

Date: Feb 17, 2012  
Memo to: Industry Cooperators  
From: Tim Brenneman  
Subject: Field Trial Results

Attached are the results of our 2011 field trials on peanuts and pecans. This year was generally very hot and dry, especially early in the growing season when average temperatures were much higher than normal. In fact we are still dry and ponds are very low for this time of year. These conditions lead to very light foliar disease pressure on both peanuts and pecans, but there were some extreme stem rot epidemics both in our small plots and in grower fields. In fact, some normally good stem rot treatments were overwhelmed by the extreme disease levels on susceptible cultivars and/or short rotations. Overall it was a good year for disease data on peanuts, and there was enough pecan scab to evaluate treatments.

I want to acknowledge the hard work of our crew lead by Russ Griffin, Lewis Mullis, and Pat Hilton. Summer workers included Michael Lawhorn, and Miranda Goodman, and the cooperation of other scientists including Dr. Albert Culbreath, Dr. Bob Kemerait, Dr. Corley Holbrook, Dr. Patty Timper, Dr. Bill Branch, Dr. John Beasley, and Dr. Barry Tillman is much appreciated. Dr. Joao Augusto, a post-doc in my program, was also an important part of these investigations, as was Tom Ingram who is working toward an M.S.

Once again we are making this available primarily as an online document, and it can be found at [www.tomatospottedwiltinfo.org](http://www.tomatospottedwiltinfo.org) by clicking on “Publications”, and “2011 Field Trial Results on Diseases of Peanuts and Pecans”. If you have any problems or any questions feel free to call. We have printed a few bound copies and can send you one upon request, but the entire book is available as a pdf file. Thanks again for your support, and we look forward to cooperating with you again in the future.

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## EVALUATION OF EXPERIMENTAL PEANUT SEED TREATMENTS

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental peanut seed treatments.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with seven replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There are eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard 89% germination
- C. **APPLICATION OF TREATMENTS:**
1. Cover sprays of chlorothalonil 720, (1.5 pts/A) (1-7) were applied on 1 Jun, 14 Jun, 28 Jun, 13 Jul, 1 Aug, 9 Aug and 24 Aug. Convoy 40 SC for white mold control (1.5 pt/A) was applied on 1 Jul (2 pt/A) on 19 Jul and 17 Aug.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Blackshank Farm, CPES Tifton, GA 31794
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 15Apr.
  4. **Soil Fertility:** pH - 6.7 P - 74 K - 23 Ca - 411 Mg - 66  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI: Sonalan (2 pt/A) + Dual Magnum (1.25 pt/A) on 26Apr  
POST: Cadre 70DF, 1.44 dry oz/A on 7 Jul
  6. **Insecticides:** Acephate 755, (1 lb/A) for thrips 6 May  
Lannate LV, (2 pt/A) for worms 19 Aug
  7. **Planting Info:** Tifguard, 6 seed/ft on 27 Apr
  8. **Harvest Dates:** Dug - 19 Sep Picked - 29 Sep

E: SUMMARY: This was an excellent seed treatment test with large differences in treated and nontreated seed, in spite of using high quality commercial seed planted in warm soil (80 F). Nearly all dying plants exhibited signs of *Aspergillus niger*. All treatments evaluated had excellent efficacy and more than doubled pod yields.

**CHEMTURA SEED TREATMENT TEST I, 2011  
BLACKSHANK FARM, WOODS FIELD**

Treatments	App's	Rate/A	Plants/ft <sup>1</sup>		% Dead plants <sup>2</sup>		Plant	TSWV <sup>4</sup>	Yield lb/A
			11-May	18-May	11-May	18-May	Width <sup>3</sup> 16-Jun	15-Aug	
1. Nontreated			0.7	0.7	0.0	9.0	27.5	1.7	1834
2. Dynasty PD	Seed Trt.	4.0 oz/100 lb	3.4	3.3	0.0	0.0	30.0	1.1	3763
3. Trilex Star	Seed Trt.	4.0 oz/100 lb	3.3	3.5	0.0	0.0	30.5	0.6	4120
4. UBI 4381	Seed Trt.	4.0 oz/100 lb	3.4	3.4	0.0	0.1	30.6	1.7	3949
5. UBI 4379	Seed Trt.	4.0 oz/100 lb	3.4	3.4	0.0	0.0	28.7	0.6	3995
6. UBI 4382	Seed Trt.	4.0 oz/100 lb	3.5	3.3	0.0	0.0	29.4	1.4	3945
<b>LSD (P&lt;0.05)</b>			0.2	0.2	n.s.	1.2	n.s.	n.s.	427

**Planting Date: April 27, 2011**

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 11 May and 18 May.

<sup>2</sup>The % of emerged plants that was dead or dying per plot on 11 May and 18 May.

<sup>3</sup>Average plant width (measure in cm), mean of 6 plants per plot.

<sup>4</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

## EVALUATION OF ENCLOSURE (RDL-29) FOR THE CONTROL OF PEANUT SOILBORNE DISEASES AND NEMATODES

- A. **PURPOSE:** To evaluate the efficacy of Enclosure (RDL-29) for the control of root knot nematode on GA-06G, and compare it to the nematode resistance in Tifguard peanut.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: GA-06G and Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.T-band, at cracking and early post sprays were applied as described in the footnotes.
  2. **Cover sprays of Chlorothalonil 720 (1.5 pts/A) were applied on 1 Jun, 14 Jun, 28 Jun, 13 Jul, 1 Aug, 9 Aug and 24 Aug. Convoy 40 SC for white mold control (1.5 pt/A) was applied on 1 Jul, 19 Jul and 17 Aug. The dates for other sprays were 7 DAP (13 May), 14-21 DAP (20 May), 45 DAP (9 Jun), and 66 DAP (5 Jul).**
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Blackshank Farm, CPES Tifton, GA 31794
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Fertilizer (3-9-18) was applied broadcast (500 lb/A) on 11 Apr. Field was deep turned and rows marked 15Apr.
  4. **Soil Fertility:** pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI:Sonalan EC (2 pt/A) + Dual Magnum (1.25pt/A) 26 Apr.  
POST: Cadre 70DF, (1.44 dry oz/A) 7 Jul
  6. **Insecticides:** Acephate 755, (1 lb/A) for thrips 6 May  
Lannate LV, (2 pt/A) for worms 19 Aug
  7. **Nematicides:** None except treatments

8. Planting Info: GA-06G and Tifguard, 6 seed/ft on 27 Apr
9. Harvest Dates: Dug – 19 Sept Picked – 29 Sep

E: SUMMARY: This test had severe pressure from root knot nematode. Tifguard had virtually no symptoms, whereas GA-06G was severely affected. No nematicide treatments showed a high level of control, and were even associated with higher levels of dark black spots on the foliage, especially with applications of RDL-29 (Enclosure).

**DEVGEN TEST I, 2011**  
**BLACKSHANK FARM, WOODS FIELD**

<b>GA-06G</b>			Plants/ft <sup>1</sup>		% Dead Plants <sup>2</sup>		TSWV <sup>3</sup>	Rootknot <sup>4</sup>	Ring <sup>4</sup>
TREATMENTS	APP'S	RATE/A	11-May	18-May	11-May	18-May	12-Jul	27-May	27-May
1. Nontreated			3.0	3.0	0.0	0.0	0.4	0.0	8.0
2. Temik	Band @ plant	10.0 lb	3.1	3.2	0.0	0.0	0.4	1.2	6.2
	Temik	Band @ 45 DAP							
3. Temik	Band @ 45 DAP	10.0 lb	2.9	3.0	0.0	0.0	0.4	.	.
	Temik	Band @ 45 DAP							
	RDL-29	45 DAP							
4. RDL-29	45 & 66 DAP	3.0 pt	3.0	3.3	0.0	0.0	0.4	.	.
5. RDL-29	at cracking (7 DAP)	2.0 pt *	3.0	3.3	0.0	0.0	0.4	0.6	8.6
	RDL-29	45 & 66 DAP							
6. RDL-29	early post (14-21 DAP)	3.0 pt *	3.0	3.0	0.0	0.0	0.8	.	.
	RDL-29	45 DAP*							
7. RDL-29	at cracking (7 DAP)	3.0 pt *	2.9	3.0	0.0	0.0	1.2	.	.
	RDL-29	45 DAP*							
8. RDL-29	T-Band @ plant	3.0 pt **	2.9	3.2	0.0	0.0	0.0	.	.
	RDL-29	45 DAP							
<b>Trts 9 &amp; 10 are Tifguard</b>									
9. Nontreated			3.0	3.4	0.0	0.0	0.0	.	.
10. RDL-29	45 DAP	3.0 pt	3.2	3.1	0.0	0.0	0.4	.	.
<b>LSD (P&lt;0.05)</b>			<b>0.3</b>	<b>0.3</b>	<b>n.s.</b>	<b>n.s.</b>	<b>n.s.</b>	<b>0.8</b>	<b>n.s.</b>

**Notes**

\* "At cracking" and "Early post" applications applied in a narrow band (2-4 inches) directly over the row with a single 8010 nozzle in a total spray volume of 40 GPA.

\*\* "T-Band" applied in 3.72 GPA w/a single nozzle applying at 6 inch band centered over the open furrow.

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 11 May and 18 May.

<sup>2</sup>The % of emerged plants that was dead or dying per plot on 11 May & 18 May.

<sup>3</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

<sup>4</sup>Number of nematodes per 100cc of soil.

**DEVGEN TEST I, 2011**  
**BLACKSHANK FARM, WOODS FIELD**

**GA-06G**

TREATMENTS	APP'S	RATE/A	Root	Black	Vigor <sup>7</sup>	Yield
			galling <sup>5</sup>	spot <sup>6</sup>		
			3-Oct	3-Oct		
1. Nontreated			35.0	35.0	5.4	2271
2. Temik	Band @ plant	10.0 lb	27.0	58.0	6.4	2619
Temik	Band @ 45 DAP	10.0 lb				
3. Temik	Band @ 45 DAP	10.0 lb	44.0	62.8	5.4	2201
Temik	Band @ 45 DAP	10.0 lb				
RDL-29	45 DAP	3.0 pt				
4. RDL-29	45 & 66 DAP	3.0 pt	53.0	98.8	4.6	1725
5. RDL-29	at cracking (7 DAP)	2.0 pt *	37.0	91.3	5.4	1847
RDL-29	45 & 66 DAP	2.0 pt				
6. RDL-29	early post (14-21 DAP)	3.0 pt *	52.0	63.3	4.0	1801
RDL-29	45 DAP	3.0 pt				
7. RDL-29	at cracking (7 DAP)	3.0 pt *	57.0	80.0	5.0	2056
RDL-29	45 DAP	3.0 pt				
8. RDL-29	T-Band @ plant	3.0 pt **	64.0	60.0	4.2	1382
RDL-29	45 DAP	3.0 pt				
<b>Trts 9 &amp; 10 are Tifguard</b>						
9. Nontreated			0.0	3.0	9.6	4252
10. RDL-29	45 DAP	3.0 pt	0.0	25.0	9.8	4252
<b>LSD (P&lt;0.05)</b>			<b>29.5</b>	<b>21.2</b>	<b>2.5</b>	<b>1202</b>

**Notes**

\* "**At cracking**" and "**Early post**" applications applied in a narrow band (2-4 inches) directly over the row with a single 8010 nozzle in a total spray volume of 40 GPA.

\*\* "**T-Band**" applied in 3.72 GPA w/a single nozzle applying at 6 inch band centered over the open furrow.

<sup>5</sup> Root galling on a 0 -10 scale where 10=no galling, 1=1-20%, 2=22-20%, etc.

<sup>6</sup> Visual rating of the percentage of leaves with dark black spots, primarily on the lower surface.

<sup>7</sup> Based on a scale of 1 - 10 with 10 being the most vigorous growth.



## EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES (MULTIPLE COMPANY TEST I)

A. PURPOSE: To evaluate the comparative efficacy of labeled and experimental fungicides for the control of southern stem rot on Tifguard peanut.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were in an area with a history of continuous peanut production.
5. Variety: Tifguard

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. In furrow sprays were applied 3.72 GPA using a TP 80015E nozzle at 22 psi. The Early Emergence spray was applied in a 4 inch band at 40.0 GPA using a single 8010 nozzle per row.
2. Early Emergence sprays were applied on 19 May. Treatment sprays 1-7 were done on 1 Jun, 14 Jun, 29 Jun, 12 Jul, 28 Jul, 9 Aug, and 24 Aug. , and spray # 1.5 on 6 Jun. This test was not coversprayed with chlorothalonil.

D. ADDITIONAL INFORMATION:

- 1: Location: Blackshank Farm, CPES Tifton, GA 31794
2. Crop History: Peanut - 2010, Peanut - 2009, Peanut - 2008
3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 15Apr.
4. Soil Fertility: pH - 6.5 P - 29 K - 32 Ca - 431 Mg - 59  
Soil type: Tifton loamy sand, 2 - 5 % slope
5. Herbicides: PPI: Sonalan (2 pt/A) + Dual Magnum (1.25 pt/A) on 26Apr.  
POST: Cadre 70 DF (1.44 oz/A) on 7 Jul.
6. Insecticides: Acephate 755 (1 lb/A) for thrips on 9 May.  
Lannate LV, (2 pt/A) for worms 19 Aug

7. Planting Info: Tifguard, 6 seed/ft, 2" deep on 29Apr.
8. Harvest Dates: Dug – 19 Sep Picked – 29 Sep

E: SUMMARY: This trial had severe pressure from stem rot (white mold) and large yield losses. Some registered treatments did a good job, and some experimentals were exceptionally effective, resulting in yields that were more than 2X the chlorothalonil standard.

**MULTIPLE COMPANY TEST I, 2011  
BLACK SHANK FARM, POND FIELD**

Treatments	App's	Rate/A	Plants/ft <sup>1</sup>		% Dead	White Mold <sup>3</sup>		TSWV <sup>4</sup>	Yield lb/A
			13-May	20-May	Plants <sup>2</sup> 20-May	19-Jul	19-Sep	12-Jul	
1. Echo 720	1 - 7	1.5 pt	3.4	3.4	0.0	29.2	60.0	0.8	2579
2. Echo 720 + Eminent 125SL	1.5	1.0 pt 7.2 oz	.	.	.	10.4	24.8	1.2	4507
Echo 720 + Muscle 3.6F	3 - 6	1.0 pt 7.2 oz							
Echo 720	7	1.5 pt							
3. Echo 720 + Eminent 125SL	1.5	12.0 fl oz 5.4 oz	.	.	.	12.4	28.0	2.0	3857
Echo 720 + Muscle 3.6F	3 - 6	1.0 pt 7.2 oz							
Echo 720	7	1.5 pt							
4. Headline Echo 720 + Muscle 3.6F	1.5	9.0 oz 7.2 oz	.	.	.	16.4	44.8	0.4	3723
Echo 720	3 - 6	1.0 pt							
	7	1.5 pt							
5. Echo 720 + Eminent 125SL	1.5	1.0 pt 7.2 oz	.	.	.	11.6	24.4	1.2	4188
SA-0120305	3 - 6	2.0 pt							
Echo 720	7	1.5 pt							
6. Actinogrow AG Echo 720 + Eminent 125SL	In Furrow 1.5	3.0 oz 1.0 pt 7.2 oz	3.1	3.4	0.0	17.2	34.4	0.4	4042
Echo 720 + Muscle 3.6F	3 - 6	1.0 pt 7.2 oz							
Echo 720	7	1.5 pt							

Continued

**MULTIPLE COMPANY TEST I, 2011  
BLACK SHANK FARM, POND FIELD**

Treatments	App's	Rate/A	Plants/ft <sup>1</sup>		% Dead Plants <sup>2</sup>	White Mold <sup>3</sup>		TSWV <sup>4</sup>	Yield lb/A
			13-May	20-May	20-May	19-Jul	19-Sep	12-Jul	
7. Exp C	In Furrow	14.5 fl oz	3.4	3.4	0.0	5.2	2.8	0.8	5965
EXP C	E E	13.8 fl oz							
+ Induce		0.125%							
Echo 720	1, 2, 7	1.5 pt							
EXP C	3 - 6	13.8 fl oz							
+ Induce		0.125%							
8. EXP D	In Furrow	14.5 fl oz	3.2	3.5	0.0	19.6	48.4	0.8	3253
EXP D	E E	13.8 fl oz							
+ Induce		0.125%							
Echo 720	1, 2, 7	1.5 pt							
EXP D	3 - 6	13.8 fl oz							
+ Induce		0.125%							
9. Echo 720	1, 2, 4, 6, 7	1.5 pt	.	.	.	22.0	45.6	1.6	3235
Evito 480SC	3 & 5	5.7 fl oz							
10. Echo 720	1, 2, 4, 6, 7	1.5 pt	.	.	.	10.8	18.8	0.4	4606
Evito T	3 & 5	11.2 fl oz							
11. Echo 720	1, 2, 7	1.5 pt	.	.	.	13.6	17.2	0.8	4281
Evito T	3 & 5	11.2 fl oz							
Echo 720	4 & 6	1.0 pt							
+ T-methyl		10.0 fl oz							
12. Echo 720	1, 2, 7	1.5 pt	.	.	.	18.8	31.6	0.4	4130
Evito 480SC	3 & 5	5.7 fl oz							
Echo 720	4 & 6	1.0 pt							
+ T-methyl		10.0 fl oz							

Continued

**MULTIPLE COMPANY TEST I, 2011  
BLACK SHANK FARM, POND FIELD**

Treatments	App's	Rate/A	Plants/ft <sup>1</sup>		% Dead Plants <sup>2</sup>	White Mold <sup>3</sup>		TSWV <sup>4</sup>	Yield lb/A
			13-May	20-May	20-May	19-Jul	19-Sep	12-Jul	
13. Evito 480SC	E E	5.7 fl oz	.	.	.	21.6	42.8	1.6	3374
Echo 720	1 - 7	1.5 pt							
14. Headline	1.5	9.0 fl oz	.	.	.	9.5	13.6	0.5	4426
Fontelis	3, 4, 5	16.0 fl oz							
Bravo W'stik	6, 7	1.5 pt							
15. Approach	1.5	12.0 fl oz	.	.	.	11.2	21.2	0.4	4205
Fontelis	3, 4, 5	16.0 fl oz							
Bravo W'stik	6, 7	1.5 pt							
16. Headline	1.5	9.0 fl oz	.	.	.	17.6	30.8	0.4	4379
Provost	3, 4, 5	8.0 fl oz							
Bravo W'stik	6, 7	1.5 pt							
17. Headline	1.5	9.0 fl oz	.	.	.	14.0	28.8	0.4	4350
Convoy	3, 4, 5	16.0 fl oz							
+ Bravo W'stik		16.0 fl oz							
Bravo W'stik	6, 7	1.5 pt							
18. Nontreated			.	.	.	24.8	51.6	1.2	3096
<b>LSD(P&lt;0.05)</b>			n.s.	n.s.	n.s.	14.3	20.4	n.s.	919

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 13 May and 20 May.

<sup>2</sup>The % of emerged plants that was dead or dying per plot on 20 May.

<sup>3 & 4</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

## EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASE (SYNGENTA/AGRAQUEST TEST)

- A. PURPOSE: To evaluate the efficacy of labeled and experimental fungicides for the control of southern stem rot on Tifguard peanut.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with five replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. Eight foot alleyways between blocks.
  4. Plots were established in an area of continuous peanut production.
  5. Variety: Tifguard
- C. APPLICATION OF TREATMENTS:
1. Equipment: Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. In furrow sprays were applied 3.72 GPA using a TP 80015E nozzle at 22 psi. The Early Emergence spray was applied in a 4 inch band at 40.0 GPA using a single 8010 nozzle per row.
  2. There were cover sprays of Tilt/Bravo WS (1.5 pt/A) on 1 June, 14 June, and cover sprays with Bravo WeatherStick (1.5 pt/A) on 28 June, 13 July, 1 August, 9 August, and 24 August. Early Emergence sprays were applied on 19 May.
- D. ADDITIONAL INFORMATION:
1. Location: Blackshank Farm, CPES, Tifton, GA 31794
  2. Crop History: Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 15Apr.
  4. Soil Fertility: pH - 6.3 P - 37 K - 42 Ca - 408 Mg - 59  
Soil type: Tifton loamy sand, 2 - 5 % slope
  5. Herbicides: PPI: Sonalan (2 pt/A) + Dual Magnum (1.25 pt/A) on 26April.  
POST: Cadre 70DF (144 oz/A) for thrips on 7 July.

- 6. Insecticides: Acephate 755 (1 lb/A) on 9 May.  
Lannate LV, (2 pt/A) for worms 19 Aug
- 7. Planting Info: Tifguard, 6 seed/ft on 29 April
- 8. Harvest Dates: Dug - 19 Sep                  Picked - 29 Sep

E: SUMMARY: This trial had severe pressure from stem rot (white mold) and large yield losses. Some registered treatments did a good job, especially if combined with early emergence applications, and EXP E looked to be a very good white mold fungicide.

**SYNGENTA/AGRAQUEST TEST, 2011  
BLACKSHANK FARM, POND FIELD**

Treatments	App's	Rate/A	Plants/ft <sup>1</sup>		% Dead	White Mold <sup>3</sup>		TSWV <sup>4</sup>	Yield lb/A
			13-May	20-May	20-May	19-Jul	19-Sep	12-Jul	
1. Serenade Soil	In Furrow	16.0 fl oz	3.1	3.5	0.0	47.6	60.0	1.2	1824
2. Serenade Soil	In Furrow	32.0 fl oz	3.2	3.5	0.0	57.6	71.6	0.0	1324
3. Nontreated			3.1	3.4	0.1	47.2	61.2	0.0	1679
4. Abound	Early Emerg	6.0 fl oz	.	.	.	50.0	60.0	0.8	1644
5. Abound	Early Emerg	12.0 fl oz	.	.	.	29.2	60.8	1.2	1812
6. Abound	Early Emerg	18.0 fl oz	.	.	.	36.4	55.2	0.4	1841
7. EXP E	Early Emerg	13.7 fl oz	.	.	.	19.6	31.6	0.4	3485
8. Abound	Early Emerg	6.0 fl oz	.	.	.	25.6	39.2	0.0	2927
Abound	3 & 5	18.0 fl oz							
9. Abound	Early Emerg	12.0 fl oz	.	.	.	13.6	33.2	0.4	2951
Abound	3 & 5	18.0 fl oz							
10. Abound	Early Emerg	18.0 fl oz	.	.	.	8.4	30.4	0.4	3659
Abound	3 & 5	18.0 fl oz							
11. EXP E	Early Emerg	13.7 fl oz	.	.	.	10.0	14.0	0.8	4100
Abound	3 & 5	18.0 fl oz							
12. Proline 480SC	Early Emerg	5.7 fl oz	.	.	.	36.0	52.0	0.0	2091
<b>LDS(P&lt;0.05)</b>			n.s.	n.s.	n.s.	11.7	14.8	1.2	645

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 13 May and 20 May.

<sup>2</sup>The % of emerged plants that was dead or dying per plot on 20 May.

<sup>3&4</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

## EVALUATION OF ORGANIC PEANUT SEED TREATMENTS

- A. **PURPOSE:** To evaluate the comparative efficacy of organic peanut seed treatments.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. Eight foot alleyways between blocks.
  4. Plots were in an area with a history of continuous peanut production.
  5. Variety: Tifguard, 89% germination
- C. **APPLICATION OF TREATMENTS:**
1. Cover sprays of chlorothalonil 720 (1.5 pt/A) (1-7) were applied on 1 Jun, 14 Jun, 28 Jun, 13 Jul, 1 Aug, 9 Aug, and 24 Aug. Convoy 40SC for white mold control spray (1.5 pt/A) was applied at 1 July and (2 pt/A) on 19 Jul and 17 Aug. In furrow sprays were applied 3.72 GPA using a TP 80015E nozzle at 22 psi.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Blackshank Farm, CPES Tifton, GA 31794
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Prior to turning, fertilizer (3-9-18) was applied broadcast (500 lb/A) on 11 Apr. Moldboard plowed on 15 Apr and subsoiled 25 Apr.
  4. **Soil Fertility:** pH – 6.3 P - 37 K - 42 Ca - 408 Mg - 59  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI:Sonalan (2 pt/A) + Dual Magnum (1.25 pt/A) on 26 April.  
POST:Cadre 70DF (1.44 oz/A) on 7 July
  6. **Insecticides:** Acephate 755 (1 lb/A) sprayed for thrips on 12 May.
  7. **Planting Info:** Tifguard, 6 seed/ft on 3 May
  8. **Harvest Dates:** Dug - 19 Sep Picked – 29 Sep

E: SUMMARY: Very poor stands developed with all treatments and there were no significant differences in yield. The early season was very dry and irrigation was not adequate in this area which contributed to the high variability in the data.

**ORGANIC SEED TREATMENT TEST, 2011  
BLACKSHANK FARM, IRR/NON FIELD**

Treatments	App's	Rate/A	Plants/ft <sup>1</sup>			% Dead Plants <sup>2</sup>			Yield lb/A
			17-May	24-May	16-Jun	24-May	16-Jun	17-Aug	
1. Nontreated			0.6	0.7	0.5	2.2	7.5	3.2	1370
2. Serenade	In Furrow	32.0 fl oz **	0.5	0.6	0.6	1.9	6.4	2.4	1757
3. Nordox (2/Pepsi)	Seed Trt.	4.0 oz/100 lb	0.5	0.9	0.7	1.4	6.1	3.7	2343
4. Kodiak HB	Seed Trt.	4.0 oz/100 lb	0.5	0.7	0.6	2.0	2.2	6.0	1578
5. Nordox	In Furrow	0.5 lb **	0.4	0.5	0.5	0.7	5.3	4.0	1539
<b>LSD (P&lt;0.05)</b>			n.s.	0.2	n.s.	n.s.	n.s.	n.s.	n.s.

**In Furrow: \*\***

Planting Date: May 3, 2011

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 17 May, 24 May and 16 June.

<sup>2</sup>The % of emerged plants that were dead or dying per plot on 24 May, 16 June and 17 Aug..

<sup>3</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.



## EVALUATION OF PROLINE APPLIED AT EARLY EMERGENCE IN DIFFERENT VOLUMES TO SINGLE AND TWIN ROW PEANUTS

- A. **PURPOSE:** To evaluate the comparative efficacy of Proline applied in various ways at early emergence to twin and single row peanuts for the control of foliar and soil borne diseases.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with seven replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing. The twin rows were spaced at 36 inches outside, and 8 inches between twins.
  3. There are eight foot alleyways between blocks.
  4. Plots were in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** The early season spray was applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles 20 May in 40, 20, and 10 GPA. The Early Emergence spray was applied in a 4 inch band at 40.0 GPA using a single 8010 nozzle per row.
  2. All plots were traveled by tractor and cover sprayed with chlorothalonil 720 (1.5 pt/A) on 1 Jun, 14 Jun, 28 Jun, 13 Jul, 1 Aug, 9 Aug, and 24 August.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Blackshank Farm, CPES Tifton, GA 31794
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 15Apr., and subsoiled 25 Apr.
  4. **Soil Fertility:** pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) 26 Apr  
POST: Cadre 70DF (1.44 oz/A) on 7 Jul
  6. **Insecticides:** Acephate 755 (1 lb/A) sprayed for thrips on 12 May.

7. Planting Info: Tifguard, single 6 seed/ft, twin 3 seed/ft 29 Apr

8. Harvest Dates: Dug – 19 Sep Picked - 29 Sep

E: SUMMARY: This was a good test demonstrating the potential benefits of an early emergence Proline application, particularly in single rows with high disease pressure. The various application methods for twin rows all worked equally well indicating a good degree of flexibility in how that application is made.

**EARLY EMERGENCE TWIN ROW TEST, 2011  
BLACKSHANK FARM, IRR/NON FIELD**

Treatment	App's	Rate/A	Row	White Mold <sup>1</sup>		TSWV <sup>2</sup>	Yield
			Spacing	16-Jul	4-Oct	10-Aug	lb/A
1. Nontreated			Single	43.9	44.3	1.7	2497
2. Proline	EE 40 GPA *	5.7 oz	Single	41.8	22.3	5.1	3705
3. Nontreated			Twin	45.7	40.6	0.9	3344
4. Proline	EE 40 GPA **	5.7 oz	Twin	41.1	26.6	2.0	4024
5. Proline	EE 20 GPA ***	5.7 oz	Twin	46.1	28.6	0.9	3821
6. Proline	EE 20 GPA ****	5.7 oz	Twin	53.6	27.4	1.4	4032
7. Proline	EE 10 GPA *****	5.7 oz	Twin	54.3	23.1	2.9	3999
<b>LDS(&lt;P0.5)</b>				n.s.	9.0	3.0	471

\*=40 GPA boom, spray a band the width of the plants.

\*\*=40 GPA boom to cover both rows of each twin

\*\*\*=20 GPA boom to cover both rows of each twin.

\*\*\*\*=20 GPA boom nozzles are 28 inches and spray outside + inside row of each of 2 passes per plot.

\*\*\*\*\*=10 GPA boom so nozzles are 28 inches and spray outside + inside row on each of 2 passes per plot.

**NOTE: twin row incidence is the sum of the 2 row spacing**

<sup>1 & 2</sup>Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.

## EVALUATION OF FUNGICIDES APPLIED EARLY EMERGENCE AND IN FURROW FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

- A. **PURPOSE:** To evaluate the comparative efficacy of fungicides applied in furrow or early emergence for the control of southern stem rot on Tifguard peanut.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with nine replicates.
  2. One two-row bed (20 x 6 ft) per plot, 36-inch row spacing.
  3. There eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band and the in furrow sprays a single 80015E at 22 psi applying 3.7 GPA.
  2. Belt-pack spray treatments (1-7) were applied on 1 June, 14 Jun, 28 Jun, 11 Jul, 27 Jul, 9 August, and 24 August. Also treatment 1.5 was applied on 6 June. This test was not cover-sprayed with Bravo. Early Emergence sprays were applied on 19 May.
- D. **ADDITIONAL INFORMATION:**
- 1: **Location:** Blackshank Farm, Tifton, GA 31794
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 15Apr. and subsoiled 25 Apr
  4. **Soil Fertility:** pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) on 26 Apr  
POST: Cadre 70DF (1.44 oz/A) on 7 Jul.

6. Insecticides: Acephate 755, (1 lb/A) on 12 May
7. Planting Info: Tifguard, 6 seed/ft on 29 April
8. Harvest Dates: Dug – 19 Sep Picked – 29 Sep

E: **SUMMARY:** This trial had severe pressure from stem rot (white mold) and large yield losses. Provost applied mid season did a good job, but an additional application of Proline EE gave much improved control and higher yield. Adding Proline in furrow did not significantly improve disease control or yield compared to the Provost alone.

**BAYER IN FURROW TEST I, 2011  
BLACKSHANK FARM, IRR/NON FIELD**

TREATMENTS	APP'S	RATE	Dead							Yield lb/A
			Plants/ft <sup>1</sup>		Plants <sup>2</sup>	White Mold <sup>3</sup>		Leaf Spot <sup>4</sup>		
			13-May	20-May	20-May	26-Jul	4-Oct	18-Sep	3-Oct	
1. Nontreated			2.4	3.1	0.0	31.8	52.9	2.8	5.1	1888
2. Bravo WS	1, 2 & 7	1.5 pt	2.4	2.9	0.0	14.7	25.1	1.0	2.7	3530
Provost	3 - 6	10.7 fl oz								
3. Proline	EE	5.7 fl oz **	.	.	.	4.0	4.9	1.0	2.6	4188
Bravo WS	1, 2 & 7	1.5 pt								
Provost	3 - 6	10.7 fl oz								
4. Proline	In Furrow	5.7 fl oz *	2.3	2.9	0.0	9.1	18.2	1.0	2.8	3730
Bravo WS	1, 2 & 7	1.5 pt								
Provost	3 - 6	10.7 fl oz								
5. Proline	EE	5.7 fl oz **	.	.	0.0	6.0	8.0	1.0	2.7	4150
Provost	1.5, 3, 4, 5	10.7 fl oz								
Bravo WS	6 & 7	1.5 pt								
6. Bravo WS	1 - 7	1.5 pt	2.3	3.0	0.0	39.8	51.6	1.0	2.7	1994
7. Proline	EE	5.7 fl oz **	.	.	.	31.8	32.7	1.0	2.6	2827
Bravo WS	1 - 7	1.5 pt								
LSD(P<0.05)			n.s.	n.s.	n.s.	5.3	6.6	0.2	0.7	402

NOTE: EE=Early Emergence

\*=in furrow applications applied in 3.75 GPA and mixed in 2 L volume.

(TP 80015E flat fan nozzle w/100 mesh t-ball check valve at 22 psi).

\*\*=Applied in a narrow band (2-4 inches) directly over the row with a single 80-10 nozzle in a total spray volume of 40 GPA.

\*\*\***This test was NOT be coversprayed with Bravo.**

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 13 May and 20 May.

<sup>2</sup>The % of emerged plants that were dead or dying per plot on 20 May.

<sup>3</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

<sup>4</sup>Florida 1 - 10 scale where 1=no disease and 10=dead plant.

## EVALUATION OF FUNGICIDES APPLIED IN FURROW OR EARLY EMERGENCE FOR THE CONTROL OF PEANUT SOILBORNE DISEASES (DUPONT TEST)

- A. PURPOSE: To evaluate the comparative efficacy of fungicides applied in furrow or early emergence for the control of southern stem rot on Tifguard peanut.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with nine replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There eight foot alleyways between blocks.
  4. Plots were established in an area of continuous peanut production.
  5. Variety: Tifguard
- C. APPLICATION OF TREATMENTS:
1. Equipment: Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band and the in furrow sprays a single 80015E at 22 psi applying 3.7 GPA.
  2. Belt-pack spray treatments (1-7) were applied on 1 June, 14 June, 28 Jun, 13 Jul, 1 Aug, 9 Aug, and 24 Aug. This test was cover-sprayed with Bravo every 2 weeks. Early Emergence spray was applied on 19 May.
- D. ADDITIONAL INFORMATION:
- 1: Location: Blackshank Farm, Tifton, GA 31794
  2. Crop History: Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 15Apr. and subsoiled 25 Apr
  4. Soil Fertility: pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72  
Soil type: Tifton loamy sand, 2 - 5 % slope
  5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) 26 April  
POST: Cadre 70DF (1.44 oz/A) 7 Jul

6. Insecticides: Acephate 755 (1 lb/A) for thrips on 12 May
7. Planting Info: Tifguard, 6 seed/ft on 29 April
8. Harvest Dates: Dug – 19 Sep                      Picked – 29 Sep

E: SUMMARY: This test showed the benefits of both Fontelis and Proline applied either early emergence or in furrow to provide additional control of soilborne diseases.

**DUPONT IN FURROW TEST, 2011  
BLACKSHANK FARM, IRR/NON FIELD**

Treatments	App's	Rate/A	Plants/ft <sup>1</sup>		Per Dead Plants <sup>2</sup>		White Mold <sup>3</sup>		TSWV <sup>4</sup>	Yield lb/A
			13-May	20-May	13-May	20-May	26-Jul	4-Oct	26-Jul	
1. Bravo WS	1 - 7	1.5 pt	2.5	3.0	0.9	0.0	12.9	28.4	1.3	3101
2. Fontelis Bravo WS	In furrow 1 - 7	24.0 fl oz ** 1.5 pt	.	.	.	.	11.3	18.7	3.3	3649
3. Fontelis Bravo WS	EE 1 - 7	24.0 fl oz * 1.5 pt	.	.	.	.	7.3	16.9	2.7	3575
4. Approach Bravo WS	In furrow 1 - 7	12.0 fl oz 1.5 pt	2.7	3.2	0.0	0.0	13.1	25.8	3.1	3178
5. Approach Bravo WS	EE 1 - 7	12.0 fl oz * 1.5 pt	.	.	.	.	14.0	24.9	4.9	3359
6. Proline Bravo WS	In furrow 1 - 7	5.7 fl oz 1.5 pt	.	.	.	.	9.1	19.6	2.2	3582
7. Proline Bravo WS	EE 1 - 7	5.7 fl oz * 1.5 pt	.	.	.	.	6.2	11.6	2.0	3704
LSD (P<0.05)			n.s.	n.s.	n.s.	n.s.	4.8	8.1	2.5	417

NOTE: EE=Early Emergence \*

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 13 May and 20 May.

<sup>2</sup>The number of dead or dying plants per plot (50 row feet) on 13 May and 20 May.

<sup>3</sup>&<sup>4</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

## EVALUATION OF CULTIVARS AND BREEDING LINES FOR DISEASE RESISTANCE

- A. **PURPOSE:** To evaluate the relative susceptibility of peanut breeding lines and cultivars to major peanut diseases in Georgia.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
  2. One two-row bed (15 x 6 ft) per plot, 36-inch row spacing.
  3. There were eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production, but fumigated prior to planting with methyl bromide (400 lb/A MBC 33, tarped). Six plants per plot were inoculated with *Sclerotium rolfsii* at midseason, and length of each disease locus measured at digging.
  5. Variety: Multiple varieties
- C. **APPLICATION OF TREATMENTS:**
1. This test was sprayed with chlorothalonil 720 (1.5 pt/A) on 28 Jul, 1 Aug, and 24 Aug to minimize but not eliminate leaf spot.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Blackshank Farm, Tifton, GA 31794
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 15Apr. and subsoiled 25 Apr
  4. **Soil Fertility:** pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) on 26 Apr  
POST: Cadre 70DF (1.44 oz/A) on 7 Jul
  6. **Insecticides:** Acephate 755 (1 lb/A) for ants on 2 Aug and 6 Sep.  
Lannate LV (2 pt/A) for worms on 19 Apr
  7. **Planting Info:** Different varieties, 6 seed/ft on 24 May.
  8. **Harvest Dates:** Dug – 26 Oct Picked – 1 Nov



E: SUMMARY: This test provided a good comparison of current cultivars and advanced breeding lines for susceptibility to our major diseases. The “Percent Zeroes” is particularly helpful for white mold with the higher numbers indicating that a lot of those inoculated plants developed no symptoms at all.

**MULTI-STATE DISEASE EVALUATION, 2011  
BLACKSHANK FARM**

Advanced Lines	Percent <sup>1</sup>	White Mold <sup>2</sup>		Leafspot <sup>3</sup>	Yield lb/A
	Zeroes	No Zeroes	All	20-Oct	
C875-2-5-20	12.5	37.5	35.8	5.0	3436
C1207-5-4	37.5	14.6	13.0	4.5	3848
C1494-1-1	20.8	26.9	22.7	3.5	3751
C1500-4-4	37.5	28.1	17.3	5.8	3703
C1805-3-43	16.7	28.0	23.3	3.3	5009
C1321-1-2	33.3	17.5	11.7	3.3	2456
C1321-2-298	12.5	32.5	33.2	3.0	1904
C1494-1-5	29.2	21.7	15.8	4.1	3400
C1321-4-4	12.5	33.3	29.8	3.6	3436
C1494-1-2	12.5	36.9	32.1	4.6	2965
C1457-7	29.2	20.8	15.0	4.0	3061
C740-2-10-30-T	41.7	18.5	10.8	3.1	3678
C740-2-10-30-R	16.7	43.3	38.1	3.5	3400
C740-1-51-2-T	33.3	24.9	17.1	3.4	3279
C740-1-51-3-T	12.5	30.5	27.1	3.0	2904
C740-1-51-5-T	33.3	32.5	22.9	2.9	3557
C740-1-76-3-T	54.2	36.8	14.0	3.1	3303
C740-1-76-5-T	33.3	24.0	18.6	3.5	4223
C1093-22-T	8.3	32.4	29.7	4.9	3424
UFT 113	25.0	45.8	35.0	4.4	3521
UF 11303	16.7	23.8	20.0	4.0	4550
UF 11302	20.8	36.3	27.3	3.8	3037
UF 11301	25.0	28.8	21.5	5.6	4538
UF 10302	33.3	37.7	25.0	4.4	4089
04JOR-11-1-1-1	12.5	39.8	34.4	6.0	2602
04JOR-17-20-1-1	8.3	37.8	35.0	3.3	2662
04JOR-32-3-1-3	45.8	19.5	10.8	3.9	3485
05044-1-6-2-2	29.2	27.6	19.6	5.4	4175
06058-1-10-1	20.8	21.8	17.3	3.3	3073

continued

**MULTI-STATE DISEASE EVALUATION, 2011  
BLACKSHANK FARM**

Advanced Lines	Percent <sup>1</sup>		White Mold <sup>2</sup>		Leafspot <sup>3</sup>	Yield lb/A
	Zeroes	No Zeroes	All	20-Oct		
2000X2-2-B2-7-1-2	54.2	30.2	13.5	2.6	3315	
2000X2-2-B2-7-1-1	62.5	19.0	6.9	3.6	3666	
WT09-0-0808	8.3	34.8	31.3	6.6	3497	
WT09-0-0814	20.8	28.7	18.2	3.6	2339	
D2-31,32	25.0	46.1	33.1	3.9	3158	
H2-133,134	45.8	38.0	21.7	5.0	3303	
H3-109,110	12.5	51.8	47.7	5.6	2432	
GA-09B	0.0	55.2	55.2	6.6	3158	
FLORIDA 07	33.3	27.0	17.5	4.3	4175	
BAILEY	54.2	18.3	6.9	3.6	3533	
GEORGIA GREENER	8.3	32.2	29.6	4.6	4683	
GA-06G	25.0	39.3	29.2	4.9	3594	
TIFGUARD	12.5	42.4	36.7	3.8	3557	
GA-07W	25.0	29.8	22.9	4.8	3824	
GEORGIA GREEN	4.2	57.9	55.2	6.6	3461	
YORK	58.3	16.5	7.9	2.8	3073	
GA-10T	54.2	16.4	7.9	4.3	4344	
FLORUN 107	25.0	37.9	32.3	4.5	3388	
MSD (P<0.5)	52.6	36.6	34.3	2.5	1826	

<sup>1</sup>Percent of plants inoculated with *S.rolfsii* that had no disease.

<sup>2</sup>Average length of white mold "hits" (cm) calculated with and without "0's".

<sup>3</sup>Florida 1-10 scale where 1=no disease and 10=dead plant.

## EVALUATION OF CULTIVAR SUSCEPTIBILITY TO CYLINDROCLADIUM BLACK ROT

- A. **PURPOSE:** To evaluate the comparative susceptibility of cultivars to *Cylindrocladium* black rot.
- B. **EXPERIMENTAL DESIGN:**
1. Split plot, with whole plots being cultivars and sub-plots being inoculated versus non-inoculated with *C. parasiticum* (four replicates).
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. Eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production, but fumigated prior to planting with methyl bromide (400 lb/A MBC 33, tarped).
  5. Variety: Multiple varieties
- C. **APPLICATION OF TREATMENTS:**
1. Plots were inoculated on 3 Aug with microsclerotia from a hand sprayer and immediately watered in. Coversprays were applied 28 Jun, 13 Jul, 1 Aug, 9 Aug, and 24 Aug. Convoy 40SC (1.5 pt/A) was sprayed on 1 Jul, (2 pt/A) on 19 Jul and 17 Aug.
- D. **ADDITIONAL INFORMATION:**
1. Location: Blackshank Farm, Tifton, GA 31794
  2. Crop History: Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 25Apr.
  4. Soil Fertility: pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72  
Soil type: Tifton loamy sand, 2 - 5 % slope
  5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) on 26 Apr  
POST: Cadre 70DF (1.44 oz/A) on 7 Jul.
  6. Insecticides: Acephate 755 (1 lb/A) on 2 Aug and 6 Sep.  
Lannate LV (2 pt/A) on 19 Apr
  7. Planting Info: Multiple varieties, 7 seed/ft on
  8. Harvest Dates: Dug - 26 Oct Picked -2 Nov

E: SUMMARY: The epidemic started late in the year due to the hot temperatures, but sufficient disease developed to separate varieties. Known resistant lines like Bailey held up well while susceptible lines like Georgia Green had severe losses.

**CBR CULTIVAR TEST, 2011  
BLACKSHANK FARM, BANANA FIELD**

Cultivars	Inoculated with CBR		Non- inoculated with CBR		Yield loss (lb/A)
	CBR <sup>1</sup>	Yield (lb/A)	CBR <sup>1</sup>	Yield (lb/A)	
GA-09B	12.8	4017	1.3	4683	666
FLORIDA FANCY	.	.	.	.	
FLORIDA 07	15.0	3618	0.0	4029	411
BAILEY	3.3	3049	0.3	3114	65
GEORGIA GREENER	13.0	3328	0.0	3969	641
GA-06G	14.0	3376	0.3	4622	1246
TIFGUARD	15.5	3194	0.0	3618	424
GA-07W	12.0	3170	0.3	3799	629
GEORGIA GREEN	13.3	2638	0.3	3743	1105
YORK	6.5	2662	0.3	3469	807
GA-10T	12.3	3400	0.0	3969	569
FLORUN 107	11.3	3207	0.0	4247	1041
<b>LSD (P&lt;0.05)</b>	7.6	931	1.2	1195	

<sup>1</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

## EVALUATION OF CULTIVARS SUSCEPTIBILITY TO RHIZOCTONIA AG-1

- A. **PURPOSE:** To evaluate the comparative susceptibility of cultivars to Rhizoctonia AG-1.
- B. **EXPERIMENTAL DESIGN:**
1. Split plot, with whole plots being cultivars and sub-plots being inoculated versus non-inoculated with AG-1 (four replicates).
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production, but fumigated prior to planting with methyl bromide (400 lb/A MBC 33, tarped).
  5. Variety: Multiple varieties
- C. **APPLICATION OF TREATMENTS:**
1. Plots were inoculated on 3 Aug by distributing oat grains that were previously colonized by *R. solani* AG-1 isolated from peanut. Plots were watered for several days after inoculation and coverprayed with chlorothalonil 720 (1.5 pt/A) on 18 Jun, 13 Jul, 1 Aug, 9 Aug, and 24 Aug.
- D. **ADDITIONAL INFORMATION:**
- 1: **Location:** Blackshank Farm, Tifton, GA 31794
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 25Apr.
  4. **Soil Fertility:** pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) on 26 Apr  
POST: Cadre 70DF (1.44 oz/A) on 7 Jul.
  6. **Insecticides:** Acephate 755 (1 lb/A) on 2 Aug and 6 Sep.  
Lannate LV (2 pt/A) on 19 Apr
  7. **Planting Info:** Multiple varieties, 7 seed/ft on 24 May
  8. **Harvest Dates:** Dug-26 Oct Picked-2 Nov

E: SUMMARY: Very little disease developed in these plots and therefore the test was not considered definitive to distinguish cultivar susceptibility.

**RHIZOCTONIA AG-1 TEST, 2011  
BLACKSHANK FARM**

Genotype	Inoculated with Rhiz		Non- inoculated with Rhiz		Yield loss (lb/A)
	RHZ <sup>1</sup>	Yield (lb/A)	RHZ <sup>1</sup>	Yield (lb/A)	
GA-09B	4.8	4598	0.0	4731	133
FLORIDA 07	4.5	3703	0.0	4562	859
GEORGIA GREENER	2.0	4417	0.0	4162	-255
GA-06G	2.8	4562	0.0	4574	12
TIFGUARD	3.0	4078	0.0	4320	242
GA-07W	3.5	4235	0.0	4404	169
FLORUN 107	5.5	4175	0.0	3751	-424
TX OL-07	2.3	3703	0.0	3836	133
GEORGANIC	2.5	3086	0.0	2928	-157
LSD (P<0.05)	2.1	783	n.s.	868	

<sup>1</sup>Percent severity of leaves/stems with lesions after inverting.

**OFFICIAL DAILY RAINFALL 2011  
BLACKSHANK FARM**

<b>Rainfall</b>							
<b>DATE</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>
4		0.0				0.6	
5	0.9			0.6	0.1	0.5	
6			0.4				
8					0.6		
9					0.4		0.3
10							0.9
11				0.9			0.5
12	0.1						0.0
13				0.4			0.2
14				0.1	0.1		0.0
15				0.2			
16	0.1		0.1	0.4			
17			1.5				
18							2.9
20						1.3	
21						0.1	0.0
22			0.1	0.1	0.6	0.4	
23			0.0	0.1			
24			0.1				0.0
25						2.2	
26			0.1	3.2		0.7	
27				0.1			
28	0.5		2.1	0.0			
30			0.1				
31				0.2			
<b>Total</b>	<b>1.6</b>	<b>0.0</b>	<b>4.5</b>	<b>6.3</b>	<b>1.8</b>	<b>5.7</b>	<b>4.8</b>

**continued**

**Irrigation Multi-State Disease Evaluation, CBR Evaluations & Rhizoctonia AG-1**

<b>DATE</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>
1						0.5	<b>0.5</b>
2			1.0			0.5	0.5
3							0.5
4					1		0.5
5				1.0	1.0		
7						0.5	
8					1.0	0.5	
9		1.0				0.5	
10			1.0			0.5	
11					1.0	0.5	
12					1.0	0.5	
13			1.0			0.5	
14						0.5	
15			1.0			0.5	
16						0.5	
17						0.5	
18					1.0	0.5	
19						0.5	
20						0.5	
21				1.0		0.5	
22			1.0			0.5	
23		0.5			1.0	0.5	
24						0.5	
25					1.0	0.5	
26		1.0				0.5	
27						0.5	
28						0.5	
29			1.0		1.0	0.5	
30						0.5	
31		1.0					
<b>Total</b>	0.0	3.5	6.0	2.0	9.0	13.0	2.0

**Rain & Irr Multi-State Disease Evaluation, CBR Evaluations & Rhizoctonia AG-1**

<b>Total</b>	1.6	3.5	10.5	8.3	9.8	18.7	6.8
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continued



<u>Irrigation</u>	<b>Chemtura Seed Trt I &amp; Devgen I</b>						
<b>DATE</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>
2			1.0			1.0	
4					1.0		
6				1.0			
9		1.0				1.0	
10			1.0				
12					1.0		
13		1.0					
15			1.0				
18					1.0		
19		1.0					
21				1.0			
22			1.0				
23		1.0			1.0		
25					1.0		
26		1.0					
29					1.0		
<b>Total</b>	0.0	5.0	4.0	2.0	6.0	2.0	0.0

<b>Rain &amp; Irr</b>	<b>Chemtura Seed Trt I &amp; Devgen I</b>						
<b>Total</b>	1.6	5.0	8.5	8.3	7.7	7.7	4.8

**continued**

<u>Irrigation</u>	<u>Multiple Co, &amp; Syngenta/Agraquest</u>						
<u>DATE</u>	<u>APR</u>	<u>MAY</u>	<u>JUN</u>	<u>JUL</u>	<u>AUG</u>	<u>SEP</u>	<u>OCT</u>
2			1.0			1.0	
4					1.0		
6				1.0			
9		1.0				1.0	
10			1.0				
12					1.0		
13		1.0					
15			1.0				
18					1.0		
19		1.0					
21				1.0			
22			1.0				
23		0.5			1.0		
25					1.0		
26		1.0					
29					1.0		
<b>Total</b>	0.0	4.5	4.0	2.0	6.0	2.0	0.0

<u>Rain &amp; Irr</u>	<u>Multiple Co, &amp; Syngenta/Agraquest</u>						
<b>Total</b>	1.6	4.5	8.5	8.3	7.8	7.7	4.8

continued

<b>Irrigation</b>	<b>Organic Seed Trt, EE Twin Row, Bayer IF, &amp; Dupont In Furrow</b>						
<b>DATE</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>
2		1.0	1.0			1.0	
4		1.0			1.0		
6				1.0			
8						1.0	
9		1.0					
10			1.0				
12					1.0		
13		1.0					
15			1.0				
18					1.0		
19		0.5					
20		1.0					
21				1.0			
22			1.0				
23		0.5			1.0		
25					1.0		
26		1.0					
29					1.0		
<b>Total</b>	0.0	7.0	4.0	2.0	6.0	2.0	0.0

<b>Rain &amp; Irr</b>	<b>Organic Seed Trt, EE Twin Row, Bayer IF, &amp; Dupont In Furrow</b>						
<b>Total</b>	1.6	7.0	8.5	8.3	7.8	7.7	4.8

## EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES (LOVELAND TEST)

- A. **PURPOSE:** To evaluate the comparative effects of various spray adjuvants on the efficacy of labeled fungicides for the control of southern stem rot and leaf spot on peanut.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. Equipment: Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.
  2. Treatments (1-7) were applied on 2 June, 16 June, 30 Jun, 4 July, 27 Jul, 10 August, and 21 Aug. This test was not cover-sprayed, although treatments 1, 2, 6 and 7 were sprayed by tractor. Sprays 3 – 5 were applied via belt-pack sprayer.
- D. **ADDITIONAL INFORMATION:**
1. Location: Lang Farm, Cotton Field CPES Tifton, GA 31794
  2. Crop History: Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 27Apr.
  4. Soil Fertility: pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72  
Soil type: Tifton loamy sand, 2 - 5 % slope
  5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum (1 pt//A) on 27 Apr.  
POST: Cadre 70 DF, (1.44 oz/A) on 8 Jul.
  6. Insecticides: Acephate 755 (1 lb/A) for thrips on 12 May.
  7. Planting Info: Tifguard, 6 seed/ft on 2 May

8. Harvest Dates: Dug - 19 Sep Picked – 28 Sep

E: SUMMARY: This trial had severe white mold and little else in terms of disease pressure. It was a good trial for determining fungicide efficacy, and treatments gave good but not exceptional control.

**LOVELAND TEST, 2011**  
**RIGDON FARM, COTTON FIELD**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		TSWV <sup>2</sup> 18-Aug	Yield lb/A
			28-Jul	19-Sep		
1. Bravo W'stick	1 - 7	1.5 pt	36.0	59.0	1.5	1655
2. Bravo W'stick	1, 2, 6, 7	1.5 pt	17.0	34.5	0.5	2345
Orius 3.6F	3, 4, 5	7.2 fl oz				
3. Bravo W'stick	1, 2, 6, 7	1.5 pt	17.5	31.5	0.0	2396
LI-6355	3, 4, 5	5.7 oz				
4. Bravo W'stick	1, 2, 6, 7	1.5 pt	7.5	27.0	2.0	2512
LI-6355	3, 4, 5	3.8 oz			0.0	
+ Orius 3.6F		7.2 fl oz				
5. Bravo W'stick	1, 2, 6, 7	1.5 pt	18.0	31.0	2.0	2643
LI-6355	3, 4, 5	4.5 oz			0.0	
+ Orius 3.6F		7.2 fl oz				
6. Bravo W'stick	1, 2, 6, 7	1.5 pt	14.5	38.5	0.5	2701
LI-6355	3, 4, 5	5.7 oz				
+ LI-1079		0.25% v/v				
7. Bravo W'stick	1, 2, 6, 7	1.5 pt	9.5	25.5	1.0	2686
LI-6355	3, 4, 5	3.8 oz				
+ Orius 3.6F		7.2 fl oz				
+ LI-1079		0.25% v/v				
8. Bravo W'stick	1, 2, 6, 7	1.5 pt	10.5	24.0	1.0	2888
LI-6355	3, 4, 5	4.5 oz				
+ Orius 3.6F		7.2 fl oz				
+ LI-1079		0.25% v/v				
9. Bravo W'stick	1, 2, 6, 7	1.5 pt	18.5	31.0	0.5	2548
LI-6355	3, 4, 5	5.7 oz				
+ LI-6262		0.25% v/v				
10. Bravo W'stick	1, 2, 6, 7	1.5 pt	13.5	34.0	0.0	2323
LI-6355	3, 4, 5	3.8 oz				
+ Orius 3.6F		7.2 fl oz				
+ LI-6262		0.25% v/v				
11. Bravo W'stick	1, 2, 6, 7	1.5 pt	15.5	28.0	0.5	3158
LI-6355	3, 4, 5	4.5 oz				
+ Orius 3.6F		7.2 fl oz				
+ LI-6262		0.25% v/v				
12. Bravo W'stick	1, 2, 6, 7	1.5 pt	16.0	36.0	0.5	2360
Orius 3.6F	3, 4, 5	7.2 fl oz				
+ Bravo W'stick		1.0 pt				
<b>LSD(P&lt;0.05)</b>			10.7	15.0	1.3	555

<sup>1</sup> & <sup>2</sup> Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

EVALUATION OF VARIOUS FUNGICIDES AND ADJUVANTS FOR THE CONTROL OF PEANUT SOILBORNE AND FOLIAR DISEASES (HELENA / EXP B TEST)

- A. PURPOSE: To evaluate the comparative efficacy of experimental and labeled fungicides alone and with various adjuvants for the control of leaf spot and southern stem rot (white mold) when sprayed during the day or at night.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. APPLICATION OF TREATMENTS:
1. Equipment: Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.
  2. Belt-pack spray treatments (1-7) were applied on 2 June, 16 June, 30 Jun, 14 July, 27 Jul, 10 August, and 21 Aug. This test was not cover-sprayed with Chlorothalonil.
- D. ADDITIONAL INFORMATION:
1. Location: Lang Farm, Cotton Field CPES Tifton, GA 31794
  2. Crop History: Peanut – 2010, Peanut – 2009, Peanut – 2008
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 27 Apr.
  4. Soil Fertility: pH – 5.9 P – 76 K – 64 Ca – 762 Mg – 72  
Soil type: Tifton loamy sand, 2 – 5 % slope
  5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum (1 pt/A) on 27 Apr.  
POST: Cadre 70 DF (1.44 oz/A) on 8 Jul.
  6. Insecticides: Acephate 75, (1 lb/A) for thrips on 12 May.
  7. Planting Info: Tifguard, 6 seed/ft on 2 May

8. Harvest Dates: Dug – 19 Sep Picked – 28 Sep

E: SUMMARY: This test had very little leaf spot due to the extremely dry conditions, but severe stem rot (white mold) developed. While most treatments reduced disease levels, none provided an exceptional level of control. However, yields were consistently higher than the “Bravo only” check. Treatments applied at night tended to have less stem rot and higher yields, but differences were not significant. Adjuvants applied with Provost did not improve disease control or pod yield, and in some cases resulted in more stem rot and decreased yield.



**HELENA/EXP B TEST, 2011  
RIGDON FARM, COTTON FIELD**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		TSWV <sup>2</sup>	Leaf Spot <sup>3</sup>	Yield lb/A
			28-Jul	19-Sep	19-Aug	19-Sep	
1. Untreated			52.0	66.0	0.0	2.0	1951
2. Bravo W'stick	1 – 7	1.5 pt	37.7	61.7	0.3	1.3	1757
3. Bravo W'stick Provost 433SC	1, 2, 7 3 – 6	1.5 pt 8.0 fl oz	21.7	51.0	1.3	1.3	2827
4. Bravo W'stick <b>Provost 433SC</b>	1, 2, 7 <b>3 – 6</b>	1.5 pt <b>8.0 fl oz ***</b>	12.0	44.7	1.7	1.1	2841
5. Bravo W'stick Provost 433SC + HM8902	1, 2, 7 3 – 6	1.5 pt 8.0 fl oz 5 fl oz	26.7	53.7	1.3	1.4	2609
6. Bravo W'stick Provost 433SC + HM9679A	1, 2, 7 3 – 6	1.5 pt 8.0 fl oz 1% v/v	23.7	51.7	0.7	1.6	2488
7. Bravo W'stick Provost 433SC + HM9934	1, 2, 7 3 – 6	1.5 pt 8.0 fl oz 1.0 qt	31.3	62.0	0.3	1.5	2396
8. Bravo W'stick <b>Provost 433SC</b> <b>+ HM8902</b>	1, 2, 7 <b>3 – 6</b>	1.5 pt <b>8.0 fl oz ***</b> <b>5 fl oz</b>	12.7	48.3	0.3	1.3	2817
9. Bravo W'stick <b>Provost 433SC</b> <b>+ HM9679A</b>	1, 2, 7 <b>3 – 6</b>	1.5 pt <b>8.0 fl oz ***</b> <b>1% v/v</b>	12.7	48.3	0.0	1.3	2749
10. Bravo W'stick <b>Provost 433SC</b> <b>+ HM9934</b>	1, 2, 7 <b>3 – 6</b>	1.5 pt <b>8.0 fl oz ***</b> <b>1.0 qt</b>	22.7	61.0	1.3	1.3	2183

**Continued**

**HELENA/EXP B TEST, 2011  
RIGDON FARM, COTTON FIELD**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		TSWV <sup>2</sup>	Leaf Spot <sup>3</sup>	Yield lb/A
			28-Jul	19-Sep	19-Aug	19-Sep	
11. Bravo W'stick EXP B (A) 20WP	1, 2, 7 3 – 6	1.5 pt 17.8 qt	16.3	29.7	1.0	1.6	3751
12. Bravo W'stick EXP B (A) 20WP	1, 2, 7 3 – 6	1.5 pt 25.0 oz	16.0	31.3	1.0	1.4	3369
13. Bravo W'stick EXP B (D) 25EM	1, 2, 7 3 – 6	1.5 pt 13.7 fl oz	18.3	35.0	2.3	1.3	3349
14. Bravo W'stick EXP B (D) 25EM	1, 2, 7 3 – 6	1.5 pt 19.2 fl oz	25.0	31.7	0.3	1.3	3185
15. Bravo W'stick EXP B (D) 25EC	1, 2, 7 3 – 6	1.5 pt 22.7 fl oz	27.0	53.7	1.0	1.3	2444
16. Bravo W'stick EXP B (E) 15EC	1, 2, 7 3 – 6	1.5 pt 31.7 fl oz	20.0	44.7	0.3	1.3	2812
17. Bravo W'stick Orius 3.6	1, 2, 7 3 – 6	1.5 pt 7.2 fl oz	14.7	48.7	1.7	1.4	2623
<b>LSD(P&lt;0.05)</b>			13.9	13.1	1.3	0.4	641

\*\*\*=early morning spray  
before daylight

<sup>1&2</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

<sup>3</sup>Florida 1 - 10 where 1=no disease and 10=dead plant.

## EVALUATION OF FUNGICIDES APPLIED MIDSEASON AND EARLY EMERGENCE FOR THE CONTROL OF PEANUT SOILBORNE AND FOLIAR DISEASES (NICHINO)

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled fungicides applied at midseason or at early plant emergence for the control of leaf spot and southern stem rot (white mold).
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There are eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band.
  2. Belt-pack spray treatments (1-7) were applied on 2 Jun, 16 Jun, 30 Jun, 14 Jul, 27 Jul, 10 Aug, and 21 Aug. This test was not cover-sprayed with Chlorothalonil. Early emergence sprays were applied 26 May.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Lang Farm, Cotton Field CPES Tifton, GA 31794
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 26 Apr.
  4. **Soil Fertility:** pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1 pt/A) on 27 Apr.  
POST: Cadre 70 DF (1.44 oz/A) on 8 Jul.
  6. **Insecticides:** Acephate 75, (1 lb/A) for thrips on 12 May.
  7. **Planting Info:** Tifguard, 6 seed/ft on 2 May

8. Harvest Dates: Dug - 19 Sep Picked – 28 Sep

E: SUMMARY: This trial had severe white mold pressure. All treatments reduced final disease incidence, and all except the lowest rate of Convoy significantly increased yields. The reductions in disease at mid July were particularly impressive for some treatments. Due to the dry weather very little leaf spot developed, but the value of early season control of white mold was clearly seen in this test.

**NICHINO TEST, 2011  
LANG FARM, COTTON FIELD**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		TSWV <sup>2</sup>	Yield
			28-Jul	20-Sep	18-Aug	lb/A
1. Nontreated			46.0	69.7	2.0	1631
2. Bravo W'stick	1 - 7	1.5 pt	48.3	60.0	2.3	1621
3. Bravo W'stick Convoy	1 - 7 <b>Early Emergence **</b>	1.5 pt <b>16.0 fl oz</b>	17.0	52.3	0.3	1951
4. Bravo W'stick Convoy	1 - 7 <b>Early Emergence **</b>	1.5 pt <b>32.0 fl oz</b>	11.0	37.7	2.3	2401
5. Bravo W'stick Convoy	1 - 7 <b>Early Emergence **</b>	1.5 pt <b>48.0 fl oz</b>	4.3	26.3	1.7	3156
6. Bravo W'stick Proline	1 - 7 <b>Early Emergence **</b>	1.5 pt <b>5.7 fl oz</b>	32.3	39.0	1.7	2967
7. Convoy Headline Artisan Bravo W'stick	<b>Early Emergence **</b> 1.5 3, 4, 5, 6 7	<b>32.0 fl oz</b> 9.0 oz 16.0 fl oz 1.5 pt	4.7	21.7	3.3	3272
8. Proline Headline Artisan Bravo W'stick	<b>Early Emergence **</b> 1.5 3, 4, 5, 6 7	<b>5.7 fl oz</b> 9.0 oz 16.0 fl oz 1.5 pt	7.0	22.7	2.3	3374
9. Headline Artisan Bravo W'stick	1.5 3, 4, 5, 6 7	9.0 oz 16.0 fl oz 1.5 pt	15.7	26.7	3.7	2720
<b>LSD(P&lt;0.05)</b>			13.1	14.3	2.5	514

\*\*=early emergence sprays

<sup>1</sup>& <sup>2</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

## EVALUATION OF NEMATICIDES FOR PEANUT ROOT KNOT NEMATODES

- A. **PURPOSE:** To evaluate the efficacy of Enclosure (RDL-29) and Neem for the control of root knot nematode on GA-06G and Tifguard peanut.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: GA-06G and Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. Details of other applications are in the Table footnotes.
  2. Cover sprays of chlorothalonil 720, (1.5 pts/A) were applied on 2 Jun, 16 Jun, 30 Jun, 14 Jul, 27 Jul, 10 Aug, and 21 Aug. Convoy 40 SC for white mold control (1.5 pt/A) was applied on 1 Jul, (2 pt/A) on 19 Jul and 17 Aug. Sprayed timed treatments of 14-21 DAP on 20 May, 45 DAP on 16 Jun, 75 DAP on 27 Jul, and 66 DAP on 7 Jul.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Lang Farm, Cotton Field CPES Tifton, GA  
31794
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut – 2008
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 26 Apr.
  4. **Soil Fertility:** pH -6.3 P – 58 K – 16 Ca – 358 Mg - 40  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1 pt/A),  
27 April  
POST: Cadre 70 DF (1.44 oz/A) on 8 Jul.

6. Insecticides: Acephate 755 (1 lb/A) for thrips on 12 May
7. Planting Info: GA-06G and Tifguard, 6 seed/ft on 2May
8. Harvest Dates: Dug - 19 Sep Picked – 28 Sep

E. SUMMARY: Although other diseases were present, the primary factor in the trial was peanut root knot nematode. None of the products evaluated significantly reduced damage or increased yields on GA-06G, the susceptible cultivar. The level of resistance in Tifguard is outstanding and it showed almost no damage. Overall the field site was somewhat variable making it harder to show significant differences. There was significant levels of black spotting on the lower leaves in some plots treated with RDL-29 (Enclosure).

**DEVGEN/NEEM TEST, 2011**  
**RIGDON FARM, COTTON FIELD**

GA-06G			Plants/ft <sup>1</sup>		Per Dead Plants <sup>2</sup>	TSWV <sup>3</sup>	Root Knot <sup>4</sup>	
TREATMENTS	APP'S	RATE/A	16-May	23-May	23-May	18-Aug	27-May	2-Sep
1. Nontreated			3.1	3.0	0.2	1.6	1.0	146.0
2. Temik	Band @ plant	10.0 lb	3.1	3.2	0.0	1.2	0.0	89.8
Temik	Band @ 45 DAP	10.0 lb						
3. RDL-29	45 & 66 DAP	3.0 pt	3.1	3.0	0.0	2.0	.	87.8
4. RDL-29	early post (14-21 DAP)	3.0 pt *	3.0	2.9	0.0	0.8	0.2	60.6
RDL-29	45 DAP	3.0 pt						
5. GOS Neem 7-way + Spray Clean 80/20	PPI*	2.0 qt ** 1.0 pt **	3.0	3.1	0.4	0.8	1.0	56.0
6. GOS Neem 7-way + Spray Clean 80/20	PPI*	2.0 qt ** 1.0 pt **	3.1	3.0	0.0	0.8	.	30.8
GOS Neem 7-way + Spray Clean 80/20	45 DAP*	1.0 pt ** 1.0 pt **						
7. GOS Neem 7-way + Spray Clean 80/20	PPI*	2.0 qt ** 1.0 pt **	3.1	3.0	0.0	2.0	.	39.0
GOS Neem 7-way + Spray Clean 80/20	45 DAP*	1.0 pt ** 1.0 pt **						
GOS Neem 7-way + Spray Clean 80/20	75 DAP*	1.0 pt ** 1.0 pt **						
<b>Trt 8 &amp; 9 are Tifguard</b>								
8. Nontreated			3.1	3.0	0.0	0.0	.	11.0
9. RDL-29	45 DAP	3.0 pt	2.8	3.1	0.2	0.4	.	0.6
<b>LSD (P&lt;0.5)</b>			n.s.	n.s.	0.4	n.s.	1.0	108.0

**Notes**

\* "Early post" applications applied in a narrow band (2-4 inches) directly over the row with a single 8010 nozzle in a total spray volume of 40 GPA.

\*\* "PPI" applications applied in a 14" band applied to the bed and incorporated with the rototiller before planting; apply directly over the row with a single 8010 nozzle in a total spray volume of 40 GPA. "45 DAP" and "75 DAP" applications applied in a 14" band over each row of growing peanuts.

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 16 May and 23 May.

<sup>2</sup>The number of dead or dying plants per plot (50 row feet) on 23 May.

<sup>3&5</sup>Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

<sup>4</sup>Number of nematodes/100cc of soil.

**DEVGEN/NEEM TEST, 2011**  
**RIGDON FARM, COTTON FIELD**

<b>GA-06G</b>			<b>Ring<sup>4</sup></b>		<b>White Mold<sup>5</sup></b>	<b>Gall Index<sup>6</sup></b>	<b>Black spot<sup>7</sup></b>	<b>Yield</b>	<b>vigor<sup>8</sup></b>
<b>TREATMENTS</b>	<b>APP'S</b>	<b>RATE/A</b>	<b>27-May</b>	<b>20-Jun</b>	<b>19-Sep</b>	<b>19-Sep</b>	<b>19-Sep</b>	<b>lb/A</b>	<b>7-Jul</b>
1. Nontreated			12.2	24.2	10.0	42.0	0.0	2312	6.4
2. Temik	Band @ plant	10.0 lb	17.6	31.8	10.4	29.0	1.0	2097	6.4
Temik	Band @ 45 DAP	10.0 lb							
3. RDL-29	45 & 66 DAP	3.0 pt	.	20.2	13.6	29.0	31.0	2468	6.2
4. RDL-29	early post (14-21 DAP)	3.0 pt *	32.0	20.6	11.2	38.0	52.0	1882	4.6
RDL-29	45 DAP	3.0 pt							
5. GOS Neem 7-way	PPI*	2.0 qt **	9.2	54.2	12.0	25.0	0.0	2422	5.2
+ Spray Clean 80/20		1.0 pt **							
6. GOS Neem 7-way	PPI*	2.0 qt **	.	26.4	13.6	28.0	5.0	2091	5.8
+ Spray Clean 80/20		1.0 pt **							
GOS Neem 7-way	45 DAP*	1.0 pt **							
+ Spray Clean 80/20		1.0 pt **							
7. GOS Neem 7-way	PPI*	2.0 qt **	.	62.2	10.8	30.0	0.0	2544	6.0
+ Spray Clean 80/20		1.0 pt **							
GOS Neem 7-way	45 DAP*	1.0 pt **							
+ Spray Clean 80/20		1.0 pt **							
GOS Neem 7-way	75 DAP*	1.0 pt **							
+ Spray Clean 80/20		1.0 pt **							
<b>Trt 8 &amp; 9 are Tifguard</b>									
8. Nontreated			.	33.6	9.2	1.0	0.0	2991	9.0
9. RDL-29	45 DAP	3.0 pt	.	13.2	7.2	1.6	0.0	2503	8.4
<b>LSD (P&lt;0.5)</b>			<b>19.1</b>	<b>42.8</b>	<b>5.7</b>	<b>23.3</b>	<b>8.5</b>	<b>775</b>	<b>2.0</b>

**Notes**

\* "Early post" applications applied in a narrow band (2-4 inches) directly over the row with a single 8010 nozzle in a total spray volume of 40 GPA.

\*\* "PPI" applications applied in a 14" band applied to the bed and incorporated with the rototiller before planting; apply directly over the row with a single 8010 nozzle in a total spray volume of 40 GPA. "45 DAP" and "75 DAP" applications applied in a 14" band over each row of growing peanuts.

<sup>3 & 5</sup>Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

<sup>6</sup>Root galling on a 0 - 10 scale where 0=no galling, 1= 1-10%, 2=11 -20%, etc.

<sup>8</sup>Based on a scale of 1-10 with 10 being the most vigorous growth.



**OFFICIAL DAILY RAINFALL 2011  
RIGDON FARM**

<b>Rainfall</b>							
<b>DATE</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>
4	1.1						
5					0.3		
6			0.6				
8							0.5
9				0.2	0.4		
10					0.2		0.7
11							0.2
14	0.2						
15			1.5				
16				0.5			
17			2.5				
19							3.1
20						1.3	
21						0.2	
22	0.3						
23		0.1		0.2	0.2		
25						2.9	
26				0.4			
27				3.7		0.2	
28	0.3		0.4	0.2			
29				0.2			
30			0.1				
31				0.1			
<b>TOTAL</b>	<b>1.9</b>	<b>0.1</b>	<b>5.5</b>	<b>5.5</b>	<b>1.1</b>	<b>4.9</b>	<b>4.5</b>

<b>Irrigation Loveland, Helena/Exp B, Nichino, Nematode, Devgen/Neem</b>							
<b>DATE</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>
1			0.8				
5					0.8		
6		0.8					
15					0.7		
24					0.9		
<b>Total</b>	<b>0.0</b>	<b>0.8</b>	<b>0.8</b>	<b>0.0</b>	<b>2.4</b>	<b>0.0</b>	<b>0.0</b>

<b>Rain + Irrigation Loveland, Helena/Exp B, Nichino, Nematode, Devgen/Neem</b>							
<b>Total</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>
<b>Total</b>	<b>1.9</b>	<b>0.9</b>	<b>6.3</b>	<b>5.5</b>	<b>3.5</b>	<b>4.9</b>	<b>4.5</b>

## EVALUATION OF PEANUT RX PROGRAMS FROM DUPONT

A. **PURPOSE:** To evaluate the comparative effects of risk index programs from Dupont against peanut soilborne and foliar diseases.

B. **EXPERIMENTAL DESIGN:**

1. Randomized complete blocks with six replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. There eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: GA-06G and GA-07W

C. **APPLICATION OF TREATMENTS:**

1. Equipment: Spray treatments were applied with a Co<sub>2</sub> pressurized belt pack sprayer using 2 liters bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.
2. Treatments (1-7) were applied on 6 Jun, 5, 18 Jul, 2 Aug, 16 Aug and 30 Aug. Spray #1.5 on 14 Jun, #2.5 on 27 Jun, and #5.5 on 8 Aug. This test was not coversprayed.

D. **ADDITIONAL INFORMATION:**

1. Location: Land Farm, South Field, CPES Tifton, GA 31794
2. Crop History: Peanut - 2010, Peanut - 2009, Peanut - 2008
3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 26 Apr.
4. Soil Fertility: pH – 6.4 P - 85 K - 17 Ca - 362 Mg - 48  
Soil type: Tifton loamy sand, 2 - 5 % slope
5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) 27 Apr  
POST: Cadre 70 DF (1.44 oz/A) on 8 Jul
6. Insecticides: Acephate 755 (1 lb/A) for thrips on 13 May  
Lannate LV, (2 pt/A) for worms on 19 Aug
7. Planting Info: GA-06G and GA-07W, 6 seed/ft on 7 May
8. Harvest Dates: Dug - 22 Sept Picked – 30 Sep

E: **SUMMARY:** This was a very high risk field and the Medium levels of input gave similar results as the High Risk programs. As might be expected, the Low Risk programs did have more disease. As seen previously, GA-07W had less white mold than GA-06G.

**DUPONT RISK INDEX TEST, 2011**  
**LANG FARM, SOUTH FIELD**

<b>Cultivar GA-06G</b>			<b>White Mold<sup>1</sup></b>		<b>TSWV<sup>2</sup></b>	<b>Leaf Spot<sup>3</sup></b>	<b>Yield</b>
<b>Treatments</b>	<b>App's</b>	<b>Rate/A</b>	<b>20-Jul</b>	<b>23-Sep</b>	<b>4-Aug</b>	<b>20-Sep</b>	<b>lb/A</b>
<b>High Risk</b>							
1. Aproach	1.5	12.0 FL oz	9.0	11.0	3.0	2.8	3645
Fontelis	3, 4, 5	16.0 FL oz					
Bravo W'S	6, 7	1.5 PT					
<b>Medium Risk</b>							
2. Aproach	1	9.0 FL oz	10.0	17.7	3.3	4.0	3374
Fontelis	2.5 & 4	16.0 FL oz					
Bravo W'S	5.5 & 7	1.5 PT					
<b>Low Risk</b>							
3. Aproach	1	9.0 fl oz	13.7	22.7	1.0	4.8	2880
Fontelis	3 & 5	12.0 fl oz					
Bravo W'S	7	1.5 PT					
<b>LSD(P&lt;0.5)</b>			n.s.	n.s.	n.s.	0.6	n.s.

<b>Cultivar GA-07W</b>			<b>White Mold<sup>1</sup></b>		<b>TSWV<sup>2</sup></b>	<b>Leaf Spot<sup>3</sup></b>	<b>Yield</b>
<b>Treatments</b>	<b>App's</b>	<b>Rate/A</b>	<b>20-Jul</b>	<b>23-Sep</b>	<b>4-Aug</b>	<b>20-Sep</b>	<b>lb/A</b>
<b>High Risk</b>							
1. Aproach	1.5	12.0 FL oz	6.3	6.0	1.3	2.7	3209
Fontelis	3, 4, 5	16.0 FL oz					
Bravo W'S	6, 7	1.5 PT					
<b>Medium Risk</b>							
2. Aproach	1	9.0 FL oz	5.0	9.7	1.3	3.4	3693
Fontelis	2.5 & 4	16.0 FL oz					
Bravo W'S	5.5 & 7	1.5 PT					
<b>LOW RISK</b>							
3. Aproach	1	9.0 fl oz	8.7	21.3	4.7	4.4	2981
Fontelis	3 & 5	12.0 fl oz					
Bravo W'S	7	1.5 PT					
<b>LSD(P&lt;0.05)</b>			2.2	12.3	2.8	0.7	546

<sup>1</sup>&<sup>2</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

<sup>3</sup>Florida 1 - 10 scale where 1=no disease and 10=dead plant.

## EVALUATION OF FUNGICIDES FROM DUPONT FOR FOLIAR AND SOILBORNE DISEASE CONTROL ON TIFGUARD

- A. **PURPOSE:** To evaluate the comparative efficacy of fungicides applied for the control of foliar and soilborne diseases.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. Eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. Equipment: Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.
  2. Belt-pack spray treatments (1-7) were applied on 6 Jun, 20 Jun, 6 Jul, 18 Jul, 2 Aug, 16 Aug and 30 Aug. Spray #1.5 on 14 Jun. This test was not coversprayed.
- D. **ADDITIONAL INFORMATION:**
1. Location: Lang Farm, South Field Tifton, GA 31794
  2. Crop History: Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 27 Apr.
  4. Soil Fertility: pH - 6.3 P - 37 K - 42 Ca - 408 Mg - 59  
Soil type: Tifton loamy sand, 2 - 5 % slope
  5. Herbicides: PPI: Sonalan (2 pt/A) + Dual Magnum (1 pt/A) on 27Apr  
POST: Cadre 70 DF (1.44 oz/A) on 9 Jul
  6. Insecticides: Acephate 755 (1 lb/AO for thrips on 13 May  
Lannate LV (2 pt/A) on 19 Aug
  7. Planting Info: Tifguard, 6 seed/ft on 3 May
  8. Harvest Dates: Dug - 22 Sep Picked - 30 Sep

E: SUMMARY: Severe white mold developed, and many treatments were not as effective as expected, although significant yield increases were generally found. Leaf spot pressure was extremely light for this location.

**DUPONT TEST I, 2011  
LANG FARM, SOUTH FIELD**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		TSWV <sup>2</sup>	Leaf Spot <sup>3</sup>	Yield
			20-Jul	23-Sep	5-Aug	20-Sep	lb/A
1. Headline	1.5	9.0 fl oz	14.0	24.3	1.3	1.8	4438
Fontelis	3, 4, 5	16.0 fl oz					
Bravo W'stick	6, 7	1.5 pt					
2. Aproach	1.5	9.0 fl oz	26.7	41.3	2.0	1.8	3495
Fontelis	3, 4, 5	16.0 fl oz					
Bravo W'stick	6, 7	1.5 pt					
3. Bravo W'stick	1, 2, 7	1.5 pt	15.7	24.7	1.0	1.8	4235
Fontelis	3, 4, 5, 6	16.0 fl oz					
4. Headline	1.5	9.0 fl oz	16.3	46.7	1.7	1.8	3161
Provost	3, 4, 5	8.0 fl oz					
Bravo W'stick	6, 7	1.5 pt					
5. Bravo W'stick	1, 2, 7	1.5 pt	11.7	29.7	1.3	1.7	3756
Provost	3, 4, 5, 6	8.0 fl oz					
6. Headline	1.5	9.0 fl oz	6.0	26.3	0.7	2.1	4245
Convoy	3, 4, 5	16.0 fl oz					
+ Bravo W'stick		16.0 fl oz					
Bravo W'stick	6, 7	1.5 pt					
7. Bravo W'stick	1, 2, 7	1.5 pt	11.7	28.7	0.3	2.3	4133
Convoy	3, 4, 5, 6	16.0 fl oz					
+ Bravo W'stick		16.0 fl oz					
8. Nontreated			29.0	46.3	1.0	4.8	3025
<b>LSD(P&lt;0.05)</b>			10.7	14.7	n.s.	0.6	662

<sup>1&2</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

<sup>3</sup>Florida 1 - 10 scale where 1=no disease and 10=dead plant.

## EARLY EMERGENCE MISCELLANEOUS FUNGICIDE TRIAL

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental fungicides applied to peanut early emergence.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There are eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. All plots were coversprayed with Chlorothalonil 720 (1.5 pt/A) on 6 July, 21 July, 1 August, 16 August and 30 August, and Convoy 40SC (2 pt/A) on 19 July. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch spray band and were applied on 26 May.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Lang Farm, South Field. CPES Tifton, GA 31794
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 26 Apr.
  4. **Soil Fertility:** pH – 6.3 P - 37 K - 42 Ca - 408 Mg - 59  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI: Sonalan (2 pt/A) + Dual Magnum (1.25 pt/A) on 27 April  
POST: Cadre 70DF (1.44 oz/A) on 8 Jul
  6. **Insecticides:** Acephate 755 (1 lb/A) for thrips on 13 May  
Lannate LV (2 pt/A) for worms on 19 Aug
  7. **Planting Info:** Tifguard, 6 seed/ft on 3 May
  8. **Harvest Dates:** Dug – 22 Sept Picked – 30 Sept

E: SUMMARY: Severe white mold developed in this test very early in the season. To keep from losing the test, a Convoy application was made to the entire test. This application was very effective and probably resulted in their being much less separation of treatments than we would otherwise have seen.

**EARLY EMERGENCE MISCELLANEOUS FUNGICIDE TEST, 2011  
LANG FARM, SOUTH FIELD**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		TSWV <sup>2</sup>	Leaf Spot <sup>3</sup>	Yield lb/A
			17-Jul	23-Sep	5-Aug	20-Sep	
1. Nontreated			46.0	27.3	2.7	1.0	3935
2. Proline 480sc	Early Emergence	5.7 fl oz	27.0	14.3	1.7	1.0	4138
3. Headline	Early Emergence	9.0 fl oz	26.3	26.0	2.3	1.0	4129
4. Fontelis	Early Emergence	16.0 fl oz	22.7	23.7	3.3	1.0	4061
5. Artisan	Early Emergence	32.0 fl oz	16.0	28.7	1.0	1.0	3872
6. Provost	Early Emergence	8.0 fl oz	31.3	21.0	1.7	1.0	4090
7. Abound	Early Emergence	18.0 fl oz	21.0	18.3	2.3	1.0	4482
8. Aproach	Early Emergence	12.0 fl oz	32.7	34.7	2.7	1.0	3867
9. Tebuconazole	Early Emergence	7.2 fl oz	48.0	30.3	2.0	1.0	4046
10. Evito	Early Emergence	5.7 oz	29.7	20.0	2.0	1.0	3896
<b>LSD(P&lt;0.05)</b>			14.2	8.5	n.s.	n.s.	524

<sup>1&2</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

<sup>3</sup>Florida 1 - 10 scale where 1=no disease and 10=dead plant.

## EARLY EMERGENCE SPRAY TIMING AND VOLUME TEST

- A. **PURPOSE:** To evaluate the comparative of Proline applied early emergence in different spray volumes and timings
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There are eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. All plots were coversprayed with Chlorothalonil 720 (1.5 pt/A) on 6 July, 21 July, 1 August, 16 August, and 30 Aug. Convoy 40SC (2 pt/A) on 19 July. Early emergence sprays were applied the width of plants (3 week) on 26 May, (4 week) on 1 Jun, (5 week) on 8 Jun, and (6 week) on 15 Jun.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Lang Farm, South Field Tifton, GA 31794
  2. **Crop History:** Peanut 2010 Peanut 2009 Peanut - 2008
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 11 Apr. Moldboard plowed and marked rows on 26 Apr.
  4. **Soil Fertility:** pH – 6.5 P - 29 K - 32 Ca - 430 Mg -59  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI: Sonalan (2 pt /A) + Dual Magnum (1.25 pt/A) 27Apr  
POST: Cadre 70DF (1.44 oz/A) on 8 Jul
  6. **Insecticides:** Acephate 755 (1 lb/A) for thrips on 13 May  
Lannate LV (2 pt/A) for worms on 19 Aug
  7. **Planting Info:** Tifguard, 6 seed/ft on 3 May
  8. **Harvest Dates:** Dug – 22 Sep Picked – 30 Oct
- E. **SUMMARY:** Severe white mold developed in this test very early in the season. To keep from losing the test, a Convoy application was made to the entire test. This application was very effective and probably resulted in their being less separation of treatments than we would otherwise have seen. However, it was apparent that lower spray volumes can be effective, and later timings may be needed in some situations.



**EARLY EMERGENCE TIMING AND VOLUME TEST, 2011  
LANG FARM, SOUTH FIELD**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		TSWV <sup>2</sup>	Leaf Spot <sup>3</sup>	Yield lb/A
			14-Jul	23-Sep	5-Aug	20-Sep	
1. Nontreated			62.7	34.7	4.0	1.0	3398
2. Provost	3 - 6	8.0 fl oz	51.0	24.3	3.0	1.0	3601
3. Proline 480SC	6 weeks post-P	5.7 fl oz	31.0	18.0	1.3	1.0	4404
4. Proline 480SC	3 weeks post-P	5.7 fl oz	65.3	39.0	1.3	1.0	3219
5. Proline 480SC	4 weeks post-P	5.7 fl oz	42.7	29.3	1.3	1.0	3790
6. Proline 480SC	5 weeks post-P	5.7 fl oz	41.7	28.3	1.7	1.0	3601
7. Proline 480SC	6 weeks post-P	5.7 fl oz	26.0	15.3	2.0	1.0	4467
8. Proline 480SC	3 weeks post-P	5.7 fl oz	59.0	37.7	1.7	1.0	3248
9. Proline 480SC	4 weeks post-P	5.7 fl oz	34.3	24.7	1.3	1.0	4041
10. Proline 480SC	5 weeks post-P	5.7 fl oz	40.3	24.7	3.3	1.0	3524
<b>LSD(P&lt;0.05)</b>			14.1	8.2	n.s.	n.s.	704

<sup>1</sup> & <sup>2</sup> Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

<sup>3</sup> Florida 1 - 10 scale where 1=no disease and 10=dead plant.

Plant Width/cm	24-May	1-Jun	8-Jun	15-Jun
	13.0	19.0	26.5	38.0
	14.0	21.0	24.0	40.0
	15.0	21.0	31.0	36.0
	15.0	24.0	21.0	33.0
	15.0	25.0	23.0	38.0
	13.0	19.0	28.0	39.0
	12.0	20.0	30.0	37.0
	15.0	20.0	25.0	38.0
<b>Average</b>	14.0	21.1	26.1	37.4

**OFFICIAL DAILY RAINFALL 2011**  
**LANG FARM**

<b>Rainfall</b>							
<b>DATE</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>
4	1.1						
5					0.3		
6			0.6				
8							0.5
9				0.2	0.4		
10					0.2		0.7
11							0.2
14	0.2						
15			1.5				
16				0.5			
17			2.5				
19							3.1
20						1.3	
21						0.2	
22	0.3						
23		0.1		0.2	0.2		
25						2.9	
26				0.4			
27				3.7		0.2	
28	0.3		0.4	0.2			
29				0.2			
30			0.1				
31				0.1			
<b>TOTAL</b>	<b>1.9</b>	<b>0.1</b>	<b>5.5</b>	<b>5.5</b>	<b>1.1</b>	<b>4.9</b>	<b>4.5</b>

**Irrigation****EE Timing, EE Miscellaneous, Dupont Risk Index**

<b>DATE</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>
<b>1</b>			0.8			0.6	
<b>4</b>					0.6		
<b>5</b>		0.6			0.8		
<b>6</b>		0.8					
<b>11</b>				0.5			
<b>12</b>		0.6				0.5	
<b>15</b>					0.7	0.5	
<b>17</b>		0.6					
<b>18</b>					0.6		
<b>21</b>				0.7			
<b>22</b>					0.6		
<b>24</b>					0.9		
<b>25</b>					0.6		
<b>29</b>					0.6		
<b>Total</b>	0.0	2.6	0.8	1.2	5.4	1.6	0.0

**Rain + Irrigation****EE Timing, EE Miscellaneous, Dupont Risk Index**

<b>Total</b>	1.9	2.7	6.3	6.7	6.5	6.5	4.5
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## EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF CYLINDROCLADIUM BLACK ROT AND WHITE MOLD (OLD CBR FIELD)

A. PURPOSE: To evaluate the comparative efficacy of various fungicides against peanut soil borne diseases

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six replicates.
2. One two- row bed (25 x 6 ft) per plot, 36 inch row spacing
3. Eight foot alleyways between blocks
4. Plots were established in an area with a history of CBR and white mold.
5. Variety: Tifguard

C. APPLICATION OF TREATMENTS:

1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule, 14 Jun, 21 Jun, 6 Jul, 19 Jul, 3 Aug, 10 Aug, and 30 Aug. Belt-pack spray treatments (3-6) were applied on 5 Jul, 19 Jul, 2 Aug, and 13 Aug. Early Emergence sprays (50 DAP) applied 29 June.
2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band and the in furrow sprays a single 80015E at 22 psi applying 3.7 GPA.

D. ADDITIONAL INFORMATION:

1. Location: Attapulcus Research & Education Center, Attapulcus, GA
2. Crop History: Peanut - 2010, Peanut 2009, Peanut - 2008
3. Land Preparation: Moldboard plowed on 6 May and marked rows on 10 May
4. Soil Fertility: pH – 6.0 P - 25 K - 40 Ca - 309 Mg -48  
Soil type: Norfolk loamy sand
5. Herbicides: PPI: Prowl (1qt/A), Valor (3oz/A), Strongarm (45oz/A) on 12 May  
POST: Cadre (4 oz/A) on 12 Jul
6. Insecticides: Radiant (6 oz/A) on 19 July, Karate 2 (25oz/A) 3Aug  
Lamda 5 oz/A) on 30 Aug
7. Planting Info: Tifguard, 6 seed/ft on 10 May
8. Harvest Dates: Dug – 3 Oct Picked – 6 Oct

E. SUMMARY:

**FUNGICIDE CBR TEST I, 2011  
OLD NEMATODE/ CBR FIELD, ATTAPULGUS**

Treatments	App's	Rate/A	Plants/ft <sup>1</sup>		% Dead Plants <sup>2</sup>	White Mold <sup>3</sup>		Yield (lb/A)
			25-May	2-Jun	2-Jun	11-Aug	3-Oct	
1. Nontreated			2.7	2.9	0.0	0.0	3.6	5773
2. Proline 480SC	In Furrow**	5.7 fl oz	2.6	3.0	0.0	0.0	2.8	6830
3. Propulse 4--SC	In Furrow**	13.7 fl oz	2.6	3.1	0.0	0.0	2.4	6331
4. Proline 480SC	EE 20 GPA*	5.7 fl oz	.	.	0.0	0.0	3.2	6093
5. Propulse 400SC	EE 20 GPA*	13.7 fl oz	.	.	0.0	0.0	2.4	6581
6. Proline 480SC	Band @ 50 DAP 40 GPA*	5.7 fl oz	.	.	0.0	0.0	3.2	5855
7. Luna Priviledge	EE 20 GPA*	6.84 fl oz	.	.	0.0	0.0	2.4	6104
8. Proline 480SC	In Furrow**	5.7 fl oz	2.3	3.1	0.0	0.0	2.8	6238
Proline 480SC	Band @ 50 DAP 40 GPA*	5.7 fl oz						
9. Proline 480SC	EE 10 GPA*	5.7 fl oz	.	.	0.0	0.0	4.0	6522
10. Proline 480SC	EE 40 GPA*	5.7 fl oz	.	.	0.0	0.0	4.4	6493
<b>LSD (P&lt;0.5)</b>			n.s.	n.s.	n.s.	n.s.	n.s.	673

\*\*= In furrow in 3.72 GPA

\*= Early emergence sprays single 80-10 nozzles per row

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 25 May and 2 June.

<sup>2</sup>The % of emerged plants that was dead or dying per plot on 2 June.

<sup>3</sup>Percent of row feet infected based on disease loci (up of 12" of linear row) per plot.

## EARLY EMERGENCE MISCELLANEOUS FUNGICIDE TEST II

A. PURPOSE: To evaluate the comparative efficacy of labeled and experimental peanut fungicides when applied early emergence..

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area with a history of CBR and white mold
5. Variety: Tifguard

C. APPLICATION OF TREATMENTS:

1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule, 14 Jun, 21 Jun, 6 Jul, 19 Jul, 3 Aug, 10 Aug, and 30 Aug. Belt-pack spray treatments (3-6) were applied on 5 Jul, 19 Jul, 2 Aug, and 13 Aug. Early emergence sprays applied 2 Jun.
2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band

D. ADDITIONAL INFORMATION:

1. Location: Attapulgus Research and Education Center, Attapulgus, GA
2. Crop History: Peanut - 2010, Peanut - 2009, Peanut - 2008
3. Land Preparation: Moldboard plowed 6 May and marked rows on 10 May
4. Soil Fertility: pH - 6.0 P - 25 K - 40 Ca - 309 Mg - 48  
Soil type: Norfolk loamy sand
5. Herbicides: PPI: Prowl (1qt/A), Valor (3oz/A) Strongarm (45oz/A) on 12 May  
POST: Cadre (4 oz/A) on 12 Jul
6. Insecticides: Radiant (6 oz/A) on 19 July, Karate (2 oz/A) on 3 Aug, and Lambda (5 oz/A) on 30 Aug.
7. Planting Info: Tifguard, 6 seed/ft on 10 May
8. Harvest Dates: Dug – 3 Oct Picked – 6 Oct

E: SUMMARY: All treatments reduced leaf spot but overall pressure was low. There was also very little white mold and no CBR. However, several treatments resulted in significantly higher yields, in spite of the lack of apparent disease pressure.

**EARLY EMERGENCE MISCELLANEOUS FUNGICIDE TEST II, 2011  
OLD NEMATODE/CBR FIELD, ATTAPULGUS**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		Leaf Spot <sup>2</sup>	Yield lb/A
			11-Aug	3-Oct	28-Sep	
1. Nontreated			0.0	5.5	4.0	5336
2. Proline 480sc	Early Emergence*	5.7 fl oz	1.0	4.0	3.0	6157
3. Headline	Early Emergence*	9.0 fl oz	0.5	4.5	2.8	5837
4. Fontelis	Early Emergence*	16.0 fl oz	0.0	2.0	3.2	5656
5. Artisan	Early Emergence*	32.0 fl oz	0.5	5.0	2.9	5757
6. Provost	Early Emergence*	8.0 fl oz	0.5	1.5	3.2	5866
7. Abound	Early Emergence*	18.0 fl oz	0.0	5.0	3.1	6157
8. Aproach	Early Emergence*	12.0 fl oz	0.0	3.5	3.3	5750
9. Tebuconazole	Early Emergence*	7.2 fl oz	1.0	9.5	3.3	5191
10. Evito	Early Emergence*	5.7 oz	2.5	4.5	3.8	5605
<b>LSD(P&lt;0.5)</b>			n.s.	4.4	0.8	744

\*=Early emergence sprays

<sup>1</sup>Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

<sup>2</sup>Florida 1-10 scale where 1=no disease and 10=dead plant.

## EARLY EMERGENCE MISCELLANEOUS FUNGICIDE TEST I

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental peanut fungicides applied early emergence
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There are eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule, 14 Jun, 21 Jun, 6 Jul, 19 Jul, 3 Aug, 10 Aug, and 30 Aug. Belt-pack spray treatments (3-6) were applied on 5 Jul, 19 Jul, 2 Aug, and 13 Aug. Early emergence sprays applied 2 Jun.
  2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band
- D. **ADDITIONAL INFORMATION:**
- 1: **Location:** Attapulgus Research and Education Center, Attapulgus, GA
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Moldboard plowed 6 May, marked rows on 10 May
  4. **Soil Fertility:** pH – 6.0 P - 48 K - 37 Ca - 320 Mg - 41  
**Soil type:** Norfolk loamy sand, 2 - 5 % slope
  5. **Herbicides:** PPI: Prowl (1qt/A), Valor (3oz/A), Strongarm (.45oz/A) was applied on 12 May  
POST: Cadre (4 oz/A) on 12 Jul
  6. **Insecticides:** Radiant (6 oz/A) on 19 July, Karate (2 oz/A) on 3 Aug, and Lambda (5 oz/A) on 30 Aug.
  7. **Planting Info:** Tifguard, 6 seed/ft on 10 May
  9. **Harvest Dates:** Dug – 3 Oct Picked - 6 Oct



E: SUMMARY: Disease pressure was not high in this test. Fungicide treatments did give some reductions in disease, but there were few significant differences in yield.

**EARLY EMERGENCE MISCELLANEOUS FUNGICIDE TEST, 2011  
NEW CBR FIELD, ATTAPULGUS**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		Leaf Spot <sup>2</sup>	Yield lb/A
			9-Aug	3-Oct	28-Sep	
1. Nontreated			7.2	18.4	4.1	5634
2. Proline 480SC	Early Emergence*	5.7 fl oz	1.6	12.0	3.5	6546
3. Headline	Early Emergence*	9.0 fl oz	4.0	17.6	3.8	5947
4. Fontelis	Early Emergence*	16.0 fl oz	0.4	18.4	3.6	5314
5. Artisan	Early Emergence*	32.0 fl oz	3.2	16.0	3.6	6040
6. Provost	Early Emergence*	8.0 fl oz	2.8	16.8	3.7	5489
7. Abound	Early Emergence*	18.0 fl oz	3.6	14.0	3.5	6122
8. Aproach	Early Emergence*	12.0 fl oz	3.2	18.8	3.5	5384
9. Tebuconazole	Early Emergence*	7.2 fl oz	4.0	14.8	3.5	6447
10. Evito	Early Emergence*	5.7 oz	3.2	12.4	3.5	5709
<b>LSD (P&lt;0.05)</b>			4.4	n.s.	0.5	953

\*=Early emergence

<sup>1</sup>Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

<sup>2</sup>Florida 1-10 scale where 1=no disease and 10=dead plant.

## EVALUATION OF PROLINE APPLIED EARLY EMERGENCE IN DIFFERENT SPRAY VOLUMES AND TIMINGS

- A. **PURPOSE:** To evaluate the efficacy of Proline applied early emergence in different spray volumes and timings.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
  2. One two- row bed (25 x 6 ft) per plot, 36 inch row spacing
  3. Eight foot alleyways between blocks
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule, 14 Jun, 21 Jun, 6 Jul, 19 Jul, 3 Aug, 10 Aug, and 30 Aug. Belt-pack spray treatments (3-6) were applied on 5 Jul, 19 Jul, 2 Aug, and 13 Aug. Early emergence sprays applied on (2 week) 25 May, (3 week) on 2 Jun, (4 week) on 9 Jun, and (5 week) on 16 Jun.
  2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Attapulgus Research and Education Center, Attapulgus, GA
  2. **Crop History:** Peanut - 2010, Peanut 2009, Peanut - 2008
  3. **Land Preparation:** Moldboard plowed 6 May, marked rows on 10 May
  4. **Soil Fertility:** pH – 6.0 P - 48 K - 37 Ca - 320 Mg -41  
**Soil type:** Norfolk loamy sand
  5. **Herbicides:** PPI: Prowl (1qt/A), Valor (3oz/A), Strongarm (.45oz/A) was applied on 12 May  
POST: Cadre (4 oz/A) on 12 Jul
  6. **Insecticides:** Radiant (6 oz/A) on 19 July, Karate (2 oz/A) on 3 Aug, and Lambda (5 oz/A) on 30 Aug.
  7. **Planting Info:** Tifguard, 6 seed/ft on 10 May
  9. **Harvest Dates:** Dug – 3 Oct Picked – 6 Oct

- E. SUMMARY: Disease pressure was not severe. Most treatments, especially the later ones, reduced leaf spot, but effects on white mold were minimal, as were effects on yield.

**EARLY EMERGENCE TIMING AND VOLUME TEST, 2011  
NEW CBR FIELD, ATTAPULGUS**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		Leaf Spot <sup>2</sup>	Yield lb/A
			11-Aug	3-Oct	28-Sep	
1. Nontreated			6.8	15.2	4.2	5593
2. Provost	3 - 6	8.0 fl oz	10.0	12.4	2.8	6470
3. Proline 480SC	2 weeks post-P 40 GPA	5.7 fl oz	6.4	13.6	4.2	6249
4. Proline 480SC	3 weeks post-P 40 GPA	5.7 fl oz	2.0	16.0	3.1	5907
5. Proline 480SC	4 weeks post-P 40 GPA	5.7 fl oz	4.4	20.8	3.4	5959
6. Proline 480SC	5 weeks post-P 40 GPA	5.7 fl oz	2.8	16.8	2.9	5843
7. Proline 480SC	2 weeks post-P 10 GPA	5.7 fl oz	5.2	14.4	3.7	6127
8. Proline 480SC	3 weeks post-P 10 GPA	5.7 fl oz	2.4	19.2	3.3	5744
9. Proline 480SC	4 weeks post-P 10 GPA	5.7 fl oz	2.8	15.2	3.8	6325
10. Proline 480SC	5 weeks post-P 10 GPA	5.7 fl oz	7.2	16.4	2.9	6151
<b>LSD (P&lt;0.5)</b>			6.5	7.4	0.5	812

**Post-p (planting) applications applied in a band directly over the row in a band exactly as wide as the plants in each growth stage with a single 80-10 nozzle in a total spray volume of 40 GPA, or a single 80-02 tip for 10 GPA.**

<sup>1</sup>Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

<sup>2</sup>Florida 1-10 scale where 1=no disease and 10=dead plant.

Plant Width	24-May	2-Jun	9-Jun	16-Jun
	9.0	18.0	22.0	29.5
	11.0	15.0	24.0	23.0
	10.0	17.0	17.0	33.0
	10.0	16.0	21.0	26.0
	10.0	17.0	22.0	30.0
	11.0	13.0	20.0	33.0
	9.0	19.0	24.0	29.5
	10.0	16.0	19.0	33.0
<b>Average</b>	10.0	16.4	21.1	29.6

## EVALUATION OF HEADLINE FORMULATIONS APPLIED EARLY EMERGENCE

- A. PURPOSE: To evaluate the comparative efficacy of Headline formulations applied early emergence to peanut
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing, 8 foot alley ways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: Tifguard
- C. APPLICATION OF TREATMENTS:
1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule, 14 Jun, 21 Jun, 6 Jul, 19 Jul, 3 Aug, 10 Aug, and 30 Aug. Belt-pack spray treatments (3-6) were applied on 5 Jul, 19 Jul, 2 Aug, and 13 Aug. Early emergence sprays applied on 16 Jun.
  2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band
- D. ADDITIONAL INFORMATION:
- 1: Location: Attapulgus Research and Education Center, Attapulgus, GA
  2. Crop History: Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. Land Preparation: Moldboard plowed 6 May, marked rows on 10 May
  4. Soil Fertility: pH -6.0 P - 48 K - 37 Ca - 320 Mg - 41  
Soil type: Norfolk loamy sand, 2 - 5 % slope
  5. Herbicides: PPI: Prowl (1qt/A), Valor (3oz/A), Strongarm (.45oz/A) was applied on 12 May  
POST: Cadre (4 oz/A) on 12 Jul
  6. Insecticides: Radiant (6 oz/A) on 19 July, Karate (2 oz/A) on 3 Aug, and Lambda (5 oz/A) on 30 Aug.
  7. Planting Info: Tifguard 6 seed/ft on 10 May
  9. Harvest Dates: Dug - 7 Oct Picked - 13 Oct

E: SUMMARY: The treatments evaluated did not have much effect on disease levels, but the data were quite variable.

**HEADLINE EARLY EMERGENCE SPRAYS, 2011  
NEW CBR FIELD, ATTAPULGUS**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		Leaf Spot <sup>2</sup>	Yield lb/A
			9-Aug	3-Oct	28-Sep	
1. Nontreated			8.0	34.0	3.5	4414
2. Proline 480SC	35 DAP	5.7 fl oz	3.5	29.5	2.8	4581
3. Headline SC	35 DAP	9.0 fl oz	7.5	35.0	2.7	3550
4. Headline EC	35 DAP	9.0 fl oz	12.5	33.5	3.1	3477
<b>LSD (P&lt;0.05)</b>			7.2	n.s.	0.7	974

<sup>1</sup>Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

<sup>2</sup>Florida 1-10 scale where 1=no disease and 10=dead plant.

**OFFICIAL DAILY RAINFALL 2011  
ATTAPULGUS FARM**

Rainfall					
DATE	MAY	JUN	JUL	AUG	SEP
4		0.6	0.0		2.2
5		0.0		0.0	0.5
8			0.1		
9			0.3	0.4	
11		0.2	0.0		
13	0.3	2.3	1.0		
14	0.8		0.0		
15			0.9		0.0
16			0.8		
19				0.1	
20				0.2	
21				0.3	0.0
22			0.5	0.1	0.1
23		0.0	0.4		
25			0.8		0.5
26			0.7		
27			0.1		
28		1.7	0.0		
30		0.1			
31				0.4	
<b>TOTAL</b>	<b>1.1</b>	<b>4.8</b>	<b>5.6</b>	<b>1.5</b>	<b>3.3</b>

**OFFICIAL DAILY RAINFALL 2011  
ATTAPULGUS FARM**

<u>Irrigation</u>					
<b>DATE</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>
<b>1</b>		0.5		0.5	0.5
<b>4</b>			0.5		
<b>8</b>		0.5	0.5	0.5	
<b>10</b>		0.5			
<b>11</b>				0.5	
<b>12</b>	0.5		0.5		0.5
<b>15</b>		0.5		0.5	
<b>18</b>	0.5			0.5	
<b>19</b>					0.5
<b>20</b>		0.5			
<b>23</b>					0.5
<b>24</b>		0.5		0.5	
<b>26</b>		0.5			
<b>27</b>	0.5				
<b>29</b>				0.5	
<b>30</b>					0.5
<b>Total</b>	1.5	3.5	1.5	3.5	2.5

<u>Rain + Irrigation</u>					
<b>Total</b>	2.6	8.3	7.1	5	5.8

## EARLY EMERGENCE MISCELLANEOUS FUNGICIDE TEST, PLAINS TS

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental peanut fungicides when applied at early emergence.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There are eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: GA-06G
- C. **APPLICATION OF TREATMENTS:**
1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule, 5 Jul, 25 Jul, 8 Aug, 22 Aug, 9 Sep and 27 Sep. Early emergence sprays were applied on 7 Jun.
  2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Southwest Georgia Branch Station, Plains, GA 31780
  2. **Crop History:** Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. **Land Preparation:** Prior to planting fertilized 400 lbs/A 7-20-20 on 21 Mar. Moldboard plowed and marked rows on 28 April
  4. **Soil Fertility:** pH – 6.3 P - 58 K - 247 Ca - 957 Mg - 239  
**Soil type:** Greenville sandy clay
  5. **Herbicides:** PPI: Prowl (1 qt/A), Valor (3 oz/A), Strongarm (.45 oz/A) was applied on 16 May  
POST: Ultra blazer (1 pt/A) on 23 Jun
  6. **Insecticides:** Lorsban (15 lb/A) on 20 July, Lanate (1 pt/A) on 22 Aug
  7. **Planting Info:** GA-06G, 5 seed/ft on 16 May
  8. **Harvest Dates:** Dug – 24 Oct Picked - 31 Oct



E: SUMMARY: The early emergence treatments showed some very significant levels of white mold control at mid season, but disease levels were lower and generally not significant by harvest. Most treatments did reduce leaf spot severity.

**EARLY EMERGENCE MISCELLANEOUS FUNGICIDE TEST, 2011  
CBR FIELD, PLAINS**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		TSWV <sup>2</sup>	Leaf Spot <sup>3</sup>	Yield lb/A
			3-Aug	Harvest	25-Jul	21-Oct	
1. Nontreated			27.3	14.0	1.3	4.1	4230
2. Proline 480SC	Early Emergence*	5.7 fl oz	26.0	14.3	2.3	3.5	4482
3. Headline	Early Emergence*	9.0 fl oz	13.3	14.3	1.7	3.7	4114
4. Fontelis	Early Emergence*	16.0 fl oz	4.7	14.7	1.0	3.3	3809
5. Artisan	Early Emergence*	32.0 fl oz	14.7	9.7	3.0	3.7	4187
6. Provost	Early Emergence*	8.0 fl oz	15.3	14.7	3.7	3.5	4056
7. Abound	Early Emergence*	18.0 fl oz	21.3	11.0	1.7	3.3	4027
8. Aproach	Early Emergence*	12.0 fl oz	4.0	11.0	2.7	3.3	3795
9. Tebuconazole	Early Emergence*	7.2 fl oz	29.3	20.3	4.0	4.3	4429
10. Evito	Early Emergence*	5.7 oz	22.7	15.3	3.3	3.8	4240
<b>LSD (P&lt;0.05)</b>			<b>14.4</b>	<b>7.8</b>	<b>n.s.</b>	<b>0.5</b>	<b>n.s.</b>

\*=Early Emergence

<sup>1</sup>& <sup>2</sup>Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

<sup>3</sup>Florida 1-10 scale where 1=no disease and 10=dead plant.

EVALUATION OF EARLY EMERGENCE SPRAYS APPLIED AT DIFFERENT TIMINGS  
AND SPRAY VOLUMES, PLAINS

- A. PURPOSE: To evaluate the comparative efficacy of Proline applied at early emergence in different spray volumes and timings
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
  3. There are eight foot alleyways between blocks.
  4. Plots were established in an area with a history of continuous peanut production.
  5. Variety: GA-06G
- C. APPLICATION OF TREATMENTS:
1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule, 5 Jul, 25 Jul, 8 Aug, 22 Aug, 9 Sep and 27 Sep.. Early emergence sprays applied on 7 Jun.
  2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band
- D. ADDITIONAL INFORMATION:
1. Location: Southwest Georgia Branch Station, Plains, GA
  2. Crop History: Peanut - 2010, Peanut - 2009, Peanut - 2008
  3. Land Preparation: Prior to planting fertilized 400 lbs/A 7-20-20 on 21 Mar. Moldboard plowed and marked rows on 28 April
  4. Soil Fertility: pH – 6.3 P - 58 K - 247 Ca - 957 Mg - 239  
Soil type: Greenville sandy clay
  5. Herbicides: PPI: Prowl (1 qt/A), Valor (3 oz/A), Strongarm (.45 oz/A) was applied on 16 May  
POST: Ultra blazer (1 pt/A) on 23 Jun
  6. Insecticides: Lorsban (15 lb/A) on 20 July, Lanate (1 pt/A) on 22 Aug
  7. Planting Info: GA-06G, 5 seed/ft on 16 May
  8. Harvest Dates: Dug – 24 Oct Picked - 31 Oct
- E. SUMMARY: The early emergence Proline sprays generally reduced levels of both foliar and soilborne diseases.

**EARLY EMERGENCE TIMING AND VOLUME TEST, 2011  
CBR FIELD, PLAINS**

Treatments	App's	Rate/A	White Mold <sup>1</sup>		TSWV <sup>2</sup>	Leaf Spot <sup>3</sup>	Yield lb/A
			3-Aug	Final	25-Jul	21-Oct	
1. Nontreated			11.0	34.7	2.0	3.8	4090
2. Provost	3 - 6	8.0 fl oz	10.3	13.0	3.0	2.7	4801
3. Proline 480SC	2 weeks post-P	5.7 fl oz	14.3	18.8	3.7	3.4	3901
4. Proline 480SC	3 weeks post-P	5.7 fl oz	17.3	23.3	2.7	3.2	4608
5. Proline 480SC	4 weeks post-P	5.7 fl oz	12.0	30.3	1.0	3.0	4700
6. Proline 480SC	5 weeks post-P	5.7 fl oz	13.3	14.7	1.3	3.2	5043
7. Proline 480SC	2 weeks post-P	5.7 fl oz	17.3	18.0	3.0	3.5	4409
8. Proline 480SC	3 weeks post-P	5.7 fl oz	16.7	22.3	1.3	3.4	4414
9. Proline 480SC	4 weeks post-P	5.7 fl oz	6.3	22.7	2.3	3.3	4874
10. Proline 480SC	5 weeks post-P	5.7 fl oz	10.3	19.0	5.0	3.1	5101
<b>LSD (P&lt;0.05)</b>			6.3	8.3	3.1	0.3	604

<sup>1&2</sup>Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

<sup>3</sup>Florida 1-10 scale where 1=no disease and 10=dead plant.

Plant Width/cm	30-May	7-Jun	15-Jun	22-Jun
	8.0	15.0	18.5	26.0
	11.0	10.0	17.5	35.5
	10.0	12.0	20.0	28.5
	11.0	15.0	22.0	32.0
	9.0	13.0	19.5	30.0
	11.0	9.0	20.0	23.0
	8.0	11.0	16.0	32.0
	10.0	12.0	18.5	30.0
<b>Average</b>	9.8	12.1	19.0	29.6

## EVALUATION OF VARIOUS FUNGICIDES APPLIED IN FURROW OR AT EARLY EMERGENCE FOR THE CONTROL OF SOILBORNE PEANUT DISEASES

- A. **PURPOSE:** To evaluate the comparative efficacy of various fungicides applied early emergence or in furrow against peanut soilborne diseases.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
  2. One two- row bed (25 x 6 ft) per plot, 36 inch row spacing
  3. Eight foot alleyways between blocks
  4. Plots were established in an area with a history of CBR and white mold
  5. Variety: GA-06G
- C. **APPLICATION OF TREATMENTS:**
1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule, 14 Jun, 21 Jun, 6 Jul, Bravo + Radian C (6 oz/A) on 19 Jul, + Karate 2 (2 oz/A) on 3 Aug, 10 Aug, and Bravo + Lamda (5 oz/A) on 30 Aug. The early emergence spray was applied 7 Jun and the 50 DAP treatment was applied on 11 Jul.
  2. In furrow treatments were applied with an 80015E tip at 22 PSI for a total volume of 3.7 GPA and the early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band
- D. **ADDITIONAL INFORMATION:**
1. Location: Southwest Georgia Branch Station, Plains, GA
  2. Crop History: Peanut - 2010, Peanut 2009, Peanut - 2008
  3. Land Preparation: Prior to planting fertilized 400 lbs/A 7-20-20 on 21 Mar. Moldboard plowed and marked rows on 28 April
  4. Soil Fertility: pH – 6.3 P - 58 K - 247 Ca - 957 Mg -239  
Soil type: Greenville sandy clay
  5. Herbicides: PPI: Prowl (1qt/A), Valor (3oz/A), Strongarm (.45oz/A) on 12 May  
POST: Cadre (4 oz/A) on 12 Jul
  6. Insecticides: Radiant (6 oz/A) on 19 July, Karate 2 (25 oz/A) 3 Aug, Lamda 5 oz/A) on 30 August
  7. Planting Info: Ga-06G, 5 seed/ft on 16 May

8. Harvest Dates: Dug – 24 Oct Picked – 31 Oct

E. SUMMARY: Big differences were seen in levels of white mold both at mid-season and at harvest from the early emergence sprays. NEED YIELD DATA!!

**FUNGICIDE CBR/WHITE MOLD TEST I, 2011  
OLD/CBR FIELD, PLAINS**

Treatments	App's	Rate/A	Plants/ft <sup>1</sup>		White Mold <sup>2</sup>		TSWV <sup>3</sup>	Leaf Spot <sup>4</sup>	Yield lb/A
			30-May	7-Jun	3-Aug	Harvest	25-Jul	21-Oct	
1. Nontreated			2.4	2.8	16.7	35.3	1.3	4.9	4250
2. Proline 480SC	In Furrow**	5.7 fl oz	2.5	2.9	11.0	23.7	1.3	4.7	4932
3. Propulse 400SC	In Furrow**	13.7 fl oz	2.8	3.0	11.7	29.3	0.0	4.0	5038
4. Proline 480SC	Early Emerg*	5.7 fl oz	.	.	8.3	19.0	1.0	4.4	4037
5. Propulse 400SC	Early Emerg*	13.7 fl oz	.	.	10.7	26.0	3.0	3.8	5092
6. Luna Priviledge	Early Emerg*	6.84 fl oz	.	.	10.0	24.0	1.0	3.6	4472
7. Proline 480SC	In Furrow**	5.7 fl oz	.	.	3.7	13.7	3.3	3.4	5542
Proline 480SC	Band @ 50 DAP*	5.7 fl oz							
<b>LSD(P&lt;0.05)</b>			n.s.	n.s.	4.9	8.5	2.6	0.3	651

\*\*=In furrow

\*= Early emergence

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 30 May and 7 Jun.

<sup>2&3</sup>Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

<sup>4</sup>Florida 1-10 scale where 1= no disease and 10=dead plant.

**OFFICIAL DAILY RAINFALL 2011  
PLAINS, GA**

**Rainfall**

DATE	MAY	JUN	JUL	AUG	SEP
2			0.5		
4				0.4	0.7
5					0.7
8				0.1	
9		0.1		0.4	
11			1.2	0.1	
14			1.1		
15			1.8		0.0
16		0.5	1.0		
17		0.1	0.0		
19			0.9	0.1	
22					1.0
23		0.3			0.4
26	0.0	0.0	0.2		
27		0.0	0.0		0.2
28					0.4
30				0.1	
31			0.1	0.3	
<b>TOTAL</b>	<b>0.0</b>	<b>1.1</b>	<b>6.9</b>	<b>1.4</b>	<b>3.4</b>

**Irrigation**

DATE	MAY	JUN	JUL	AUG	SEP
1					1.0
4		1.0			
7			1.0		
8		1.0		1.0	
10				1.0	
13					1.0
14		0.5			
17	1.0				
18				1.0	
19	1.0				1.0
21		1.0			
23				1.0	
29		1.0			
Total	2.0	4.5	1.0	4.0	3.0

**Rain + Irrigation**

<b>Total</b>	<b>2.0</b>	<b>5.6</b>	<b>8.0</b>	<b>5.5</b>	<b>6.4</b>
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## EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITA PECAN NORTH BLOCK

- A. PURPOSE: To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a highly susceptible cultivar.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with four replicates.
  2. Each replication consisted of single-tree treatments.
  3. The orchard was established in 1988 with alternating rows of Wichita and Desirable trees planted on a 40 x 40 ft spacing running north and south. This test consisted of Wichita trees only.
- C. APPLICATION OF TREATMENTS:
1. Equipment: All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.
  2. Calendar-based spray treatments (1 - 10) were applied on 8 Apr, 22 Apr, 4 May, 18 May, 1 Jun, 15 Jun, 28 Jun, 12 Jul, 26 July, and 9 Sep.
- D. ADDITIONAL INFORMATION:
1. Location: Ponder Farm, CPES, Tifton, GA 31794
  2. Soil Fertility: pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44  
Soil type: Tifton loamy sand, 2 - 5 % slope
  3. Herbicide strips: Roundup (1 qt/A) + Surflan (2qt/A) on 22 Mar, Roundup (1qt/A) on 15 May, Roundup (1qt/A) + Valor (6oz/A) on 25 Jul and Gramoxone (1 qt/A) on 8 Aug.
  4. Insecticides: Intrepid (8 oz/A) 26 Aug
  5. Harvest Information: Wichita trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 10 Nov. A 50 nut sample was collected from each tree on 4 Nov to determine yield and quality.

E: SUMMARY: Although it was a dry year, damaging levels of scab developed on this very susceptible pecan cultivar. Some differences in efficacy were seen early in the season on leaf scab, and more significant differences were observed later on nut scab incidence and severity, although all treatments gave an acceptable level of control. We also observed a late season shuck necrosis on some trees late in the season caused by a combination of factors including scab, but with significant impact of anthracnose as well. High levels of anthracnose were found as latent infections in leaves, but did not develop as foliar lesions.

**PECAN FUNGICIDE TEST, 2011  
PONDER FARM, WICHITA (NORTH BLOCK)**

Treatments	Rate/A	App's	Leaf	Leaf	Nut Inc. <sup>3</sup>		Nut Sev <sup>4</sup>		Blacknut <sup>5</sup>	Leaf
			Inc. <sup>1</sup>	Sev <sup>2</sup>	15-Aug	10-Oct	15-Aug	10-Oct	10-Oct	Ret <sup>6</sup>
1. Absolute 500SC + Induce Super Tin 4L + Elast 400F	5.0 fl oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9  2, 4, 6, 8, 10	4.0	1.0	0.0	8.6	0.0	0.4	19.5	66.3
2. Quadris Top 2.71 Super Tin 4L + Elast 400F	8 fl oz 6.0 oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	0.3	0.2	2.1	3.9	0.2	0.3	13.0	73.8
3. Quadris Top 3.71 Super Tin 4L + Elast 400F	10 fl oz 6.0 fl oz 25. fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	2.8	0.6	0.0	9.7	0.0	0.3	8.3	77.8
4. BAS70004F + Latron B-1956 Super Tin 4L + Elast 400F	3.4 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	1.5	0.3	0.0	16.7	0.0	1.0	28.3	80.0
5. BAS70004F + Latron B-1956 Super Tin 4L + Elast 400F	5.7 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	2.8	0.5	1.0	15.3	0.0	0.7	7.8	80.0
6. Merivon + Latron B-1956 Super Tin 4L + Elast 400F	4.0 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	3.4	0.6	16.7	15.3	1.7	0.8	15.8	85.0
7. Merivon + Latron B-1956 Super Tin 4L + Elast 400F	5.5 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	1.2	0.3	5.6	14.2	0.5	0.8	17.0	78.8

Continued



**PECAN FUNGICIDE TEST, 2011  
PONDER FARM, WICHITA (NORTH BLOCK)**

Treatments	Rate/A	App's	Leaf Inc. <sup>1</sup>	Leaf Sev <sup>2</sup>	Nut Inc. <sup>3</sup>		Nut Sev <sup>4</sup>		Blacknut <sup>5</sup>	Leaf Ret <sup>6</sup>
			15-Jun	15-Jun	15-Aug	10-Oct	15-Aug	10-Oct	10-Oct	
8. Merivon	6.7 oz	1, 3, 5, 7, 9	1.2	0.3	1.7	11.9	0.2	0.4	13.8	86.3
+ Latron B-1956	0.06% v/v									
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10								
+ Elast 400F	25.0 fl oz									
9. Luna Sensation	5.0 fl oz	1, 3, 5, 7, 9	4.0	0.6	0.0	16.3	0.0	0.6	18.8	78.8
+ Induce	0.06% v/v									
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10								
+ Elast 400F	25.0 fl oz									
10. ProPhyt	2.5 pt	1, 3, 5, 7, 9	0.6	0.2	2.8	9.7	0.2	0.4	8.8	81.3
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10								
+ Elast 400F	25.0 fl oz									
11. Sovran	3.2 oz	1, 3	1.2	0.4	0.0	43.4	0.0	1.8	22.5	70.0
+ Orius 3.6F	4.0 fl oz									
Sovran	3.2 oz	5, 7, 9								
+ Orius 3,6F	8.0 fl oz									
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10								
+ Elast 400F	25.0 fl oz									
12. Agri Tin 4F	6.0 fl oz	10-Jan	1.9	0.4	0.0	26.4	0.0	1.5	12.5	62.5
+ Phostrol	2.5 pt									
13. Super Tin 4L	6.0 fl oz	10-Jan	1.8	0.3	0.0	29.6	0.0	1.3	14.5	81.3
+ Elast 400F	25.0 fl oz									
14. Nontreated			3.6	0.6	58.3	96.5	16.9	49.7	65	55.0
LSD (P<0.5)			3.3	0.7	9.9	15.3	3.7	5.4	21.1	17.3

<sup>1</sup>Leaf Inc.=leaf scab incidence, based on 6 terminals per tree (% of leaflets on middle leaf with any scab).

<sup>2</sup>Leaf sev=leaf scab severity, based on 6 terminal per tree (% of leaflets covered with scab).

<sup>3</sup>Nut Inc=nut scab incidence, based on 6 nut clusters per tree (% of nuts with any scab).

<sup>4</sup>Nut sev=nut scab severity, based on 6 nut clusters per tree (% percentage of shuck covered with scab).

<sup>5</sup>Black nut rating was visual assessment of all nuts per tree with black shucks from a combination of scab, anthracnose, and other unknown causes.

<sup>6</sup>Indicates the percent of leaves that were retained on the tree based on a visual estimate of the entire tree.

## EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE PECAN (NORTH BLOCK, 2011)

- A. **PURPOSE:** To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a standard commercial cultivar.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
  2. Each replication consisted of single-tree treatments.
  3. The orchard was established in 1988 with alternating rows of Wichita and Desirable trees planted on a 40 x 40 ft spacing running north and south. This test consisted of Desirable trees only.
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.
  2. **Calendar-based spray treatments** (1 - 10) were applied on 8 Apr, 22 Apr, 4 May, 18 May, 1 Jun, 15 Jun, 28 Jun, 12 Jul, 26 July, and 9 Sep.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Ponder Farm, CPES, Tifton, GA 31794
  2. **Soil Fertility:** pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  3. **Herbicide strips:** Roundup (1 qt/A) + Surflan (2qt/A) on 22 Mar, Roundup (1qt/A) on 15 May, Roundup (1qt/A) + Valor (6oz/A) on 25 Jul and Gramoxone (1 qt/A) on 8 Aug.
  4. **Insecticides:** Intrepid (8 oz/A) 26 Aug
  5. **Harvest Information:** Desirable trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 10 Nov. A 50 nut sample was collected from each tree on 18 Nov to determine yield and quality.
- E: **SUMMARY:** Although Desirable is considered a scab-susceptible cultivar, the dry weather in 2011 simply was not conducive to disease development, particularly in this younger orchard with well spaced trees. Low levels of disease were observed, but all treatments were effective under this light disease pressure. Late season leaf retention ratings were generally higher for treated versus nontreated trees even with the low disease severity observed.

**PECAN FUNGICIDE TEST, 2011  
PONDER FARM, DESIRABLE (NORTH BLOCK)**

Treatments	Rate/A	App's	Leaf	Leaf	Nut Inc. <sup>3</sup>		Nut Sev <sup>4</sup>		Leaf
			Inc. <sup>1</sup>	Sev <sup>2</sup>	15-Aug	10-Oct	15-Aug	10-Oct	Ret <sup>5</sup>
1. Absolute 500SC + Induce Super Tin 4L + Elast 400F	5.0 fl oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9  2, 4, 6, 8, 10	0.0	0.0	2.8	0.0	0.1	0.0	41.3
2. Quadris Top 2.71 Super Tin 4L + Elast 400F	8 fl oz 6.0 oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	0.0	0.0	0.0	0.0	0.0	0.0	56.3
3. Quadris Top 3.71 Super Tin 4L + Elast 400F	10 fl oz 6.0 fl oz 25. fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	0.0	0.0	0.0	0.0	0.0	0.0	62.5
4. BAS70004F + Latron B-1956 Super Tin 4L + Elast 400F	3.4 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	0.0	0.0	0.0	4.2	0.0	0.2	65.0
5. BAS70004F + Latron B-1956 Super Tin 4L + Elast 400F	5.7 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	0.0	0.0	0.8	0.0	0.0	0.0	65.0
6. Merivon + Latron B-1956 Super Tin 4L + Elast 400F	4.0 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	1.3	0.4	0.0	0.0	0.0	0.0	58.3
7. Merivon + Latron B-1956 Super Tin 4L + Elast 400F	5.5 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	0.0	0.0	0.0	0.0	0.0	0.0	78.8

**continued**

**PECAN FUNGICIDE TEST, 2011  
PONDER FARM, DESIRABLE (NORTH BLOCK)**

Treatments	Rate/A	App's	Leaf Inc. <sup>1</sup>	Leaf Sev <sup>2</sup>	Nut Inc. <sup>3</sup>		Nut Sev <sup>4</sup>		Leaf Ret <sup>5</sup>
			15-Jun	15-Jun	15-Aug	10-Oct	15-Aug	10-Oct	Ret <sup>5</sup>
8. Merivon + Latron B-1956 Super Tin 4L + Elast 400F	6.7 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9  2, 4, 6, 8, 10	0.6	0.1	0.0	0.0	0.0	0.0	75.0
9. Luna Sensation + Induce Super Tin 4L + Elast 400F	5.0 fl oz 0.06% v/v 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9  2, 4, 6, 8, 10	0.0	0.0	0.0	0.0	0.0	0.0	62.5
10. ProPhyt Super Tin 4L + Elast 400F	2.5 pt 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	1.6	0.3	0.0	5.2	0.0	0.4	55.0
11. Sovran + Orius 3.6F Sovran + Orius 3.6F Super Tin 4L + Elast 400F	3.2 oz 4.0 fl oz 3.2 oz 8.0 fl oz 6.0 fl oz 25.0 fl oz	1, 3  5, 7, 9  2, 4, 6, 8, 10	0.0	0.0	0.0	0.0	0.0	0.0	47.5
12. Agri Tin 4F + Phostrol	6.0 fl oz 2.5 pt	1 – 10	0.3	0.0	0.0	0.0	0.0	0.0	50.0
13. Super Tin 4L + Elast 400F	6.0 fl oz 25.0 fl oz	1 – 10	2.2	0.5	0.0	0.0	0.0	0.0	57.5
14. Nontreated			0.0	0.0	21.5	37.5	2.3	4.8	32.5
LSD (P<0.5)			1.5	0.4	5.8	8.6	0.8	1.3	22.0

<sup>1</sup>Leaf Inc.=leaf scab incidence, based on 6 terminals per tree (% of leaflets on middle leaf with any scab).

<sup>2</sup>Leaf sev=leaf scab severity, based on 6 terminal per tree (% of leaflets covered with scab).

<sup>3</sup>Nut Inc=nut scab incidence, based on 6 nut clusters per tree (% of nuts with any scab).

<sup>4</sup>Nut sev=nut scab severity, based on 6 nut clusters per tree (% percentage of shuck covered with scab).

<sup>5</sup>Indicates the percent of leaves that were retained on the tree based on a visual estimate of the entire tree.

## PECAN FUNGICIDE TEST II (DESIRABLE, SOUTH BLOCK, 2011)

- A. **PURPOSE:** To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a standard commercial cultivar.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
  2. Each replication consisted of single-tree treatments.
  3. The orchard was established in 1988 planted on a 40 x 40 ft spacing running north and south. This test consisted of Desirable trees only.
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.
  2. **Calendar-based spray treatments (1 - 10)** were applied on 7 Apr, 21 Apr, 3 May, 17 May, 31 May, 14 Jun, 27 Jun, 11 Jul, 25 July, and 8 Sep.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Ponder Farm, CPES, Tifton, GA 31794
  2. **Soil Fertility:** pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44  
**Soil type:** Tifton loamy sand, 2 - 5 % slope
  3. **Herbicide strips:** Roundup (1 qt/A) + Surflan (2qt/A) on 22 Mar, Roundup (1qt/A) on 15 May, Roundup (1qt/A) + Valor (6oz/A) on 25 Jul and Gramoxone (1 qt/A) on 8 Aug.
  4. **Insecticides:** Intrepid (8 oz/A) 26 May
  5. **Harvest Information:** Desirable trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 11 Nov. A 50 nut sample was collected from each tree on 18 Nov to determine yield and quality.
- E: **SUMMARY:** Desirable is considered a scab-susceptible cultivar, and some disease occurred, but the dry weather in 2011 simply was not conducive to severe disease development. Low to moderate levels of disease were observed, and there were differences in efficacy of treatments. This was most evident in nut scab incidence rated late in the season, and to a lesser degree nut scab severity. Late season leaf retention ratings were generally similar for treated and untreated trees.

**PECAN FUNGICIDE TEST II, 2011  
PONDER FARM, DESIRABLE (SOUTH BLOCK)**

Treatments	Rate/A	App's	Leaf	Leaf	Nut Inc. <sup>3</sup>		Nut Sev <sup>4</sup>		Leaf
			Inc. <sup>1</sup>	Sev <sup>2</sup>	16-Aug	10-Oct	16-Aug	10-Oct	Ret <sup>5</sup>
			6-Jun	6-Jun	16-Aug	10-Oct	16-Aug	10-Oct	Ret <sup>5</sup>
1. Nutriphyte Magnum + Super Tin 4L Super Tin 4 + Elast 400F	32 oz 8 fl oz 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9  2, 4, 6, 8, 10	0.0	0.0	0.0	10.0	0.0	0.9	28
2. Super Tin 80WP + Elast 400F	6.0 oz 25.0 fl oz	1 – 10	0.0	0.0	0.0	0.0	0.0	0.0	27
3. Serenade	6.0 qt.	1 – 10	0.0	0.0	4.4	23.3	0.6	6.3	37
4. Serenade + Kocide 3000	6.0 qt. 1.75 lb	1 – 10	0.0	0.0	30.0	50.0	3.8	10.8	36
5. Kocide 3000	1.75 lb	1 – 10	0.0	0.0	21.7	36.7	2.0	6.3	46
6. Fungi-phyte + Super Tin 4L Super Tin 4L + Elast 400F	32 oz 8 fl oz 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9  2, 4, 6, 8, 10	2.8	0.1	0.0	0.0	0.0	0.0	44
7. EXP A (4 lb/gal) Super Tin 4L + Elast 400F	3.0 fl oz 6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9 2, 4, 6, 8, 10	0.0	0.0	0.0	0.0	0.0	0.0	41

**continued**

**PONDER FARM, DESIRABLE (SOUTH BLOCK)  
PECAN FUNGICIDE TEST II, 2011**

Treatments	Rate/A	App's	Leaf Inc. <sup>1</sup>	Leaf Sev <sup>2</sup>	Nut Inc. <sup>3</sup>		Nut Sev <sup>4</sup>		Leaf
			6-Jun	6-Jun	16-Aug	10-Oct	16-Aug	10-Oct	Ret <sup>5</sup>
8. EXP A (2.5 lb/gal)	4.8 fl oz	1, 3, 5, 7, 9	0.0	0.0	3.3	0.0	0.1	0.0	34.0
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10							
+ Elast 400F	25.0 fl oz								
9. EXP A (4 lb/gal)	4.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	0.0	0.0	0.0	0.0	32.0
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10							
+ Elast 400F	25.0 fl oz								
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	3.3	0.0	0.1	0.0	54.0
+ Elast 400F	25.0 fl oz								
Quash 50WG	3.0 oz	2, 4, 6, 8, 10							
+ EXP A (4 lb/gal)	3.0 fl oz								
11. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	0.0	0.0	0.0	0.0	19.0
+ Elast 400F	25.0 fl oz								
Quash 50WG	2.5 oz	2, 4, 6, 8, 10							
+ EXP A (4 lb/gal)	2.5 fl oz								
12. Quash 50WG	2.5 oz	1, 3, 5, 7, 9	0.0	0.0	0.0	3.3	0.0	0.2	30.0
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10							
+ Elast 400F	25.0 fl oz								
13. Topguard 1.04	14.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	0.0	0.0	0.0	0.0	33.0
+ Elast 400F	50.0 fl oz	2, 4, 6, 8, 10							
14. Super Tin 4L	12.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	0.0	0.0	0.0	0.0	33.0
Elast 400F	50.0 fl oz	2, 4, 6, 8, 10							
15. Enable 2F	4.0 fl oz	1 - 10	0.3	0.1	0.0	13.3	0.0	1.3	39.0
+ Elast 400F	25.0 fl oz								
16. Enable 2F	8.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	0.0	0.0	0.0	0.0	25.0
Elast 400F	50.0 fl oz	2, 4, 6, 8, 10							
17. Nontreated			1.1	0.1	69.4	100.0	10.7	31.7	21.0
LSD (P<0.5)			1.5	0.1	9.9	11.8	1.8	4.1	25.0

<sup>1</sup>Leaf Inc.=leaf scab incidence, based on 6 terminals per tree (% of leaflets on middle leaf with any scab).

<sup>2</sup>Leaf sev=leaf scab severity, based on 6 terminal per tree (% of leaflets covered with scab).

<sup>3</sup>Nut Inc=nut scab incidence, based on 6 nut clusters per tree (% of nuts with any scab).

<sup>4</sup>Nut sev=nut scab severity, based on 6 nut clusters per tree (% percentage of shuck covered with scab).

<sup>5</sup>Indicates the percent of leaves that were retained on the tree based on a visual estimate of the entire tree.

## TEBUCONAZOLE-KPHYTE DRIP TEST SOUTH BLOCK

A. PURPOSE: To evaluate the efficacy of Kphyte fungicides applied to smaller Desirable pecan trees.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. Each replication consisted of single-tree treatments.
3. The orchard was established in 2007 with smaller Desirable trees.

C. APPLICATION OF TREATMENTS:

1. Equipment:
2. Calendar-based sprays (3) were applied on 13 April, 27 April, and 11 May.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, CPES, Tifton, GA 31794
2. Soil Fertility: pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44  
Soil type: Tifton loamy sand, 2 - 5 % slope
3. Herbicide strips: Buccaneer Plus (4 qt/A) 16 May, 26 July, & 5 Sep
4. Insecticides: Intrepid (8 oz/A) 26 May and 9 June
5. Harvest Information: No nuts were collected.

E. SUMMARY:



**TEBUCONAZOLE-KPHYTE DRIP TEST, 2011**  
**PONDER FARM, SMALLER TREES, DESIRABLE (SOUTH BLOCK)**

Treatments	Rate/A	Nut Inc. <sup>1</sup>		Nut Sev <sup>2</sup>		Leaf Inc. <sup>3</sup>	Leaf Sev <sup>4</sup>
		22-Aug	5-Oct	22-Aug	5-Oct	22-Aug	22-Aug
1. Untreated		57.8	100.0	11.8	25.3	1.1	0.3
2. Tebuconazole 3.6F	8.0 oz/A	93.3	96.7	27.8	36.7	0.0	0.0
3. Kphyte	2 qt./A	66.1	94.4	10.5	21.8	0.3	0.1
4. Kphyte + Folicur 3.6F	2 qt./A	83.3	100.0	22.8	28.5	0.9	0.2
5. Luna Priviledge	6.8 oz/A	78.9	100.0	15.3	23.8	0.0	0.0
LSD (P<0.5)		20.1	n.s.	9.3	8.4	n.s.	n.s.

<sup>1</sup>Nut Inc=nut scab incidence, based on 6 nut clusters per tree (% of nuts with any scab).

<sup>2</sup>Nut sev=nut scab severity, based on 6 nut clusters per tree (% percentage of shuck covered with scab).

<sup>3</sup>Based on rating six terminal per tree. Incidence is the % of leaflets on middle leaf on each terminal with any scab present.

<sup>4</sup>Based on rating six terminal per tree. Severity is the % of middle leaf area covered with scab.

**OFFICIAL DAILY RAINFALL 2011**  
**PONDER FARM, TY TY, GA**

<b>Rainfall</b>							
<b>DATE</b>	<b>APR</b>	<b>MAY</b>	<b>JUN</b>	<b>JUL</b>	<b>AUG</b>	<b>SEP</b>	<b>OCT</b>
4					0.1	0.5	
5	0.8					0.1	
7							0.1
9					0.7		0.2
10							0.8
11				0.2			0.5
12							0.1
13				2.0			0.2
16			0.2	1.8			
17			0.6	0.2			
18							1.8
20						0.8	
21					0.3		
22			0.1				
23			0.1	0.1			
24			0.1				
25						0.3	
26				0.2			
27	0.1			0.1			
28	0.1		1.7				
30					0.1		
31				0.2			
<b>TOTAL</b>	<b>1.0</b>		<b>2.77</b>	<b>4.8</b>	<b>1.2</b>	<b>1.6</b>	<b>3.6</b>

Irrigation was applied as needed on all trees on North and South side of Orchard.