35' x 44"  
Replications: six

Tobacco variety: K394

<u>Treatment</u>	<u>Rate</u>	<u>Application Schedule</u>
1. Non-treated	N/A	N/A
2. Telone II	6 gal/A	2-3 wks pre plant, 2 chisels/row
3. Devgen	1qt/A	PPI + 2 wks post plant + 4 weeks post plant, apply in a 16" band
4. Temik	20 lbs/A	Pre-plant incorporated, apply in a 16" band
5. MANA	3.31 lbs/A	Pre-plant incorporated, apply in a 16" band
6. VAPAM	37.5 gal/A	2-3 wks pre-plant, chisel + rototill + sealsoil surface with irrigation water
7. D-EXP	0.5 lba.i./A	Pre-plant incorporated + 3 wks post plant
8. Melocon (Certis)	1 lb/7000 plants 4lbs/A 4lbs/A	Treat in float tray 2 wks pre-plant (1 wk before GH apps. of Actigard/Admire) Transplant water at planting Layby spray

**Data to be collected:**

- Stand Counts
- Plant Height at 6 weeks
- Soil samples before plant and pre-treatment and at final harvest
- Vigor ratings at 2wks and 6 wks
- Root gall ratings mid season (4 wks-5 plants per plot) and at harvest (Evaluate using Zeck's scale)
- Yield

***\*\*Note all parameters that would effect plant growth, nematode infestation and treatment differences***

2010 Tobacco Variety Tests

Regional Small Plot Test

1. NC 2326
2. NC 95
3. K 326
4. NC EX 30
5. XHN 44
6. CC 1093
7. CU 144
8. CU 137
9. GL EX 322
10. NC EX 33
11. NC EX 29
12. NC EX 32
13. GL EX 339
14. PXII 2
15. CC 1063
16. GL EX 321
17. NC EX 34
18. NC EX 31
19. GF 157
20. CU 141
21. GL EX 362
22. CC 26
23. PXH 3
24. NC TG 156
25. GL EX 320
26. CU 136
27. PXII 1
28. NC TG 158

Regional Small Plot Test

29. CU 139
30. ULT 123
31. ULT 143
32. GF 318

Official Variety Test

1. K 346
2. NC 71
3. NC 72
4. NC 297
5. NC 291
6. NC 196
7. NC 299
8. NC 471
9. NC 92
10. CC 27
11. CC 37
12. CC 67
13. CC 700
14. PVH 1596
15. PVH 1452
16. PVH 2277
17. Speight 168
18. Speight 225
19. Speight 236
20. Speight 227
21. GL 368
22. GL 338
23. K 399
24. GF 52

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

Road

**2010 Regional Farm Test**  
Field 6634

- |              |             |
|--------------|-------------|
| 1. NC 2326   | 2. NC 95    |
| 3. GLEX 328  | 4. CC 304   |
| 5. GL 395    | 6. AOV 911  |
| 7. NC EX 25  | 8. NC EX 10 |
| 9. XP 248    | 10. CU 110  |
| 11. NC EX 24 | 12. XP 275  |
| 13. CU 75    | 14. ULT 142 |
| 15. ULT 112  |             |

Rep	5	5	10	10	12	12	6	6	3	3	8	8	4	4	13
3&6	7	7	1	1	9	9	14	14	11	11	15	15	2	2	13
Rep	6	6	4	4	15	15	10	10	8	8	12	12	3	3	1
2&5	13	13	7	7	5	5	9	9	2	2	11	11	14	14	1
Rep	15	15	14	14	13	13	12	12	11	11	10	10	9	9	8
1&4	1	1	2	2	3	3	4	4	5	5	6	6	7	7	8

Road

**Table 1. 2010 Regional Tobacco Growth Regulator Test: two-row plots, 4 replications**

TREATMENTS	Formulated chemical (ml/1000 ml) (applications)				Spray method (applications)			
	1st	2nd	3rd	4th	1st	2nd	3rd	4th
1. Topped and not suckered	-	-	-	-	-	-	-	-
2. OST 85/OST 85/(RMH-30 & PRIME+) TM 2.0 GPA/2.5 GPA/(1.5 GPA & 0.5 GPA)	40	50	(30+10)	-	OT	OT+ 3-5D	OT+7D	-
3. OST 85/OST 85/FLUPRO 2.0 GPA/2.5 GPA/0.5 GPA	40	50	10	-	OT	OT+ 3-5D	OT+7D	-
4. OST 85/OST 85/PRIME+ 2.0 GPA/2.5 GPA/0.5 GPA	40	50	10	-	OT	OT+ 3-5D	OT+7D	-
5. OST 85/OST 85/DREXALIN PLUS 2.0 GPA/2.5 GPA/0.5 GPA	40	50	10	-	OT	OT+ 3-5D	OT+7D	-
6. OST 85/OST 85/PRIME+ (2011 FORMULATION) 2.0 GPA/2.5 GPA/0.5 GPA	40	50	10	-	OT	OT+ 3-5D	OT+7D	-
7. OST 85/OST 85/(RMH 30 & PRIME+) TM 2.0 GPA/2.5 GPA/(1.5 GPA & 0.5 GPA) (P+ 2011 FORMULATION)	40	50	(30+10)	-	OT	OT+ 3-5D	OT+7D	-
8. OST 85/OST 85- 2.0 GPA/2.5 GPA (RMH 30 & PRIME+) (0.25 GPA & 0.5 GPA) (RMH 30 & PRIME+) (0.75 GPA & 0.25 GPA) MH APPLIED AFTER 1 <sup>ST</sup> HARVEST	40	50	(3.75+10)	(15+5)	OT	OT+ 3-5D	OT+7D	OT+7D
9. OST 85/OST 85- 2.0 GPA/2.5 GPA (RMH 30 & PRIME+) (0.25 GPA & 0.5 GPA) (RMH 30 & PRIME+) (0.5 GPA & 0.25 GPA) MH APPLIED AFTER 1 <sup>ST</sup> HARVEST	40	50	(3.75+10)	(10+5)	OT	OT+ 3-5D	OT+7D	OT+7D
10. OST 85/OST 85/PRIME+/(RMH-30 & PRIME+) 2.0 GPA/2.5 GPA/0.5 GPA/(0.5 GPA & 0.25 GPA) PRIME+ APPLIED AFTER 1 <sup>ST</sup> HARVEST	40	50	10	(10+5)	OT	OT+ 3-5D	OT+7D	OT+7D
11. OST 85/OST 85/PRIME+/(RMH 30 & PRIME+) 2.0 GPA/2.5 GPA/0.5 GPA/(1.0 GPA & 0.25 GPA) PRIME+ APPLIED AFTER 1 <sup>ST</sup> HARVEST	40	50	10	(20+5)	OT	OT+ 3-5D	OT+7D	OT+7D
12. OST 85/OST 85/PRIME+/RMH 30 2.0 GPA/2.5 GPA/0.5 GPA/1.0 GPA PRIME+ APPLIED AFTER 1 <sup>ST</sup> HARVEST	40	50	10	20	OT	OT+ 3-5D	OT+7D	OT+7D

GPA = 50 gallons per acre; Equivalent based on 6000 plants per acre.

OT = over-the-top as 30 ml/plant early button stage; OT @ 3-5D = 3-5 days after 1<sup>st</sup> appl.; OT@7D = 7 days after 2<sup>nd</sup> and 3<sup>rd</sup> appl.

OST 85, RMH 30 AND Flupro from Chemtura Corporation.

Drexalin Plus from Drexel Chemical Corporation.

PRIME+ from Syngenta Corporation. (Trts 6 and 7 intended to be the Prime+ formulation to be marketed in 2011).

RMH 30 = 1.5 lb ai/gal; OST-85 = 6.01 lb ai/gal; Flupro = 1.2 lb ai/gal; Drexalin Plus = 1.2 lb ai/gal; Prime+ = 1.2 lb ai/gal.

2010 Johnson Variety Trial  
Bowen Farm- Tifton, GA  
University of Georgia -A.S. Csinos

509	505	510	508	503	506	507	504	512	514
A	B	A	B	A	B	A	B	A	B

513	502	402	409	408	410	412	405	401	414	411	413	407	403	406
A	B	A	B	A	B	A	B	A	B	A	B	A	B	A
B	A	B	A	B	A	B	A	B	A	B	A	B	A	B

501	511	213	204	311	306	303	312	307	302	313	310	305	308	301	314	304	309
A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A

33

105	110	108	101	210	214	205	206	207	212	201	202	209	211	208	203
A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
B	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A

111	104	114	102	107	112	106	103	109	113
A	B	A	B	A	B	A	B	A	B
B	A	B	A	B	A	B	A	B	A

Split Plot Design      Replications: five with approx. 25 plants/ plot

Two row plots- A= non-treated plants B= plants treated with Actigard and Admire in the greenhouse

Rates: Actigard 2g ai/7000 plants      Admire Pro 1.0z/1000 plants

**Cultivar**

1. H75
2. H95
3. H102
4. H100
5. H106
6. H110
7. H128
8. H136
9. H138
10. H139
11. H140
12. H143
13. NC71
14. K-326

**Data to be collected:**

- Vigor rating at 4 and 6 weeks
- Plant height at 6 weeks (measurements in centimeters)
- Weekly stand counts, flagging TSWV symptomatic plant
- Yield
- ELISA- collecting root samples from all remaining plants in plot

**2010 Johnson Variety Trial, Bowen Farm, Tifton, Georgia**

Table 1. Percent Tomato Spotted Wilt Symptomatic plants as of June 09, 2010

<b>Tobacco Cultivar</b>	<b>A-Row Non-Treated (%)<sup>1</sup></b>	<b>B-Row* Treated (%)<sup>1</sup></b>
1. H-75	6.5	0
2. H-95	1.9	1.9
3. H-102	4.7	.95
4. H-100	5.7	0
5. H-106	1.9	0
6. H-110	2.8	0
7. H-128	2.8	.95
8. H-136	4.6	0
9. H-138	2.7	.91
10. H-139	6.4	.91
11. H-140	3.7	.95
12. H-143	0	0
13. NC 71	0.95	0
14. K 326	8.5	5.6

<sup>1</sup> Percent TSWV calculated using stand counts made from April through June with TSWV plants being flagged every 7 days. 1<sup>st</sup> symptom of TSWV was noted on 28, April, 2010.

\* B-row (Treated) cultivars were treated with Actigard and Admire Pro in the greenhouse on 26 March. Tobacco was transplanted into trial plots on 30 March.



**2010 Planting Date, Float House and Field Application  
of ASM for TSWV Management**

Trial Plot 1- Early Planting						Trial Plot 2- Mid Planting						Trial Plot 3- Late Planting					
503	506	501	502	504	505	503	504	502	505	501	506	504	506	503	502	505	501
405	402	403	404	406	401	405	401	406	403	404	402	403	401	405	404	402	406
301	303	305	306	302	304	306	303	304	302	305	301	302	303	304	301	306	305
202	205	204	201	203	206	204	202	205	201	206	203	201	205	206	203	204	202
104	101	106	103	105	102	101	106	103	104	102	105	106	104	102	105	101	103
<b>Early Planting Date: March 31, 2010</b>						<b>Mid Planting Date: April 13, 2010</b>						<b>Late Planting Date: April 28, 2010</b>					

Plot size 32 feet long, w/ 10' alleys  
Replications: five

Tobacco Variety: NC 71  
Randomized Complete Block Design (RCBD)

**Float House Treatment**

- No treatment
- Admire Pro
- No treatment
- Admire Pro
- Admire Pro and Actigard
- Admire Pro and Actigard

**Field Treatment applied at 1<sup>st</sup> Symptom** (\* Actigard Field Rate 0.5 oz/A)

- No treatment
- No treatment
- Actigard + 1 week + 1 week
- Actigard + 1 week + 1 week
- No treatment
- Actigard + 1 week + 1 week

**Data to be collected:**

- Weekly stand counts, flagging TSWV symptomatic plants
- Plant height at 4 and 8 weeks
- Vigor ratings at 3, 6 & 9 weeks
- Yield
- ELISA-collecting root samples from ten plants per plot

**2010 Planting Date, Float House and Field Application of ASM for TSWV Management**

Table 1. Percent Tomato Spotted Wilt Symptomatic plants as of June 09, 2010

<b>Float House Treatment</b>	<b>Field Treatment applied at 1<sup>st</sup> Symptom<sup>1</sup></b>	<b>Planting Date 1 % TSWV<sup>2</sup></b>	<b>Planting Date 2 % TSWV<sup>3</sup></b>	<b>Planting Date 3 % TSWV<sup>4</sup></b>
1. No treatment	No treatment	12.6	6.4	6.0
2. Admire Pro	No treatment	3.4	7.6	5.0
3. No treatment	Actigard + 1 week + week	9.1	6.7	7.1
4. Admire Pro	Actigard + 1 week + 1 week	9.2	6.4	9.4
5. Admire Pro and Actigard	No treatment	6.7	9.5	5.3
6. Admire Pro and Actigard	Actigard + 1 week + 1 week	5.6	4.3	3.7

<sup>1</sup> Percent TSWV calculated using stand counts made from April through June with TSWV plants being flagged every 7 days

<sup>2</sup> Field application dates for Planting Date 1 were 28 April (1<sup>st</sup> Symptom), 05 May (+1 week), and 12 May (+1 week + 1 week)

<sup>3</sup> Field application dates for Planting Date 2 were 20 May (1<sup>st</sup> Symptom), 27 May (+1 week), and 02 June (+1 week + 1 week)

<sup>4</sup> Field application dates for Planting Date 3 were 02 June (1<sup>st</sup> Symptom), 10 June (+1 week), and 16 June (+1 week + 1 week)

**UNIVERSITY OF GEORGIA  
COOPERATIVE EXTENSION SERVICE  
TOBACCO ON-FARM DEMONSTRATION  
JEFF DAVIS COUNTY & TIFT COUNTY, GEORGIA – 2010**

Kenneth, Jason & Ken Williams, Farmer Cooperators; Tim Varnedore, County Extension Coordinator;  
J. Michael Moore, Extension Agronomist- Tobacco; David C. Jones, Extension Entomologist (Retired);  
Paul Bertrand, Pathologist (Retired); Chris Chammoun, Ag Extension Technician;  
Steve LaHue, Research Coordinator; Ed Troxell, Research Coordinator;

**EVALUATION OF SQM ELEMENT Q FOR REDUCING PLANT STRESS ASSOCIATED WITH  
THE APPLICATION OF ACTIGARD IN FLUE-CURED TOBACCO  
KENNETH & JASON WILLIAMS FARM – JEFF DAVIS COUNTY, GA – 2010**

**MATERIALS AND METHODS**

**Plots:** Four rows, 46 inches wide and 100 feet long. Approximately 266 plants per plot.  
Approximately 7,600 plants per acre. Randomized complete block design with 4 replications per  
treatment. Alleys 30 feet wide. Transplant water applied at the rate of 150 gallons per acre.

**Application:** Telone II (6 gals/A) was applied to the plots.  
Employ was applied to the plants in the greenhouse on April 7, 2010 for treatment 13 and  
April 12, 2010 for treatment 14. Employ, & Actigard 50WG applied to plants in the greenhouse  
on April 12, 2010. Admire Pro applied to plants in the greenhouse on April 16, 2010.

**Variety:** Tobacco cultivar NC 196 seeded January 23, 2010 transplanted April 21, 2010.

\*\*\*\*\*

**EVALUATION OF SQM ELEMENT Q FOR REDUCING PLANT STRESS ASSOCIATED WITH  
THE APPLICATION OF ACTIGARD IN FLUE-CURED TOBACCO  
– CPES, BOWEN FARM, TIFTON, GA – 2010**

**MATERIALS AND METHODS**

**Plots:** One rows, 44 inches wide and 59 feet long. Approximately 32 plants per plot.  
Approximately 6,440 plants per acre. Randomized complete block design with 4 replications per  
treatment. Alleys 6 feet wide. Transplant water applied at the rate of 180 gallons per acre.

**Application:** Telone II (10 gals/A) was applied to the plots.  
Employ was applied to the plants in the greenhouse on April 1, 2009 for treatment 13 and April  
16, 2009 for treatment 14.  
Admire Pro, Employ, & Actigard 50WG applied to plants in the greenhouse on April 16, 2009.

**Variety:** Tobacco cultivar NC 196 seeded January 23, 2010 transplanted April 22, 2010.

**Table 1. Treatments: Kenneth & Jason Williams Farm, Jeff Davis County GA - 2010**

1	NPK standard		APro	
2	NPK standard		APro+ Actigard	
3	NPK standard	+ Element Q1	APro	
4	NPK standard	+ Element Q1	APro+ Actigard	
5	NPK standard	+ Element Q2	APro	
6	NPK standard	+ Element Q2	APro+ Actigard	
7	NPK standard		APro	9-45-15
8	NPK standard		Apro+ Actigard	9-45-15
9	NPK standard	+ Element Q1	APro	9-45-15
10	NPK standard	+ Element Q1	APro+ Actigard	9-45-15
11	NPK standard	+ Element Q2	APro	9-45-15
12	NPK standard	+ Element Q2	APro+ Actigard	9-45-15
13	NPK standard	Employ Pre-Actigard (5 days), + APro		
14	NPK standard	Employ TM w/ Actigard applied same day), + APro		
15	NPK standard		+ Admire Pro	
16	NPK standard		+ Actigard + Admire Pro	

**(Trts 13 &14 applications to seedlings removed from the greenhouse only due to test intent and concerns of drift in the field.)**

**(Trts 15 and 16 are being considered for inclusion in the study.)**

**Notes:**

NPK standard float bed fertilization program (100 ppm N weeks 1-4, followed by 100 ppm weeks 5-10)

Actigard applied as a drench over trays on float water (1oz./100,000 tray cells on transplant sized plants) in designated rows 7 days prior to transplanting.

9-45-15 applied to designated treatments at 6 lbs / 100 gallons of water applied per acre at transplanting.

NC 196 seeded on Friday, January 23, 2010

<b>Treatments:</b>	9	11	16	7	4	12	1	13	15	2	14	5	3	6	10	8
<b>Plots →</b>	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64

<b>Treatments:</b>	15	6	4	10	2	12	8	11	5	9	13	1	16	14	3	7
<b>Plots →</b>	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48

<b>Treatments:</b>	7	5	14	11	1	13	15	3	6	16	9	2	10	8	4	12
<b>Plots →</b>	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32

<b>Treatments:</b>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Plots →</b>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16

Two additional treatments being considered for inclusion in the test.

Plots are four rows of tobacco with a skip row every ninth row. Application of Employ in the field is not possible in this case due to the potential of drift.

2010 UNIVERSITY OF GEORGIA, COOPERATIVE EXTENSION  
TOBACCO ON-FARM DEMONSTRATION

Title of Demonstration: BLACK SHANK VARIETY TEST

Farmer Name/Address: JAY DAVIS  
1357 Millbranch Rd,  
Alma, GA 31510-412  
(912) 449-2457

Extension Agent Responsible: JAMES JACOBS, PIERCE COUNTY CEC  
Extension Specialist Responsible: J. MICHAEL MOORE, EXTENSION AGRONOMIST

**Table 1. Disease Resistance of 2010 Black Shank Variety Demonstration, Jay Davis Farm, Pierce County, Georgia.**

Trt	VARIETY	PEDIGREE	Disease Resistance					
			BS	GW	FW	RK	BSp	Virus
1.	CC 67	F1 Hybrid Cross Creek Seed	R	R		TCN /R		TMV
2.	K 346	McNair 926 X 80241 Gold Leaf Seed Co.	R	R		R	T	
3.	NC 196	F1 Hybrid Gold Leaf Seed Co.	M	L		R	N/A	
4.	NC 471	NC 1127 X NC 810 Gold Leaf Seed Co.	R	R				TMV
5.	NC 810	F1 Hybrid Cross Creek Seed	H	H		R		
6.	Spt 225	(SP 168 X K 346) (SPA 95 X SP 168) Speight Seed Farm	R	R		R		
7.	Spt 227	(SP 151 X K 346) (SP 202 X K 346) Speight Seed Farm	R	R		R		
8.	Spt 234	(SP 168 X K 346) Speight Seed Farm	R	R		R		
9.	Spt 236	(SP 168 X SP 196) (SP 179 X SP 177) Speight Seed Farm	R	R		R		
10.	CC 700	F1 Hybrid Cross Creek Seed	H	M		TCN /R		
11.	K 399	(C-139 X C-319) X NC 95 Gold Leaf Seed Co.	M	M		R	MT	
12.	PVH 1452	F1 Hybrid Profigen	R	R		TCN /R		

3 quarts of Meta-Star were applied prior to layby cultivation to 16 row blocks alternating across the plot from the front half of the plot to the back half of the plot. This area has a history of black shank and has been rotated out of tobacco for several years.

**BLACKSHANK VARIETY TRIAL – HURRICANE CREEK FARMS**

```

XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
XXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXXX
    
```

VARIETIES								
1-8	8-1	1-8	9-12	PVH1452	PVH1452	9-12	9-12	PVH1452
NUMBER OF ROWS								
8	8	8	4	4	4	4	4	4

**8 rows closest to greenhouse and road are border rows**

Transplanted on Tuesday, April 20<sup>th</sup>

3 Replications

Varieties are as follows

1. CC67
2. K346
3. NC196
4. NC471
5. NC810
6. SPT225
7. SPT227
8. SPT234
9. SPT236
10. CC700
11. K399
12. PVH1452 (1 Row in Plot, 4 row blocks of PVH 1452 not in plot)

XXXXXXXX: 3 Qts Meta-Star on the week of May 3<sup>rd</sup> (16 rows)  
 OOOOOOO: Control (16 rows)

2010 UNIVERSITY OF GEORGIA  
COOPERATIVE EXTENSION  
TOBACCO ON-FARM DEMONSTRATIONS

Title of Demonstration: REGIONAL FARM TEST

Farmer Name/Address: FRANKLIN BURCH  
3163 Nine Run Road, Screven, GA 31560-8946  
912 294-0273

Extension Specialist Responsible: J. MICHAEL MOORE

Extension Agent Responsible: MARK FRYE

Plot Size: 2 (48") ROWS X 1361'

Variety: AS PER PLOT                  Soil Type: SL                  Date Transplanted: (4/13/10)

Crop History: 2008: Corn    2009: Cotton

Herbicide/Rate: PPI; PROWL 3.3: 0.85 qt

Fungicides/Rate:     Ridomil Gold 2 pt/A                  Nematicides/Rate: Telone II 8 gal/A  
                            Quadris 4 oz/A

Soil Insecticide/Rate: Admire Pro: 0.8 oz/1000 plants + Actigard; 1 oz/100,000 plants in GH

Foliar Insecticide/Rate:     Acephate 97 0.75 lb/A + Calcium 1 gal/A  
                                    Tracer 2 oz/A + Calcium 1gal/A  
                                    Belt 3 oz/A

Date: pre-trsp	Fertility Program:	11-0-11	125-225 LBS/A	precision spread
Date: sidedress	Fertility Program:	9-0-19	438 LBS/A	
Date: sidedress	<u>Fertility Program:</u>	<u>9-0-19</u>	<u>---- LBS/A</u>	
	Total	92 - 63 - 135		

Rainfall:     March;                  April;                  May;                  June;                  July;                  August;

0.75 irrigation after transplanting

Topping: Date;                          Average No. Leaves Per Plant:

Sucker Control:

Material;	Rate/Acre;	Date;
Material;	Rate/Acre;	Date;
Material;	Rate/Acre;	Date;



**Table 1. Disease Resistance of the 2010 Regional Farm Test (lines in their last year of testing before approval for release), Franklin Burch Farm, Wayne County, Georgia.**

Trt	VARIETY	PEDIGREE	Disease Resistance					
			BS	GW	FW	RK	BSp	Virus
1.	NC 2326	(Hicks X 9102)(Hicks)Hicks)Hicks) NC	L	SU	M			
2.	NC 95	(C-139XBel.4-30)X(C-139XHicks) NC	L	H	M	R		
3.	GLEX 328	GL						
4.	CC 304	CC						
5.	GL 395	GL						
6.	AOV 911	Alliance One International						
7.	NC EX 25	NC						
8.	NC EX 10	NC						
9.	XP 248	Profigen						
10.	CU 110	Clemson University						
11.	NC EX 24	NC						
12.	XP 275	Profigen						
13.	CU 75	Clemson University						
14.	ULT 142	Universal Leaf Tobacco Co.						
15.	ULT 112	Universal Leaf Tobacco Co.						

<sup>1</sup>Resistance; 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; 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; M.j - Meloidogyne javanica

**UNIVERSITY OF GEORGIA  
COOPERATIVE EXTENSION SERVICE  
TOBACCO ON-FARM DEMONSTRATION  
JEFF DAVIS COUNTY & TIFT COUNTY, GEORGIA – 2010**

Kenneth, Jason & Ken Williams, Farmer Cooperators; Tim Varnedore, County Extension Coordinator;  
J. Michael Moore, Extension Agronomist- Tobacco; David C. Jones, Extension Entomologist (Retired);  
Paul Bertrand, Pathologist (Retired); Chris Chammoun, Ag Extension Technician;  
Steve LaHue, Research Coordinator; Ed Troxell, Research Coordinator;

**EVALUATION OF SQM ELEMENT Q FOR REDUCING PLANT STRESS ASSOCIATED WITH  
THE APPLICATION OF ACTIGARD IN FLUE-CURED TOBACCO  
KENNETH & JASON WILLIAMS FARM – JEFF DAVIS COUNTY, GA – 2010**

**MATERIALS AND METHODS**

**Plots:** Four rows, 46 inches wide and 100 feet long. Approximately 266 plants per plot.  
Approximately 7,600 plants per acre. Randomized complete block design with 4 replications per  
treatment. Alleys 30 feet wide. Transplant water applied at the rate of 150 gallons per acre.

**Application:** Telone II (6 gals/A) was applied to the plots.  
Employ was applied to the plants in the greenhouse on April 7, 2010 for treatment 13 and  
April 12, 2010 for treatment 14. Employ, & Actigard 50WG applied to plants in the greenhouse  
on April 12, 2010. Admire Pro applied to plants in the greenhouse on April 16, 2010.

**Variety:** Tobacco cultivar NC 196 seeded January 23, 2010 transplanted April 21, 2010.

\*\*\*\*\*

**EVALUATION OF SQM ELEMENT Q FOR REDUCING PLANT STRESS ASSOCIATED WITH  
THE APPLICATION OF ACTIGARD IN FLUE-CURED TOBACCO  
– CPES, BOWEN FARM, TIFTON, GA – 2010**

**MATERIALS AND METHODS**

**Plots:** One rows, 44 inches wide and 59 feet long. Approximately 32 plants per plot.  
Approximately 6.440 plants per acre. Randomized complete block design with 4 replications per  
treatment. Alleys 6 feet wide. Transplant water applied at the rate of 180 gallons per acre.

**Application:** Telone II (10 gals/A) was applied to the plots.  
Employ was applied to the plants in the greenhouse on April 1, 2009 for treatment 13 and April  
16, 2009 for treatment 14.  
Admire Pro, Employ, & Actigard 50WG applied to plants in the greenhouse on April 16, 2009.

**Variety:** Tobacco cultivar NC 196 seeded January 23, 2010 transplanted April 22, 2010.

**Table 1. Treatments: Kenneth & Jason Williams Farm, Jeff Davis County GA - 2010**

1	NPK standard		APro	
2	NPK standard		APro+ Actigard	
3	NPK standard	+ Element Q1	APro	
4	NPK standard	+ Element Q1	APro+ Actigard	
5	NPK standard	+ Element Q2	APro	
6	NPK standard	+ Element Q2	APro+ Actigard	
7	NPK standard		APro	9-45-15
8	NPK standard		Apro+ Actigard	9-45-15
9	NPK standard	+ Element Q1	APro	9-45-15
10	NPK standard	+ Element Q1	APro+ Actigard	9-45-15
11	NPK standard	+ Element Q2	APro	9-45-15
12	NPK standard	+ Element Q2	APro+ Actigard	9-45-15
13	NPK standard	Employ Pre-Actigard (5 days), + APro		
14	NPK standard	Employ TM w/ Actigard applied same day), + APro		
15	NPK standard		+ Admire Pro	
16	NPK standard		+ Actigard + Admire Pro	

**(Trts 13 &14 applications to seedlings removed from the greenhouse only due to test intent and concerns of drift in the field.)**

**(Trts 15 and 16 are being considered for inclusion in the study.)**

**Notes:**

NPK standard float bed fertilization program (100 ppm N weeks 1-4, followed by 100 ppm weeks 5-10)

Actigard applied as a drench over trays on float water (1oz./100,000 tray cells on transplant sized plants) in designated rows 7 days prior to transplanting.

9-45-15 applied to designated treatments at 6 lbs / 100 gallons of water applied per acre at transplanting.

NC 196 seeded on Friday, January 23, 2010

**EVALUATION OF SQM ELEMENT Q FOR REDUCING PLANT STRESS ASSOCIATED WITH  
THE APPLICATION OF ACTIGARD IN FLUE-CURED TOBACCO  
KENNETH & JASON WILLIAMS FARM – JEFF DAVIS COUNTY, GA – 2010**

**Experimental Design:**

<b>Treatments:</b>	9	11	16	7	4	12	1	13	15	2	14	5	3	6	10	8
<b>Plots →</b>	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416

<b>Treatments:</b>	15	6	4	10	2	12	8	11	5	9	13	1	16	14	3	7
<b>Plots →</b>	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316

<b>Treatments:</b>	7	5	14	11	1	13	15	3	6	16	9	2	10	8	4	12
<b>Plots →</b>	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216

<b>Treatments:</b>	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Plots →</b>	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116

Two additional treatments being considered for inclusion in the test.

Plots are four rows of tobacco with a skip row every ninth row. Application of Employ in the field is not possible in this case due to the potential of drift.

May 7, 2010 – Visual Rating: 1 – 5, 1= dead, irregular, discolored, 5 = robust, uniform size, green.

**Table 1. Evaluation of SQM Element Q for Reducing Plant Stress Associated with the Application of Actigard in Flue-Cured Tobacco  
Kenneth & Jason Williams Farm, Jeff Davis County, GA - 2010**

Treatment Number	Suppression of Tomato Spotted Wilt Virus in Flue-Cured Tobacco	TSWV (% Symptomatic Plants <sup>1</sup> )			
		5/11	5/18	5/26	6/10
1	Treatment NPK Standard Admire Pro	-	-	-	-
2	NPK Standard Admire Pro + Actigard	-	-	-	-
3	NPK Standard Element Q1 Admire Pro	0.6	2.8	7.0	14.0
4	NPK Standard Element Q1 Admire Pro + Actigard	0.2	1.0	2.6	10.2
5	NPK Standard Element Q2 Admire Pro	0.5	2.5	6.6	13.3
6	NPK Standard Element Q2 Admire Pro + Actigard	0.1	0.6	3.9	11.6
7	NPK Standard Admire Pro 9-45-15 (TPW)	1.4	5.1	10.2	16.4
8	NPK Standard Admire Pro + Actigard 9-45-15 (TPW)	0.2	1.0	4.6	9.7

Table 1. (Cont'd)

Suppression of Tomato Spotted Wilt Virus in Flue-Cured Tobacco		TSWV (% Symptomatic Plants <sup>1</sup> )			
Treatment Number	Treatment	5/11	5/18	5/26	6/10
9	NPK Standard Element Q1 Admire Pro 9-45-15 (TPW)	0.7	1.8	7.1	11.6
10	NPK Standard Element Q1 Admire Pro + Actigard 9-45-15 (TPW)	0.2	1.1	4.0	9.9
11	NPK Standard Element Q2 Admire Pro 9-45-15 (TPW)	0.5	2.4	7.7	12.9
12	NPK Standard Element Q2 Admire Pro + Actigard 9-45-15 (TPW)	0.1	0.7	3.9	10.4
13	NPK Standard Employ Pre-Actigard (5 days) AdmirePro	0.1	1.0	4.5	13.2
14	NPK Standard Employ TM w/Actigard applied same day + Admire Pro	0	0.3	2.2	10.4
15	NPK Standard Admire Pro	0.7	3.0	7.9	14.9
16	NPK Standard Actigard + Admire Pro	0	0.7	2.1	9.1

<sup>1</sup>TSWV: % Symptomatic Plants – Examined all plants in each plot on each evaluation date.

**EVALUATION OF CORAGEN, DURIVO, BELT, DENIM AND TRACER FOR WORM CONTROL IN FLUE-CURED TOBACCO**

Kenneth Williams, Farmer, Jeff Davis County, planted April 21, 2010  
 783 Hatton Still Road  
 Hazlehurst, GA 31539  
 912 240 4003

David C. Jones, University of Georgia, Rehired  
 J. Michael Moore, 229 392 6424 cell  
 Tim Varnedore, Jeff Davis County Extension Coordinator 9122535356 cell  
 Chris Chammoun, University of Georgia 229 546 5073 cell

- All plants treated with Actigard (1 oz / 100,000 cells) and imidacloprid (0.8 oz Admire Pro / 1,000 cells) in the greenhouse unless otherwise noted.

Treatment	Chemical	Formulation	Rate (oz/A)		Timing
1	Coragen	SC 1.67	3.5		Foliar
2	Coragen	SC 1.67	5		Tray drench
3	Coragen	SC 1.67	7		Tray drench
4	Coragen #	SC 1.67	7.0		Transplant
			5.0		Water, fb foliar
5	Coragen	SC 1.67	5.0		Foliar
6	Belt	SC 4.0	3.0		Foliar
7	Tracer	4.0 lb/gal	2.0		Foliar
8	Denim	EC 0.16	8		Foliar
9	Durivo*	SC	8		Tray drench
10	Durivo*	SC	10		Tray drench
11	Durivo*	SC 1.67 lb/gal thiamethoxam 0.835 lb/gal chlorantraniliprole	10		Transplant Water
12	Coragen	SC 1.67	5.0		Foliar
13	Coragen	SC 1.67	5.0		Foliar

- = No imidacloprid applied to plants treated with Durivo.
  - KW – 130 gal water / A. Mixed 80 gal of transplant water using 122.2 ml of Coragen (7 oz/A), and 174.5 ml of Durivo (10 oz/A).
- # = 7.0 fl oz Coragen in transplant water followed by 5.0 fl oz post topping as a foliar spray
- Target Pests: splitworm, cutworm, budworm, hornworm or looper.
- Application at threshold of 10% of plants infested.
- Evaluations at 3 & 5 days or until the residual control plays out.
  - May 7, 2010 survey for insects, number by type of insect. Williams and Wooten.
- Treatment of Trts 2,3, 9, 10, for both locations 4/16/10 Jerry Wooten – K 326
- Kenneth Williams – NC 196 except for trts 9, 10, 11 which are NC 297 and were treated in Jerry Wooten’s greenhouse.
- Transplanted: April 21, 2010 – Kenneth Williams;

**EVALUATION OF CORAGEN, DURIVO, BELT, DENIM AND TRACER FOR WORM CONTROL IN  
FLUE-CURED TOBACCO  
KENNETH & JASON WILLIAMS FARM – JEFF DAVIS COUNTY, GA – 2010  
JERRY WOOTEEN FARM – JEFF DAVIS COUNTY, GA – 2010**

**Experimental Design:**

<b>Treatments:</b>	9	11	7	4	12	1	13	2	5	3	6	10	8
Plots →	401	402	403	404	405	406	407	408	409	410	411	412	413
<b>Treatments:</b>	6	4	10	2	12	8	11	5	9	13	1	3	7
Plots →	301	302	303	304	305	306	307	308	309	310	311	312	313
<b>Treatments:</b>	7	5	11	1	13	3	6	9	2	10	8	4	12
Plots →	201	202	203	204	205	206	207	208	209	210	211	212	213
<b>Treatments:</b>	1	2	3	4	5	6	7	8	9	10	11	12	13
Plots →	101	102	103	104	105	106	107	108	109	110	111	112	113

Sprayed 6/1/10 from 4pm until 6:30pm. 3 x TX-18s per row. 50 psi. 30 gpa.

Spray solution ran out leaving the front half of plot 406 unsprayed. Spray solution ran out leaving the front half of plot 409 unsprayed. This front half was sprayed from another mix on this solution.



**Table 2. Comparing Foliar Insecticides to Coragen 1.67 SC and Durivo SC in Controlling Tobacco Budworm in Flue-Cured Tobacco – Kenneth & Jason Williams Farm  
Jeff Davis County, Georgia – 2010**

Treatment Number	Treatment	Rate	% Infestation <sup>3</sup>	
			May 25	June 1
1	Coragen 1.56 SC	3.5 ozs./Acre (Foliar)	2.6	11.4
2	Coragen 1.67 SC <sup>1</sup>	5 ozs. (Tray Drench)	0.1	4.5
3	Coragen 1.67 SC <sup>1</sup>	7 ozs. (Tray Drench)	0.2	5.8
4	Coragen 1.67 SC <sup>1</sup>	7 ozs. (Transplant Water)	0.1	3.7
5	Coragen 1.67 SC	5 ozs./Acre (Foliar)	-	12.6
6	Belt 4 SC	3 ozs./Acre (Foliar)	-	14.4
7	Tracer 4 SC	2 ozs./Acre (Foliar)	-	13.3
8	Denim 1.6 EC	8 ozs./Acre (Foliar)	-	10.1
9	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	8 ozs. (Tray Drench)	0.8	3.9
10	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Tray Drench)	1.1	3.7
11	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Transplant Water)	0.4	3.1

<sup>1</sup>All plants treated with Actigard (.5 oz./50,000 cells) + Admire Pro (.8 ozs./1,000 cells) in the greenhouse.

<sup>2</sup>All plants treated with Actigard (.5 oz./50,000 cells) in the greenhouse.

<sup>3</sup>Examined all plants in each plot.

**Table 3. Comparing Foliar Insecticides to Coragen 1.67 SC and Durivo SC in Controlling Tobacco Budworm in Flue-Cured Tobacco – Kenneth & Jason Williams Farm - Jeff Davis County, Georgia – 2010**

Treatment Number	Treatment	Rate	June 1 % Infestation <sup>3</sup>	Average % Control	
				4 DAT	6 DAT
1	Coragen 1.56 SC	3.5 ozs./Acre (Foliar)	11.4	87.3	96.1
2	Coragen 1.67 SC <sup>1</sup>	5 ozs. (Tray Drench)	4.5	55.9	85.6
3	Coragen 1.67 SC <sup>1</sup>	7 ozs. (Tray Drench)	5.8	52.6	83.5
4	Coragen 1.67 SC <sup>1</sup>	7 ozs. (Transplant Water)	3.7	40.6	90.5
5	Coragen 1.67 SC	5 ozs./Acre (Foliar)	12.6	89.7	94.8
6	Belt 4 SC	3 ozs./Acre (Foliar)	14.4	89.3	98.2
7	Tracer 4 SC	2 ozs./Acre (Foliar)	13.3	90.0	97.8
8	Denim 1.6EC	8 ozs./Acre (Foliar)	10.1	93.0	99.3
9	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	8 ozs. (Tray Drench)	3.9	62.9	90.7
10	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Tray Drench)	3.7	35.8	74.6
11	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Transplant Water)	3.1	57.6	89.1

<sup>1</sup>All plants treated with Actigard (.5 oz./50,000 cells) + Admire Pro (.8 oz./1,000 cells) in the greenhouse.

<sup>2</sup>All plants treated with Actigard (.5 oz./50,000 cells) in the greenhouse.

<sup>3</sup>Examined all plants in each plot.

**Table 4. Comparing Foliar Insecticides to Coragen 1.67 SC and Durivo SC in Controlling Tobacco Hornworm in Flue-Cured Tobacco – Kenneth & Jason Williams Farm - Jeff Davis County, Georgia – 2010**

Treatment Number	Treatment	Rate	June 1 % Infestation <sup>3</sup>	Average % Control	
				4 DAT	6 DAT
1	Coragen 1.56 SC	3.5 ozs./Acre (Foliar)	1.0	100	100
2	Coragen 1.67 SC <sup>1</sup>	5 ozs. (Tray Drench)	-	-	-
3	Coragen 1.67 SC <sup>1</sup>	7 ozs. (Tray Drench)	-	-	-
4	Coragen 1.67 SC <sup>1</sup>	7 ozs. (Transplant Water)	-	-	-
5	Coragen 1.67 SC	5 ozs./Acre (Foliar)	0.6	100	100
6	Belt 4 SC	3 ozs./Acre (Foliar)	1.1	100	100
7	Tracer 4 SC	2 ozs./Acre (Foliar)	1.7	100	100
8	Denim 1.6 EC	8 ozs./Acre (Foliar)	0.5	100	100
9	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	8 ozs. (Tray Drench)	0.1	100	100
10	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Tray Drench)	-	-	-
11	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Transplant Water)	-	-	-

<sup>1</sup>All plants treated with Actigard (.5 oz./50,000 cells) + Admire Pro (.8 oz./1,000 cells) in the greenhouse.

<sup>2</sup>All plants treated with Actigard (.5 oz./50,000 cells) in the greenhouse.

<sup>3</sup>Examined all plants in each plot.

2010

Influence of Nutri-Phite and Rescuc Foliar Applications on Flue-Cured Tobacco Yield and Quality

Kenneth Williams Farm  
 783 Hatton Still Road  
 Hazlehurst, GA 31539  
 912 240 4003

Tim Varnedore, Jeff Davis County Extension Coordinator; 9122535356 cell  
 J. Michael Moore, UGA Extension Tobacco Specialist  
 Chris Chammoun, UGA Technician

<i>Trt No.</i>	<i>Treatment Name</i>	<i>Use Rate Oz/acre</i>	<i>Timings / DAP</i>	
<b>A</b>	Untreated			1 A
<b>B</b>	NUTRI-PHITE ULTRA	16 (Banded) 1%	Layby (6/4/10)	2 B
<b>B</b>	NUTRI-PHITE ULTRA	16 (Banded) 1%	Topping	3 C
<b>B</b>	NUTRI-PHITE ULTRA	16 (Banded) 1%	First Prime	4 C
<b>C</b>	TRICARD RESCUE	16 (Banded) 1%	Layby (6/4/10)	5 A
<b>C</b>	TRICARD RESCUE	16 (Banded) 1%	Topping	6 B
<b>C</b>	TRICARD RESCUE	16 (Banded) 1%	First Prime	7 A
				8 C
				9 B
				10 C
				11 B
				12 A

Band = Banded rate, calculated to apply only to plants.  
 Applied with 3 nozzle arrangement of TX – 18 nozzles.  
 Each plot is 4 rows  
 Layby application sprayed 6/4/10

Jerry Wooten, Farmer, Jeff Davis County, planted April 22, 2010  
 508 Mount Pleasant Church Rd,  
 Denton, GA 31532-3318  
 (912) 375-7193

David C. Jones, University of Georgia, Rehired  
 J. Michael Moore, 229 392 6424 cell  
 Tim Varnedore, Jeff Davis County Extension Coordinator 9122535356 cell  
 Chris Chammoun, University of Georgia 229 546 5073 cell

Treatment	Chemical	Formulation	Rate (oz/A)		Timing
1	Non-treated Check				---
2	Coragen	SC 1.67	5		Tray drench
3	Coragen	SC 1.67	7		Tray drench
4	Coragen #	SC 1.67	7.0 5.0		Transplant Water, fb foliar
5	Coragen	SC 1.67	5.0		Foliar
6	Belt	SC 4.0	3.0		Foliar
7	Tracer	4.0 lb/gal	2.0		Foliar
8	Denim	EC 0.16	8		Foliar
9	Durivo*	SC	8		Tray drench
10	Durivo*	SC	10		Tray drench
11	Durivo*	SC 1.67 lb/gal thiamethoxam 0.835 lb/gal chlorantraniliprole	10		Transplant Water
12	Coragen	SC 1.67	5.0		Foliar
13	Coragen	SC 1.67	5.0		Foliar

- All plants treated with Actigard (1 oz / 100,000 cells) and imidacloprid (0.8 oz Admire Pro / 1,000 cells) in the greenhouse unless otherwise noted.
- = No imidacloprid applied to plants treated with Durivo.
  - JW – 112 gal water / A. Mixed 60 gal of transplant water using 110 ml of Coragen (7 oz/A), and 164 ml of Durivo (10 oz/A).
- # = 7.0 fl oz Coragen in transplant water followed by 5.0 fl oz post topping as a foliar spray
- Target Pests: splitworm, cutworm, budworm, hornworm or looper.
- Application at threshold of 10% of plants infested.
- Evaluations at 3 & 5 days or until the residual control plays out.
  - May 7, 2010 survey for insects, number by type of insect. Williams and Wooten.
- Treatment of Trts 2,3, 9, 10, for both locations 4/16/10 Jerry Wooten – K 326
- Transplanted: April 22, 2010 – Jerry Wooten.
- May 29, 2010 – sprayed foliar materials for budworm control. <0.1" rain less than 1 hr after application

**EVALUATION OF CORAGEN, DURIVO, BELT, DENIM AND TRACER FOR WORM CONTROL IN  
FLUE-CURED TOBACCO  
JERRY WOOTEN FARM – JEFF DAVIS COUNTY, GA – 2010**

**Experimental Design:**

<b>Treatments:</b>	9	11	7	4	12	1	13	2	5	3	6	10	8
Plots →	401	402	403	404	405	406	407	408	409	410	411	412	413
<b>Treatments:</b>	6	4	10	2	12	8	11	5	9	13	1	3	7
Plots →	301	302	303	304	305	306	307	308	309	310	311	312	313
<b>Treatments:</b>	7	5	11	1	13	3	6	9	2	10	8	4	12
Plots →	201	202	203	204	205	206	207	208	209	210	211	212	213
<b>Treatments:</b>	1	2	3	4	5	6	7	8	9	10	11	12	13
Plots →	101	102	103	104	105	106	107	108	109	110	111	112	113

**Table 1. Comparing Foliar Insecticides to Coragen 1.67 SC and Durivo SC in Controlling Tobacco Budworm in Flue-Cured Tobacco – Jerry Wooten & Sons Farm - Jeff Davis County, Georgia – 2010**

Treatment Number	Treatment	Rate	May 29 % Infestation <sup>3</sup>	Average % Control	
				4 DAT	6 DAT
1	Dipel ES	2 pts./Acre (Foliar)	5.0	74.1	82.8
2	Coragen 1.67 SC <sup>1</sup>	5 ozs. (Tray Drench)	0.3	100	100
3	Coragen 1.67 SC <sup>1</sup>	7 ozs. (Tray Drench)	0.6	88.9	88.9
4	Coragen 1.67 SC <sup>1</sup>	7 ozs. (Transplant Water)	0.1	100	100
5	Coragen 1.67 SC	5 ozs./Acre (Foliar)	3.8	84.4	90.7
6	Belt 4 SC	3 ozs./Acre (Foliar)	3.9	98.1	98.1
7	Tracer 4 SC	2 ozs./Acre (Foliar)	3.9	93.2	97.7
8	Denim 1.6 EC	8 ozs./Acre (Foliar)	4.4	95.0	97.5
9	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	8 ozs. (Tray Drench)	0.4	66.8	66.8
10	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Tray Drench)	0.5	66.7	66.7
11	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Transplant Water)	0.5	55.6	55.6

<sup>1</sup>All plants treated with Actigard (.5 oz./50,000 cells) + Admire Pro (.8 oz./1,000 cells) in the greenhouse.

<sup>2</sup>All plants treated with Actigard (.5 oz./50,000 cells) in the greenhouse.

<sup>3</sup>Examined all plants in each plot.

**Table 2. Comparing Foliar Insecticides to Coragen 1.67 SC and Durivo SC in Controlling Tobacco Hornworm in Flue-Cured Tobacco – Jerry Wooten & Sons - Jeff Davis County, Georgia – 2010**

Treatment Number	Treatment	Rate	May 29		Average % Control	
			% Infestation <sup>3</sup>	4 DAT	6 DAT	
1	Dipel ES	2 pts./Acre (Foliar)	3.4	100	100	
2	Coragen 1.67 SC <sup>1</sup>	5 ozs. (Tray Drench)	-	-	-	
3	Coragen 1.67 SC <sup>1</sup>	7 ozs. (Tray Drench)	0.1	100	100	
4	Coragen 1.67 SC <sup>1</sup>	7 ozs. (Transplant Water)	-	-	-	
5	Coragen 1.67 SC	5 ozs./Acre (Foliar)	4.0	98.3	100	
6	Belt 4 SC	3 ozs./Acre (Foliar)	2.5	96.6	100	
7	Tracer 4 SC	2 ozs./Acre (Foliar)	1.7	100	100	
8	Denim 1.6 EC	8 ozs./Acre (Foliar)	2.7	100	100	
9	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	8 ozs. (Tray Drench)	-	-	-	
10	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Tray Drench)	0.1	100	100	
11	Durivo SC <sup>2</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Transplant Water)	-	-	-	

<sup>1</sup>All plants treated with Actigard (.5 oz./50,000 cells) + Admire Pro (.8 oz./1,000 cells) in the greenhouse.

<sup>2</sup>All plants treated with Actigard (.5 oz./50,000 cells) in the greenhouse.

<sup>3</sup>Examined all plants in each plot.



**Table 3. Comparing Coragen 1.67 SC to Durivo SC in Suppressing Tomato Spotted Virus in Flue-Cured Tobacco – Jerry Wooten & Sons Farm - Jeff Davis County, Georgia – 2010**

Treatment Number	Suppression of Tomato Spotted Wilt Virus in Flue-Cured Tobacco		TSWV (% Symptomatic Plants <sup>1</sup> )					
	Treatment	Rate	5/12	5/19	5/26	6/9		
2	Coragen 1.67 SC <sup>2</sup>	5 ozs. (Tray Drench)	0	0.2	1.0	3.1		
3	Coragen 1.67 SC <sup>2</sup>	7 ozs. (Tray Drench)	0	0.3	1.3	3.4		
4	Coragen 1.67 SC <sup>2</sup>	7 ozs. (Transplant Water)	0	0.2	0.9	4.0		
9	Durivo SC <sup>3</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	8 ozs. (Tray Drench)	0	0.7	1.9	4.6		
10	Durivo SC <sup>3</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Tray Drench)	0.3	0.7	2.4	5.3		
11	Durivo SC <sup>3</sup> (Thiamethoxam 17.5%) + (Chlorantraniliprole 8.8%)	10 ozs. (Transplant Water)	0.3	0.8	2.5	5.3		

<sup>1</sup>TSWV: % Symptomatic Plants – Examined all plants in each plot on each evaluation date.

<sup>2</sup>All plants treated with Actigard (.5 oz./50,000 cells) + Admire Pro (.8 oz./1,000 cells) in the greenhouse.

<sup>3</sup>All plants treated with Actigard (.5 oz./50,000 cells) in the greenhouse.

**Tobacco Entomology Test 1. Table 2. Effects of selected tray drench, transplant water and foliar spray insecticide treatments on the abundance of insect pests and TSWV symptomatic plants in flue- tobacco, Tift County Georgia, 2010.**

Treatment and formulation/ acre	1 June			10 June			Total plants	Plants with TSWV			
	Aph-	HW-	BW	Aph-	HW-	BW		5/24	6/02	6/09	6/16
Coragen 5.0 oz TPW	126.0-	0.3-	0.3				160	3	3	2	
Coragen 7.0 oz TPW	8.3-	0.0-	0.0				152	6	1	0	
HGW 86SC 10.3 oz TPW	0.0-	0.0-	2.3				168	4	4	2	
Coragen 3.57oz TD	18.7-	0.7-	0.3				164	4	2	1	
Coragen 4.76oz TD	187.3-	0.3-	0.3				166	7	3	0	
HGW 86SC 9.45oz TD	0.0-	0.3-	2.0				170	9	3	Ø	
Admire Pro 3.15oz TD	0.0-	1.0-	2.7				165	4	2	2	
Durivo 10.0 oz TD	0.0-	0.3-	0.7				165	2	3	1	
Durivo 10.0 oz TPW	0.0-	0.0-	0.3				169	5	3	2	
Coragen 5.0 oz Foliar	70.0-	0.0-	0.3				168	4	7	1	
Belt 4SC 2.0 oz Foliar	106.3-	0.3-	0.7				165	5	5	4	
Durivo 10.0 OzFoliar	0.0-	0.0-	0.7				165	8	4	2	
Untreated	720.3-	2.0-	2.7				167	7	3	6	

K-326 flue-cured tobacco transplanted on April 14. Foliar sprays applied on May 18 and June 3 with a CO<sub>2</sub> powered backpack sprayer that delivered 22.8 gpa at 40 psi. Aph is aphids per four plants, HW is hornworms per plot (54 plants), and BW is budworms per plot.

2009 Top Tobacco Producing Counties in Georgia

County	Harvested	Harvested_Yield	Yield_unit	Production	Production_unit
Atkinson	1100 acres	1285 pounds		1413000 pounds	
Berrien	1470 acres	2110 pounds		3100000 pounds	
Coffee	2160 acres	2090 pounds		4512000 pounds	
Irwin	530 acres	2370 pounds		1257000 pounds	
Tift	770 acres	1705 pounds		1312000 pounds	
Appling	750 acres	2185 pounds		1640000 pounds	
Pierce	640 acres	1865 pounds		1194000 pounds	
State Total	14000 acres	2000 pounds		28000000 pounds	

Source: Georgia Ag Statistics

**THANK YOU FOR YOUR INTEREST IN THE  
2010 GEORGIA - FLORIDA TOBACCO TOUR**

**PLAN TO JOIN US FOR THE  
2011 GEORGIA - FLORIDA TOBACCO TOUR**

**JUNE 13-15, 2011**



When you have a question . . .

Call or visit your local office  
of The University of Georgia's  
Cooperative Extension Service.

You'll find a friendly, well-trained  
staff ready to help you with informa-  
tion, advice and free publications  
covering agriculture and natural  
resources, home economics, 4-H and  
youth development and resource  
development.

### 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.

Trade and brand names are used only for information. The University of Georgia College of Agricultural and Environmental Sciences Cooperative Extension does not guarantee nor warrant the standard of any product mentioned neither does it imply approval of any product to the exclusion of others which may also be suitable.

The University of Georgia College of Agricultural and Environmental Sciences Cooperative Extension offers educational programs, assistance and materials to all people without regard to race, color national origin, age, sex or handicap status.

AN EQUAL OPPORTUNITY EMPLOYER

Crop & Soil Sciences

---

CSS-10-1010

June 2010

Issued in furtherance of Cooperative Extension works, Acts of May 8 and June 30, 1914,  
The University of Georgia College of Agricultural & Environmental Sciences  
and the U. S. Department of Agriculture cooperating.

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