

Date: January, 2014  
Memo to: Industry Cooperators  
From: Tim Brenneman  
Subject: Field Trial Results

Attached are the results of our 2013 field trials on peanuts and pecans. This year was very wet and unusually cool, especially early in the growing season. The fall was drier allowing for a good harvest, These conditions lead to very heavy pecan scab pressure , but there were some serious epidemics of leaf spot in our peanut trials. Surprisingly it was not a severe year for white mold (stem rot), although we had plenty of disease in our nonrotated disease nurseries. Overall it was a good year for disease data on peanuts. The pecan scab overwhelmed all treatments on Wichita, which is ultra susceptible, and also damaged Desirable which was only sprayed every 2 weeks for a total of 10 sprays. Commercial growers sprayed much more than that this year to control scab successfully.

I want to acknowledge the hard work of our crew lead by Corey Thompson, Lewis Mullis, and Pat Hilton. Summer workers included John Ray, and Cassidy Reeh, 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. Graduate students Kyle Brown, Wendy Tsi, and Tom Ingram were also an important part of these investigations.

Once again we are making this available primarily as an online document, and it can be found at [www.tswv.org](http://www.tswv.org) by clicking on “Publications”, and “2013 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.

# TABLE OF CONTENTS

## 2013 PEANUT TESTS

### BLACKSHANK FARM (WOODS and POND FIELD)

Nontreated Proline-Abound In Furrow Test .....	5
Syngenta Seed Treatment Test III Test.....	7
Serenade Test.....	10
Nematocide/Genotypes Test .....	12
Dupont Test.....	14
Early Emergence Programs Test.....	17
Daily Rainfall, Blackshank Farm, Woods and Pond Field.....	19

### BLACKSHANK FARM (IRR/NONIRRIGATED FIELD)

Nontreated Proline In Furrow Early Emergence Test I.....	20
Proline Volume and Banding Test .....	22
Proline In-Furrow Early Emergence Test I.....	24
Cultivar x Fungicide Programs Test.....	26
Daily Rainfall, Blackshank Farm, Irr/Non Field.....	28

### BLACKSHANK FARM (BANANA FIELD)

Multi-State Disease Evaluation Test.....	29
Daily Rainfall, Blackshank Farm, Banana Field.....	32

**LANG FARM (SOUTH FIELD)**

MANA Test .....33

Nichino Test I..... 35

Syngenta Test I..... 37

Loveland Test..... 40

Proline In Furrow Early Emergence Programs Test I ..... 43

Daily Rainfall, Lang Farm, South Field..... 45

**RIGDON FARM (NEW FIELD)**

Syngenta Seed Trt Test I..... 46

Syngenta Seed Trt Test II..... 48

Miscellaneous Biologicals Test..... 50

Isagro Test..... 54

Daily Rainfall, Rigdon Farm, New Field ..... 56

**RIGDON FARM (COTTON FIELD)**

Branch Nema Lines Test..... 57

Early Emergence Programs Test..... 59

Syngenta Test II ..... 61

Nichino Test I..... 64

Nichino Programs Test..... 66

Verdesian Test..... 68

Rigdon Daily Rainfall ..... 70

## **ATTAPULGUS FARM**

Early Emergence Programs Test .....	71
Proline Banding vs Broadcast Test .....	73
Bayer Propulse/Serenade Test.....	75
Bayer Seed Treatment Test .....	78
Attapulgus Daily Rainfall .....	82

## **2013 PECAN TESTS PONDER FARM**

Chemical Wichita Fungicide Test .....	83
Chemical Desirable Fungicide Test .....	88
Pecan Fungicide Test II.....	93
Bayer Drip Test South Block .....	98
Ponder Daily Rainfall.....	101

## NONTRT PROLINE-ABOUND IN FURROW TEST

- 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 five replicates.
  2. One two-row bed (25 ft 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: Nontreated Tifguard, (94 % germination).
- C. **APPLICATION OF TREATMENTS:**
1. All plots were traveled by tractor and coversprayed with Chlorothalonil 720 (1.5 pt/A) on an approximately 2-week schedule, 17 Jun, 27 Jun, 18 Jul, 24 Jul, 7 Aug, and 4 Sept. Treatments 3 and 7 was sprayed with Chlorothalonil 720 (1.5 pt/A) (+Eminent 7.2 fl oz/A) on 11 Jul and 13 Aug. Convoy (32 fl oz/A) was applied on 18 Jul.
  2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band and 21 DAP's were applied on 28 May. In furrow applications applied in 3.72 GPA and mixed in 2 L volume on 6 May. (TP 80015E flat fan nozzle w/100 mesh t-ball check valve at 22 psi).
- D. **ADDITIONAL INFORMATION:**
1. Location: Blackshank Farm, CPES Tifton, GA 31794
  2. Crop History: Peanut – 2012, Peanut – 2011, Peanut – 2010
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard Field was deep turned and rows marked 26Apr. Cultivated 21 Jun.
  4. Soil Fertility: pH – 6.4 P – 70 K –21 Ca – 308 Mg – 42  
Soil type: Tifton loamy sand, 2 – 5 % slope
  5. Herbicides: PPI: Sonalan EC (1.5 pt/A) + Dual Magnum (1.25pt/A) 29 Apr.  
POST: Cadre (4 fl oz/A) + crop oil (1qt/A) 19 Jun
  6. Insecticides: Acephate 755, (0.85 lb/A) for thrips 31 May  
Select (8 fl oz/A) + crop oil (1 qt/A) 14 Aug
  7. Nematicides: None except treatments
  8. Planting Info: Nontreated Tifguard, 94% germination, 6 seed/ft (2.5” deep) with in furrow treatments on 6 May.

9. Harvest Dates: Dug – 24 Sep Picked – 1 Oct

E: SUMMARY: This trial gave useful data regarding early season fungicides to improve plant stands.

NONTREATED PROLINE-ABOUND IN FURROW TEST, 2013												
BLACKSHANK FARM, WOODS FIELD												
Treatments	App's	Rate/A	Plant/ft <sup>1</sup>			% Dead Plants <sup>2</sup>			Plant Width <sup>3</sup>	TSWV <sup>4</sup>	PI/ft <sup>5</sup>	YIELD
			20-May	27-May	3-Jun	20-May	27-May	3-Jun	3-Jun	15-Aug	Harvest	lb/A
1. Nontreated			1.1	1.2	1.1	0.0	0.9	3.5	12.0	4.0	0.8	2364
2. Proline	21 DAP	5.7 fl oz	1.2	1.3	1.1	0.0	2.6	5.7	13.1	6.4	1.0	2892
3. Proline	IF	5.7 fl oz	1.1	1.8	1.3	0.0	0.0	0.7	12.2	6.0	1.5	3688
4. Abound	IF	6.0 fl oz	1.4	1.9	1.9	0.0	0.0	0.9	12.7	6.8	1.8	3543
5. Abound	21 DAP	11.6 fl oz	0.9	0.9	0.9	0.0	1.3	11.6	12.4	4.5	0.8	2577
LSD (P<0.05)			0.2	0.3	0.4	n.s.	n.s.	6.9	1.1	n.s.	0.4	562
<b>Planting Date: May 24, 2013</b>												
<sup>1</sup> Stand count is the number of emerged plants per foot of row on 20 May, 27 May and 3 June.												
<sup>2</sup> The % of emerged plants that was dead or dying per plot on 20 May, 27 May and 3 June.												
<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.												
<sup>5</sup> Plant stand (plants/ft) counted after inverting.												

## EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT SEEDLING DISEASES (SYNGENTA SEED TRT TEST III)

A. PURPOSE: To evaluate the comparative experimental peanut seed treatments.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were in an area with a history of continuous peanut production.
5. Variety: Tifguard, 92% germination

C. APPLICATION OF TREATMENTS:

1. Equipment: Cover sprays were applied by tractor.
2. Cover sprays of Chlorothalonil 720 (1.5 pt/A) were applied on 17 Jun, 27 Jun, 18, Jul 24, Jul 7 Aug, and 4 Sept. Treatment # and 7 was sprayed with Chlorothalonil 720 (1.5 pt/A) (+Eminent 7.2 fl oz/A) 11 Jul and 13 Aug. All plots were inoculated with *R. solani* (RS612, Sunsweet) sprayed in furrow on the left row only.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, CPES Tifton, GA 31794
2. Crop History: Peanut – 2012, Peanut – 2011, Peanut – 2010
3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked on 26 Apr. Cultivated 21 Jun.
4. Soil Fertility: pH – 6.4 P – 70 K – 21 Ca – 308 Mg – 42  
Soil type: Tifton loamy sand, 2 – 5 % slope
5. Herbicides: PPI: Sonalan (2 pt/A) + Dual Magnum (1.25 pt/A) on 29Apr.  
POST: Cadre (4 fl oz/A) + crop oil (1qt/A) 19 Jun.
6. Insecticides: Acephate 755 (1 lb/A) for thrips on 31 May.  
Select ( fl oz/A) + crop oil (1qt/A) on 14 Aug
7. Planting Info: Tifguard, 6 seed/ft, (2” deep) on 7 May.
8. Harvest Dates: Dug – 24 Sep Picked – 1 Oct

E: SUMMARY: Significant differences in efficacy of seed treatments were found, but differences due to the *Rhizoctonia* inoculation were not as well defined.

SYNGENTA SEED TRT TEST III, 2013								
BLACKSHANK FARM, WOODS FIELD								
	Inoculated plants/ft <sup>1</sup>	Check plants/ft <sup>1</sup>	Plants/ft <sup>1</sup>		% Dead Plants <sup>2</sup>			YIELD
Treatments	21-May	21-May	28-May	4-Jun	21-May	28-May	4-Jun	lb/A
1. Cruiser 70WS	1.5	1.5	1.3	1.9	0.0	2.1	1.3	1786
2. Dynasty PD + Cruiser	3.0	3.2	2.8	2.5	0.0	0.2	1.2	2860
3. A16148 (1X) + Cruiser	2.8	2.8	2.7	2.7	0.0	0.0	0.0	2773
4. A16148 (2X) + Cruiser	2.8	2.8	2.5	2.6	0.0	1.2	0.4	2345
5. A16148 (4X) + Cruiser	2.3	2.1	2.2	2.3	0.0	0.2	0.6	2229
6. A16148 (1X) + Cruiser + Dynasty	2.7	2.8	2.6	2.7	0.0	0.2	0.2	2476
7. A16148 (2X) + Cruiser + Dynasty	2.4	3.0	2.7	2.8	0.0	0.0	0.0	2606
8. A16148 (4X) + Cruiser + Dynasty	2.6	2.8	2.5	2.7	0.0	0.0	0.0	2592
<b>LSD (P&lt;0.05)</b>	0.5	0.6	0.3	0.6	n.s.	1.9	n.s.	811
<b>Planting Date: May 6, 2013</b>								
<sup>1</sup> Stand count is the number of emerged plants per foot of row on 21 May, 28 May and 4 June.								
<sup>2</sup> The % of emerged plants that was dead or dying per plot on 21 May, 28 May and 4 June.								
<sup>3</sup> Average plant width (measure in cm), mean of 6 plants per plot.								



SYNGENTA SEED TRT TEST III, 2013								
BLACKSHANK FARM, WOODS FIELD								
	Inoculated Width <sup>3</sup>			Check Width <sup>3</sup>			TSWVL <sup>4</sup>	TSWVR <sup>5</sup>
Treatments	4-Jun	28-Jun	29-Jul	4-Jun	28-Jun	29-Jul	15-Aug	15-Aug
1. Cruiser 70WS	12.5	25.3	54.5	12.0	31.4	62.1	0.8	1.3
2. Dynasty PD + Cruiser	12.4	33.9	64.3	13.2	40.3	67.9	2.0	1.5
3. A16148 (1X) + Cruiser	12.1	32.3	62.8	12.2	35.6	62.9	1.0	1.0
4. A16148 (2X) + Cruiser	12.6	30.1	54.9	13.0	39.1	62.1	2.0	2.0
5. A16148 (4X) + Cruiser	13.1	28.8	53.7	13.7	35.3	67.4	1.3	0.8
6. A16148 (1X) + Cruiser + Dynasty	12.6	28.8	52.7	13.5	39.2	69.0	1.3	2.3
7. A16148 (2X) + Cruiser + Dynasty	12.4	27.3	53.9	13.6	38.5	70.9	1.0	1.3
8. A16148 (4X) + Cruiser + Dynasty	12.9	31.7	65.8	13.2	41.6	73.2	2	1.8
<b>LSD (P&lt;0.05)</b>	n.s.	8.4	n.s.	1.3	9.2	8.2	n.s.	n.s.
<b>Planting Date: May 6, 2013</b>								
<sup>1</sup> Stand count is the number of emerged plants per foot of row on 21 May, 28 May and 4 June.								
<sup>2</sup> The % of emerged plants that was dead or dying per plot on 21 May, 28 May and 4 June.								
<sup>3</sup> Average plant width (measure in cm), mean of 6 plants per plot on 4 June, 28 June and 29 July.								
<sup>4</sup> <sup>5</sup> Percent of row feet infected based on disease loci (up to 12" of linear row) per left and right row per plot.								

EVALUATION OF FUNGICIDES FOR FOLIAR AND SOILBORNE DISEASE CONTROL ON TIFGUARD (SERENADE TEST, 2013)

- 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 seven replicates.
  2. One two-row bed (25ft x 6ft) 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.
  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 13 Jun, 25 Jun, 8 Jul, 22 Jul, 6 Aug, 19 Aug and 4 Sept.
- D. ADDITIONAL INFORMATION:
1. Location: Blackshank Farm, CPES Tifton, GA 31794
  2. Crop History: Peanut – 2012, Peanut – 2011, Peanut – 2010
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on 26 Apr. Cultivated 21 Jun.
  4. Soil Fertility: Ph – 6.3 P – 57 K – 19 Ca – 296 Mg – 43  
Soil type: Tifton loamy sand, 2 – 5 % slope
  5. Herbicides: PPI: Sonalan (1.5 pt/A) + Dual Magnum (1.25 pt/A) 29 Apr.  
POST: Cadre (4 fl oz/A) + crop oil (1qt/A) 19 Jun  
Select (8 fl oz/A) + crop oil (1 qt/A) 14 Aug.
  6. Insecticides: Acephate 755 (0.85 lb/A) for thrips on 31 May
  7. Planting Info: Tifguard, 6 seed/ft (1.5” deep) on 10 May
  8. Harvest Dates: Dug – 24 Sep Picked – 1 Oct

E: SUMMARY: This trial showed distinct differences in disease control among treatments that were associated with significant yield differences.

SERENADE TEST, 2013						
BLACKSHANK, WOODS FIELD						
			TSWV <sup>1</sup>	Leaf Spot <sup>2</sup>	WM <sup>3</sup>	YIELD
Treatments	App's	Rate/A	15-Aug	13-Sep	25-Sep	lb/A
1. Nontreated			2.0	6.3	38.9	2473
2. Bravo	1 - 7	1.5 pt	1.7	4.3	35.7	2792
3. Provost	1 - 7	10.7 fl oz	2.3	2.2	8.6	3601
4. Serenade Optimum WP	1 - 7	14 oz	1.7	6.4	33.7	2489
5. Serenade Optimum WP	1 - 7	24 oz	1.4	6.5	36.0	2730
6. Serenade Optimum WP	1, 2, 7	24 oz	1.7	2.3	5.4	3456
Provost	3 - 6	10.7 fl oz				
7. Bravo	1, 2, 7	1.5 pt	2.0	2.6	6.6	3174
Provost	3 - 6	10.7 fl oz				
<b>LSD(P&lt;0.05)</b>			n.s.	0.6	10.9	427

<sup>1&3</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.  
<sup>2</sup>Leaf Spot<sup>2</sup>=Florida 1-10 scale where 1=no disease and 10=dead plant.

EVALUATION OF NEMATOCIDES AND GENOTYPES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES AND NEMATODES (Nematode Genotype Test)

A. PURPOSE: To evaluate the susceptibility of genotypes to root knot nematode.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with seven replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: Different varieties

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. Convoy 40 SC for white mold control (64 fl oz/A) broadcast on 17 Jun and (32 fl oz/A) on 18 Jul.
2. Cover sprays of Chlorothalonil 720 (1.5 pts/A) were applied on 17 June, 27 June, 18 Jul, 24 Jul, 7 Aug, and 4 Sept. Treatments # 3 & # 7 were sprayed with Chlorothalonil 720 (1.5 pt/A) (+ Eminent 7.2 fl oz/A) on 11 Jul and 13 Aug.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, CPES, Tifton, GA 31794
2. Crop History: Peanut – 2012, Peanut – 2011, Peanut – 2010
3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on 26Apr. Cultivated 21 Jun.
4. Soil Fertility: Ph – 5.6 P – 27 K – 16 Ca – 176 Mg – 18  
Soil type: Tifton loamy sand, 2 – 5 % slope
5. Herbicides: PPI: Sonalan (1.5 pt/A) + Dual Magnum (1.25 pt/A) on 29April.  
POST: Cadre (4 fl oz/A) + crop oil (1 qt/A) for thrips on 19 Jun. Select (8 fl oz/A) + crop oil (1 qt/A) on 19 Jun.

- 6. Insecticides: Acephate 755 (0.85 lb/A) on 31 May.
- 7. Planting Info: Different varieties, 6 seed/ft (1.5" deep) 30 May
- 8. Harvest Dates: Dug – 20 Sep Picked – 1 Oct

E: SUMMARY: This trial had issues with the overall growth and development of the plants. Nematode damage was much less severe than expected, but there were differences between the known susceptible and resistant standards.

<b>NEMATODE GENOTYPE TEST, 2013</b>				
<b>BLACKSHANK, WOODS FIELD</b>				
	<b>Nema<sup>1</sup></b>	<b>WM<sup>2</sup></b>	<b>YIELD</b>	<b>Rootknot<sup>3</sup></b>
<b>Entries</b>	<b>20-Sep</b>	<b>20-Sep</b>	<b>lb/A</b>	<b>18-Sep</b>
1. GA-07W	12.6	12.0	1722	65.9
2. Tifguard	0.1	19.7	2634	10.0
3. GA 122701	0.3	8.3	2323	3.0
4. GA 122702	1.4	6.0	2033	23.7
5. GA 122703	5.1	12.3	1913	56.3
6. GA 122704	0.0	4.9	2190	1.9
7. GA 122706	9.0	15.4	1709	77.0
<b>LSD(P&lt;0.05)</b>	2.6	6.7	352	30.1

<sup>1</sup>Visual rating of the percent of pods and roots (1-100) with visible damage from root knot nematode.  
<sup>2</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.  
<sup>3</sup>Populations of root knot nematode per 100 cm<sup>3</sup> of soil.

EVALUATION OF FUNGICIDES FROM DUPONT FOR FOLIAR AND SOILBORNE DISEASE CONTROL ON TIFGUARD (Dupont Test, 2013)

A. PURPOSE: To evaluate the comparative efficacy of fungicides applied for the control of foliar and soil borne diseases.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
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: 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 were applied 13 Jun, 27 Jun, 10 Jul, 24 Jul, 7 Aug, 22 Aug and 4 Sept. Spray #1.5 was sprayed 20 Jun. 21 DAP was applied 28 May.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, CPES Tifton, GA 31794
2. Crop History: Peanut – 2012, Peanut – 2011, Peanut – 2010
3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) 1 Apr. Moldboard turned and bedded 26 Apr. Cultivated 17 Jun.
4. Soil Fertility: Ph – 6.3 P – 44 K – 28 Ca – 306 Mg – 38  
Soil type: Tifton loamy sand, 2 – 5 % slope
5. Herbicides: PPI:Sonalan (1.5 pt/A) + Dual Magnum (1.25 pt/A) 29Apr.  
POST:Cadre (4 oz/A) + crop oil (1 qt/A) on 19 Jun.
6. Insecticides: Acephate 755 (0.85 lb/A) sprayed for thrips 31May.
7. Planting Info: Tifguard, 6 seed/ft (1.5” deep) on 10 May
8. Harvest Dates: Dug - 24 Sep Picked – 2 Oct

E: SUMMARY: This trial showed distinct differences in disease control among treatments that were associated with significant yield differences.

DUPONT TEST, 2013							
BLACKSHANK FARM, POND FIELD							
Treatments	App's	Rate	TSWV <sup>3</sup>	Leaf Spot <sup>4</sup>	WM <sup>5</sup>	YIELD	Width
			15-Aug	13-Sep	25-Sep	lb/A	
1. Fontelis	21 DAP, 4" Band**	2.23 fl oz (20 oz B'cast)	2.0	3.4	13.2	4222	.
Bravo WS	1, 2, 4, 6, 7	1.5 pt					
Fontelis	3 & 5	16 fl oz					
2. Fontelis	21 DAP, 4" Band**	2.23 fl oz (20 oz B'cast)	2.0	3.7	39.6	3404	.
Bravo WS	1 - 7	1.5 pt					
3. Fontelis	21 DAP, 4" Band**	5.7 fl oz	2.4	3.1	17.2	4176	
Bravo WS	1, 2, 4, 6, 7	1.5 pt					
Fontelis	3 & 5	16 fl oz					
4. Proline	21 DAP, 4" Band**	5.7 fl oz	2.4	3.5	22.0	3862	.
Bravo WS	1, 2, 4, 6, 7	1.5 pt					
Convoy	3 & 5	13 fl oz					
+ Bravo		1.5 pt					
5. Proline	In Furrow*	5.7 fl oz	1.6	3.3	24.8	3862	14.8
Bravo WS	1, 2, 4, 6, 7	1.5 pt					
Fontelis	3 & 5	16 fl oz					
6. Bravo WS	1 - 7	1.5 pt	1.2	4.1	51.6	3241	.
7. Orius 20AQ	1 & 2	15.4 fl oz	2.8	3.0	19.2	4252	.
+ Bravo		1.5 pt					
Fontelis	3 - 5	16 fl oz					
Bravo WS	6 & 7	1.5 pt					
8. Orius 20AQ	1, 3, 4	15.4 fl oz	3.2	2.3	14.4	4042	.
+ Bravo		1.5 pt					
Fontelis	3 & 5	16 fl oz					
Bravo WS	6 & 7	1.5 pt					
9. Headline 2.09	1.5	9.0 fl oz	1.6	2.3	12.0	4159	.
Fontelis	3 & 5	16 fl oz					
Orius 20AQ	4	15.4 fl oz					
+ Bravo		1.5pt					
Bravo WS	6 & 7	1.5 pt					
10. Orius 20AQ	1 & 2	15.4 fl oz	1.2	3.4	20.0	3769	.
+ Bravo		1.5 pt					
Convoy	3 - 5	13 fl oz					
+ Bravo		1.5 pt					
Bravo WS	6 & 7	1.5 pt					
11. Nontreated			1.2	6.2	72.5	2306	15.8
<b>LSD(P&lt;0.05)</b>			n.s.	1.0	14.3	839	n.s.

**Planting Date: May 10, 2013**

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

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

\*In furrow applications applied in 3.72 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 (4 inches) over the row, spray volume of 15 GPA.



EARLY EMERGENCE PROGRAMS FUNGICIDES TRIAL  
(Early Emergence Programs Test, 2013)

A. PURPOSE: To evaluate the effects of various early season programs applied in addition to a Convoy program for white mold.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (15ft x 6ft) 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.
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 33 DAP treatment was banded the width of the plants in 30 GPA with a single 8003 nozzle per row 11 Jun.
2. Treatments (1-7) were applied on 10 Jul, 24 Jul, 7 Aug, 22 Aug, and 4 Sept. Spray 1.5 was applied on 20 Jun. Nothing was applied on spray # 1 or # 2.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Tifton, GA 31794
2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) 1 Apr. Moldboard plowed and marked rows 26 Apr. Cultivated 17 Jun.
4. Soil Fertility: pH - 6.3 P - 44 K - 28 Ca - 306 Mg - 38  
Soil type: Tifton loamy sand, 2 - 5 % slope
5. Herbicides: PPI: Sonalan (1.5 pt/A) + Dual Magnum (1.25 pt/A) 29 Apr  
POST: Cadre (4 oz/A) + crop oil (1 qt/A) 19 Jun.
6. Insecticides: Acephate 755, (0.85 lb/A) on 31 May
7. Planting Info: Tifguard, 6 seed/ft (1.5" deep) on 10 May
8. Harvest Dates: Dug - 24 Sep Picked - 2 Oct

E: SUMMARY: Disease pressure was not high; all treatments reduced, but there were no differences in yield.

Early Emergence Programs Test, 2013											
Blackshank, Pond Field											
Treatment	App's	Rate/A	WM <sup>1</sup>					LS <sup>2</sup>		TSWV <sup>3</sup>	YIELD lb/A
			3-Jul	15-Jul	7-Aug	18-Aug	Harvest	15-Jul	18-Aug		
1. Nontreated			3.6	2.0	1.6	7.6	17.6	0.4	3.4	1.2	2512
2. Headline SC	1.5, B'cast	9.0 oz	0.0	0.0	0.0	0.0	2.4	0.2	2.9	2.0	2301
Convoy	3-5	13 fl oz									
3. Proline	33 DAP,Banded	5.7 fl oz	0.0	0.0	0.0	0.4	2.8	0.2	2.8	2.8	2737
Convoy	3-5	13 fl oz									
4. Muscle 3.6F	33 DAP,B'cast	7.2 oz	0.4	0.0	0.0	0.4	4.0	0.2	3.1	3.2	2664
Convoy	3-5	13 fl oz									
5. Convoy	3-5	13 fl oz	0.4	0.0	0.0	0.0	2.0	0.3	3.1	1.6	2490
<b>LSD (p &lt;0.05)</b>			1.7	1.2	1.0	3.0	6.2	0.2	0.3	n.s.	n.s.
* = spray 1 will be at 35 DAP, and spray 1.5 at 42 DAP.											
** = Band the width of the plant and applied in 20 GPA (8003 nozzle).											
*** = All plots will be coversprayed with Bravo, app's 3 - 7											
<b>Planting Date: May 10, 2013</b>											
WM <sup>1</sup> = Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.											
LS <sup>2</sup> = Florida 1-10 scale where 1=no disease and 10=dead plant.											
TSWV <sup>3</sup> = Percent row feet infected based on disease loci (up to 12" of linear row) per plot.											

<b>DAILY RAINFALL AND IRRIGATION, 2013</b>							
<b>Blackshank Farm, Woods and Pond Field</b>							
<b>RAIN</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					0.2		
2		0.4	1.2	0.5		0.2	
3	0.8	0.1					
4	0.5		2.0	1.8			
5		0.7					
6			1.5				
7							0.6
8				1.1			
9			1.5				
10	0.1			0.9			
11				0.1		0.1	
12	0.1						
13				0.2			
14	1.7				0.3		
15				0.1	0.6		
16				0.3		1.5	
17					1.8		
19	1.0	0.7	0.4		0.9		
20				1.3	2.0		
21		0.3			0.1		
22		0.7			2.5	1.0	
23			0.7	0.1			
24	0.5		0.8	0.1		0.2	
28				2.1			
29	0.5		3.7				
<b>TOTAL</b>	5.2	2.9	11.8	8.5	8.4	3.0	0.6
<b>IRRIGATION</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>
5					0.8		
9						0.5	
13						0.9	
21		1.0					
29		0.5					
<b>TOTAL</b>	0.0	1.5	0.0	0.0	0.8	1.4	0.0
<b>Rain &amp; Irr</b>	5.2	4.4	11.8	8.5	9.2	4.4	0.6

## NONTRT PROLINE IN FURROW AND EARLY EMERGENCE TEST

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental peanut fungicide when applied at early emergence.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25 ft x 6 ft) per plot, 36-inch row spacing.
  3. There were eight foot alleyways between blocks.
  4. Plots were established in an area of continuous peanut production.
  5. Variety: Nontreated Tifguard, 99% germination
- 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, 17 Jun, 27 Jun, 18 Jul, 24 Jul, 7 Aug, and 4 Sept along with +Emient (7.2 fl oz/A) on 11 Jul and 13 Aug.
  2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band and 21 DAP was applied on 28 May and in furrow on 6 May.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Blackshank Farm, Tifton, GA 31794
  2. **Crop History:** Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) b broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on 26Apr. Cultivated on 17 Jun.
  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 (1.5 pt/A) + Dual Magnum (1.25 pt/A) 29 Apr.  
POST: Cadre (4 oz/A) + crop oil (1 qt/A) 19 Jun
  6. **Insecticides:** Acephate 755 (0.85 lb/A) for thrips on 31 May
  7. **Planting Info:** Nontreated Tifguard,(99% germination) 6 seed/ft (2.5" deep), with in furrow treatments 6 May.
  8. **Harvest Dates:** Dug – Oct 10 Picked – Oct 15
- E: **SUMMARY:** This trial provided useful data relative to improving plant stands with early season fungicides.

NONTRT PROLINE IN FURROW-EARLY EMERGENCE TEST I, 2013												
BLACKSHANK FARM, IRR/NON FIELD												
Treatments	App's	Rate/A	Plants/ft <sup>1</sup>				% Dead plants <sup>2</sup>			Plant Width <sup>3</sup>	TSWV <sup>4</sup>	Yield
			20-May	27-May	3-Jun	10-Oct	20-May	27-May	3-Jun	3-Jun	15-Aug	lb/A
1. Nontreated			1.4	1.7	1.7	1.3	0.0	0.4	0.9	13.7	1.8	3616
2. Proline	21 DAP	5.7 fl oz**	1.3	1.7	1.7	1.1	0.0	0.2	1.5	13.4	4.5	3877
3. Proline	IF	5.7 fl oz*	0.8	1.6	1.7	1.3	0.0	0.0	0.2	13.3	2.8	4373
4. Abound	IF	6.0 fl oz*	1.4	2.4	2.1	1.6	0.0	0.1	0.0	14.2	4.0	4065
5. Abound	21 DAP	6.0 fl oz**	1.6	1.8	1.7	1.2	0.0	0.5	0.7	14.3	3.2	3862
<b>LSD(P&lt;0.05)</b>			0.3	0.6	0.4	0.3	n.s.	n.s.	1.4	0.8	2.4	n.s.
<b>Planting Date: May 24, 2013</b>												
<sup>1</sup> Stand count is the number of emerged plants per foot of row on 20 May, 27 May and 3 June.												
<sup>2</sup> The % of emerged plants that was dead or dying per plot on 20 May, 27 May and 3 June.												
<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.												
*In furrow applications applied in 3.72 GPA and mixed in 2 L volume. (TP 80015E flat fan nozzle w/100 mesh t-ball check valve at 22 psi).												
**21 DAP applied in a narrow band (4 inches) directly over the row with a single 80-10 nozzle in a total spray volume of 40 GPA.												

## EARLY EMERGENCE SPRAY VOLUME AND BANDING TEST

- A. **PURPOSE:** To evaluate the efficacy of Proline applied early emergence in a different spray volumes and banding.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with seven replicates.
  2. One two-row bed (15ft x 6ft) 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.
  5. Variety: Nontreated Tifguard, 94% germination
- 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 were applied as described in the table.
  2. Chlorothalonil 720 (1.5 pt/A) cover sprays 1-7 were applied on 17 Jun 27 Jun 18 Jul 24 Jul, 7 Aug and 4 Sept. and + Eminent (7.2 fl oz/A) were applied on 11 Jul and 13 Aug. In furrow was applied 6 May and 21 DAP was applied 28 May.
- D. **ADDITIONAL INFORMATION:**
1. Location: Blackshank Farm, Tifton, GA 31794
  2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on 26Apr. Cultivated 17 Jun.
  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 (1.5 pt/A) + Dual Magnum (1.25 pt/A) 29 Apr  
POST: Cadre (4 oz/A) + crop oil (1 qt/A) 19 Jun
  6. Insecticides: Acephate 755 (0.85 lb/A) on 31 May
  7. Planting Info: Nontreated Tifguard,(94% germination) 6 seed/ft (2.5" deep) with in furrow treatments on 6 May.
  8. Harvest Dates: Dug – 10 Oct Picked – 15 Oct

E: SUMMARY: Differences were not as evident among treatments due to the late-developing white mold epidemic, but useful data on spray volumes and timings were obtained.

<b>Proline Volume and Banding Test, 2013</b>										
<b>Blackshank, Irr/ Non Irr field</b>										
<b>Treatment</b>	<b>App's</b>	<b>Pattern</b>	<b>Rate/A</b>	<b>WM<sup>1</sup></b>			<b>LS<sup>2</sup></b>		<b>TSWV<sup>3</sup></b>	<b>Yield</b>
				<b>16-Jul</b>	<b>18-Aug</b>	<b>Harvest</b>	<b>16-Jul</b>	<b>18-Aug</b>	<b>16-Aug</b>	<b>lb/A</b>
1. Nontreated				0.0	7.5	17.4	0.4	2.2	7.4	3780
2. Proline	30 DAP	Band, 40 GPA*	5.7 fl oz	0.0	5.0	19.1	0.1	2.0	3.1	4357
3. Proline	30 DAP	Band, 20 GPA**	5.7 fl oz	0.0	5.4	20.0	0.1	2.0	6.3	4195
4. roline	30 DAP	Band, 10 GPA***	5.7 fl oz	0.0	8.2	20.9	0.0	2.1	3.7	4563
5.Proline	30 DAP	B' cast, 40 GPA*	5.7 fl oz	0.4	2.5	14.3	0.1	2.1	4.0	4631
6.Proline	30 DAP	B' cast, 20 GPA**	5.7 fl oz	0.0	4.6	14.6	0.2	2.1	6.0	4169
7.Proline	30 DAP	B' cast, 10 GPA***	5.7 fl oz	0.0	7.9	9.4	0.1	2.0	7.4	4211
<b>LSD (p &lt;0.05)</b>				n.s.	4.8	6.8	0.11	n.s.	4.3	n.s.
*=Early Emergence sprays applied with a single 8010 nozzle per row applying a total volume of 40 GPA, either in a band the width of the plant (Trt#2), or broadcast (Trt#5) **=Early Emergence sprays applied with a single 8003 nozzle per row applying a total volume of 20 GPA, either in a band the width of the plant (Trt#3), or broadcast (Trt#6) ***=Early Emergence sprays applied with a one 8002 nozzle per row applying a total volume of 10 GPA, either in a band the width of the plant (Trt#4), or broadcast (Trt#7) ****cover sprays 4-7 (Bravo only) applied to this test										
<b>Planting Date: May 24, 2013</b>										
WM <sup>1</sup> =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.										
LS <sup>2</sup> =Florida 1-10 scale where 1=no disease and 10=dead plant.										
TSWV <sup>3</sup> =Percent row feet infected based on disease loci (up to 12" of linear row) per plot.										

## PROLINE IN FURROW EARLY EMERGENCE TEST I

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental peanut fungicides when applied in various ways.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with seven replicates.
  2. One two-row bed (25ft x 6ft) 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.
  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, 24 Jul, 7 Aug, 23 Aug, 4 Sept, and 16 Sept. No sprays for treatments 1 and 2. 30 DAP was applied.
  2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Blackshank Farm, Tifton, GA 31794
  2. **Crop History:** Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows 26 Apr. Cultivated 27 Jun.
  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 (1.5 pt/A) + Dual Magnum (1.25 pt/A) 29 Apr.  
POST: Cadre (4 oz/A) + crop oil (1 qt/A) 19 Jun.
  6. **Insecticides:** Acephate 755 (0.7 lb/A) 17 Jun.
  7. **Planting Info:** Tifguard, 6 seed/ft (1.5" deep) 24 May.
  8. **Harvest Dates:** Dug - 10 Oct Picked -15 Oct
- E. **SUMMARY:** This trial gave very good data on early season fungicide use patterns.



Proline In Furrow-Early Emergence Test I, 2013															
Blackshank Farm, Irr/ Non Field															
Treatments	App's	Rate	Plant/ft <sup>1</sup>			% Dead Plants <sup>2</sup>			WM <sup>3</sup>			LS <sup>4</sup>		TSWV <sup>5</sup>	Yield
			7-Jun	14-Jun	21-Jun	7-Jun	14-Jun	21-Jun	15-Jul	18-Aug	Harvest	15-Jul	18-Aug	16-Aug	lb/A
1. Nontreated			3.6	3.9	4.0	0.0	0.4	0.2	2.5	11.4	42.9	1.4	4.2	5.1	3269
2. Proline	30 DAP**	5.7 fl oz	3.4	3.7	4.0	0.0	0.1	0.0	0.0	6.8	29.7	0.3	3.3	10.0	4045
3. Proline	In Furrow*	5.7 fl oz	3.1	3.5	3.7	0.0	0.0	0.0	0.0	10.4	30.3	0.6	3.8	8.9	3543
4. Convoy	3 & 5	26 fl oz	3.3	3.8	4.0	0.0	0.1	0.4	0.4	3.2	23.4	0.8	4.0	8.9	3912
5. Proline Convoy	30 DAP** 3 & 5	5.7 fl oz 26 fl oz	3.4	3.8	4.1	0.0	0.1	0.0	0.0	3.2	11.7	0.2	3.5	7.1	4933
6. Proline Convoy	In Furrow* 3 & 5	5.7 fl oz 26 fl oz	2.9	3.6	4.0	0.0	0.0	0.1	0.4	2.5	16.6	0.5	3.9	7.7	4086
<b>LSD (p &lt;0.05)</b>			0.3	0.3	0.3	n.s.	0.3	0.3	0.9	4.4	9.4	0.3	0.4	n.s.	539
* = In furrow applications applied in 3.72 GPA and mixed in 2 L volume. (TP 80015E flat fan nozzle w/ 100 mesh t-ball check valve at 22 psi).															
** = 30 DAP 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.															
*** = All plots will be sprayed with Bravo, app's 3-7															
<b>Planting Date: May 24, 2013</b>															
Plants/ft <sup>1</sup> = Stand count is the number of emerged plants per foot of row on 7 Jun, 14 Jun, and 21 Jun.															
% Dead Plants <sup>2</sup> = The % of emerged plants that was dead or dying per plot on 7 Jun, 14 Jun and 21 Jun.															
WM <sup>3</sup> = Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.															
LS <sup>4</sup> = Florida 1-10 scale where 1=no disease and 10=dead plant.															
TSWV <sup>5</sup> = Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.															

EVALUATION OF VARIOUS CULTIVARS AND FUNGICIDES FOR THE CONTROL OF SOILBORNE PEANUT DISEASES

- A. PURPOSE: To evaluate the comparative efficacy of different levels of input for white mold on GA-06G and GA-12Y peanuts.
- B. EXPERIMENTAL DESIGN:
1. Split plot with whole plots being cultivars and sub-plots were fungicide treatments with four replicates.
  2. One two-row bed (25ft x 6ft) 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-12Y
- 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. Cover spray treatments were applied on 27 Jun, 11 Jul, 24 Jul, 6 Aug, 22 Aug, 4 Sept and 16 Sept. 30 DAP was applied on 25 Jun.
- D. ADDITIONAL INFORMATION:
1. Location: Blackshank Farm, Tifton, GA 31794
  2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on 26Apr. Cultivated 21 Jun.
  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 (1.5 pt/A) + Dual Magnum (1.25 pt/A) 29 Apr  
POST: Cadre (4 oz/A) + crop oil (1 qt/A) on 19 Jun.
  6. Insecticides: Acephate 755 (1 lb/A) 17 Jun.
  7. Planting Info: GA-06G and GA-12Y, 6 seed/ft (1.5" deep) 24 May
  8. Harvest Dates: Dug-10 Oct Picked-15 Oct

E: SUMMARY: This trial gave very good data on fungicide programs and the relative susceptibility of the cultivars evaluated.

CULTIVAR X FUNGICIDE PROGRAMS, 2013														
BLACKSHANK FARM, IRR/NON FIELD														
Treatments	App's	Rate/A	GA-06G					GA-12Y						
			TSWV <sup>1</sup>		Leaf Spot <sup>2</sup>		WM <sup>3</sup>	Yield	TSWV <sup>1</sup>		Leaf Spot <sup>2</sup>		WM <sup>3</sup>	Yield
			16-Aug	13-Sep	9-Oct	10-Oct	lb/A	16-Aug	13-Sep	9-Oct	10-Oct	lbA		
1. Bravo WS	1 - 7	1.5 pt	10.0	3.3	5.0	27.0	3674	3.5	3.4	4.7	7.5	5256		
2. Proliine	30 DAP	5.7 fl oz**	10.5	3.5	4.8	27.0	3688	5.5	3.7	4.6	12.5	5068		
Bravo WS	3 - 7	1.5 pt												
3. Bravo WS	1, 2, 6, 7	1.5 pt	11.0	2.7	4.5	13.5	4450	3.5	2.9	4.2	7.5	5242		
Bravo WS	3 - 5	1.5 pt												
+ Orius 3.6F		7.2 fl oz												
4. Bravo WS	1, 2, 6, 7	1.5 pt	9.0	3.1	4.5	20.5	4741	1.0	3.6	4.2	8.0	5256		
Fontelis	3 - 5	16.0 fl oz												
5. Proline	30 DAP	5.7 fl oz**	8.5	2.6	4.3	9.5	5046	5.0	3.0	4.3	3.5	5554		
Fontelis	3 - 5	16.0 fl oz												
Bravo WS	6 & 7	1.5 pt												
6. Bravo WS	1, 2, 6, 7	1.5 pt	7.0	3.1	4.3	8.0	4690	3.5	3.1	4.2	4.0	5169		
Fontelis	3 - 5	16.0 fl oz												
+ Orius 3.6F	3 - 5	7.2 fl oz												
7. Proline	30 DAP	5.7 fl oz**	12.5	2.6	4.1	7.0	4828	7.0	2.9	4.1	3.5	5539		
Fontelis	3 - 5	16.0 fl oz												
+ Orius 3.6F	3 - 5	7.2 fl oz												
Bravo WS	6 & 7	1.5 pt												
<b>LSD(P&lt;0.05)</b>			n.s.	0.7	0.3	9.2	923	3.1	0.5	0.3	4.1	311		

<sup>1&3</sup>Percent of row feet infected based on 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.

\*\*30 DAP applied in a narrow band the width of the plant directly over the row with a single 8003 nozzle in a total spray volume of **20 GPA**.

<b>DAILY RAINFALL AND IRRIGATION, 2013</b>							
<b>Blackshank Farm, Irr/Non Field</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					0.2		
2		0.4	1.2	0.5		0.2	
3	0.8	0.1					
4	0.5		2.0	1.8			
5		0.7					
6			1.5				
7							0.6
8				1.1			
9			1.5				
10	0.1			0.9			
11				0.1		0.1	
12	0.1						
13				0.2			
14	1.7				0.3		
15				0.1	0.6		
16				0.3		1.5	
17					1.8		
19	1.0	0.7	0.4		0.9		
20				1.3	2.0		
21		0.3			0.1		
22		0.7			2.5	1.0	
23			0.7	0.1			
24	0.5		0.8	0.1		0.2	
28				2.1			
29	0.5		3.7				
<b>TOTAL</b>	5.2	2.9	11.8	8.5	8.4	3.0	0.6
<b>IRRIGATION</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>
5					0.8		
9						0.5	
13						0.9	
21		1.0					
<b>TOTAL</b>	0.0	1.0	0.0	0.0	0.8	1.4	0.0
<b>Rain &amp; Irr</b>	5.2	3.9	11.8	8.5	9.2	4.4	0.6

## EVALUATION OF CULTIVAR SUSCEPTIBILITY TO WHITE MOLD

- A. **PURPOSE:** To evaluate the comparative 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 (15ft x 6ft) 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. Six or more 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) for leaf spot on 17 Jun, 16 Jul, 30 Jul, 13 Aug, and 4 Sept.
- D. **ADDITIONAL INFORMATION:**
1. Location: Blackshank Farm, Banana Field, Tifton, GA 31794
  2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on
  4. Soil Fertility: pH - 6.5 P - 24 K - 36 Ca - 365 Mg - 54  
Soil type: Tifton loamy sand, 2 - 5 % slope
  5. Herbicides: PPI: Sonalan (1.5 pt/A) + Dual Magnum (1.25 pt//A) on 14 May.  
POST:
  6. Insecticides: Acephate 755 (0.7 lb/A) on 17 Jul
  7. Planting Info: Multiple Varieties, 6 seed/ft on
  8. Harvest Dates: Dug - 17 Oct Picked – 28 Oct
- E: **SUMMARY:** This test produced useful comparisons of the disease susceptibility of new genotypes and existing cultivars.

**Multi-State Disease Evaluations, 2013**

**Blackshank Farm, Banana Field**

<b>Entries</b>	<b>Percent<sup>2</sup></b>	<b>White Mold<sup>3</sup></b>		<b>Leaf Spot<sup>4</sup></b>	<b>Yield (lb/A)</b>	<b>Gall<sup>5</sup></b>	<b>Egg<sup>6</sup></b>	<b>Vigor<sup>7</sup></b>	<b>N</b>
	<b>Zeroes</b>	<b>No Zeroes</b>	<b>All</b>	<b>8-Oct</b>					
1-GA01	16.7	28.5	24.2	6.2	4550	0.8	0.0	2.4	5
2-GA02	12.5	35.1	31.3	6.8	3420	0.4	0.0	3.0	5
3-GA03	20.8	29.9	23.2	7.1	4017	0.0	0.0	3.3	3
4-GA04	8.3	39.5	36.0	6.4	4114	1.0	1.0	2.8	5
5-GA05	50.0	22.4	11.5	6.8	5389	3.2	3.0	3.2	5
6-GA06	12.5	22.7	20.0	7.0	3957	1.2	1.0	2.4	5
7-GA07	45.8	22.6	11.9	7.1	4465	3.6	2.6	2.6	5
8-GA08	12.5	36.9	31.7	7.1	4417	1.8	1.2	3.6	5
9-GA09	50.0	13.1	7.5	5.9	5191	3.0	2.4	3.8	5
10-GA10	45.8	39.6	21.7	6.0	4211	3.0	2.6	3.2	5
11-GA11	33.3	26.5	17.5	5.8	4852	2.8	2.4	3.4	5
12-GA12	50.0	19.8	12.1	4.8	5324	2.0	1.4	2.6	5
13-TD1	54.2	18.4	9.8	5.0	5372	3.2	2.8	4.0	5
14-TD2	20.8	24.9	21.9	5.3	4913	2.8	2.0	4.3	4
15-TD3	25.0	32.2	24.0	5.2	4114	3.3	2.8	3.5	4
16-TD4	37.5	17.9	12.3	5.4	5130	2.8	2.0	4.4	5
17-TD5	54.2	13.5	7.3	4.6	5106	2.8	2.4	3.6	5
18-TD6	58.3	13.5	5.8	5.5	4852	1.8	1.8	4.8	5
19-TD7	20.8	24.0	18.8	6.8	3691	2.2	2.0	4.4	5
20-TD8	45.8	21.7	11.3	5.8	5082	3.0	2.3	4.0	4
21-TD9	33.3	29.7	16.8	5.1	5276	2.2	1.6	3.8	5

**Multi-State Disease Evaluations, 2013**

**Blackshank Farm, Banana Field**

Entries	Percent <sup>2</sup>	White Mold <sup>3</sup>		Leaf Spot <sup>4</sup>	Yield (lb/A)	Gall <sup>5</sup>	Egg <sup>6</sup>	Vigor <sup>7</sup>	N
	Zeroes	No Zeroes	All	8-Oct					
22-TD10	50.0	18.9	11.4	5.0	4259	2.0	1.8	4.4	5
23-FL1	20.8	45.2	38.3	8.6	3642	2.3	2.3	4.0	3
24-FL2	8.3	39.9	38.3	8.1	3449	2.2	1.4	4.2	5
25-FL3	12.5	43.9	38.3	7.7	4453	1.6	1.2	4.4	5
26-FL4	4.2	52.5	50.2	7.9	2989	2.4	2.0	3.8	5
27-FL5	0.0	61.4	59.0	8.8	2166	3.4	2.6	3.8	5
28-GA-09B	4.2	50.4	41.2	7.8	3243	3.3	2.5	3.0	4
29-FLORIDA 07	29.2	24.6	17.5	6.5	4453	2.0	1.8	3.3	4
30-BAILEY	50.0	15.5	7.5	6.6	4102	3.0	2.8	3.8	4
31-GEORGIA GREENER	29.2	28.4	19.8	7.4	4296	2.7	2.7	3.7	3
32-GA-06G	4.2	44.0	42.7	7.6	3739	3.0	3.0	3.0	4
33-TIFGUARD	29.2	27.8	19.4	7.1	3884	0.6	0.4	3.2	5
34-GA-07W	20.8	35.8	30.4	7.7	3812	1.5	1.0	2.5	2
35-GEORGIA GREEN	0.0	51.8	52.6	7.8	2844	3.6	3.0	2.6	5
36-GA-12Y	62.5	16.7	6.0	6.1	6098	3.0	2.6	3.6	5
37-GA-10T	37.5	20.9	14.5	6.5	3884	4.0	3.0	5.0	2
38-FLORUN 107	12.5	38.7	35.2	6.8	3945	3.0	3.6	2.4	5
39-TIFRUNNER 727	20.8	28.1	22.3	6.1	5009	3.0	2.5	3.8	4
40-SUGG	29.2	30.1	19.6	7.3	3582	4.0	3.6	3.8	5
<b>MSD (P&lt;0.05)</b>	51.4	36.0	32.4	0.7	2400	1.6	1.5	1.0	?

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

<sup>2</sup>Percent of plants inoculated with *S. rolfisii* that had no disease.

<sup>3</sup>Average length of the white mold "hits" (cm) calculated with and without "0's".

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

<sup>5 & 6</sup>Root knot nematode rating of galls and egg mass indices: 0=0; 1=1-2; 2=3-10; 4=31-100; 5=>100.

<sup>7</sup>Vigor Index: 1=very small; 2=small; 3=average, 4=large; 5=very large.

N=# of reps

<b>DAILY RAINFALL AND IRRIGATION, 2013</b>							
<b>Blackshank Farm, Banana Field</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					0.2		
2		0.4	1.2	0.5		0.2	
3	0.8	0.1					
4	0.5		2.0	1.8			
5		0.7					
6			1.5				
7							0.6
8				1.1			
9			1.5				
10	0.1			0.9			
11				0.1		0.1	
12	0.1						
13				0.2			
14	1.7				0.3		
15				0.1	0.6		
16				0.3		1.5	
17					1.8		
19	1.0	0.7	0.4		0.9		
20				1.3	2.0		
21		0.3			0.1		
22		0.7			2.5	1.0	
23			0.7	0.1			
24	0.5		0.8	0.1		0.2	
28				2.1			
29	0.5		3.7				
<b>TOTAL</b>	<b>5.2</b>	<b>2.9</b>	<b>11.8</b>	<b>8.5</b>	<b>8.4</b>	<b>3.0</b>	<b>0.6</b>
<b>IRRIGATION</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	0.5	
6					0.5		
7					0.5		
9						0.5	
10						0.5	
11							0.5
12					0.5		
13						0.9	
21		1.0					
30					0.5		
<b>TOTAL</b>	<b>0.0</b>	<b>1.0</b>	<b>0.0</b>	<b>0.0</b>	<b>2.8</b>	<b>2.4</b>	<b>1.3</b>
<b>Rain &amp; Irr</b>	<b>5.2</b>	<b>3.9</b>	<b>11.8</b>	<b>8.5</b>	<b>11.2</b>	<b>5.4</b>	<b>1.9</b>



EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT  
SOILBORNE DISEASES

A. PURPOSE: To evaluate the efficacy of experimental and labeled fungicides for the control of soilborne and foliar diseases.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25ft x 6ft) 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: Spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.
2. Belt-pack sprays were applied on treatments (1-7) on 4 June, 18 June, 1 Jul, 15 July, 29 Jul, 12 August, and 28 Aug. 30 DAP was applied on 29 May.

D. ADDITIONAL INFORMATION:

1. Location: Lang Farm, South Field CPES Tifton, GA 31794
2. Crop History: Peanut – 2012, Peanut – 2011, Peanut – 2010
3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on
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 (1.5 pt/A) + Dual Magnum (1.25 pt/A) 29 Apr.  
POST: None
6. Insecticides: Acephate 755, (0.85 lb/A) for thrips on 31 May.
7. Planting Info: Tifguard, 6 seed/ft (1.5” deep) on 1 May
8. Harvest Dates: Dug – 8 Oct Picked – 15 Oct

E: SUMMARY: Yields were low and treatment differences were not as well defined due to very wet conditions.

MANA TEST, 2013								
LANG FARM, SOUTH FIELD								
Treatments	App's	Rate/A	TSWV <sup>1</sup>		Leaf Spot <sup>2</sup>		WM <sup>3</sup>	YIELD
			25-Jul	9-Sep	7-Oct	8-Oct	lb/A	
1. Nontreated			1.2	7.2	8.7	93.6	1022	
2. Equus	1, 2, 7	1.5 pt	2.0	4.1	7.0	66.8	1841	
MCW 710 SC	3 - 6	8.0 oz						
3. Equus	1, 2, 7	1.5 pt	2.4	4.1	6.6	59.6	2143	
MCW 710 SC	3 - 6	10.0 oz						
4. Equus	1, 2, 7	1.5 pt	4.8	4.0	7.0	61.2	2364	
MCW 710 SC	3 - 6	12.0 oz						
5. Equus	1, 2, 7	1.5 pt	3.6	3.6	6.6	53.2	2544	
MCW 710 SC	3 - 6	15.5 oz						
6. Equus	1, 2, 7	1.5 pt	2.8	2.8	5.5	67.6	2120	
Provost	3 - 6	8.0 oz						
7. Equus	1, 2, 4, 6, 7	1.5 pt	1.2	4.6	7.2	64.8	1783	
Artisan	3 & 5	26.0 fl oz						
8. Equus	1 - 7	1.5 pt	4.4	5.4	7.0	73.2	1940	
9. Proline	30 DAP*	5.7 fl oz	1.2	3.7	7.0	51.6	2422	
Equus	1, 2, 7	1.5 pt						
MCW 710 SC	3 - 6	8.0 oz						
10. Proline	30 DAP*	5.7 fl oz	0.8	3.2	6.6	46.4	2840	
Equus	1, 2, 7	1.5 pt						
MCW 710 SC	3 - 6	15.5 oz						
<b>LSD(P&lt;0.05)</b>			3.3	0.5	0.7	14.5	425	
<b>* Band the width of the plant and applied in 20 GPA (8003 nozzle).</b>								
<sup>1&amp;3</sup> Percent of row feet infected based on disease loci (up to 12" linear row) per plot.								
<sup>2</sup> Florida 1 - 10 scale where 1=no disease and 10=dead plant.								

## EVALUATION OF FLUTOLANIL APPLIED AT VARIOUS TIMINGS FOR THE CONTROL OF PEANUT SOILBORNE DISEASES (NICHINO TEST II)

A. PURPOSE: To evaluate the efficacy of Convoy applied at different timings for southern stem rot (white mold).

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (25ft x 6ft) 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.
2. Cover sprays of Chlorothalonil (1.5 pt/A) were applied on 4 Jun, 18 Jun, 16 Jul, 30 Jul, 13 Aug, 28 Aug and Eminent (7.2 fl oz/A) was on add on 13 Jul. 40 DAP was applied on 13 Jun, 60 DAP was applied on 28 Jun, and 90 DAP was applied on 31 Jul.

D. ADDITIONAL INFORMATION:

1. Location: Lang Farm, South Field CPES Tifton, GA 31794
2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on
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 (1.5 pt/A) + Dual Magnum (1.25 pt/A) on 29 Apr.  
POST: None
6. Insecticides: Acephate 755, (0.85 lb/A) for thrips on 31 May.
7. Planting Info: Tifguard, 6 seed/ft (1.5" deep) on 1 May
8. Harvest Dates: Dug – 8 Oct Picked – 15 Oct

E: SUMMARY: Overall yields were very low and differences were not as evident among treatments as would be expected. The extremely wet conditions no doubt contributed to this, but the results obtained were not expected and not fully understood at this time.

NICHINA TEST II, 2013					
LANG FARM, SOUTH FIELD					
			TSWV <sup>1</sup>	WM <sup>2</sup>	Yield
Treatments	App's	Rate/A	25-Jul	8-Oct	lbA
1. Nontreated			1.0	70.0	2425
2. Convoy	60 & 90 DAP	32 fl oz	1.0	56.5	2701
3. Convoy	<b>40 DAP*</b> <b>(12" Band)</b>	<b>48 fl oz</b>	1.0	71.0	2164
4. Convoy	<b>40 DAP*</b> <b>(12" Band)</b>	<b>64 fl oz</b>	0.8	66.0	2309
5. Convoy	<b>60 DAP*</b> <b>(12" Band)</b>	<b>48 fl oz</b>	0.5	58.5	2686
6. Convoy	<b>60 DAP*</b> <b>(12" Band)</b>	<b>64 fl oz</b>	0.5	66.0	2425
7. Convoy	40 DAP* (B'cast)	48 fl oz	1.5	76.0	1938
8. Convoy	40 DAP* (B'cast)	64 fl oz	1.3	73.0	1938
9. Convoy	60 DAP* (B'cast)	48 fl oz	1.8	58.0	2679
10. Convoy	60 DAP* (B'cast)	64 fl oz	1.0	66.0	2694
<b>LSD (P&lt;0.05)</b>			n.s.	15.3	517
Bravo cover spray (1 - 7) were sprayed in all plots.					
*40 & 60 DAP app's in bold are in a <u>12 inch band and applied in a 20 GPA (8003 nozzle).</u>					
The other applications are <u>broadcast with the same boom.</u>					
<sup>1&amp;3</sup> Percent of row feet infected based on disease loci (up to 12" linear row) per plot.					

## EVALUATION OF VARIOUS FUNGICIDES FROM SYNGENTA FOR CONTROL OF FOLIAR AND SOILBORNE PEANUT DISEASES (SYNGENTA TEST I)

A. PURPOSE: To evaluate the comparative efficacy of peanut fungicides.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (25ft x 6ft) 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, 92% germination

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. Sprays were applied on 4 Jun, (1.5 spray) on 11 Jun, 18 Jun, 1 Jul, 16 Jul, 30 Jul, 13 Aug, and 28 Aug. 21 DAP was applied on 23 May.

D. ADDITIONAL INFORMATION:

1. Location: Lang Farm, South Field Tifton, GA 31794
2. Crop History: Peanut - 2012, Peanut - 2011, Peanut – 2010
3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on
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 (1.5 pt/A) + Dual Magnum (1.25 pt/A), 29 April
6. Insecticides: Acephate 755 (0.85 lb/A) for thrips on 31 May
7. Planting Info: Tifguard, 6 seed/ft 1 May
8. Harvest Dates: Dug – 8 Oct Picked – 15 Oct

E. SUMMARY: Large differences in disease control and yield were found among treatments.

SYNGENTA TEST I, 2013								
LANG FARM, SOUTH FIELD								
Treatments	App's	Rate/A	TSWV <sup>1</sup>		Leaf Spot <sup>2</sup>		WM <sup>3</sup>	Yield
			23-Jul	20-Sep	7-Oct	8-Oct	lb/A	
1. Nontreated			4.0	6.3	8.2	94.5	1372	
2. Tilt/Bravo 4.3SE	1 & 2	1.5 pt	2.0	3.4	5.3	29.0	4029	
A18126 45WG	3 & 5	7.1 oz/A						
Bravo W'stik	4, 6, 7	1.5 pt						
3. Tilt/Bravo 4.3SE	1 & 2	1.5 pt	4.5	3.1	5.4	24.5	3557	
A18126 45WG	3 & 5	9.5 oz/A						
Bravo W'stik	4, 6, 7	1.5 pt						
4. Tilt/Bravo 4.3SE	2	1.5 pt	2.5	3.5	5.8	40.0	3514	
A18126 45WG	1, 3, 5	7.1 oz/A						
Bravo W'stik	4, 6, 7	1.5 pt						
5. A18993	1.5	18.3 fl oz	2.0	3.0	4.9	26.5	3652	
A18126 45WG	3 & 5	9.5 oz/A						
Bravo W'stik	4, 6, 7	1.5 pt						
6. A18126	21 DAP**	7.3 oz	0.5	3.1	4.3	17.5	4407	
Tilt/Bravo 4.3SE	1.5	1.5 pt						
A18993	3 & 5	18.3 fl oz						
Bravo W'stik	4, 6, 7	1.5 pt						
7. A18126	21 DAP**	7.3 oz	2.0	3.2	4.8	30.0	3855	
Tilt/Bravo 4.3SE	1.5	1.5 pt						
A18126	3 & 5	9.5 oz						
Bravo W'stik	4, 6, 7	1.5 pt						
8. Headline	1.5	9.0 fl oz	4.5	2.7	3.5	19.5	4559	
A18993	3 & 5	18.3 fl oz						
Bravo W'stik	4, 6, 7	1.5 pt						
9. A18126	21 DAP**	7.3 oz	1.5	3.0	3.7	22.5	3906	
Headline	1.5	9.0 fl oz						
A18993	3 & 5	18.3 fl oz						
Bravo W'stik	4, 6, 7	1.5 pt						
10. Tilt/Bravo 4.3SE	1 & 2	1.5 pt	0.5	3.1	4.2	40.5	3507	
Abound	3 & 5	18.0 fl oz						
+ Alto		5.5 fl oz						
Bravo W'stik	4, 6, 7	1.5 pt						
11. Tilt/Bravo 4.3SE	1 & 2	1.5 pt	0.5	3.1	5.1	45.5	3042	
Provost 3.6SC	3 - 6	8.0 fl oz						
Bravo W'stik	7	1.5 pt						
12. Tilt/Bravo 4.3SE	1 & 2	1.5 pt	3.5	3.2	5.0	26.0	3790	
Fontelis	3 - 5	16.0 fl oz						
Bravo W'stik	6, 7	1.5 pt						
<b>LSD(P&lt;0.05)</b>			3.7	0.3	1.1	13.3	959	

<sup>1&3</sup>Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

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

**\*\*21 DAP sprays applied in a 6" band at 20 GPA and mixed in a 2 L volume.**

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

- A. **PURPOSE:** To evaluate the comparative effects of various spray adjuvants on the efficacy of fungicides for the control of southern stem rot and leaf spot.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
  2. One two-row bed (25ft x 6ft) 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 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 4 Jun, 18 Jul, 2 Jul, 16 Jul, 30 Jul, 13 Aug and 27 Aug. This test was not coversprayed.
- D. **ADDITIONAL INFORMATION:**
1. Location: Land Farm, South Field, Tifton, GA 31794
  2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on 1 May.
  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 (1.5 pt/A) + Dual Magnum (1.25 pt/A) 29Apr.
  6. Insecticides: Acephate 755 (0.85 lb/A) for thrips on 31 May
  7. Planting Info: Tifguard, 6 seed/ft (1.5” deep) on 31 May
  8. Harvest Dates: Dug - 8 Oct Picked – 15 Oct
- E. **SUMMARY:** Differences in disease control and yield were identified.

LOVELAND TEST, 2013								
LANG FARM, SOUTH FIELD								
Treatments	App's	Rate/A	TSWV <sup>1</sup>	Leaf Spot <sup>2</sup>			WM <sup>3</sup>	Yield
			1-Aug	20-Sep	7-Oct	8-Oct	lb/A	
1. Bravo	1, 6, 7	1.5 pt	4.0	3.5	6.8	65.5	2251	
Monsoon 3.6F	2 - 5	7.2 fl oz						
+ LI-1079		0.25%						
+ Bravo		1.0 pt						
2. Bravo	1 - 7	1.5 pt	2.5	3.8	6.8	55.5	2715	
3. Bravo	1, 2, 4, 6, 7	1.5 pt	3.5	3.3	5.2	40.0	3768	
LI-6365	3 & 5	18.5 fl oz						
+ LI-6262		0.25%						
4. Bravo	1, 2, 4, 6, 7	1.5 pt	1.0	3.4	5.4	40.0	3231	
Abound	3 & 5	18.5 fl oz						
+ LI-6262		0.25%						
5. Bravo	1, 2, 4, 6, 7	1.5 pt	0.5	3.4	5.4	39.5	3920	
LI-6365	3 & 5	18.5 fl oz						
+ LI-1079		0.25%						
6. Bravo	1, 2, 4, 6, 7	1.5 pt	1.0	3.5	6.1	43.5	3013	
Abound	3 & 5	18.5 fl oz						
+ LI-1079		0.25%						
7. Bravo	1 & 2	1.5 pt	1.5	3.0	4.8	36.5	3107	
LI-6365	3 & 5	18.5 fl oz						
+ LI-1079		0.25%						
LI-6337	4, 6, 7	1.25 pt						
8. Bravo	1 & 2	1.5 pt	1.5	2.8	4.3	35.0	3274	
Abound	3 & 5	18.5 fl oz						
+ LI-1079		0.25%						
LI-6337	4, 6, 7	1.25 pt						
9. Bravo	1, 2, 3, 5	1.5n pt	2.5	3.1	4.1	53.5	2686	
LI-6337	4, 6, 7	1.25n pt						
+ LI-1079		0.25%						
10. Bravo	1	1.5 pt	2.5	3.6	6.7	49.0	2534	
+ LI-EXP # 1		2.0 pt						
Monsoon	2 - 4	7.3 fl oz						
+ LI-1079		0.25%						
+ LI-EXP # 1		2.0 pt						
Monsoon	5	7.3 fl oz						
+ LI-1079		0.25%						
Bravo	6 & 7	1.5 pt						



LOVELAND TEST, 2013							
LANG FARM, SOUTH FIELD							
Treatments	App's	Rate/A	TSWV <sup>1</sup>			WM <sup>3</sup>	Yield
			1-Aug	20-Sep	7-Oct	8-Oct	lb/A
11. Bravo	1	1.5 pt	2.5	3.9	7.2	70.5	2156
+ LI-EXP # 2		2.0 pt					
Monsson	1 - 4	7.3 fl oz					
+ LI-1079		0.25%					
+ LI-EXP # 2		2.0 pt					
Monsoon	5	7.3 fl oz					
+ LI-1079		0.25%					
Bravo	6, 7	1.5 pt					
12. Bravo	1	1.5 pt	1.0	4.0	6.8	53.5	2331
+ LI-EXP # 3		2.0 pt					
Monsson	2 - 4	7.3 fl oz					
+ LI-1079		0.25%					
+ LI-EXP # 3		2.0 pt					
Monsoon	5	7.3 fl oz					
+ LI-1079		0.25%					
Bravo	6, 7	1.5 pt					
13. Bravo	1, 6, 7	1.5 pt	1.5	4.5	7.1	72.0	2570
Monsoon	2 - 5	7.3 fl oz					
+ LI-1079		0.25%					
14. EXPT-CC38	1 - 7	1.5 pt	0.5	4.3	7.3	68.5	2185
15. Bravo	1, 2, 7	1.5 pt	0.5	4.1	6.8	49.5	2948
Bravo	3 - 6	1.5 pt					
+ Monsoon		7.2 fl oz					
16. EXPT-CC38	1, 2, 7	1.5 pt	4.0	4.1	7.2	63.0	2222
EXPT-cc38	3 - 6	1.5 pt					
+ Monsoon		7.2 fl oz					
17. Nontreated			2.0	7.5	8.8	96.0	1096
<b>LSD (P&lt;0.05)</b>			2.9	0.6	0.8	19.6	756

<sup>1 & 3</sup>Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

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

EVALUATION OF PROLINE APPLIED EARLY SEASON  
(Proline In Furrow Early Emergence Test I, 2013)

- A. **PURPOSE:** To evaluate the comparative efficacy of Proline applied early emergence to peanut in conjunction with Convoy.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25ft x 6ft) 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. In furrow applications applied in 3.72 GPA and mixed in 2 L volume. (TP 800 15E flat fan nozzle w/100 mesh T-ball check valve at 22 psi) on at plant 1 May. 30 DAP 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 on 29 May. Treatments (3-7) were applied on 2 Jul, 16 Jul, 30 Jul, 13 Aug, and 28 Aug.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Lang Farm, South Field. Tifton, GA 31794
  2. **Crop History:** Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. **Land Preparation:** Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on 1 May.
  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 (1.5 pt/A) + Dual Magnum (1.25 pt/A) 29 Apr  
POST: None
  6. **Insecticides:** Acephate 755 (0.85 lb/A) for thrips on 31 May
  7. **Planting Info:** Tifguard, 6 seed/ft (1.5" deep) on 1 May
  8. **Harvest Dates:** Dug - 8 Oct Picked - 15 Oct

E: SUMMARY: Differences were found in disease control and yield related to use of early and mid-season fungicides.

Proline In Furrow-Early Emergence Test I, 2013											
Lang Farm, South Field											
Treatments	App's	Rate	Plant/ft <sup>1</sup>			% Dead Plants <sup>2</sup>			LS <sup>3</sup>		TSWV <sup>4</sup>
			15-May	22-May	29-May	15-May	22-May	29-May	15-Jul	23-Aug	1-Aug
1. Nontreated			2.6	3.8	4.2	0.0	0.0	0.0	3.8	4.4	3.0
2. Proline	30 DAP**	5.7 fl oz	2.5	3.8	4.4	0.1	0.0	0.1	3.2	4.3	1.0
3. Proline	In Furrow*	5.7 fl oz	1.8	3.9	4.2	0.0	0.0	0.1	3.3	4.3	1.3
4. Convoy	3 & 5	26 fl oz	2.4	3.9	4.3	0.0	0.0	0.0	3.6	4.2	2.3
5. Proline	30 DAP**	5.7 fl oz	2.4	4.1	4.2	0.0	0.0	0.1	3.1	4.2	1.0
Convoy	3 & 5	26 fl oz									
6. Proline	In Furrow*	5.7 fl oz	1.8	3.9	4.0	0.0	0.0	0.0	3.3	4.3	2.7
Convoy	3 & 5	26 fl oz									
<b>LSD (p &lt;0.05)</b>			0.4	n.s.	n.s.	n.s.	n.s.	n.s.	0.2	0.3	1.8
Treatments	App's	Rate	WM <sup>5</sup>					Yield			
			27-Jun	15-Jul	7-Aug	23-Aug	Harvest	lb/A			
1. Nontreated			1.7	1.7	2.7	7.0	19.8	2623			
2. Proline	30 DAP**	5.7 fl oz	1.0	2.3	1.3	6.3	12.3	2856			
3. Proline	In Furrow*	5.7 fl oz	1.0	3.3	0.7	8.3	12.3	2967			
4. Convoy	3 & 5	26 fl oz	0.0	0.3	0.0	1.3	12.9	2406			
5. Proline	30 DAP**	5.7 fl oz	0.3	0.3	0.0	0.0	9.5	3214			
Convoy	3 & 5	26 fl oz									
6. Proline	In Furrow*	5.7 fl oz	0.7	0.3	0.3	1.3	13.3	2696			
Convoy	3 & 5	26 fl oz									
<b>LSD (p &lt;0.05)</b>			1.4	2.8	1.8	4.1	3.8	464			

\*= In furrow applications applied in 3.72 GPA and mixed in 2 L volume. (TP 80015E flat fan nozzle w/ 100 mesh t-ball check valve at 22 psi)  
 \*\*=30 DAP 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  
 \*\*\*=All plots will be sprayed with Bravo, app's 3-7

**Planting Date: May 1, 2013**  
 Plants/ft<sup>1</sup>=Stand count is the number of emerged plants per foot of row on 15 May, 22 May, and 29 May.  
 % Dead Plants<sup>2</sup>=The % of emerged plants that was dead or dying per plot on 15 May, 22 May, and 29 May.  
 LS<sup>3</sup>=Florida 1-10 scale where 1=no disease and 10=dead plant.  
 TSWV<sup>4</sup>=Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.  
 WM<sup>5</sup>=Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

<b>DAILY RAINFALL AND IRRIGATION, 2013</b>							
<b>RAIN</b>		<b>Lang Farm, South Field</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				0.7	0.2		
2		0.5	1.5	0.2		0.2	
3	0.8	0.2		1.1			
4	0.1	0.4	3.1	0.3			
5	0.4			0.9			
6			1.5				
7			0.3	0.4	0.1		0.4
8			0.6				
9			0.7				
10				0.4			
11		0.1				0.5	
12	0.1			0.3			
13						0.1	
14	1.6				0.2		
15				0.1	0.6		
16				0.4	0.8	1.0	
17					2.0		
18		0.1			0.1		0.1
19	1.3	0.5	0.2		1.2		
20	0.1		0.1	0.6	1.5		
21		0.1			0.1	0.2	
22			0.7		1.8	0.9	0.1
23		0.7				0.1	
24	0.1		1.4	0.1			
25			0.3			0.2	
26				0.2			
28			0.7				
30			2.3				
<b>TOTAL</b>	<b>4.4</b>	<b>2.6</b>	<b>13.2</b>	<b>5.6</b>	<b>8.7</b>	<b>3.1</b>	<b>0.6</b>
<b>IRRIGATION</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>
5						0.5	
6					0.5		
10						0.5	
12					0.5		
14			0.6				
16		0.5					
17			0.6				
20			0.5				
28		0.6					
30		0.6					
<b>TOTAL</b>	<b>0.0</b>	<b>1.7</b>	<b>1.7</b>	<b>0.0</b>	<b>1.0</b>	<b>1.0</b>	<b>0.0</b>
<b>Rain &amp; Irr</b>	<b>4.4</b>	<b>4.3</b>	<b>15.0</b>	<b>5.8</b>	<b>9.7</b>	<b>4.1</b>	<b>0.6</b>

## EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT SEEDLING DISEASES (SYNGENTA SEED TRT TEST I)

- A. **PURPOSE:** To evaluate the comparative efficacy of experimental peanut seed treatments.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
  2. One two-row bed (25ft x 6ft) 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, 99% germination
- C. **APPLICATION OF TREATMENTS:**
1. Equipment: Cover sprays were applied by tractor.
  2. Cover sprays of Chlorothalonil 720 (1.5 pt/A) were applied on 7 Jun, 21 Jun, 8 Jul, 19 Jul, 2 Aug, 19 Aug, and 31 Aug. Convoy (64 fl oz/A) was applied for white mold control on 17 Jun and Convoy (32 fl oz/A) on 18 Jul.
- D. **ADDITIONAL INFORMATION:**
1. Location: Rigdon Farm, New Field Tifton, GA 31794
  2. Crop History: Peanut – 2012, Cotton – 2011, Peanut- 2010
  3. Land Preparation: Prior to turning, fertilizer was applied (3-9-18) broadcast (500 lb/A) on 1 Apr. Moldboard plowed and marked rows on 17 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 (1.5 pt /A) + Dual Magnum (1.25 pt/A)  
29 Apr  
POST: Cadre 70DF (4 oz/A) + crop oil (1 qt/A) 21 Jun
  6. Insecticides: Acephate 755 (0.85 lb/A) for thrips on 31 May
  7. Planting Info: GA-06G, 99% germination, 6 seed/ft (2.5" deep) 30 Apr
  8. Harvest Dates: Dug – 27 Sep Picked – 3 Oct
- E. **SUMMARY:** Differences in efficacy of seed treatments were found, but overall yields were low due to high levels of white mold.

**SYNGENTA SEED TRT TEST I, 2013**

**RIGDON FARM, NEW FIELD**

**GA-06G Test**

Treatments	Plants/ft <sup>1</sup>				% Dead Plants <sup>2</sup>			Plant Width <sup>3</sup>	TSWV <sup>4</sup>	WM <sup>5</sup>	YIELD
	14-May	21-May	29-May	30-Sep	14-May	21-May	28-May	28-May	22-Jul	26-Sep	lb/A
1. Cruiser 70WS	0.6	1.2	1.5	1.3	0.0	0.0	0.0	12.3	5.5	20.0	2752
2. Dynasty PD + Cruiser	1.3	2.7	2.9	2.6	0.0	0.0	0.4	13.6	5.0	48.0	2614
3. A16148 (1X) + Cruiser	1.1	2.3	2.2	1.7	0.0	0.0	0.0	13.7	4.5	32.0	2810
4. A16148 (2X) + Cruiser	1.0	2.6	2.5	2.3	0.0	0.0	0.2	13.4	4.5	42.5	2701
5. A16148 (4X) + Cruiser	1.1	2.4	2.4	2.1	0.0	0.0	0.0	13.6	3.5	43.5	2222
6. A16148 (1X) + Cruiser + Dynasty	1.1	2.7	2.5	2.4	0.0	0.0	0.0	13.8	4.0	37.5	2628
7. A16148 (2X) + Cruiser + Dynasty	1.0	2.6	2.8	2.5	0.0	0.0	0.0	13.8	3.5	47.0	2360
8. A16148 (4X) + Cruiser + Dynasty	1.0	2.3	2.8	2.5	0.0	0.0	0.3	14.2	5.5	50.0	2410
<b>LSD (P&lt;0.05)</b>	0.4	0.5	0.3	0.5	n.s.	n.s.	n.s.	1.1	n.s.	21.4	n.s.
<b>Planting Date: April 30, 2013</b>											
<sup>1</sup> Stand count is the number of emerged plants per foot of row on 14 May, 21 May and 29 May.											
<sup>2</sup> The % of emerged plants that was dead or dying per plot on 14 May, 21 May and 29 May.											
<sup>3</sup> Average plant width (measure in cm), mean of 6 plants per plot.											
<sup>4</sup> <sup>5</sup> Percent of row feet infected based on disease loci (up to 12" linear row) per plot.											

EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT SEEDLING DISEASES (SYNGENTA SEED TRT TEST II)

A. PURPOSE: To evaluate the comparative efficacy of experimental peanut seed treatments.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two- row bed (25ft x 6ft) 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, 92% germination

C. APPLICATION OF TREATMENTS:

1. Equipment: Cover sprays were applied by tractor.
2. Cover sprays with Chlorothalonil 720 (1.5 pt/A) were applied on 6 Jun, 21 Jun, 8 Jul, 19 Jul, 2 Aug, 19 Aug, and 31 Aug. Convoy (64 fl oz/A) was applied on 17 Jun and (32 fl oz/A) on 18 Jul.

D. ADDITIONAL INFORMATION:

1. Location: Rigdon Farm, New Field, Tifton, GA 31794
2. Crop History: Peanut - 2012, Cotton - 2011, Peanut - 2010
3. Land Preparation: Prior to planting fertilize 3-9-18, 500 lb/A was put out 1 Apr. Moldboard plowed 17 Apr and marked 1 May.
4. Soil Fertility: pH – 5.8 P - 21 K - 89 Ca - 779 Mg -98  
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI:Sonalan (1.5qt/A)+Dual Magnum (1.25 pt/A) 29 Apr  
POST: Cadre (4 oz/A) + crop oil (1 qt/A) on 21 Jul.
6. Insecticides: Acephate 755 (0.85 lb/A) 31 May
7. Planting Info: Tifguard, 92% germination, 6 seed/ft (2.5” deep) 30 Apr
8. Harvest Dates: Dug – 27 Sep Picked – 3 Oct

E. SUMMARY: Differences in efficacy of seed treatments were found, but overall yields were low due to high levels of white mold.

SYNGENTA SEED TRT TEST II, 2013											
RIGDON FARM, NEW FIELD											
Tifguard Test											
Treatments	Plants/ft <sup>1</sup>				% Dead Plants <sup>2</sup>			Plant Width <sup>3</sup>	TSWV <sup>4</sup>	WM <sup>5</sup>	YIELD
	14-May	21-May	29-May	26-Sep	14-May	21-May	29-May	28-May	22-Jul	26-Sep	lb/A
1. Cruiser 70WS	0.5	1.1	1.2	1.6	0.0	0.0	0.7	12.7	3.6	26.4	1859
2. Dynasty PD + Cruiser	0.9	2.7	3.0	2.8	0.0	0.0	0.1	14.2	4.0	46.8	2399
3. A16148 (1X) + Cruiser	0.9	2.5	2.4	2.5	0.0	0.0	0.0	14.0	2.4	44.8	2132
4. A16148 (2X) + Cruiser	0.9	2.5	2.2	2.2	0.0	0.0	0.0	14.0	3.2	38.0	2474
5. A16148 (4X) + Cruiser	1.0	2.4	2.3	2.2	0.0	0.0	0.0	14.1	2.4	38.0	2643
6. A16148 (1X) + Cruiser + Dynasty	1.3	2.8	2.9	2.7	0.0	0.0	0.0	14.2	2.4	51.2	2236
7. A16148 (2X) + Cruiser + Dynasty	0.7	2.7	2.9	2.5	0.0	0.0	0.0	13.9	2.4	45.2	2678
8. A16148 (4X) + Cruiser + Dynasty	0.8	2.7	2.8	2.8	0.0	0.0	0.0	13.6	2.0	46.8	2666
<b>LSD (P&lt;0.05)</b>	0.5	0.4	0.4	0.6	n.s.	n.s.	n.s.	1.1	n.s.	12.6	554
<b>Planting Date: April 30, 2013</b>											
<sup>1</sup> Stand count is the number of emerged plants per foot of row on 14 May, 21 May and 28 May.											
<sup>2</sup> The % of emerged plants that was dead or dying per plot on 14 May, 21 May and 28 May.											
<sup>3</sup> Average plant width (measure in cm), mean of 6 plants per plot.											
<sup>4 &amp; 5</sup> Percent of row feet infected based on disease loci (up to 12" linear row) per plot.											



## EVALUATION OF MISCELLANEOUS BIOLOGICALS TEST

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental fungicides when applied to peanuts.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
  2. One two-row bed (25ft x 6ft) 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. 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. Cover sprays of Bravo (1.5 pt/A) were applied on 7 Jun, 21 Jun, 8 Jul, 19 Jul, 2 Aug, 19 Aug, and 31 Aug. Sprayed timed treatments of PPI 1 May, In Furrow 1 May, 45 DAP 14 Jun, 59 DAP 26 Jun, 60 DAP 26 Jun, 73 DAP 12 Jul, and 75 DAP 12 Jul.
- D. **ADDITIONAL INFORMATION:**
1. Location: Lang Farm, New Field Tifton, GA 31794
  2. Crop History: Peanut - 2012, Cotton - 2011, Peanut - 2011
  3. Land Preparation: Fertilized with 3-9-18 (500 lbs/A) 1 Apr.  
Moldboard plowed and marked rows 27 Apr.  
Cultivated land on 17 Jun.
  4. Soil Fertility: pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98  
Soil type: Tifton loamy sand, 2-5% slope
  5. Herbicides: PPI: Sonalan (1.5 pt/A), + Dual Magnum (1.25pt/A) tank mix on 29 Apr.  
POST: Cadre (4 fl oz/A) + crop oil (1 qt/A) 21 Jun
  6. Insecticides: Acephate 755 (0.85 lb/A) 31 May.
  7. Planting Info: Tifguard, 6 seed/ft (1.5" deep) on 1 May
  8. Harvest Dates: Dug – 27 Sept Picked – 3 Oct

E: SUMMARY: Severe white mold affected this trial, and even normally effective products provided only marginal control.

MISCELLANEOUS BIOLOGICALS TEST, 2013								
RIGDON FARM, NEW FIELD								
Treatments	App's	Rate/A	Plants/ft <sup>1</sup>			% Dead Plants <sup>2</sup>		
			14-May	21-May	29-May	14-May	21-May	29-May
1. GOS Neem 702ay + Spray Clean 80/20	In Furrow	64.0 fl oz 16.0 fl oz	2.0	2.7	3.5	0.0	0.0	0.0
2. GPS Neem 7-way + Spray Clean 80/20 GPS Neem 7-way + Spray Clean 80/20	In Furrow 45 DAP	64.0 fl oz 16.0 fl oz 64.0 fl oz 8.0 fl oz	2.2	2.8	3.7	0.0	0.0	0.1
3. GPS Neem 7-way + Spray Clean 80/20 GPS Neem 7-way + Spray Clean 80/20	In Furrow 45 & 75 DAP	64.0 fl oz 16.0 fl oz 64.0 fl oz 8.0 fl oz	2.1	2.9	3.5	0.0	0.0	0.0
4. Karanja Cake Granules	12" Band, PPI	80 lb/A	2.1	2.7	3.6	0.0	0.0	0.0
5. Karanja Cake Granules GOS Neem 7-way + Spray Clean 80/20	12" Band, PPI 60 DAP	80 lb/A 64.0 fl oz 8.0 fl oz	2.2	2.9	3.7	0.0	0.0	0.1
6. MBI-10616 + Provost	45, 59, & 73 DAP	10.0 fl oz 7.0 fl oz	.	.	.	0.0	0.0	0.0
7. MBI-10616 + Convoy	45 & 73 DAP	10.0 fl oz 32.0 fl oz	.	.	.	0.0	0.0	0.0
8. MBI-110	45, 59, & 73 DAP	64.0 fl oz	.	.	.	0.0	0.0	0.0
9. MBI-110	45, 59, & 73 DAP	128.0 fl oz	.	.	.	0.0	0.0	0.0
10. MBI-110	45, 59, & 73 DAP	192.0 fl oz	.	.	.	0.0	0.0	0.0
11. Convoy	45, & 73 DAP	32 fl oz	.	.	.	0.0	0.0	0.0
12. Provost	45, 59, & 73 DAP	7.0 fl oz	.	.	.	0.0	0.0	0.0
13. Nontreated			2.2	2.8	3.6	0.0	0.0	0.0
<b>LSD(P&lt;0.05)</b>			n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
Planting Date: May 21, 2013								
<sup>1</sup> Stand count is the number of emerged plants per foot of row on 14 May, 21 May and 29 May.								
<sup>2</sup> The % of emerged plants that was dead or dying per plot on 14 May, 21 May and 29 May.								
*In furrows applied in 3.72 GPA and mixed in a 2 L volume								
**Spread the material in approximately 12" band and plant through it.								

MISCELLANEOUS BIOLOGICALS TEST, 2013										
RIGDON FARM, NEW FIELD										
Treatments	App's	Rate/A	Plant	Thrips <sup>4</sup>			TSWV <sup>5</sup>	Leaf Spot <sup>6</sup>	WM <sup>7</sup>	YIELD
			Width <sup>3</sup>	29-May	27-May	3-Jun	22-Jul	13-Sep	27-Sep	lb/A
1. GOS Neem 702ay	In Furrow*	64.0 fl oz	14.7	3.7	7.2	3.6	4.5	74.0	2672	
+ Spray Clean 80/20		16.0 fl oz								
2. GPS Neem 7-way	In Furrow*	64.0 fl oz	14.8	3.8	7.0	4.4	4.6	75.0	2869	
+ Spray Clean 80/20		16.0 fl oz								
GPS Neem 7-way	45 DAP	64.0 fl oz								
+ Spray Clean 80/20		8.0 fl oz								
3. GPS Neem 7-way	In Furrow*	64.0 fl oz	14.9	4.0	7.0	2.8	4.8	69.6	2852	
+ Spray Clean 80/20		16.0 fl oz								
GPS Neem 7-way	45 & 75 DAP	64.0 fl oz								
+ Spray Clean 80/20		8.0 fl oz								
4. Karanja Cake Granules	12" Band, PPI**	80 lb/A	15.1	3.9	7.0	2.4	5.1	64.8	2852	
5. Karanja Cake Granules	12" Band, PPI**	80 lb/A	14.9	3.9	7.0	2.4	4.4	77.6	2736	
GOS Neem 7-way	60 DAP	64.0 fl oz								
+ Spray Clean 80/20		8.0 fl oz								
6. MBI-10616	45, 59, & 73 DAP	10.0 fl oz	.	4.1	7.2	1.2	3.7	44.4	3549	
+ Provost		7.0 fl oz								
7. MBI-10616	45 & 73 DAP	10.0 fl oz	.	3.9	7.2	2.8	4.1	50.0	3200	
+ Convoy		32.0 fl oz								
8. MBI-110	45, 59, & 73 DAP	64.0 fl oz	.	3.9	7.1	3.2	4.4	67.2	2718	
9. MBI-110	45, 59, & 73 DAP	128.0 fl oz	.	4.1	6.8	2.4	4.3	66.4	2515	
10. MBI-110	45, 59, & 73 DAP	192.0 fl oz	.	3.8	7.2	2.0	4.8	68.4	2759	
11. Convoy	45, & 73 DAP	32 fl oz	.	4.0	7.1	0.4	4.1	54.8	2747	
12. Provost	45, 59, & 73 DAP	7.0 fl oz	.	3.9	7.2	6.0	3.8	46.4	3565	
13. Nontreated			14.8	3.9	7.3	2.4	4.4	72.4	2811	
<b>LSD(P&lt;0.05)</b>			n.s.	0.4	0.4	3.2	0.7	16.3	705	

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

<sup>4</sup>Thrips=based on a scale of 0-10 (0=no injured, 1=10% leaves injured, 2=20% leaves injured, 3=30% leaves injured, 4=50% leaves injured, 5=> 50% leaves injured and < 5% terminal buds injured, 6=>50% leaves injured and 25% terminal buds injured, 7=>50% leaves injured and 50% terminal buds injured, 8=>50% leaves injured and 75% terminal buds injured, 9=>50% leaves injured and 90% terminal buds injured, and 10=dead plants.

<sup>5 & 7</sup>=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

<sup>6</sup>=Florida 1-10 scale where 1=no disease and 10=dead plant.

## EVALUATION OF ISAGRO FUNGICIDES

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental fungicides applied to peanuts.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
  2. One two-row bed (25ft x 6ft) 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.
  2. **Cover sprays of Bravo (1.5 pt/A)** were applied on 4 Jun (Trt 1-13), 18 Jun (Trt 1-13), 2 Jul (Trt 1-13), 16 Jul (Trt 10-13), 19 Jul (Trt 1-9), 30 Jul (Trt 1-13), 13 Aug (Trt 10-13), 19 Aug (Trt 1-9), and 31 Aug (Trt 1-13).
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Lang Farm, New Field Tifton, GA 31794
  2. **Crop History:** Peanut - 2012, Cotton - 2011, Peanut - 2010
  3. **Land Preparation:** Fertilized with 3-9-18 (500 lbs/A) 1 Apr.  
Moldboard plowed and marked rows 17 Apr.  
Cultivated land on 17 Jun.
  4. **Soil Fertility:** pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98  
**Soil type:** Tifton loamy sand, 2-5% slope
  5. **Herbicides:** PPI: Sonalan (1.5 pt/A), + Dual Magnum (1.25pt/A) tank mix on 29 Apr.  
POST: Cadre (4 fl oz/A) + crop oil (1 qt/A) 21 Jun
  6. **Insecticides:** Acephate 755 (0.85 lb/A) 31 May.
  7. **Planting Info:** Tifguard, 6 seed/ft (1.5" deep) on 1 May
  8. **Harvest Dates:** Dug – 27 Sept Picked – 3 Oct

E: **SUMMARY:** This trial showed clear differences in efficacy on foliar and soilborne diseases.

ISAGRO TEST, 2013						
RIGDON FARM, NEW FIELD						
			TSWV <sup>1</sup>	Leaf Spot <sup>2</sup>	WM <sup>3</sup>	YIELD
Treatments	App's	Rate/A	22-Jul	13-Sep	27-Sep	lb/A
1. Tilt Bravo	1 & 2	1.5 pt	3.0	3.3	22.0	4019
Abound 1.08	3 & 5	18.2 fl oz				
Bravo	4, 6, 7	24.0 fl oz				
2. IRF169 2.61SC	1 & 2	25.0 fl oz	0.7	3.4	32.0	3901
Abound 2.08	3 & 5	18.2 fl oz				
Bravo	4, 6, 7	24.0 fl oz				
3. IR14360	1 & 2	8.0 fl oz	2.3	3.5	30.0	4008
Abound 2.08	3 & 5	18.2 fl oz				
Bravo	4, 6, 7	24.0 fl oz				
4. IR14360	1 & 2	10.0 fl oz	4.0	3.6	32.8	3746
Abound 2.08	3 & 5	18.2 fl oz				
Bravo	4, 6, 7	24.0 fl oz				
5. IR14360	1 & 2	13.0 fl oz	2.7	3.5	26.4	3485
Abound 2.08	3 & 5	18.2 fl oz				
Bravo	4, 6, 7	24.0 fl oz				
6. Bravo	1, 2, 4, 6, 7	24.0 fl oz	2.0	3.6	29.5	4385
Abound 2.08	3 & 5	18.2 fl oz				
7. Bravo	1, 2, 4, 6, 7	24.0 fl oz	3.0	3.5	49.2	2904
OSA-1-F	3 & 5	19.0 fl oz				
8. Bravo	1, 2, 4, 6, 7	24.0 fl oz	3.3	3.7	49.2	3009
ISA010F	3 & 5	16.5 fl oz				
9. Bravo	1, 2, 4, 6, 7	24.0 fl oz	4.3	3.6	50.8	3229
ISA010F	3 & 5	14.0 fl oz				
10. Bravo	1, 2, 7	24.0 fl oz	3.0	4.3	43.6	3156
Orius 2.6F	3 - 6	7.2 fl oz				
11. Bravo	1, 2, 7	24.0 fl oz	1.3	3.3	30.0	4281
ISA010F	3 - 6	19.0 fl oz				
12. Bravo	1, 2, 7	24.0 fl oz	4.7	3.4	29.7	4138
ISA010F	3 - 6	16.5 fl oz				
13. Bravo	1, 2, 7	24.0 fl oz	2.3	3.3	30.0	3944
ISA010F	3 - 6	14.0 fl oz				
14. Nontreated			1.0	5.4	74.0	2156
<b>LSD(P&lt;0.05)</b>			3.3	0.4	20.6	884

<sup>1&3</sup>Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

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

<b>DAILY RAINFALL AND IRRIGATION, 2013</b>							
<b>Lang Farm, New Field</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				0.7	0.2		
2		0.5	1.5	0.2		0.2	
3	0.8	0.2		1.1			
4	0.1	0.4	3.1	0.3			
5	0.4			0.9			
6			1.5				
7			0.3	0.4	0.1		0.4
8			0.6				
9			0.7				
10				0.4			
11		0.1				0.5	
12	0.1			0.3			
13						0.1	
14	1.6				0.2		
15				0.1	0.6		
16				0.4	0.8	1.0	
17					2.0		
18		0.1			0.1		0.1
19	1.3	0.5	0.2		1.2		
20	0.1		0.1	0.6	1.5		
21		0.1			0.1	0.2	
22			0.7		1.8	0.9	0.1
23		0.7				0.1	
24	0.1		1.4	0.1			
25			0.3			0.2	
26				0.2			
28			0.7				
30			2.3				
<b>TOTAL</b>	<b>4.4</b>	<b>2.6</b>	<b>13.2</b>	<b>5.6</b>	<b>8.7</b>	<b>3.1</b>	<b>0.6</b>
<b>IRRIGATION</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>
5						0.5	
6					0.5		
10						0.5	
12					0.5		
14			0.6				
16		0.5					
17			0.6				
20			0.5				
28		0.6					
30		0.6					
<b>TOTAL</b>	<b>0.0</b>	<b>1.7</b>	<b>1.7</b>	<b>0.0</b>	<b>1.0</b>	<b>1.0</b>	<b>0.0</b>
<b>Rain &amp; Irr</b>	<b>4.4</b>	<b>4.3</b>	<b>15.0</b>	<b>5.8</b>	<b>9.7</b>	<b>4.1</b>	<b>0.6</b>



## EVALUATION OF PEANUT GENOTYPES FOR NEMATODE RESISTANCE

- A. PURPOSE: To evaluate the susceptibility of peanut lines to root knot nematode.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with three replicates.
  2. One two-row bed (25ft x 6ft) 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 and infested with *M. arenaria*.
  5. Variety: different varieties
- 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. Cover sprays of Chlorothalonil 720 (1.5 pt/A) were applied on 7 Jun, 21 Jun, 8 Jul, 19 Jul, 2 Aug, 19 Aug, and 31 Aug. Convoy (64 fl oz/A) was applied 17 Jun and Convoy (32 fl oz/A) was applied on 18 Jul.
- D. ADDITIONAL INFORMATION:
1. Location: Lang Farm, Cotton Field Tifton, GA 31794
  2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. Land Preparation: Fertilized with 3-9-18 (500 lbs/A) 1 Apr.  
Moldboard plowed and marked rows 17 Apr.  
Cultivated land on 27 Jun.
  4. Soil Fertility: pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98  
Soil type: Tifton loamy sand, 2-5% slope
  5. Herbicides: PPI: Sonalan (1.5 pt/A), + Dual Magnum (1.25pt/A) tank mix on 29 Apr.
  6. Insecticides: Acephate 755 (0.85 lb/A) 31 May.
  7. Planting Info: Tifguard, 6 seed/ft (1.5" deep) on 1 May
  8. Harvest Dates: Dug – 25 Sept Picked – 2 Oct
- E. SUMMARY: A wide range of susceptibilities to root knot nematode was identified.

NEMATODE SCREENING TRIAL, 2013				
RIGDON FARM, COTTON FIELD				
	Galling <sup>1</sup>	WM <sup>2</sup>	YIELD	Rootknot <sup>3</sup>
VARIETY	25-Sep	26-Sep	lb/A	18-Sep
1	13.3	20.7	2604	150.7
2	2.5	32.0	2831	12.0
3	36.7	44.7	1471	124.0
4	18.3	47.3	1617	119.0
5	1.3	35.5	2577	7.5
6	16.7	26.0	2594	222.3
7	86.7	29.3	1162	398.7
8	70.0	36.7	1713	341.0
9	63.3	39.3	1723	333.3
10	15.0	39.3	1771	228.7
11	65.0	27.3	1539	322.7
12	46.7	36.0	1646	139.7
13	15.0	35.3	1500	84.7
14	28.3	37.3	1539	382.7
15	0.0	28.7	3262	8.7
16	41.7	39.3	2120	459.3
17	0.0	24.7	3349	50.3
18	0.0	22.7	2981	2.0
19	40.0	20.7	2343	118.3
20	28.3	18.7	3407	172.7
21	0.0	24.7	2856	0.7
<b>LSD(P&lt;0.05)</b>	<b>27.2</b>	<b>15.0</b>	<b>1274</b>	<b>369.5</b>

<sup>1</sup>Visual rating of the % of pods and roots (1-100) with visual damage from root know nematode.

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

<sup>3</sup>Number of *M. arenaria juveniles* per 100cc of soil.

## EARLY EMERGENCE PROGRAMS TEST

- A. **PURPOSE:** To evaluate the effects of various early season programs applied in addition to a Convoy program for white mold.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
  2. One two-row bed (25ft x 6ft) 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 30 DAP treatment was banded the width of the plants in 30 GPA with a single 8003 nozzle per row and applied on 31 May.
  2. **Cover sprays of Chlorothalonil 720 (1.5 pt/A)** were applied on 8 Jun, 19 Jun, 2 Aug, 19 Aug, and 31 Aug and **Spray #3 (Trt 2-5)** was applied on 4 Jul, #4 (Trt 2-5) on 18 Jul, #5 (Trt 2-5) on 1 Aug. **Convoy (64 fl oz/A)** was applied 17 Jun and **Convoy (32 fl oz/A)** was applied on 18 Jul.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Lang Farm, Cotton Field Tifton, GA 31794
  2. **Crop History:** Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. **Land Preparation:** Fertilized with 3-9-18 (500 lbs/A) 1 Apr.  
Moldboard plowed and marked rows 17 Apr.  
Cultivated land on 27 Jun.
  4. **Soil Fertility:** pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98  
**Soil type:** Tifton loamy sand, 2-5% slope
  5. **Herbicides:** PPI: Sonalan (1.5 pt/A), + Dual Magnum (1.25pt/A) tank mix on 29 Apr.
  6. **Insecticides:** Acephate 755 (0.85 lb/A) 31 May.
  7. **Planting Info:** Tifguard, 6 seed/ft (1.5" deep) on 1 May

8. Harvest Dates: Dug – 25 Sept Picked – 2 Oct

E: SUMMARY: Some differences were found among treatments, but yields were very low and results not as definitive as expected.

Early Emergence Programs Test, 2013											
Lang Farm, Cotton Field											
Treatments	App's	Rate	WM <sup>1</sup>					LS <sup>2</sup>		TSWV <sup>3</sup>	Yield lb/A
			27-Jun	28-Jul	7-Aug	21-Aug	Harvest	15-Jul	21-Aug		
1. Nontreated			0.0	1.0	0.5	18.5	35.5	2.5	4.7	1.0	1334
2. Headline SC	1.5, B'cast	9.0 oz	0.0	0.5	0.5	7.5	31.0	2.1	4.2	0.0	1797
Convoy	3-5	13 fl oz									
3. Proline	33 DAP, Banded**	5.7 fl oz	0.0	0.0	0.0	5.0	20.5	2.2	4.3	1.5	2178
Convoy	3-5	13 fl oz									
4. Muscle 3.6F	33 DAP, B'cast	7.2 oz	0.0	0.0	0.0	4.0	21.5	2.2	4.5	1.0	1788
Convoy	3-5	13 fl oz									
5. Convoy	3-5	13 fl oz	0.0	0.0	0.0	6.0	30.5	2.2	4.6	2.0	2160
<b>LSD(P&lt;0.05)</b>			n.s.	n.s.	n.s.	10.7	n.s.	0.1	0.3	n.s.	554
*=spray 1 will be at 35 DAP, and spray 1.5 at 42 DAP											
**=Band the width of the plant and applied in 20 GPA (8003 nozzle).											
***=All plots will be coversprayed with Bravo, app's 3-7											
<b>Planting Date: May 1, 2013</b>											
WM <sup>1</sup> =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.											
LS <sup>2</sup> =Florida 1-10 scale where 1=no disease and 10=dead plant.											
TSWV <sup>3</sup> =Percent row feet infected based on disease loci (up to 12" of linear row) per plot.											

EVALUATION OF TREATMENTS FOR CONTROL OF PEANUTS DISEASES  
(SYNGENTA TEST II)

A. PURPOSE: To evaluate the comparative efficacy of experimental peanut fungicides.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (25ft x 6ft) 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 21 DAP treatment was banded the width of the plants in 30 GPA with a single 8003 nozzle per row and applied on 23 May.
2. Cover sprays of Chlorothalonil 720 (1.5 pt/A) were applied on 5 Jun, 19 Jun, 3 Jul, 17 Jul, 31 Jul, 14 Aug, and 28 Aug. The 21 DAP was applied on 23 May.

D. ADDITIONAL INFORMATION:

1. Location: Lang Farm, Cotton Field Tifton, GA 31794
2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
3. Land Preparation: Fertilized with 3-9-18 (500 lbs/A) 1 Apr.  
Moldboard plowed and marked rows 17 Apr.  
Cultivated land on 27 Jun.
4. Soil Fertility: pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98  
Soil type: Tifton loamy sand, 2-5% slope
5. Herbicides: PPI: Sonalan (1.5 pt/A), + Dual Magnum  
(1.25pt/A) tank mix on 29 Apr.
6. Insecticides: Acephate 755 (0.85 lb/A) 31 May.
7. Planting Info: Tifguard, 6 seed/ft (1.5" deep) on 1 May

8. Harvest Dates:           Dug – 25 Sept           Picked – 3 Oct

E: SUMMARY: Results were more variable than normally seen, but differences in treatment efficacy were still identified.

SYNGENTA TEST II, 2013						
RIGDON FARM, COTTON FIELD						
Treatments	App's	Rate/A	TSWV <sup>1</sup>	Leaf Spot <sup>2</sup>	Wm <sup>3</sup>	YIELD
			23-Jul	19-Sep	26-Sep	lb/A
1. Tilt/Bravo 4.3SE	1 & 2	1.5 pt	1.5	3.6	60.5	2476
Bravo W'stik	3 - 7	1.5 pt				
2. Tilt/Bravo 4.3SE	1 & 2	1.5 pt	2.0	3.2	38.0	3674
Abound	3 & 5	18.0 fl oz				
+ Alto		5.5 fl oz				
Bravo W'stik	4, 6, 7	1.5 pt				
3. Tilt/Bravo 4.3SE	1 & 2	1.5 pt	2.5	3.2	56.0	4872
Provost 3.6SC	3 - 6	8.0 fl oz				
Bravo W'stik	7	1.5 pt				
4. Tilt/Bravo 4.3SE	1 & 2	1.5 pt	0.5	3.2	42.5	3514
Fontelis	3 - 5	16.0 fl oz				
Bravo W'stik	6, 7	1.5 pt				
5. A15457	21 DAP **	13.8 fl oz **	3.5	3.2	24.0	4305
A18993	1 & 2	13.7 fl oz				
Abound	3 & 5	18.0 fl oz				
+ Alto		5.5 fl oz				
Bravo W'stik	4, 6, 7	1.5 pt				
6. A15457	21 DAP**	13.8 fl oz **	1.0	3.5	27.5	4087
A18993	1 & 2	13.7 fl oz				
Bravo W'stik	1 - 7	1.5 pt				
7. A15457	21 DAP, B'cast 20 GPA	13.8 fl oz	2.0	3.5	39.0	3325
A18993	1 & 2	13.8 fl oz				
Bravo W'stik	3 - 7	1.5 pt				
8. A15457	21 DAP**	13.8 fl oz **	1.5	3.2	25.5	4668
Tilt/Bravo 4.3SE	1 & 2	1.5 pt				
A18126 45 WG	3 & 5	9.5 oz/A				
Bravo W'stik	4, 6, 7	1.5 pt				
9. Tilt/Bravo 4.3SE	1 & 2	1.5 pt	2.5	3.3	18.5	4262
A18126 45 WG	3, 4, 5	7.1 oz/A				
Bravo W'stik	6, 7	1.5 pt				
10.A18126 45WG	1, 3, 5	7.1 oz/A	1.0	3.5	36.0	4051
Bravo W'stik	2, 4, 6, 7	1.5 pt				
11.A18993	1, 3, 5	13.7 fl oz	2.0	3.0	35.0	4799
Bravo W'stik	2, 4, 6, 7	1.5 pt				
<b>LSD(P&lt;0.05)</b>			n.s.	0.3	26.8	1643

<sup>1</sup> & <sup>3</sup> Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

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

**\*\*21 DAP sprays applied in a 6" band at 20 GPA mixed in a 2 L volume.**

EVALUATION OF FLUTOLANIL APPLIED MIDSEASON AND EARLY EMERGENCE FOR THE CONTROL OF PEANUT SOILBORNE DISEASES (NICHINO TEST I)

A. PURPOSE: To evaluate the efficacy of Convoy applied at different timings for southern stem rot (white mold).

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25ft x6ft) 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 20 GPA broadcast boom with 3 Conejet TX-SS6 nozzles per row at 40 PSI.
2. Cover sprays of Chlorothalonil (1.5 pt/A) were applied on 7 Jun, 21 Jun, 8 Jul, 19 Jul, 2 Aug, 19 Aug, and 21 Aug. The 40 DAP was applied on 13 Jun, 60 DAP on 28 Jun and 90 DAP on 31 Jul.

D. ADDITIONAL INFORMATION:

1. Location: Lang Farm, Cotton Field Tifton, GA 31794
2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
3. Land Preparation: Fertilized with 3-9-18 (500 lbs/A) 1 Apr.  
Moldboard plowed and marked rows 17 Apr.  
Cultivated land on 27 Jun.
4. Soil Fertility: pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98  
Soil type: Tifton loamy sand, 2-5% slope
5. Herbicides: PPI: Sonalan (1.5 pt/A), + Dual Magnum (1.25pt/A) tank mix on 29 Apr.
6. Insecticides: Acephate 755 (0.85 lb/A) 31 May.
7. Planting Info: Tifguard, 6 seed/ft (1.5" deep) on 1 May
8. Harvest Dates: Dug - 25 Sept Picked - 3 Oct



E: SUMMARY: Severe white mold affected this trial, and even normally effective products provided only marginal control. Severe wet conditions no doubt contributed to this, but the results were unexpected and largely unexplained at this time.

NICHINO TEST I, 2013					
LANG FARM, COTTON FIELD					
			TSWV <sup>1</sup>	WM <sup>2</sup>	YIELD
Treatments	App's	Rate/A	23-Jul	26-Sep	lb/A
1. Nontreated			0.8	86.8	2033
2. Convoy	60 & 90 DAP	32 fl oz	1.2	78.8	1992
<b>3. Convoy</b>	<b>40 DAP*</b> <b>(23" Band)</b>	<b>48 fl oz</b>	0.4	88.4	1754
<b>4. Convoy</b>	<b>40 DAP*</b> <b>(23" Band)</b>	<b>64 fl oz</b>	1.2	82.0	1928
<b>5. Convoy</b>	<b>60 DAP*</b> <b>(23" Band)</b>	<b>48 fl oz</b>	0.0	77.6	1911
<b>6. Convoy</b>	<b>60 DAP*</b> <b>(23" Band)</b>	<b>64 fl oz</b>	1.2	78.8	1777
7. Convoy	40 DAP (B'cast)	48 fl oz	0.4	86.4	2166
8. Convoy	40 DAP (B'cast)	64 fl oz	3.2	88.0	1605
9. Convoy	60 DAP (B'cast)	48 fl oz	1.2	78.8	1690
10. Convoy	60 DAP (B'cast)	64 fl oz	2.0	88.4	1748
<b>LSD(P&lt;0.05)</b>			<b>1.9</b>	<b>10.7</b>	<b>695</b>
Bravo cover spray (1 - 7) were sprayed in all plots.					
<sup>1&amp;2</sup> Percent of row feet infected based on disease loci (up to 12" linear row) per plot.					
<b>*40 &amp; 60 DAP app's in bold are in a 12 inch band and applied in 20 GPA (8003 nozzle).</b>					
<b>The other applications are broadcast with the same boom.</b>					

EVALUATION OF VARIOUS FUNGICIDES APPLIED MIDSEASON AND EARLY EMERGENCE FOR THE CONTROL OF PEANUT SOILBORNE AND FOLIAR DISEASES (NCHINO PROGRAMS TEST)

- A. PURPOSE: To evaluate the comparative efficacy of various fungicides applied at different timings for southern stem rot (white mold).
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with four replicates.
  2. One two- row bed (25ft x 6ft) 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. Equipment: Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and 20 GPA broadcast boom with 3 Conejet TX-SS6 nozzles per row at 40 PSI.
  2. Cover sprays of Chlorothalonil (1.5 pt/A) were applied on 6 Jun, 12 Jun, 19 Jun, 4 Jul, 18 Jul, 1 Aug, 14 Aug, and 28 Aug.
- D. ADDITIONAL INFORMATION:
1. Location: Lang Farm, Cotton Field Tifton, GA 31794
  2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. Land Preparation: Fertilized with 3-9-18 (500 lbs/A) 1 Apr. Moldboard plowed and marked rows 17 Apr. Cultivated land on 27 Jun.
  4. Soil Fertility: pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98  
Soil type: Tifton loamy sand, 2-5% slope
  5. Herbicides: PPI: Sonalan (1.5 pt/A), + Dual Magnum (1.25pt/A) tank mix on 29 Apr.
  6. Insecticides: Acephate 755 (0.85 lb/A) 31 May.
  7. Planting Info: Tifguard, 6 seed/ft (1.5" deep) on 1 May
  8. Harvest Dates: Dug – 25 Sept Picked – 3 Oct

E. SUMMARY: Differences in efficacy and yield were found, but severe disease pressure affected all treatments.

NICHINO PROGRAMS TEST, 2013						
RIGDON FARM, COTTON FIELD						
			TSWV <sup>1</sup>	Leaf Spot <sup>2</sup>	WM <sup>3</sup>	YIELD
Treatments	App's	Rate/A	23-Jul	19-Sep	26-Sep	lb/A
1. Nontreated			0.8	5.3	86.0	1568
2. Bravo	1 - 7	1.5 pt	2.0	4.5	81.3	1583
3. Headline	1.5	9.0 fl oz	0.3	2.9	60.5	2577
Convoy	3 & 5	13 fl oz				
+ Bravo		16 fl oz				
+ Topsin		5 fl oz				
Convoy	4	13 fl oz				
+ Bravo		24 fl oz				
Convoy	6	13 fl oz				
+ Headline		6 fl oz				
Bravo	7	1.5 pt				
4. Headline	1.5	9.0 fl oz	1.3	2.8	63.5	1880
Artisan	3 & 5	16 fl oz				
+ Bravo		16 fl oz%				
Artisan	4 & 6	16 fl oz				
+ Topsin		5 fl oz				
Bravo	7	1.5 pt				
5. Bravo	1, 2, 6, 7	1.5 pt	0.0	3.4	40.5	2606
Fontelis	3 - 5	16 fl oz				
6. Bravo	1, 2, 7	1.5 pt%	1.5	2.9	60.5	1750
Provost	3 - 6	9.0 fl oz				
7. Bravo	1, 2, 7	1.5 pt	1.2	4.1	64.4	2084
Muscle 3.6F	3 - 6	7.2 fl oz				
<b>LSD(P&lt;0.05)</b>			1.8	0.7	19.2	988
<sup>1 &amp; 3</sup> Percent of row feet infected based on disease loci (up to 12" linear row) per plot.						
<sup>2</sup> =Florida scale 1 - 10 where 1=no disease and 10=dead plant.						

EVALUATION OF VARIOUS FUNGICIDES APPLIED MIDSEASON AND EARLY EMERGENCE FOR THE CONTROL OF PEANUT SOILBORNE AND FOLIAR DISEASES (VERDESIA TEST)

A. PURPOSE: To evaluate the comparative efficacy of Convoy applied at different timings for southern stem rot (white mold).

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two- row bed (25ft x 6ft) 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. Equipment: Midseason spray treatments were applied with a CO<sub>2</sub> pressurized belt-pack sprayer using 2 liter bottles and 20 GPA broadcast boom with 3 Conejet TX-SS6 nozzles per row at 40 PSI.
2. Cover sprays of Chlorothalonil (1.5 pt/A) were applied on 6 Jun, 19 Jun, 4 Jul, 18 Jul, 1 Aug, 14 Aug, and 28 Aug.

D. ADDITIONAL INFORMATION:

1. Location: Lang Farm, Cotton Field Tifton, GA 31794
2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
3. Land Preparation: Fertilized with 3-9-18 (500 lbs/A) 1 Apr.  
Moldboard plowed and marked rows 17 Apr.  
Cultivated land on 27 Jun.
4. Soil Fertility: pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98  
Soil type: Tifton loamy sand, 2-5% slope
5. Herbicides: PPI: Sonalan (1.5 pt/A), + Dual Magnum (1.25pt/A) tank mix on 29 Apr.
6. Insecticides: Acephate 755 (0.85 lb/A) 31 May.
7. Planting Info: Tifguard, 6 seed/ft (1.5" deep) on 1 May
8. Harvest Dates: Dug - 25 Sept Picked - 3 Oct

E. SUMMARY: Severe white mold affected this trial, and even normally effective products provided only marginal control. Severe wet conditions no doubt contributed to this, but the results were unexpected and largely unexplained at this time.

VERDESIAN TEST I, 2013						
RIGDON FARM, COTTON FIELD						
Treatments	App's	Rate/A	TSWV <sup>1</sup>	Leaf Spot <sup>2</sup>	WM <sup>3</sup>	YIELD
			23-Jul	19-Sep	26-Sep	lb/A
1. Bravo	1 - 7	1.5 pt	0.6	3.4	74.8	1586
2. EXPT-CC38	1 - 7	1.5 pt	1.0	3.3	62	1713
3. Bravo	1, 2, 7	1.5 pt	0.6	3.4	74.4	1975
Bravo	3 - 6	1.5 pt				
+ Convoy		13 fl oz				
4. EXPT-CC38	1, 2, 7	1.5 pt	0.4	3.3	74	1708
EXPT-CC38	3 - 6	1.5 pt				
+ Convoy		13 fl oz				
5. Bravo	1, 2, 7	1.5 pt	0.8	3.1	60	1853
Bravo	3 - 6	1.5 pt				
+ Monsoon		7.2 fl oz				
6. EXPT-CC38	1, 2, 7	1.5 pt	0.6	3.4	66.8	1411
EXPT-CC38	3 - 6	1.5 pt				
+ Monsoon		7.2 fl oz				
7. Nontreated			0.6	3.5	69.2	1609
<b>LSD(P&lt;0.05)</b>			n.s.	n.s.	n.s.	n.s.

<sup>1&3</sup>Percent of row feet infected based on 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.

<b>DAILY RAINFALL AND IRRIGATION, 2013</b>							
<b>Lang Farm, Cotton Field</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				0.7	0.2		
2		0.5	1.5	0.2		0.2	
3	0.8	0.2		1.1			
4	0.1	0.4	3.1	0.3			
5	0.4			0.9			
6			1.5				
7			0.3	0.4	0.1		0.4
8			0.6				
9			0.7				
10				0.4			
11		0.1				0.5	
12	0.1			0.3			
13						0.1	
14	1.6				0.2		
15				0.1	0.6		
16				0.4	0.8	1.0	
17					2.0		
18		0.1			0.1		0.1
19	1.3	0.5	0.2		1.2		
20	0.1		0.1	0.6	1.5		
21		0.1			0.1	0.2	
22			0.7		1.8	0.9	0.1
23		0.7				0.1	
24	0.1		1.4	0.1			
25			0.3			0.2	
26				0.2			
28			0.7				
30			2.3				
<b>TOTAL</b>	4.4	2.6	13.2	5.6	8.7	3.1	0.6
<b>IRRIGATION</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>
5						0.5	
6					0.5		
10						0.5	
12					0.5		
14			0.6				
16		0.5					
17			0.6				
20			0.5				
28		0.6					
30		0.6					
<b>TOTAL</b>	0.0	1.7	1.7	0.0	1.0	1.0	0.0
<b>Rain &amp; Irr</b>	4.4	4.3	15.0	5.8	9.7	4.1	0.6

## EARLY EMERGENCE PROGRAMS TEST (ATTAPULGUS)

- A. **PURPOSE:** To evaluate the effects of various early season programs applied in addition to a Convoy program for white mold.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
  2. One two-row bed (25ft x 6ft) 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 (8003 nozzle) broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.
  2. **Cover sprays of Chlorothalonil 720 (1.5 pt/A)** were applied on 21 Jun, 17 Jul, 30 Jul, 12 Aug, 28 Aug and 12 Sept. Spray # 1.5 was applied on 9 Jul, spray # 3 on 17 Jul, spray # 4 on 8 Aug, and spray # 5 on 21 Aug. The 33 DAP was applied on 20 Jun.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Attapulgus Research & Education Center, Attapulgus, GA
  2. **Crop History:** Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. **Land Preparation:** Moldboard plowed and marked rows 17 Apr.
  4. **Soil Fertility:** pH - 6.0 P - 25 K - 40 Ca - 309 Mg - 48  
**Soil type:** Norfolk loamy sand
  9. **Herbicides:** PPI: Prowl (1 qt/A), Strongram (0.45 oz/A) on 23 May.  
POST: Cadre (4 oz.A) + crop oil (1 qt/A) on 31 Jul.
  10. **Insecticides:** Karate Z (20 oz/A) 29 Aug.
  11. **Planting Info:** Tifguard, 6 seed/ft (1.5" deep) on 21 May
  12. **Harvest Dates:** Dug – 30 Sept Picked – 3 Oct
- E. **SUMMARY:** Disease pressure was low and yields were highly variable due to the extremely wet field conditions.

Early Emergence Programs Test, 2013									
Attapulugus, New CBR field									
Treatments	App's	Rate	WM <sup>1</sup>			LS <sup>2</sup>		TSWV <sup>3</sup>	Yield
			12-Jul	15-Aug	Harvest	18-Jul	15-Aug	8-Aug	lb/A
1. Nontreated			0.5	1.0	4.5	1.4	3.7	5.5	4320
2. Headline SC Convoy	1.5, B'cast 3-5	9.0 oz 13 fl oz	0.0	0.0	1.8	1.2	3.3	2.5	5377
3. Proline Convoy	33 DAP, Banded** 3-5	5.7 fl oz 13 fl oz	0.0	0.0	2.3	0.8	3.2	1.5	5767
4. Muscle 3.6F Convoy	33 DAP, B'cast 3-5	7.2 oz 13 fl oz	0.0	0.0	5.0	1.3	3.5	5.5	4887
5. Convoy	3-5	13 fl oz	0.0	0.0	3.3	1.1	3.6	1.0	4855
<b>LSD(P&lt;0.05)</b>			n.s.	0.8	1.9	0.4	0.3	n.s.	n.s.
*=spray 1 will be at 35 DAP, and spray 1.5 at 42 DAP									
**=Band the width of the plant and applied in 20 GPA (8003 nozzle).									
***=All plots will be coversprayed with Bravo									
<b>Planting Date: May 21, 2013</b>									
WM <sup>1</sup> =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.									
LS <sup>2</sup> =Florida 1-10 scale where 1=no disease and 10=dead plant.									
TSWV <sup>3</sup> =Percent row feet infected based on disease loci (up to 12" of linear row) per plot.									



## EARLY EMERGENCE SPRAY VOLUME AND BANDING TEST (ATTAPULGUS)

- A. **PURPOSE:** To evaluate the efficacy of Proline applied early emergence in different spray volumes and banding.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
  2. One two-row bed (25ft x 6ft) 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 applied with a single 8010 nozzle per row applying a total volume of 40 GPA, either in a band the width of the plant (Trt#2), or broadcast (Trt #5); and with a single 8003 nozzle per row applying a total volume of 20 GPA, either in a band the width of the plant (Trt #3), or broadcast (Trt #6); and with one 8002 nozzle per row applying a total volume of 10 GPA, either in a band the width of the plant (Trt #4), or broadcast (Trt #7) was applied on 20 Jun. 20 Jun.
  2. Cover sprays of Chlorothalonil 720 (1.5 pt/A) were applied on 21 Jun, 17 Jul, 30 Jul, 12 Aug, 28 Aug, and 12 Sept. The 30 DAP was applied on 20 Jun.
- D. **ADDITIONAL INFORMATION:**
1. Location: Attapulgus Research & Education Center, Attapulgus, GA
  2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. Land Preparation: Moldboard plowed and marked rows 17 Apr.
  4. Soil Fertility: pH - 6.0 P - 25 K - 40 Ca - 309 Mg - 48  
Soil type: Norfolk loamy sand
  5. Herbicides: PPI: Prowl (1 qt/A), Strongram (0.45 oz/A) on 23 May.  
POST: Cadre (4 oz.A) + crop oil (1 qt/A) on 31 Jul.
  6. Insecticides: Karate Z (20 oz/A) 29 Aug.
  7. Planting Info: Tifguard, 6 seed/ft (1.5" deep) on 21 May

8. Harvest Dates: Dug – 30 Sept Picked – 3 Oct

E: SUMMARY: Disease pressure was low and few differences were found among treatments.

Proline Banding/ B'cast Test, 2013											
Attapulgu, New CBR field											
Treatment	App's	Pattern	Rate/A	WM <sup>1</sup>			LS <sup>2</sup>			TSWV <sup>3</sup>	Yield
				16-Jul	15-Aug	Harvest	18-Jul	15-Aug	30-Aug	13-Aug	lb/A
1. Nontreated				0.5	1.5	7.3	1.6	4.6	4.6	0.8	4274
2. Proline	30 DAP	Band, 40 GPA*	5.7 fl oz	0.5	1.0	6.0	1.3	4.3	4.2	0.8	4497
3. Proline	30 DAP	Band, 20 GPA**	5.7 fl oz	0.0	2.0	8.3	1.3	4.0	3.8	1.3	4665
4. roline	30 DAP	Band, 10 GPA***	5.7 fl oz	0.0	0.0	6.8	1.4	4.2	3.6	0.8	5127
5. Proline	30 DAP	B' cast, 40 GPA*	5.7 fl oz	0.5	2.5	5.8	1.5	4.2	4.1	1.0	4819
6. Proline	30 DAP	B' cast, 20 GPA**	5.7 fl oz	0.5	1.0	5.5	1.5	4.3	4.1	1.0	4424
7. Proline	30 DAP	B' cast, 10 GPA***	5.7 fl oz	0.0	2.0	5.3	1.9	4.3	4.2	1.5	4656
<b>LSD (p &lt;0.05)</b>				n.s.	2.5	n.s.	0.4	0.5	0.5	n.s.	n.s.
* = Early Emergence sprays applied with a single 8010 nozzle per row applying a total volume of 40 GPA, either in a band the width of the plant (Trt#2), or broadcast (Trt#5)											
** = Early Emergence sprays applied with a single 8003 nozzle per row applying a total volume of 20 GPA, either in a band the width of the plant (Trt#3,8), or broadcast (Trt#6,9,10)											
*** = Early Emergence sprays applied with a one 8002 nozzle per row applying a total volume of 10 GPA, either in a band the width of the plant (Trt#4), or broadcast (Trt#7)											
**** All plots will be coversprayed with Bravo.											
<b>Planting Date: May 21, 2013</b>											
WM <sup>1</sup> = Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.											
LS <sup>2</sup> = Florida 1-10 scale where 1=no disease and 10=dead plant.											
TSWV <sup>3</sup> = Percent row feet infected based on disease loci (up to 12" of linear row) per plot.											

EVALUATION OF VARIOUS FUNGICIDES AND TIMINGS FOR THE CONTROL OF  
CYLINDROCLADIUM BLACK ROT AND WHITE MOLD  
(BAYER PROPULSE SERENADE TEST, NEW FIELD, ATTAPULGUS)

- A. PURPOSE: To evaluate the comparative efficacy of various fungicides against peanut soilborne diseases.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with five replicates.
  2. One two-row bed (25ft x 6ft) 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, 90% germination
- 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. Cover sprays of Chlorothalonil 720 (1.5 pt/A) were applied on 21 Jun, 17 Jul, 30 Jul, 12 Aug, 28 Aug, and 12 Sept. The 21 DAP sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band and were applied on 11 Jun. In furrow applications were applied in 3.72 GPA and mixed in 2 L volume. (TP 80015E flat fan nozzle w/100 mesh t-ball check valve at 22 psi) and applied on 21 May.
- D. ADDITIONAL INFORMATION:
1. Location: Attapulcus Research & Education Center, Attapulcus, GA
  2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. Land Preparation: Moldboard plowed and marked rows 17 Apr.
  4. Soil Fertility: pH - 6.0 P - 25 K - 40 Ca - 309 Mg - 48  
Soil type: Norfolk loamy sand
  5. Herbicides: PPI: Prowl (1 qt/A), Strongram (0.45 oz/A) on 23 May.  
POST: Cadre (4 oz.A) + crop oil (1 qt/A) on 31 Jul.
  6. Insecticides: Karate Z (20 oz/A) 29 Aug.
  7. Planting Info: Tifguard, 90% germination, 6 seed/ft (1.5" deep) 21 May

8. Harvest Dates: Dug – 30 Sept                  Picked – 3 Oct

E: SUMMARY: No CBR developed and conditions were extremely wet. Differences were found in efficacy on white mold and root knot nematode, and large yield differences were found.

**BAYER PROPULSE/SERENADE TEST, 2013**

**ATTAPULGUS**

Treatments	App's	Rate	Plants/ft <sup>1</sup>			% Dead Plants <sup>2</sup>			Plant	TSWV <sup>4</sup>	Leaf Spot <sup>5</sup>			WM <sup>6</sup>	Nema <sup>7</sup>	Yield lbs/A
			4-Jun	11-Jun	18-Jun	4-Jun	11-Jun	18-Jun	18-Jun		13-Aug	30-Aug	30-Sep	30-Sep	30-Sep	
1. Nontreated			3.2	2.9	2.7	0.0	0.0	0.0	16.2	3.2	5.2	8.9	83.6	20.8	1452	
2. Propulse	IF*	13.7 fl oz	3.2	2.8	2.7	0.0	0.0	0.0	14.8	2.0	3.0	8.1	64.0	12.0	3322	
3. Ser. Soil	IF*	2.0 qt	3.2	2.7	2.8	0.0	0.0	0.0	15.8	1.6	4.9	9.1	78.8	19.0	1847	
4. Propulse	21 DAP**	13.7 fl oz	.	.	.	.	.	.	.	2.4	3.5	8.7	64.0	16.8	2561	
5. Ser. Soil	IF*	2.0 qt	3.2	2.7	2.6	0.0	0.0	0.0	15.4	3.2	2.9	8.1	61.2	10.8	3566	
+ Propulse	IF*	13.7 fl oz														
6. Propulse	21 DAP**	13.7 fl oz	.	.	.	.	.	.	.	1.2	3.4	8.6	64.0	16.0	2602	
+ Ser. Soil	21 DAP**	2.0 qt														
7. Proline	IF*	5.7 fl oz	3.3	2.6	2.7	0.0	0.0	0.0	15.4	1.2	4.4	8.6	74.0	18.8	2834	
8. Proline	21 DAP**	5.7 fl oz	.	.	.	.	.	.	.	2.8	3.2	8.8	71.6	14.5	2765	
9. Proline	In Furrow*	5.7 fl oz	3.7	2.7	2.8	0.0	0.0	0.0	15.9	1.2	4.6	8.7	73.6	16.5	2532	
+ Ser. Soil	IF*	2.0 qt														
10. Proliine	21 DAP**	5.7 fl oz	.	.	.	.	.	.	.	3.2	3.4	8.7	63.6	13.3	2904	
+ Ser. Soil	21 DAP**	2.0 qt														
<b>LSD(P&lt;0.05)</b>			n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	0.9	n.s.	0.6	0.5	15.0	4.8	977	

\*=In furrow applications applied in 3.72 GPA and mixed in 2L volume (TP 80015E flat fan nozzle w/100 mesh t-ball check valve at 22 psi).

\*\*=21 DAP applied in a narrow band (4 inches) directly over the row with a single 80-10 nozzle in a total spray volume of 40 GPA.

\*\*\*=All plots will be coversprayed with Bravo.

**Planting Date: May 21, 2013**

<sup>1</sup>Stand count is the number of emerged plants per foot of row on 04 June, 11 June and 18 June.

<sup>2</sup>The % of emerged plants that was dead or dying per plot on 04 June, 11 June and 18 June.

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

<sup>4</sup>& <sup>6</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

<sup>5</sup>Florida 1-10 scale where 1=no disease and 10=dead plant.

<sup>7</sup>Visual rating of the percent of pods and roots (1-100) with visual damage from root knot nematode.

EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT DISEASES AND NEMATODES (BAYER SEED TRT TEST, ATTAPULGUS)

- A. PURPOSE: To evaluate the comparative efficacy of experimental treatments for diseases and nematodes.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with five replicates.
  2. One two-row bed (25ft x 6ft) 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 and root knot nematodes.
  5. Variety: GA-06G
- 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. Cover sprays of Chlorothalonil 720 (1.5 pt/A) were applied on 21 Jun, 17 Jul, 30 Jul, 12 Aug, 28 Aug, and 12 Sept. The 45 DAP was applied on 9 Jul and the in furrow on 21 May. All sprays applied in furrow in 3.7 GPA. Chemigated simulation in 0.10 inches per acre via sprinkler cans applied uniformly to entire plots.
- D. ADDITIONAL INFORMATION:
1. Location: Attapulgus Research & Education Center, Attapulgus, GA
  2. Crop History: Peanut - 2012, Peanut - 2011, Peanut - 2010
  3. Land Preparation: Moldboard plowed and marked rows 17 Apr.
  4. Soil Fertility: pH - 6.0 P - 25 K - 40 Ca - 309 Mg - 48  
Soil type: Norfolk loamy sand
  5. Herbicides: PPI: Prowl (1 qt/A), Strongram (0.45 oz/A) 23 May.  
POST: Cadre (4 oz.A) + crop oil (1 qt/A) 31 Jul.
  6. Insecticides: Karate Z (20 oz/A) 29 Aug.
  7. Planting Info: GA-06G, 6 seed/ft (1.5" deep) on 21 May
  8. Harvest Dates: Dug – 30 Sept Picked – 3 Oct

E: SUMMARY: No CBR developed and conditions were extremely wet. Differences were found in efficacy on white mold and root knot nematode, and large yield differences were found. However, levels of both pathogens were extremely high and yields were low in all plots.

BAYER SEED TRT TEST, 2013										
ATTAPULGUS										
Treatments	App's	Rate/A	Plants/ft <sup>1</sup>			% Dead Plants <sup>2</sup>			Yield lbs/A	Root knot 9/30 <sup>3</sup>
			4-Jun	11-Jun	18-Jun	4-Jun	11-Jun	18-Jun		
1. Seed Trt 1										
Admire Pro	In Furrow	9.0 fl oz	2.5	2.1	2.1	0.0	0.0	0.4	720	495
2. Seed Trt 2										
Temik 15G	At plant	10 lb/A	2.3	2.1	2.2	0.0	0.0	0.0	546	376
3. Seed Trt 3										
Admire Pro	In Furrow	9.0 fl oz	2.3	2.1	2.1	0.0	0.0	0.0	732	543
4. Seed Trt 4										
Admire Pro	In Furrow	9.0 fl oz	2.4	2.0	2.1	0.0	0.0	0.6	865	559
5. Seed Trt 5										
Admire Pro	In Furrow	9.0 fl oz	2.2	2.0	2.1	0.0	0.0	0.2	1336	477
SP102000025914	<b>45 DAP</b>	13.7 fl oz								
6. Seed Trt 6										
Admire Pro	In Furrow	9.0 fl oz	2.3	2.0	2.3	0.0	0.0	0.0	1469	313
SP102000025914	<b>45 DAP</b>	13.7 fl oz								
7. Seed Trt 7										
SP102000026966	In Furrow	10.0 fl oz	2.5	2.1	2.2	0.0	0.0	1.1	1452	689
8. Seed Trt 8										
SP102000026966	In Furrow	18.0 fl oz	2.4	2.3	2.2	0.0	0.2	0.4	1098	616
9. Seed Trt 9										
SP102000026966	In Furrow	10.0 fl oz	2.6	2.0	2.5	0.0	0.0	0.2	1679	416
SP102000025914	<b>45 DAP</b>	13.7 fl oz								
10. Seed Trt 10										
SP102000026966	In Furrow	18.0 fl oz	2.5	2.1	2.1	0.0	0.0	0.4	1382	431
SP102000025914	<b>45 DAP</b>	13.7 fl oz								
<b>LSD (P&lt;0.05)</b>			n.s.	0.2	0.3	n.s.	0.2	0.7	694	n.s.
<b>Planting Date: May 21, 2013</b>										
<sup>1</sup> Stand count is the number of emerged plants per foot of row on 4 June, 11 June, and 18 June.										
<sup>2</sup> The % of emerged plants that was dead or dying per plot on 4 June, 11 June, and 18 June.										
<sup>3</sup> Number of <i>M. arenaria</i> juveniles per 100 CC of soil.										



BAYER SEED TRT TEST, 2013											
ATTAPULGUS											
Treatments	App's	Rate/A	Plant Width <sup>4</sup>		Thrips <sup>5</sup>		TSWV <sup>6</sup>	Leaf Spot <sup>7</sup>		WM <sup>8</sup>	Nema <sup>9</sup>
			11-Jun	18-Jun	11-Jun	18-Jun	13-Aug	8/30	9/30	9/30	9/30
1. Seed Trt 1											
Admire Pro	In Furrow	9.0 fl oz	13.0	16.0	2.2	1.7	2.8	5.7	9.6	94	82
2. Seed Trt 2											
Temik 15G	At plant	10 lb/A	13.6	15.1	2.6	4.0	3.2	5.9	9.8	97	83
3. Seed Trt 3											
Admire Pro	In Furrow	9.0 fl oz	12.7	15.2	2.0	2.4	4.0	5.1	9.0	94	86
4. Seed Trt 4											
Admire Pro	In Furrow	9.0 fl oz	13.5	15.6	2.1	2.2	1.2	5.2	9.0	90	71
5. Seed Trt 5											
Admire Pro	In Furrow	9.0 fl oz	13.1	15.8	2.3	2.4	1.2	4.5	8.4	84	72
SP102000025914	<b>45 DAP</b>	13.7 fl oz									
6. Seed Trt 6											
Admire Pro	In Furrow	9.0 fl oz	13.5	15.5	2.7	2.3	2.0	4.3	8.1	79	52
SP102000025914	<b>45 DAP</b>	13.7 fl oz									
7. Seed Trt 7											
SP102000026966	In Furrow	10.0 fl oz	14.1	15.9	2.1	2.3	2.4	4.7	8.7	86	71
8. Seed Trt 8											
SP102000026966	In Furrow	18.0 fl oz	13.4	16.1	2.2	2.0	0.4	4.2	8.3	84	75
9. Seed Trt 9											
SP102000026966	In Furrow	10.0 fl oz	13.3	15.9	2.4	2.6	1.2	3.8	8.1	70	50
SP102000025914	<b>45 DAP</b>	13.7 fl oz									
10. Seed Trt 10											
SP102000026966	In Furrow	18.0 fl oz	13.3	15.1	2.1	2.0	2.4	3.8	7.8	80	48
SP102000025914	<b>45 DAP</b>	13.7 fl oz									
<b>LSD (P&lt;0.05)</b>			0.8	0.9	0.6	0.7	3.0	0.6	0.7	12	20

<sup>4</sup>Average plant width (measure in cm), mean of 6 plants per plot on 11 June and 18 June.

<sup>5</sup>Thrips=based on a scale of 1-5 (1=no damage, 2=leaf speckling ((small patches of chlorosis)), 3=leaf silvering, 4=leaf distortion & browning & browning, & 5=beginning stages of tissue necrosis, loss of apical dominance.

<sup>6</sup>& <sup>8</sup>Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

<sup>7</sup>Florida 1-10 scale where 1=no disease and 10=dead plant.

<sup>9</sup> The % of roots and pods galled by *M. arenaria*.

<b>DAILY RAINFALL AND IRRIGATION, 2013</b>							
<b>Attapulcus, GA</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		0.2		0.1			
3	0.2	0.3		1.3			
4	0.1	0.3		1.2	0.1		
5				0.5			
6			0.8	0.2			
7				0.3			0.2
8				0.5			
9			0.8				
10				1.8			
11	1.0			0.4			
12	0.2			1.3			
13				0.2	0.7		
14	1.3			0.1	0.9		
15	0.1			0.2	0.1		
16					0.3		
17					1.3	0.1	
18					0.3		0.3
19	1.0				0.4		0.1
20	0.1		0.1	0.2	1.0		
21				0.2	0.5	0.4	
22			0.1	0.6		1.6	0.2
23			0.1	1.1	0.2	0.6	
24				1.4	0.2	0.2	
25						0.2	
27					0.1		
28			0.7	0.1			
29	0.7		0.2	0.4			
30			1.4		0.5		
<b>TOTAL</b>	4.7	0.8	4.2	11.8	6.3	3.1	0.6
<b>IRRIGATION</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					0.5		
3			0.5				
6					0.5	0.5	
12						0.5	
13			0.5				
17			0.5				
19				0.5		0.5	
20			0.5				
23		0.5					
24			0.5				
25		0.5					
28		0.5					
29					0.5		
30		0.5					
<b>TOTAL</b>	0.0	2.0	2.5	0.5	1.5	1.5	0.0
<b>Rain &amp; Irr</b>	4.7	2.8	6.8	12.3	7.8	4.6	0.6

## 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 40ft x 40ft spacing running north and south. Every other tree in each row was replanted in 2000, and these were the test trees. Alternating trees were replanted in 2008 and were not sprayed, serving as buffer trees. This test used 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, 23 Apr, 6 May, 20 May, 3 Jun, 19 Jun, 1 Jul, 15 Jul, 29 July, and 5 Aug. Spray #1.5 was applied on 15 Apr.
- 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 (2 qt/A) on 22 Mar, 15 May, and 8 Aug.  
Alion 329 (5 oz/A) on 22 Mar.
  4. Insecticides: Belt (4 oz/A) 9 Aug and Portal (2 pt/A) for mites on 23 Aug.
  5. Harvest Information: Virtually all nuts were lost to scab.
- E: SUMMARY: Extremely wet weather resulted in severe scab epidemics. Definitive differences among treatments were found by mid-season, but by harvest all treatments had been overwhelmed by disease.

PECAN FUNGICIDE TEST, 2013									
PONDER FARM, NORTH ORCHARD									
WICHITA									
Treatments	Rate/A	App's	Leaf Inc. <sup>1</sup>		Leaf Sev. <sup>2</sup>		Ninc <sup>3</sup>	Neo <sup>4</sup>	Leaf Defoliation <sup>5</sup>
			8-May	17-Jul	8-May	17-Jul	17-Jul	1-Oct	20-Nov
1. YT669 2.08SC	8.0 fl oz	1, 1.5, 2	4.1	14.6	0.5	0.8	100.0	.	3.5
Super Tin 4L	6.0 fl oz	3 - 10							
+ Elast 400F	25.0 fl oz								
2. YT669 2.08SC	12 floz	2, 4, 6, 8, 10	12.5	35.4	1.9	2.1	100.0	.	6.3
Super Tin 4L	6.0 fl oz								
+ Elast 400F	25.0 fl oz	1, 3, 5, 7, 9							
3. YT669 2.08SC	6.0 fl oz	2, 4, 6, 8, 10	12.7	41.7	1.5	2.6	100.0	.	4.8
+ Fontelis	14 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
4. Quadris Top 2.71	10 fl oz	2, 4, 6, 8, 10	12.9	35.6	1.5	2.0	97.9	1.0	5.5
Super Tin 4L	6.0 fl oz								
+ Elast 400F	25.0 fl oz	1, 3, 5, 7, 9							
5. Priaxor 500 (BAS 70302)	4.0 fl oz	2, 4, 6, 8, 10	10.1	44.4	1.1	2.8	100.0	.	4.0
+ Latron B-1956	0.06% v/v								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
6. Priaxor 500 (BAS 70302)	5.5 fl oz	2, 4, 6, 8, 10	15.9	33.7	2.1	2.1	98.6	.	4.0
+ Latron B-1956	0.06% v/v								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
7. Merivon	4.0 fl oz	2, 4, 6, 8, 10	13.8	40.3	1.7	2.8	100.0	.	9.0
+ Latron B-1956	0.06% v/v								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
8. FungiPhte	32.0 oz	2, 4, 6, 8, 10	13.8	41.1	1.4	2.9	100.0	4.0	6.8
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
9. FungiPhte	32.0 oz	2, 4, 6, 8, 10	11.8	31.9	2.0	2.0	100.0	.	2.8
+ Abound 2.08SC	6.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								

PONDER FARM, NORTH ORCHARD									
WICHITA									
Treatments	Rate/A	App's	Leaf Inc. <sup>1</sup>		Leaf Sev. <sup>2</sup>		Ninc <sup>3</sup>	Neo <sup>4</sup>	Leaf Defoliation <sup>5</sup>
			8-May	17-Jul	8-May	17-Jul	17-Jul	1-Oct	20-Nov
10 FungiPhite	32.0 oz	2, 4, 6, 8, 10	20.2	31.4	2.6	2.3	100.0	2.0	4.0
+ Abound 2.08SC	9.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
11. Viathon 4.1L	2.5 pt	1 - 3, 5, 7, 9	8.8	28.8	1.0	1.7	98.3	.	5.3
Super Tin 4L	6.0 fl oz	4, 6, 8, 10							
+ Elast 400F	25.0 fl oz								
12. Viathon 4.1 L	2.0 pt	2 & 4	9.8	32.0	0.9	2.2	100.0	5.8	8.8
Viathon 4.1 L	2.5 pt	6, 8, 10							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
13. Super Tin 4L	6.0 fl oz	1 - 10	24.1	46.6	3.9	2.5	93.1	4.0	3.3
+ Elast 400F	25.0 fl oz								
14. Nontreated			33.2	67.8	4.9	5.1	100.0	18.8	37.3
<b>LSD (P&lt;0.05)</b>			<b>7.2</b>	<b>11.1</b>	<b>1.2</b>	<b>0.7</b>	<b>4.3</b>	<b>3.7</b>	<b>15.4</b>

Leaf Inc.<sup>1</sup>=Leaf scab incidence, based on 6 terminals per tree (% of leaflets on middle leaf with any scab).  
Leafsev.<sup>2</sup>=Leaf scab severity, based on 6 terminal per tree (% of leaflets covered with scab).  
Ninc<sup>3</sup>=Nut scab incidence, based on ratings of 6 nut clusters per tree (% of nuts with any scab).  
Neo<sup>4</sup>=Incidence of terminals per tree with foliar dieback associated with *Neofusicoccum sp.*  
<sup>5</sup>Based on a visual assessment of the percent defoliation (0-100) of foliage on whole trees.

PECAN FUNGICIDE TEST, 2013					
PONDER FARM, NORTH ORCHARD					
WICHITA					
Treatments	Rate/A	App's	Nut Sev <sup>6</sup>		SecDef <sup>7</sup>
			17-Jul	26-Aug	26-Aug
1. YT669 2.08SC	8.0 fl oz	1, 1.5, 2	13.3	74.9	47.1
Super Tin 4L	6.0 fl oz	3 - 10			
+ Elast 400F	25.0 fl oz				
2. YT669 2.08SC	12 floz	2, 4, 6, 8, 10	17.0	94.8	68.2
Super Tin 4L	6.0 fl oz				
+ Elast 400F	25.0 fl oz	1, 3, 5, 7, 9			
3. YT669 2.08SC	6.0 fl oz	2, 4, 6, 8, 10	29.7	92.6	79.3
+ Fontelis	14 fl oz				
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9			
+ Elast 400F	25.0 fl oz				
4. Quadris Top 2.71	10 fl oz	2, 4, 6, 8, 10	12.0	67.8	35.8
Super Tin 4L	6.0 fl oz				
+ Elast 400F	25.0 fl oz	1, 3, 5, 7, 9			
5. Priaxor 500 (BAS 70302)	4.0 fl oz	2, 4, 6, 8, 10	37.9	92.0	86.8
+ Latron B-1956	0.06% v/v				
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9			
+ Elast 400F	25.0 fl oz				
6. Priaxor 500 (BAS 70302)	5.5 fl oz	2, 4, 6, 8, 10	29.0	95.6	78.8
+ Latron B-1956	0.06% v/v				
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9			
+ Elast 400F	25.0 fl oz				
7. Merivon	4.0 fl oz	2, 4, 6, 8, 10	47.0	96.3	83.7
+ Latron B-1956	0.06% v/v				
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9			
+ Elast 400F	25.0 fl oz				
8. FungiPhite	32.0 oz	2, 4, 6, 8, 10	38.9	93.5	72.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9			
+ Elast 400F	25.0 fl oz				
9. FungiPhite	32.0 oz	2, 4, 6, 8, 10	29.2	89.9	59.5
+ Abound 2.08SC	6.0 fl oz				
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9			
+ Elast 400F	25.0 fl oz				

PECAN FUNGICIDE TEST, 2013					
PONDER FARM, NORTH ORCHARD					
WICHITA					
Treatments	Rate/A	App's	Nut Sev <sup>6</sup>		SecDef <sup>7</sup>
			17-Jul	26-Aug	26-Aug
10 FungiPhite	32.0 oz	2, 4, 6, 8, 10	20.1	81.3	61.1
+ Abound 2.08SC	9.0 fl oz				
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9			
+ Elast 400F	25.0 fl oz				
11. Viathon 4.1 L	2.5 pt	1 - 3, 5, 7, 9	30.7	91.8	61.7
Super Tin 4L	6.0 fl oz	4, 6, 8, 10			
+ Elast 400F	25.0 fl oz				
12. Viathon 4.1 L	2.0 pt	2 & 4	42.7	96.1	88.6
Viathon 4.1 L	2.5 pt	6, 8, 10			
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9			
+ Elast 400F	25.0 fl oz				
13. Super Tin 4L	6.0 fl oz	1 - 10	16.6	79.6	53.3
+ Elast 400F	25.0 fl oz				
14. Nontreated			96.2	100.0	99.8
<b>LSD (P&lt;0.05)</b>			<b>13.0</b>	<b>7.5</b>	<b>14.7</b>

Nut Sev<sup>6</sup>=Nut scab severity, based on ratings of 6-8 nut clusters per tree (% of schuck area covered with scab).  
 SecDef<sup>7</sup>=secondary shoot (later season growth flushes) defoliation.

## EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE 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 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 ft x 40 ft spacing running north and south. Every other tree in each row was replanted in 2000, and these were the test trees. Alternating trees were replanted in 2008 and were not sprayed, serving as buffer trees. This test used 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, 23 Apr, 6 May, 20 May, 3 Jun, 19 Jun, 1 Jul, 15 Jul, 29 Jul, and 5 Aug. Spray #1.5 was applied on 15 Apr.
- 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 (2 qt/A) on 22 Mar, 15 May, and 8 Aug.  
Alion 329 (5 oz/A) on 22 Mar.
  4. **Insecticides:** Belt (4 oz/A) 9 Aug and Portal (2 pt/A) 23 Aug.
  5. **Harvest Information:** Desirable trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 5 Nov. A 50 nut sample was collected from each tree on 6 Nov to determine yield and quality.
- E: **SUMMARY:** Extremely wet weather resulted in severe scab epidemics. Definitive differences among treatments were found.



PECAN FUNGICIDE TEST, 2013								
PONDER FARM, NORTH ORCHARD								
DESIRABLE								
Treatments	Rate/A	App's	Leaf Inc. <sup>1</sup>		Leaf Sev <sup>2</sup>		Sh. Split <sup>3</sup>	Leaf Ret <sup>4</sup>
			14-Jun	17-Jul	14-Jun	17-Jul	17-Oct	20-Nov
1. YT669 2.08SC	8.0 fl oz	1, 1.5, 2	35.1	17.1	6.5	2.7	61.7	94.0
Super Tin 4L	6.0 fl oz	3 - 10						
+ Elast 400F	25.0 fl oz							
2. YT669 2.08SC	12 fl oz	2, 4, 6, 8, 10	23.8	11.5	4.3	1.6	68.1	96.3
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
3. YT669 2.08SC	6.0 fl oz	2, 4, 6, 8, 10	43.2	18.1	9.1	2.5	69.0	46.8
+ Fontelis	14 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
4. Quadris Top 271	10 fl oz	2, 4, 6, 8, 10	27.6	13.0	5.5	1.9	92.7	90.3
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
5. Lpriaxor 500 (BAS 70302)	4.0 fl oz	2, 4, 6, 8, 10	31.2	21.9	6.0	2.4	34.0	74.8
+ Latron B-1956	0.06% v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
6. Merivon	5.5 fl oz	2, 4, 6, 8, 10	33.6	19.5	7.8	2.2	47.1	84.3
+ Latron B-1956	0.06% v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
7. Merivon	4.0 fl oz	2, 4, 6, 8, 10	41.6	19.5	9.3	2.8	46.6	84.8
+ Latron B-1956	0.06% v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
8. FungiPhite	32.0 oz	2, 4, 6, 8, 10	68.1	28.0	11.7	3.0	62.0	43.8
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
9. FungiPhite	32.0 oz	2, 4, 6, 8, 10	25.8	18.5	5.1	2.4	64.3	85.3
+ Abound 2.08F	6.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							

PECAN FUNGICIDE TEST, 2013								
PONDER FARM, NORTH ORCHARD								
DESIRABLE								
Treatments	Rate/A	App's	Leaf Inc. <sup>1</sup>		Leaf Sev <sup>2</sup>		Sh. Split <sup>3</sup>	Leaf Ret <sup>4</sup>
			14-Jun	17-Jul	14-Jun	17-Jul	17-Oct	20-Nov
10. FungiPhite	32.0 oz	2, 4, 6, 8, 10	42.1	24.0	8.4	2.7	87.8	71.8
+ Abound 2.08F	9.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
11. Viathon 4.1L	2.5 py	1 - 3, 5, 7, 9	21.1	14.4	3.3	2.3	75.8	62.5
Super Tin 4L	6.0 fl oz	4, 6, 8, 10						
+ Elast 400F	25.0 fl oz							
12. LBG -61 4.1L (Viathon)	2.0 pt	2 & 4	46.9	17.8	8.8	1.8	58.1	55.0
LBG -61 4.1L (Viathon)	2.5 pt	6, 8, 10						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
13. Super Tin 4L	6.0 fl oz	1 - 10	38.0	12.7	7.2	1.8	85.9	93.8
+ Elast 400F	25.0 fl oz							
14. Nontreated			76.1	62.8	21.9	10.1	n.r.	24.5
<b>LSD (P&lt;0.05)</b>			12.9	7.7	3.6	2.3	18.0	33.5
Leaf Inc. <sup>1</sup> =Leaf scab incidence, based on 6-8 terminals per tree (% of leaflets with any scab).								
Leaf Inc. <sup>2</sup> =Leaf scab severity, based on 6-8 terminals per tree (% of leaflets covered with scab).								
<sup>3</sup> Shuck split=the % of shucks visibly split on October 17.								
<sup>4</sup> Based on a visual assessment of the percent retention (0-100) of foliage on whole trees.								

PECAN FUNGICIDE TEST, 2013							
PONDER FARM, NORTH ORCHARD							
DESIRABLE							
Treatments	Rate/A	App's	Nut Inc. <sup>3</sup>		Nut Sev <sup>4</sup>		L. Scorch <sup>5</sup>
			17-Jul	26-Aug	17-Jul	26-Aug	26-Aug
1. YT669 2.08SC	8.0 fl oz	1, 1.5, 2	18.4	79.9	1.6	4.2	6.8
Super Tin 4L	6.0 fl oz	3 - 10					
+ Elast 400F	25.0 fl oz						
2. YT669 2.08SC	12 fl oz	2, 4, 6, 8, 10	28.8	95.3	1.9	10.2	5.2
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
3. YT669 2.08SC	6.0 fl oz	2, 4, 6, 8, 10	44.6	100.0	3.6	22.9	7.2
+ Fontelis	14 fl oz						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
4. Quadris Top	10 fl oz	2, 4, 6, 8, 10	15.3	84.9	2.0	4.6	3.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
5. Priaxor 500 4.1L	4.0 fl oz	2, 4, 6, 8, 10	48.1	95.3	2.9	14.2	9.2
+ Latron B-1956	0.06% v/v						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
6. Merivon	5.5 fl oz	2, 4, 6, 8, 10	37.5	95.3	3.5	15.1	7.0
+ Latron B-1956	0.06% v/v						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
7. Merivon	4.0 fl oz	2, 4, 6, 8, 10	66.7	100.0	3.7	20.2	4.7
+ Latron B-1956	0.06% v/v						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
8. FungiPhte	32.0 oz	2, 4, 6, 8, 10	80.6	100.0	4.9	29.0	2.2
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
9. FungiPhte	32.0 oz	2, 4, 6, 8, 10	37.5	92.7	2.5	10.1	8.3
+ Abound 2.08F	6.0 fl oz						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						

PECAN FUNGICIDE TEST, 2013							
PONDER FARM, NORTH ORCHARD							
DESIRABLE							
Treatments	Rate/A	App's	Nut Inc. <sup>3</sup>		Nut Sev <sup>4</sup>		Leaf Scorch <sup>5</sup>
			17-Jul	26-Aug	17-Jul	26-Aug	26-Aug
10. FungiPhite	32.0 oz	2, 4, 6, 8, 10	52.1	99.2	2.8	14.2	1.0
+ Abound 2.08F	9.0 fl oz						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
11. Viathon 4.1L	2.5 py	1 - 3, 5, 7, 9	47.9	98.4	2.8	17.3	4.3
Super Tin 4L	6.0 fl oz	4, 6, 8, 10					
+ Elast 400F	25.0 fl oz						
12. LBG -61 4.1L (Viathon)	2.0 pt	2 & 4	86.8	100.0	7.7	27.8	5.8
LBG -61 4.1L (Viathon)	2.5 pt	6, 8, 10					
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
13. Super Tin 4L	6.0 fl oz	1 - 10	30.2	78.6	3.7	11.6	1.6
+ Elast 400F	25.0 fl oz						
14. Nontreated			100.0	100.0	39.3	99.2	6.8
<b>LSD (P&lt;0.05)</b>			19.5	9.6	5.7	5.9	4.6

Nut Inc.<sup>3</sup>=Nut scab incidence, based on 6-8 nut clusters per tree (% of nuts with any scab).  
Nut Inc.<sup>4</sup>=Nut scab severity, based on 6-8 nut clusters per tree (% of of schuck covered with scab).  
Lscorch<sup>5</sup>=Percent of middle leaf w/scorch (mainly antracnose &/or scorch mites, 8 terminals per tree).

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

- 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 40ft x 40ft 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 10 Apr, 24 Apr, 8 May, 22 May, 5 Jun, 21 Jun, 3 Jul, 17 Jul, 31 July, and 7 Aug.
- 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 (2 qt/A) on 22 Mar, 15 May, and 8 Aug.  
Alion 329 (5 oz/A) on 22 Mar.
  4. **Insecticides:** Belt (4 oz/A) 9 Aug and Portal (2 pt/A) for mites on 23 Aug.
  5. **Harvest Information:** Desirable trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 12 Nov. A 50 nut sample was collected from each tree on 12 Nov to determine yield and quality.
- E: **SUMMARY:** Extremely wet weather resulted in severe scab epidemics. Definitive differences among treatments were found.

**PECAN FUNGICIDE TEST II, 2013  
PONDER FARM, SOUTH ORCHARD**

**DESIRABLE**

Treatments	Rate/A	App's	Leaf Inc. <sup>1</sup>			Leaf sev. <sup>2</sup>		
			10-May	19-Jul	22-Aug	10-May	19-Jul	22-Aug
1. Rampart	64 oz	2, 4, 6, 8, 10	36.9	44.8	38.0	4.5	7.8	8.3
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
2. Super Tin 4L	6.0 fl oz	1 - 10	47.2	47.3	42.8	7.0	7.4	9.9
+ Elast 400F	25.0 fl oz							
3. Headline	7.0 fl oz	2, 4, 6, 8, 10	38.7	52.5	42.4	5.6	7.7	8.7
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
4. Abound	12 fl oz	2, 4, 6, 8, 10	33.7	46.5	36.3	3.9	6.8	9.3
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
5. Nordox 75WG	6.5 lb	2, 4, 6, 8, 10	48.1	60.2	64.8	6.3	11.5	8.8
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
6. Sovran 50W	3.2 oz	2, 4, 6, 8, 10	32.3	37.3	27.5	4.1	6.0	7.2
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
7. Orius 3.6F	8.0 fl oz	2, 4, 6, 8, 10	30.4	67.1	39.7	4.1	14.6	11.7
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
8. Enable	5.0 fl oz	2, 4, 6, 8, 10	46.0	52.0	72.6	6.9	9.2	20.3
+ Abound	10.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
9. Custodia	8.6 fl oz	2, 4, 6, 8, 10	35.1	60.1	64.8	4.2	10.2	19.9
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
10. Custodia	17.2 fl oz	2, 4, 6, 8, 10	40.6	46.6	41.7	5.6	10.3	11.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							

PECAN FUNGICIDE TEST II, 2013								
PONDER FARM, SOUTH ORCHARD								
DESIRABLE								
Treatments	Rate/A	App's	Leaf Inc. <sup>1</sup>			Leaf sev. <sup>2</sup>		
			10-May	19-Jul	22-Aug	10-May	19-Jul	22-Aug
11. Sovran 50W	3.2 oz	1 & 2	30.7	51.2	69.9	3.5	8.5	21.8
Topguard 1.04	14.0 fl oz	3, 5, 7, 9						
Elast 400F	50.0 fl oz	4, 6, 8, 10						
12. Enable	8.0 fl oz	1, 3, 5, 7, 9	50.9	47.4	74.2	6.5	9.0	18.3
Elast 400F	50 fl oz	2, 4, 6, 8, 10						
13. Topguard 1.04	14.0 fl oz	1, 3, 5, 7, 9	50.6	56.4	78.8	6.9	8.7	12.6
Elast 400F	50 fl oz	2, 4, 6, 8, 10						
14. Super Tin 4L	12.0 fl oz	1, 3, 5, 7, 9	49.9	58.2	73.6	8.2	9.6	14.4
Elast 400F	50.0 fl oz	2, 4, 6, 8, 10						
15. Enable 2F	4.0 fl oz	1 - 10	48.1	41.4	68.5	6.7	6.5	15.3
+ Elast 400F	25.0 fl oz							
16. Kphyte	64 oz	2, 4, 6, 8, 10	22.0	34.6	35.6	7.8	6.8	7.4
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
17. Nontreated			68.9	89.1	88.1	10.7	24.3	22.9
<b>LSD (P&lt;0.05)</b>			<b>8.7</b>	<b>11.7</b>	<b>10.9</b>	<b>1.6</b>	<b>3.0</b>	<b>4.4</b>
Leaf Inc. <sup>1</sup> =Leaf scab incidence, 6 terminals per tree (% of leaflets w/ scab on worst leaf).								
Leaf sev. <sup>2</sup> =Leaf scab severity, 6 shoots per tree (% scab severity on worst leaf).								

**PECAN FUNGICIDE TEST II, 2013  
PONDER FARM, SOUTH ORCHARD**

**DESIRABLE**

Treatments	Rate/A	App's	Sh. split <sup>3</sup>	Ninc <sup>4</sup>		Nut Sev <sup>5</sup>		Leaf Scorch <sup>6</sup>
			17-Oct	19-Jul	22-Aug	19-Jul	22-Aug	22-Aug
1. Rampart	64 oz	2, 4, 6, 8, 10	71.0	75.0	98.9	13.4	28.9	20.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
2. Super Tin 4L	6.0 fl oz	1 - 10	82.0	61.2	100.0	3.7	9.9	14.1
+ Elast 400F	25.0 fl oz							
3. Headline	7.0 fl oz	2, 4, 6, 8, 10	89.0	71.7	93.3	7.7	20.7	16.3
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
4. Abound	12 fl oz	2, 4, 6, 8, 10	69.0	70.0	100.0	8.4	11.3	21.6
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
5. Nordox 75WG	6.5 lb	2, 4, 6, 8, 10	66.0	78.9	100.0	7.1	16.4	55.1
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
6. Sovran 50W	3.2 oz	2, 4, 6, 8, 10	61.0	71.7	100.0	6.6	12.1	24.3
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
7. Orius 3.6F	8.0 fl oz	2, 4, 6, 8, 10	50.0	80.0	100.0	9.4	19.6	20.8
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
8. Enable	5.0 fl oz	2, 4, 6, 8, 10	51.0	75.6	100.0	8.5	23.0	41.0
+ Abound	10.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
9. Custodia	8.6 fl oz	2, 4, 6, 8, 10	69.0	84.7	100.0	11.9	25.7	37.4
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
10. Custodia	17.2 fl oz	2, 4, 6, 8, 10	72.0	88.1	96.7	6.0	10.3	31.5
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							



**PECAN FUNGICIDE TEST II, 2013  
PONDER FARM, SOUTH ORCHARD**

**DESIRABLE**

Treatments	Rate/A	App's	Sh. split <sup>3</sup>	Ninc <sup>4</sup>		Nut Sev <sup>5</sup>		Leaf Scorch <sup>6</sup>
			17-Oct	19-Jul	22-Aug	19-Jul	22-Aug	22-Aug
11. Sovran 50W	3.2 oz	1 & 2	25.0	100.0	100.0	30.5	62.5	36.1
Topguard 1.04	14.0 fl oz	3, 5, 7, 9						
Elast 400F	50.0 fl oz	4, 6, 8, 10						
12. Enable	8.0 fl oz	1, 3, 5, 7, 9	49.0	100.0	100.0	19.6	58.3	52.1
Elast 400F	50 fl oz	2, 4, 6, 8, 10						
13. Topguard 1.04	14.0 fl oz	1, 3, 5, 7, 9	63.0	100.0	100.0	25.3	64.8	35.0
Elast 400F	50 fl oz	2, 4, 6, 8, 10						
14. Super Tin 4L	12.0 fl oz	1, 3, 5, 7, 9	81.0	84.9	100.0	20.1	42.9	43.1
Elast 400F	50.0 fl oz	2, 4, 6, 8, 10						
15. Enable 2F	4.0 fl oz	1 - 10	61.0	90.0	100.0	22.6	60.5	54.8
+ Elast 400F	25.0 fl oz							
16. Kphyte	64 oz	2, 4, 6, 8, 10	77.0	82.8	96.7	8.5	20.9	16.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
17. Nontreated			n.r.	100.0	100.0	58.7	95.8	44.2
<b>LSD (P&lt;0.05)</b>			<b>20.0</b>	<b>16.3</b>	<b>4.4</b>	<b>6.3</b>	<b>10.9</b>	<b>11.9</b>

Shuck split<sup>3</sup> = the % of shucks visibly split on October 17.

Ninc<sup>4</sup> = Nut scab incidence, based on ratings of 6 nut clusters per tree (% of nuts with any scab).

Nut Sev<sup>5</sup> = Nut scab severity, based on ratings of 6 nut clusters per tree (% of schuck area covered with scab).

Leaf Scorch<sup>6</sup> = the % of middle leaf w/ scorch (mainly anthracnose and mites).

## BAYER DRIP TEST SOUTH BLOCK

- A. **PURPOSE:** To evaluate the efficacy of fungicides applied to smaller Desirable pecan trees via injection in a drip system.
- 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 on a 40 X 40 spacing.
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** Five gallon buckets were put at each spray tree and chemical was mixed in with water and a continuous drip was applied to trees.
  2. **Calendar-based sprays (1 - 10)** were applied on 9 April, 30 April, 14 May, 28 May, 11 Jun, 25 Jun, 9 Jul, 23 Jul, 6 Aug and 20 Aug. Spray #2.5 was applied on 7 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:** Roundup (2 qt/A) on 22 Mar, 15 May, and 8 Aug.  
Alion 329 (5 oz/A) on 22 Mar.
  4. **Insecticides:** Belt (4 oz/A) 9 Aug and Portal (2 pt/A) for mites on 23 Aug.
  5. **Harvest Information:** Desirable trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 13 Nov. A 50 nut sample was collected from each tree on 14 Nov to determine yield and quality.
- E: **SUMMARY:** Extremely wet weather resulted in severe scab epidemics. Definitive differences among treatments were found.

BAYER DRIP TEST ON PECAN TEST, 2013							
PONDER FARM, SOUTH ORCHARD							
DESIRABLE							
Treatments	Method	App's	Leaf Inc. <sup>1</sup>		Leaf Sev <sup>2</sup>		% Def.
			13-May	10-Jul	13-May	10-Jul	20-Nov
1. Untrt, pre-pollination			50.5	66.5	7.5	6.0	55.6
Untrt, post-pollination							
2. Luna Priviledge, 6.8 oz	Drip	1 & 2.5	43.2	60.9	6.3	4.9	73.0
Untrt, post-pollination							
3. Luna Priviledge, 6.8 oz	Drip	1 & 2.5	39.0	48.6	5.9	2.5	22.4
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
4. Untreated			50.8	76.1	8.7	7.5	49.0
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
5. Quadris Top, 8 fl oz	airblast	1 & 3	45.8	61.1	7.5	4.9	12.6
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
6. Super Tin/Elast (6/25 oz)	airblast	1 & 3	44.5	64.4	7.0	5.7	29.8
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
7. Quadris Top 8 fl oz	airblast	2	46.4	44.9	6.8	2.0	6.2
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
8. Super Tin/Elast (6/25 oz)	airblast	2	46.8	47.2	7.0	2.4	7.6
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
<b>LSD (P&lt;0.05)</b>			7.8	9.0	1.6	1.7	36.8

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

Leaf Sev<sup>2</sup>=Leaf scab severity, based on 6 terminals per tree.

% Def = visual estimate of the % defoliation of whole tree.

BAYER DRIP TEST ON PECAN TEST, 2013							
PONDER FARM, SOUTH ORCHARD							
DESIRABLE							
Treatments	Method	App's	Nut Sev <sup>3</sup>		Ninc <sup>4</sup>	Leaf Position <sup>5</sup>	Yield
			10-Jul	4-Sep	10-Jul	12-Oct	#/lb
1. Untrt, pre-pollination			25.3	50.5	97.5	2.7	no nuts
Untrt, post-pollination							
2. Luna Priviledge, 6.8 oz	Drip	1 & 2.5	19.8	73.7	100.0	2.5	85.2
Untrt, post-pollination							
3. Luna Priviledge, 6.8 oz	Drip	1 & 2.5	6.5	40.8	86.3	2.8	60.3
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
4. Untreated			8.8	25.2	85.0	2.9	66.2
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
5. Quadris Top, 8 fl oz	airblast	1 & 3	1.2	27.1	31.3	2.9	51.1
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
6. Super Tin/Elast (6/25 oz)	airblast	1 & 3	1.5	36.8	43.8	2.8	55.8
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
7. Quadris Top 8 fl oz	airblast	2	1.0	26.0	23.1	2.6	49.3
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
8. Super Tin/Elast (6/25 oz)	airblast	2	0.3	31.9	15.4	2.4	51.5
Super Tin/Elast (6/25 oz)	airblast	4 - 10					
<b>LSD (P&lt;0.05)</b>			3.2	12.7	16.9	0.4	15.7

Nut Sev<sup>3</sup>=Nut scab severity, based on 6 nut clusters per tree (% of shuck covered with scab).  
Ninc<sup>4</sup>=Nut scab incidence, based on 6 nut clusters per tree (% of nuts with any scab).  
Leaf Position<sup>5</sup>=Leaf position with most scab (from base of terminal).

## DAILY RAINFALL AND IRRIGATION, 2013

### Ponder Farm

RAIN							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1				0.3	1.2		
2		0.3	0.6			0.4	
3	0.6	0.2	0.1	1.0			
4	0.1	0.7	3.9	0.3			
5	0.1			0.6			
6			1.5				
7			0.2	0.1			0.2
8			0.4	0.7			
10				1.4			
11		0.1		0.1			
12	0.1			0.2			
13				0.1			
14	1.3				0.4		
15				0.1	0.8		
16					0.9	1.0	
17					0.8		
18		0.1			0.3		0.1
19	1.0	0.1	0.4	0.1	0.3		
20	0.1			0.3	2.1		
21		0.5		0.2	0.3	0.1	
22		0.3	0.3	0.2	0.2	0.6	
23		0.7		0.1		0.1	
24			0.3	0.1			
25						0.1	
26				0.2			
27			0.1				
28			1.5				
29			0.1				
30			2.4				
<b>TOTAL</b>	3.1	2.9	11.7	5.9	7.2	2.3	0.4

Irrigation was applied as needed on all trees.