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 <u>www.tomatospottedwiltinfo.org</u> 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 CONTENTS2013 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:

- 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).

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: Soil type:	pH - 6.4 P - 70 K - 21 Ca - 308 Mg - 42 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.

		r	NONTREA	TED PRO	LINE-A	BOUND	IN FURRO	W TES	T, 2013			
				BLACKS	HANK	FARM, W	OODS FIE	LD				
			P	Plant/ft <sup>1</sup>		% D	ead Plan	ts²	Plant Width <sup>3</sup>	TSWV <sup>4</sup>	Pl/ft⁵	YIELD
Treatments	App's	Rate/A	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
Planting Date	e: May 2	4, 2013										
<sup>1</sup> Stand count	is the nu	umber of e	emerged	plants pe	er foot	of row o	n 20 May	, 27 M	ay and 3 June			
<sup>2</sup> The % of em	erged pla	ants that	was dead	l or dying	g per pl	ot on 20	May, 27	May ar	nd 3 June.			
<sup>3</sup> Average plar	nt width	(measure	in cm), n	nean of 6	plants	s per plot						
<sup>4</sup> Percent of ro	ow feet ii	nfected ba	ased on c	lisease lo	ci (up	to 12" of	linear ro	w) per	plot.			
<sup>5</sup> Plant stand (	plants/f	t) counted	d after in	verting.								

## 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.

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: Soil type:	pH - 6.4 P - 70 K - 21 Tifton loamy sand, $2 - 5\%$	Ca – 308 Mg – 42 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	p) 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											
	BLACK	SHANK FAF	RM, WOO	DS FIELD								
	Inoculated	Check										
	plants/ft <sup>1</sup>	plants/ft <sup>1</sup>	Plant	s/ft <sup>1</sup>	s/ft <sup>1</sup> %C		Dead Plants <sup>2</sup>					
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				
LSD (P<0.05)	0.5	0.6	0.3	0.6	n.s.	1.9	n.s.	811				
Planting Date: May 6, 2013												
<sup>1</sup> Stand count is the number of eme	erged plants	per foot of	row on 21	May, 28	May and	4 June.						
<sup>2</sup> The % of emerged plants that was	dead or dyir	ng per plot	on 21 Ma	y, 28 Ma	y and 4 Ju	ne.						
<sup>3</sup> Average plant width (measure in o	cm), mean of	6 plants pe	er plot.									

	SYNGENTA SEED TRT TEST III, 2013									
	BLAC	KSHANK FAI	RM, WOO	DS FIELD						
	Inoculated Width <sup>3</sup> Check Width <sup>3</sup> T									
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		
LSD (P<0.05)	n.s.	8.4	n.s.	1.3	9.2	8.2	n.s.	n.s.		
Planting Date: May 6, 2013										
<sup>1</sup> Stand count is the number of emerged	ged plants	per foot of	row on 21	L May, 28	May and	4 June.				
<sup>2</sup> The % of emerged plants that was c	dead or dyi	ng per plot	on 21 Ma	y, 28 Ma	y and 4 Ju	ne.				
<sup>3</sup> Average plant width (measure in cn	n), mean of	f 6 plants pe	er plot on	4 June, 2	8 June an	d 29 July.				
<sup>4 &amp; 5</sup> Percent of row feet infected base	ed on disea	se loci (up t	to 12" of I	inear rov	v) per left	and right	row per p	lot.		

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.

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: Soil type:	Ph - 6.3 $P - 57$ $K - 19$ $Ca - 296$ $Mg - 43Tifton loamy sand, 2 - 5 % slope$						
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						

SERENADE TEST, 2013									
	BLACK	SHANK, WO	ODS FIELI	כ					
			TSWV <sup>1</sup>	Leaf Spot <sup>2</sup>	WM <sup>3</sup>	YIFLD			
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							
LSD(P<0.05)			n.s.	0.6	10.9	427			
<sup>1&amp;3</sup> Percent of row feet infec	ted based	on disease	loci (up to	o 12" of line	ar row) pe	er plot.			
Leaf Spot <sup>2</sup> =Florida 1-10 scale	where 1	=no disease	and 10=d	ead plant.					

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

#### 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.

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: Soil type:	Ph = 5.6 $P = 27$ $K = 16$ $Ca = 176$ $Mg = 18Tifton loamy sand, 2 = 5 % slope$
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 (0.8	5 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.

NEM	ATODE GE	ΝΟΤΥΡΕ ΤΕ						
BL	ACKSHAN	k, WOODS	FIELD					
	Nema <sup>1</sup>	WM <sup>2</sup>	YIELD	Rootknot <sup>3</sup>				
Entries	20-Sep	20-Sep	lb/A	18-Sep				
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				
LSD(P<0.05)	2.6	6.7	352	30.1				
<sup>1</sup> Visual rating of t	he percent	t of pods a	nd roots (	1-100) with	visible dar	nage from	root knot r	nematode.
<sup>2</sup> Percent of row fo	eet infecte	d based or	n disease l	oci (up to 12	2" of linear	r row) per	plot.	
		-	-	~ ~ ~		71-		

<sup>3</sup>Populations of root knot namatode 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.
- 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.

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 beded 26 Apr. Cultivated 17 Jun.						
4.	Soil Fertility: Soil type:	Ph - 6.3 $P - 44$ $K - 28$ $Ca - 306$ $Mg - 38Tifton loamy sand, 2 - 5 % slope$						
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	1, POND F	IELD					
			TSWV <sup>3</sup>	Leaf Spot <sup>4</sup>	WM⁵	YIELD	Width		
Treatments	App's	Rate	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		
LSD(P<0.05)			n.s.	1.0	14.3	839	n.s.		
Planting Date: N	May 10, 2013								
<sup>3 &amp; 5</sup> SPercent row	feet infected base	d on disease loci (up to 1	2" of tow	) per plot.					
<sup>4</sup> Florida scale wh	ere 1=no disease a	nd 10=dead plant.							
*In furrow applie	cations applied in 3	.72 GPA and mixed in 2 I	L volume.	(TP 80015	E flat fai	n nozzle	w/100		
mesh t-ball ch	neck valve at 22 psi	).		, , , , , , , , , , , , , , , , , , , ,					
**Applied in a n	arrow band (4 inch	es) over the row, spray v	olume 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  $CO_2$  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.

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: Soil type:	pH - 6.3 P - 44 K - 28 Ca - 306 Mg - 38 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											
		$WM^1    LS^2    TSWV^3    YIELD$									
Treatment	App's	Rate/A	3-Jul	15-Jul	7-Aug	18-Aug	Harvest	15-Jul	18-Aug	16-Aug	lb/A
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						0.2			
5 Convoy	3_5	13 fl.oz	0.4	0.0	0.0	0.0	2.0	0.3	3.1	16	2400
J. Convoy	n <0 05)	13 11 02	1.7	1.2	1.0	3.0	6.2	0.3	0.3	1.0 n.c	2490 n.s
	p <0.03)		1./	1.2	1.0	5.0	0.2	0.2	0.5	11.5.	11.3.
*=spray 1 will b	be at 35 DAP, and	spray 1.5	at 42 D	AP.							
**=Band the wid	dth of the plant and	l applied i	n 20 G	PA (800	3 nozzle	).					
***=All plots w	ill be coverspraye	d with Bra	avo, ap	p's 3 - 7							
<b>Planting Date</b>	: May 10, 2013										
WM <sup>1</sup> =Percent of	f row feet infected	based on	disease	e loci (u	p to 12"	of linear	row) per	plot.			
LS <sup>2</sup> =Florida 1-1	0 scale where 1=	no disease	and 10	dead p	olant.						
TSWV <sup>3</sup> =Percent	t row feet infected	based on	disease	loci (u	p to 12"	of linear	row) per	plot.			

DAILY RAINFALL AND IRRGATION, 2013										
		Blackshan	k Farm, W	loods and	Pond Field	I				
RA	IN									
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ			
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							
TOTAL	5.2	2.9	11.8	8.5	8.4	3.0	0.6			
IRRIGA	ATION									
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ			
5					0.8					
9						0.5				
13						0.9				
21		1.0								
29		0.5								
TOTAL	0.0	1.5	0.0	0.0	0.8	1.4	0.0			
Rain & Irr	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.

- 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 FURR	OW-EA	RLY EME	RGENCE	TEST I, 2	2013			
			BLAC	KSHANK	FARM,	IRR/NO	N FIELD					
										Plant		
				Plants	/ft <sup>1</sup>		% D	ead plan	ts²	Width <sup>3</sup>	TSWV⁴	Yield
Treatments	App's	Rate/A	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
LSD(P<0.05)			0.3	0.6	0.4	0.3	n.s.	n.s.	1.4	0.8	2.4	n.s.
Planting Date:	May 24, 2	2013										
<sup>1</sup> Stand count is	the num	ber of emerg	ged plant	s per foo	t of rov	v on 20	May, 27	May and	3 June	•		
<sup>2</sup> The % of emer	ged plant	s that was d	ead or d	/ing per p	olot on	20 May	, 27 May	and 3 Ju	ne.			
<sup>3</sup> Average plant	width (m	easure in cm	ı), mean o	of 6 plant	s per p	lot.						
<sup>4</sup> Percent of row	/ feet infe	cted based o	on diseas	e loci (up	to 12"	of linea	r row) pe	er plot.				
*In furrow app	lications a	applied in 3.	72 GPA a	nd mixed	in 2 L	volume.	(TP 800	15E flat f	an noz	zle w/100	)	
mesh t-ball	check valv	ve at 22 psi).										
**21 DAP appli	ed in a na	arrow band (	4 inches)	directly	over th	e row w	ith a sing	gle 80-10	nozzle	in a tota	I	
spray volum	ne of 40 G	iPA.										

#### 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  $CO_2$  pressurized beltpack 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.
- 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.

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: Soil type:	pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72 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) on31 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 latedeveloping white mold epidemic, but useful data on spray volumes and timings were obtained.

		Proline V	/olume a	nd Ban	ding Tes	t, 2013				
		Bla	ckshank,	Irr/ No	on Irr fiel	d				
					WM <sup>1</sup>		L	.S <sup>2</sup>	TSWV <sup>3</sup>	Yield
Treatment	App's	Pattern	Rate/A	16-Jul	18-Aug	Harvest	16-Jul	18-Aug	16-Aug	lb/A
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
<b>a</b>	20 5 4 5		()	0.0	0.0	20.0	0.0	2.4	27	45.00
4. roline	30 DAP	Band, 10 GPA***	5.7 TI OZ	0.0	8.2	20.9	0.0	2.1	3.7	4563
E Drolino	20 0 40	P'cast 40 CDA*	E 7 fl.oz	0.4	2 5	1/2	0.1	2.1	4.0	4621
5.FTOIIIIE	JU DAF	B Cast, 40 GFA	5.7 11 02	0.4	2.5	14.5	0.1	2.1	4.0	4031
6 Proline	30 DAP	B' cast 20 GPA**	5 7 fl oz	0.0	4.6	14.6	0.2	21	6.0	4169
0.1101110	50 0/1		5.7 11 02	0.0	1.0	1.10	0.2	2.1	0.0	1105
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
	LSD	(p <0.05)		n.s.	4.8	6.8	0.11	n.s.	4.3	n.s.
*=Early Emerg	gence sp	rays applied with a	single 8	010 no:	zzle per i	ow appl	ying a t	otal volu	me of 40	) GPA,
either in a l	band the	width of the plant	t (Trt#2),	or broa	adcast (T	rt#5)				
**=Early Eme	rgence s	prays applied with	a single	8003 no	ozzle per	row app	lying a	total vol	ume of 2	20 GPA
either in a l	band the	width of the plant	t (Trt#3),	or broa	adcast (T	rt#6)				
***=Early Em	ergence	sprays applied wit	h a one 8	002 no	zzle per	row app	ying a t	total volu	ume of 1	0 GPA,
either in a	band the	e width of the plan	t (Trt#4),	or bro	adcast ( <sup>-</sup>	Trt#7)				
****cover spr	ays 4-7 (	Bravo only) applie	d to this	test						
Dianting Data		. 2012								
	: iviay 24	+, 2013			1	211 . (.):		\		
WIVI =Percent	t of row f	eet infected based	i on disea	ase loci	(up to 1	2" of line	ar row	) per plo	t.	
LS <sup>-</sup> =Florida 1-:	10 scale	where 1=no diseas	e and 10	=dead	plant.					
TSWV <sup>3</sup> =Percer	nt row fe	et infected based	on diseas	se loci (	up to 12	" of linea	r 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: Soil type:	pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72 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.

				Proli	ne In Fui	rrow-Ea	arly Eme	rgence 1	fest I, 2	013					
	1				Black	shank I	Farm, Irr	/ Non Fi	eld						
				Plant/ft	1	% [	Dead Pla	nts <sup>2</sup>		WM <sup>3</sup>		L	.S <sup>4</sup>	TSWV⁵	Yield
Treatments	App's	Rate	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 0 V	20.04.0**	C	2.4	2.0		0.0	0.1	0.0	0.0	2.2	44 7	0.0	2.5	74	4000
5. Proline	30 DAP**	5. / fl oz	3.4	3.8	4.1	0.0	0.1	0.0	0.0	3.2	11./	0.2	3.5	7.1	4933
Convoy	3 & 5	26 fi OZ													
6 Drolino	In Eurrow <sup>*</sup>	E 7 fl.oz	2.0	26	4.0	0.0	0.0	0.1	0.4	2 5	16.6	0 5	2.0	77	1006
Convoy	28.5	26 fl oz	2.9	5.0	4.0	0.0	0.0	0.1	0.4	2.5	10.0	0.5	5.9	7.7	4080
CONVOY	303	2011 02													
LSD	) (p <0.05)		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 a	applications	s applied i	in 3.72	GPA and	l mixed i	n 2 L vo	olume.								
(TP 8001	5E flat fan i	nozzle w/	100 me	esh t-bal	l check v	alve at	22 psi).								
**=30 DAP ap	plied in a n	arrow ba	nd (2-4	inches)	directly	over th	e row w	ith a sin	gle 80-1	0 nozzle	in				
a total sp	oray volume	e of 40 GF	PA.												
***=All plots	will be spra	yed with	Bravo,	app's 3-	7										
Planting Date	: May 24, 2	2013													
Plants/ft <sup>1</sup> =Sta	nd count is	the num	ber of e	merged	plants p	er foot	t of row	on 7 Jun	, 14 Jun	, and 21	Jun.				
% Dead Plants	s <sup>2</sup> =The % of	femerged	l plants	that wa	s dead o	or dying	g per plo	t on 7 Ju	n, 14 Ju	n and 21	Jun.				
WM <sup>3</sup> =Percent	of row fee	t infected	based	on disea	ase loci (	up to 1	2" of lin	ear row)	per plo	ot.					
LS <sup>4</sup> =Florida 1-	10 scale wh	nere 1=no	diseas	e and 10	=dead p	lant.									
				1 1.			4.211 (1)		`						

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

#### EVALUATION OFVARIOUS 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.

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: Soil type:	pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72 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

		Cl	JLTIVAR	X FUNG	ICIDE P	ROGRA	MS, 20	013				
			BLACKS	HANK F	ARM, II	RR/NON	I FIELD	)				
			GA-	06G				GA-	12Y			
			TSWV <sup>1</sup>	Leaf S	Spot <sup>2</sup>	WM <sup>3</sup>	Yield	TSWV <sup>1</sup>	Leaf S	Spot <sup>2</sup>	WM <sup>3</sup>	Yield
Treatments	App's	Rate/A	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 Data 14/6	4 2 6 7	4.5	0.0	2.4	4 5	20 5	4744	1.0	2.6	4.2	0.0	5356
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										
LSD(P<0.05)			n.s.	0.7	0.3	9.2	923	3.1	0.5	0.3	4.1	311
<sup>1&amp;3</sup> Percent of ro	ow feet ir	nfected bas	ed on di	sease lo	ci (up t	o 12" of	linea	r row) p	er plot.			
<sup>2</sup> Florida 1-10 sc	ale wher	e 1=no dise	ease and	10=dea	d plant	t.						
**30 DAP appli	ed in a n	arrow band	d the wic	lth of th	e plant	directly	over	the row	with a s	single 8	8003 noz	zzle
in a total spr	ay volun	ne jof <b>20 GF</b>	PA.									

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

	DA	ILY RAIN	IFALL AN	ND IRRG	ATION, 2	013	
		Black	kshank Far	m, Irr/Non	Field		
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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				
TOTAL	5.2	2.9	11.8	8.5	8.4	3.0	0.6
IRRIGA	TION						
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
5					0.8		
9						0.5	
13						0.9	
21		1.0					
TOTAL	0.0	1.0	0.0	0.0	0.8	1.4	0.0
Rain & Irr	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: Soil type:	pH - 6.5 P - 24 K - 36 Ca - 365 Mg - 54 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

	Percent <sup>2</sup>	White Mo	ld <sup>3</sup>	Leaf Spot <sup>4</sup>	Yield	Gall⁵	Egg <sup>6</sup>	Vigor <sup>7</sup>	Ν
Entries	Zeroes	No Zeroes	All	8-Oct	(lb/A)				
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

	-		, Dain						
	Percent <sup>2</sup>	White Mo	old³	Leaf Spot <sup>4</sup>	Yield	Gall⁵	Egg <sup>6</sup>	Vigor <sup>7</sup>	Ν
Entries	Zeroes	No Zeroes	All	8-Oct	(lb/A)				
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
MSD (P<0.05)	51.4	36.0	32.4	0.7	2400	1.6	1.5	1.0	?

#### Multi-State Disease Evaluations, 2013 Blackshank Farm, Banana Field

<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. rolfsii 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

	DA	ILY RAIN	FALL A	ND IRRG	ATION, 2	013	
		Black	shank Far	m, Banana	a Field		
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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				
TOTAL	5.2	2.9	11.8	8.5	8.4	3.0	0.6
IRRIGA	ATION						
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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		
TOTAL	0.0	1.0	0.0	0.0	2.8	2.4	1.3
Rain & Irr	5.2	3.9	11.8	8.5	11.2	5.4	1.9

#### 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.

1.	Location:	Lang Farm, South Field CPES Tifton, GA 31794				
2.	Crop History:	Peanut – 2012, Pean	ut – 2011, Peanut – 2010			
3.	Land Preparation:	Prior to turning, fertili broadcast (500 lb/A) of and marked rows on	izer was applied (3-9-18) on 1 Apr. Moldboard plowed			
4.	Soil Fertility: Soil type:	pH – 5.9 P – 76 H Tifton loamy sand, 2 -	K – 64 Ca – 762 Mg – 72 – 5 % slope			
5.	Herbicides:	PPI: Sonalan (1.5 pt/A (1.25 pt/A) 29 Apr. POST: None	A) + Dual Magnum			
6.	Insecticides:	Acephate 755, (0.85 ll	b/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			

MANA TEST, 2013 LANG FARM, SOUTH FIELD							
			TSWV <sup>1</sup>	Leaf	Spot <sup>2</sup>	WM <sup>3</sup>	YIELD
TreatIments	App's	Rate/A	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					
	1.2.7	4 5 .	2.6	2.6			2544
5. Equus	1, 2, 7	1.5 pt	3.6	3.6	6.6	53.2	2544
MCW /10 SC	3-6	15.5 OZ					
6 Equus	1 2 7	1 E nt	<b>२</b> ०	<b>२</b> ०	<b></b>	67.6	2120
D. Equus	1, 2, 7	2.5 pt	2.0	2.0	5.5	07.0	2120
FIOVOSL	3-0	8.0 02					
7. Fauus	1, 2, 4, 6, 7	1.5 pt	1.2	4.6	7.2	64.8	1783
Artisan	3 & 5	26.0 fl oz				0.10	
8. Eguus	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					
LSD(P<0.05)			3.3	0.5	0.7	14.5	425
* Band the width of	the plant and	applied in 2	0 GPA (800	3 nozzle).			
<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 v	vhere 1=no di	sease and 10	)=dead pla	nt.			

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

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.

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: Soil type:	pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72 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				

NICHINA TEST II, 2013							
			1	2			_
			TSWV	WM <sup>2</sup>	Yield		_
TreatIments	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	40 DAP*	48 fl oz	1.0	71.0	2164		
	(12" Band)						
							_
4. Convoy	40 DAP*	64 fl oz	0.8	66.0	2309		
	(12" Band)						
							_
5. Convoy	60 DAP*	48 fl oz	0.5	58.5	2686		
	(12" Band)						_
6. Convoy	60 DAP*	64 fl oz	0.5	66.0	2425		_
	(12" Band)						
7. Convoy	40 DAP*	48 fl oz	1.5	76.0	1938		_
	(B'cast)						
8. Convoy	40 DAP*	64 fl oz	1.3	73.0	1938		_
	(B'cast)						
							_
9. Convoy	60 DAP*	48 fl oz	1.8	58.0	2679		
	(B'cast)						
10.0		6 A (1					
10. Convoy	60 DAP*	64 fl oz	1.0	66.0	2694		
	(B'cast)						
LSD (P<0.05)			n.s.	15.3	517		
Bravo cover spr	ay (1 - 7) were sp	prayed in all	l plots.				
*40 & 60 DAP a	pp's in bold are i	n a <u>12 inch</u>	<u>band and a</u>	applied in a	<u>a 20 GPA (8</u>	<u>3003 nozzle).</u>	
The other ap	plications are bro	oadcast wit	<u>h the same</u>	<u>boom.</u>			

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.

<sup>1 & 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: Soil type:	pH -6.3 P - 58 K - 16 Ca - 358 Mg - 40 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 FAR	M, SOUTI	H FIELD						
			TSWV <sup>1</sup>	Leaf S	pot <sup>2</sup>	WM <sup>3</sup>	Yield			
Treatments	App's	Rate/A	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								
LSD(P<0.05)			3.7	0.3	1.1	13.3	959			
<sup>1&amp;3</sup> Percent of row f	eet infected	d based on	disease lo	oci (up to 1	2" linear	row) per	plot.			
<sup>2</sup> Florida scale 1 - 10	where 1=n	o disease a	nd 10=de	ad plant.			-			
**21 DAP sprays ap	plied in a 6	band at 2	<u>20 GPA</u> ar	nd mixed in	a 2 L vol	ume.				

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 plowe and marked rows on 1 May.									
4.	Soil Fertility: Soil type:	pH – 6.4 P - 85 K - 17 Ca - 362 Mg - 48 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 OctPicked - 15 Oct									

E: SUMMARY: Differences in disease control and yield were identified.

LOVELAND TEST, 2013										
		LANG F	ARM, SOU	TH FIELD						
			TSWV <sup>1</sup>	Leaf	Spot <sup>2</sup>	WM <sup>3</sup>	Yield			
Treatments	App's	Rate/A	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 D	4 7	4 5	25	2.0	6.0		2745			
Z. 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	18.7	15 nt	15	28	12	25.0	227/			
Abound	28.5	185 fl oz	1.5	2.0	4.5	33.0	5274			
	5 & 5	0.25%								
+ LI-1073	467	0.2370 1.25 nt								
LI-0337	4, 0, 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%								
			<u> </u>							
10. Bravo	1	1.5 pt	2.5	3.6	6.7	49.0	2534			
+ LI-EXP # 1		2.0 pt								
Monsson	2 - 4	7.3 fl oz								
+ LI-1079		0.25%								
+ LI-EXP # 1		2.0 pt								
Monsoon	5	7.3 tl oz								
+ LI-1079		0.25%								
Bravo	6&7	1.5 pt								

LOVELAND TEST, 2013										
			TSWV <sup>1</sup>	Leaf	Spot <sup>2</sup>	WM <sup>3</sup>	Yield			
Treatments	App's	Rate/A	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 Pravo	1	1 E pt	1.0	4.0	6.0	E2 E	2221			
		1.5 pt	1.0	4.0	0.0	55.5	2331			
+ LI-EAP # 5	2 4	2.0 pt								
	Z - 4	7.5 11 02								
+ LI-1079		0.25%								
+ LI-EAP # 5	E	2.0 pt								
	Э	7.3 11 02								
+ LI-1079	67	0.25%								
BLANO	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								
	1 2 7	1 5+	4.0	A_4	7.2	62.0	2222			
10. EXPT-CC38	1, 2, 7	1.5 pt	4.0	4.1	1.2	63.0	2222			
EXPI-CC38	3-6	1.5 pt								
+ Monsoon		7.2 fl oz								
17. Nontreated			2.0	7.5	8.8	96.0	1096			
LSD (P<0.05)			2.9	0.6	0.8	19.6	756			
<sup>1 &amp; 3</sup> Percent of row fee	et infected	based on di	sease loci (	up to 12" lir	near row) pe	er plot.				
<sup>2</sup> Florida scale of 1 - 1	0 where 1=	no disease a	ind 10=dea	d 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.

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: Soil type:	pH – 6.3 P - 37 K - 42 Ca - 408 Mg - 59 Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI:Sonalan(1.5 pt/A)+Dual Magnum (1.25pt/A) 29Apr 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.

		Р	roline In	Furrow-Ea	arly Emerg	gence Tes	t I, 2013							
				Lang Fai	m, South	Field								
				Plant/ft <sup>1</sup>	L	%	Dead Pla	nts²		LS <sup>3</sup>	TSWV <sup>4</sup>			
Treatments	App's	Rate	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			
E Droling	20 0 4 0 * *	Г 7 fl or	2.4	4.1	4.2	0.0	0.0	0.1	2.1	4.2	1.0			
5. Prolifie	30 DAP	5.7 II 02	2.4	4.1	4.2	0.0	0.0	0.1	3.1	4.2	1.0			
CONVOY	505	2011.02												
6 Proline	In Eurrow*	57fl.07	1.8	3.0	4.0	0.0	0.0	0.0	22	13	27			
Convoy	3 & 5	26 fl oz	1.0	5.5	4.0	0.0	0.0	0.0	5.5	4.5	2.7			
control		201102												
LSI	D (p <0.05)		0.4	n.s.	n.s.	n.s.	n.s.	n.s.	0.2	0.3	1.8			
			1		WM⁵			Yield						
Treatments	App's	Rate	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						
		0												
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 Prolino	In Eurrow*	5 7 fl.oz	0.7	0.2	0.2	12	12.2	2606						
Convoy	2 & 5	26 fl oz	0.7	0.3	0.5	1.5	15.5	2090						
convoy	5005	2011 02												
LSI	D (p <0.05)		1.4	2.8	1.8	4.1	3.8	464	-					
	(p 0.00)	1							•					
*= In furrow a	pplications	applied in	3.72 GP/	A and mix	ed in 2 L v	olume. (	TP 80015E	E flat fan i	nozzle v	v/ 100 m	esh t-bal	I check va	lve at 22	2 psi)
**=30 DAP ap	plied in a na	arrow ban	d (2-4 inc	hes) direc	tly over t	he row w	ith a sing	le 80-10 n	ozzle ir	n a total	spray vol	ume of 40	) GPA	
***=All plots	will be spray	yed with E	sravo, app	o's 3-7										
Planting Date	: May 1, 20	13												
Plants/ft <sup>1</sup> =Sta	nd count is	the numb	er of eme	erged plar	its per foc	ot of row	on 15 Ma	y, 22 May	, and 2	9 May.				
% Dead Plants	<sup>2</sup> =The % of	emerged p	plants that	at was dea	ad or dyin	g per plo	t on 15 M	lay, 22 Ma	ay, and	29 May.				
LS <sup>3</sup> =Florida 1-	10 scale whe	ere 1=no d	lisease ar	nd 10=dea	d 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.

	DA	ILY RAIN	IFALL AN	ND IRRG	ATION, 2	013	
RAI	N		Lang Farr	n, South F	ield		
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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				
TOTAL	4.4	2.6	13.2	5.6	8.7	3.1	0.6
IRRIGA	ATION						
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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					
TOTAL	0.0	1.7	1.7	0.0	1.0	1.0	0.0
Rain & Irr	4.4	4.3	15.0	5.8	9.7	4.1	0.6

# 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: Soil type:	pH – 6.5 P - 29 K - 32 Ca - 430 Mg -59 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											
		Plants/ft <sup>1</sup>				% Dead Plants <sup>2</sup>			TSWV⁴	WM⁵	YIELD
Treatments	14-May 21-May 29-May 30-Sep 14-Ma		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
				~ ~				40.0			
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
LSD (P<0.05)	0.4	0.5	0.3	0.5	n.s.	n.s.	n.s.	1.1	n.s.	21.4	n.s.
Planting Date: April 30, 2013											
<sup>1</sup> Stand count is the number of	emerge	d plants	per foo	t of rov	v on 14	May, 21	May an	d 29 Ma	у.		
<sup>2</sup> The % of emerged plants that	was dea	ad or dy	ing per	plot on	14 May	, 21 May	/ and 29	May.			
<sup>3</sup> Average plant width (measure	e in cm),	mean o	f 6 plan	ts per p	lot.						
<sup>4 &amp; 5</sup> Percent of row feet infected	d based	on disea	ase loci	(up to 1	2" linea	r row) p	er 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: Soil type:	pH – 5.8 P - 21 K - 89 Ca - 779 Mg -98 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											
			<i>i</i> .1				. 2	Pllant			
	Plants/ft <sup>+</sup>			% [	Dead Plar	nts⁻	Width	TSWV	WM	YIELD	
Treatments	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
LSD (P<0.05)	0.5	0.4	0.4	0.6	n.s.	n.s.	n.s.	1.1	n.s.	12.6	554
Planting Date: April 30, 2013											
<sup>1</sup> Stand count is the number of	emerge	d plants	per foo	t of rov	v on 14 I	May, 21	May and	d 28 Ma	y.		
<sup>2</sup> The % of emerged plants that	was dea	ad or dy	ing per I	olot on	14 May,	21 May	and 28	May.			
<sup>3</sup> Average plant width (measure	e in cm),	mean o	f 6 plan	ts per p	lot.			-			
<sup>4 &amp; 5</sup> Percent of row feet infected	d based	on disea	ase loci	up to 1	.2" linea	r row) p	er 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.
- 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.

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: Soil type:	pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98 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.

	MISC	ELLANEOUS	BIOLOG	ICALS TES	т, 2013				
		RIGDON	FARM, N	EW FIELD					
				Plants/ft <sup>1</sup>	L	%	Dead Plan	its <sup>2</sup>	
Treatments	App's	Rate/A	14-May	21-May	29-May	14-May	21-May	29-May	
1. GOS Neem 702ay	In Furrow	64.0 fl oz	2.0	2.7	3.5	0.0	0.0	0.0	
+ Spray Clean 80/20		16.0 fl oz							
2. GPS Neem 7-way	In Furrow	64.0 fl oz	2.2	2.8	3.7	0.0	0.0	0.1	
+ 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	2.1	2.9	3.5	0.0	0.0	0.0	
+ 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	2.1	2.7	3.6	0.0	0.0	0.0	
5. Karanja Cake Granules	12" Band, PPI	80 lb/A	2.2	2.9	3.7	0.0	0.0	0.1	
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				0.0	0.0	0.0	
+ Provost		7.0 fl oz							
7. MBI-10616	45 & 73 DAP	10.0 fl oz				0.0	0.0	0.0	
+ Convoy		32.0 fl oz							
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	
LSD(P<0.05)			n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	
Planting Date: May 21. 20	)13								
<sup>1</sup> Stand count is the numb	er of emerged pla	nts per foot	t of row o	on 14 May	, 21 Mav	and 29 I	May.		
<sup>2</sup> The % of emerged plants	that was dead or	dving per r	lot on 14	1 Mav. 21	May and	29 Mav	- /		
*In furrows applied in 3.7	2 GPA and mixed	in a 2 L volu	ume	- ,, ==	.,				
**Spread the material in	approximately 12"	band and	plant thr	ough it.					

	MISC	ELLANEOUS	BIOLOG	CALS TES	T, 2013				
		RIGDON	FARM, NI	W FIELD					
			Plant					_	
			Width <sup>3</sup>	Thri	ps⁴	TSWV⁵	Leaf Spot <sup>6</sup>	WM <sup>7</sup>	YIELD
Treatments	App's	Rate/A	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 MBL-110	15 50 & 73 DAD	128 0 fl oz		11	6.8	2.4	13	66.4	2515
	-5, 55, & 75 DAI	120.0 11 02	•	4.1	0.0	2.7	4.5	00.4	2313
10. MBI-110	45, 59, & 73 DAP	192.0 fl oz		3.8	7.2	2.0	4.8	68.4	2759
44.0	45 0 70 54 5	00 (I			- 4				
11. Convoy	45, & 73 DAP	32 fl oz	•	4.0	7.1	0.4	4.1	54.8	2/4/
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
LSD(P<0.05)			n.s.	0.4	0.4	3.2	0.7	16.3	705
<sup>3</sup> Average plant width (me	asure in cm). mea	n of 6 plant	s per plo	t.					
<sup>4</sup> Thrins=hased on a scale of	of 0-10 (0-no iniu	red 1-10%	leaver in	iured 2-7	20% lesv	es iniure	d 3=30% la	avec ini	ured

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.
- 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).

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: Soil type:	pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98 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		
LSD(P<0.05)			3.3	0.4	20.6	884		
<sup>1&amp;3</sup> Percent of row	feet infected ba	ised on dise	ase loci (u	ip to 12" line	ear row) p	er plot.		
<sup>2</sup> Florida 1-10 scale	where 1=no dis	ease and 10	)=dead pla	ant.				

	DA	ILY RAIN	FALL A	ND IRRG	ATION, 2	013	
			Lang Farm	, New Fiel	d		
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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				
TOTAL	4.4	2.6	13.2	5.6	8.7	3.1	0.6
IRRIG <i>A</i>	ATION						
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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					
TOTAL	0.0	1.7	1.7	0.0	1.0	1.0	0.0
Rain & Irr	4.4	4.3	15.0	5.8	9.7	4.1	0.6

## 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: Soil type:	pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98 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.

N	EMATODE SC	REENING T						
	<b>RIGDON FAF</b>	RM, СОТТО	N 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				
LSD(P<0.05)	27.2	15.0	1274	369.5				
<sup>1</sup> Visual rating	of the % of p	ods and ro	oots (1-100	)) with visua	l damage f	rom root l	know nema	tode.
<sup>2</sup> Percent of ro	w feet infect	ed based o	on disease	loci (up to 1	.2" of linea	r row) per	plot.	
<sup>3</sup> Number of A	Л. arenaria ju	<i>iveniles</i> pe	r 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.
- 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) on18 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.

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: Soil type:	pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98 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 E	mergen	ce Prog	rams Te	est, 2013					
Lang Farm, Cotton Field											
					<b>WM</b> <sup>1</sup>	L		L	_S <sup>2</sup>	TSWV <sup>3</sup>	Yield
Treatments	App's	Rate	27-Jun	28-Jul	7-Aug	21-Aug	Harvest	15-Jul	21-Aug	23-Jul	lb/A
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
LSD(P<0.05)			n.s.	n.s.	n.s.	10.7	n.s.	0.1	0.3	n.s.	554
*=spray 1 will b	e at 35 DAP, and spr	ay 1.5 at	42 DAP								
**=Band the wi	dth of the plant and	applied	in 20 GF	PA (8003	3 nozzle	e).					
***=All plots wi	ill be coversprayed w	ith Bravo	o, app's	3-7							
Planting Date:	May 1, 2013										
WM <sup>1</sup> =Percent o	f row feet infected b	ased on o	disease	loci (up	to 12"	of linea	r row) pei	r plot.			
LS <sup>2</sup> =Florida 1-10	scale where 1=no d	isease an	d 10=de	ead plai	nt.						
TSWV <sup>3</sup> =Percent	row feet infected ba	sed on d	isease lo	oci (up	to 12" c	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.
- 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.

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: Soil type:	pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98 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.

		SYNGEN	TA TEST II, 2	2013			
_		RIGDON FA	RM, COTTO	N FIELD		3	
				TSWV	Leaf Spot <sup>2</sup>	Wm³	YIELD
_	Treatments	App's	Rate/A	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				
-	T:1. /D 4.005	4.0.0		0.5	2.2	40.5	254.4
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 Wistik	6, /	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 iz **	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				
	LSD(P<0.05)	, , -,	r -	n.s.	0.3	26.8	1643
1 &	<sup>3</sup> Dercent of row f	eet infected based on a	disease loci (	un to 12	" linear rou	() ner nler	ł
<sup>2</sup> F	lorida 1 - 10 scale	where 1=no disease ar	nd 10=dead r	op to 12 plant.		, per più	ι.
**	21 DAP sprays ap	plied in a 6" band at 2	0 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.

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: Soil type:	pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98 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.

	NICH	INO TEST	l, 2013				
	LANG FA	ARM, COTT	ON FIELD				
			TSWV <sup>1</sup>	WM <sup>2</sup>	YIELD		
Treatlments	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		
	*						
3. Convoy	40 DAP*	48 fl oz	0.4	88.4	1754		
	(23" Band)						
Δ. Convov	/0 DAD*	64 fl oz	1 2	82.0	1078		
4. Convoy	(23" Band)	041102	1.2	02.0	1520		
5. Convov	60 DAP*	48 fl oz	0.0	77.6	1911		
	(23" Band)		0.0				
6. Convoy	60 DAP*	64 fl oz	1.2	78.8	1777		
	(23" Band)						
7. Convoy	40 DAP	48 fl oz	0.4	86.4	2166		
	(B'cast)						
8. Convoy	40 DAP	64 fl oz	3.2	88.0	1605		
	(B'cast)						
9. Convoy	60 DAP	48 fl oz	1.2	78.8	1690		
	(B'cast)						
10. Солина			2.0	00.4	1740		
10. Convoy	60 DAP	64 TI OZ	2.0	88.4	1748		
	(B'cast)		1.0	10.7	605		
LSD(P<0.05)			1.9	10.7	695	=	
Bravo cover spr	ray (1 - 7) were	sprayed ir	n all plots.				
1 & 7							
<sup>1</sup> <sup>°</sup> <sup>2</sup> Percent of ro	ow feet infecte	d based or	n disease lo	oci (up to 1	2" linear r	ow) per plo	ot.
*40 & 60 DAP a	pp's in bold ar	e in a <u>12 in</u>	che band a	and applied	d in 20 GP/	<u> 4 (8003 no:</u>	<u>zzle)</u> .
The other appli	ications are <u>bro</u>	<u>badcast wi</u>	<u>th the sam</u>	<u>e boom</u> .			

## 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.

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: Soil type:	pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98 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						

	NIC	HINO PRO	GRAMS TE	ST, 2013			
	RI	GDON FARI	и, сотто	N 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					
LSD(P<0.05	)		1.8	0.7	19.2	988	
<sup>1 &amp; 3</sup> Percent of re	ow feet infe	ected based	l on disea	se loci (up to	o 12" linea	r row) per p	olot.
<sup>2</sup> =Florida scale 1	1 - 10 where	e 1=no dise	ase and 1	D=dead plan	it.		

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

## EVALUATION OF VARIOUS FUNGICIDES APPLIED MIDSEASON AND EARLY EMERGENCE FOR THE CONTROL OF PEANUT SOILBORNE AND FOLIAR DISEASES (VERDESIAN 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.

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: Soil type:	pH - 5.8 P - 21 K - 89 Ca - 779 Mg - 98 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	I TEST I, 20	)13			
	RIC	GDON FARM	Ι, COTTON	FIELD			
Trootmonts	<b>A</b> nn's	Pata /A	TSWV <sup>1</sup>	Leaf Spot <sup>2</sup>	WM <sup>3</sup>	YIELD	
1 Bravo	<u>App s</u>	1 E nt	<b>23-Jul</b>	2.4	20-3ep	1596	
I. DIAVO	1-/	1.5 pt	0.0	5.4	74.0	1290	
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		.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	
LSD(P<0.05)			n.s.	n.s.	n.s.	n.s.	
1&3	+ :						1-4
Percent of row f	eet infect	ed based of	n disease l	oci (up to 12	2" of linea	r row) per p	lot.
<sup>2</sup> =Florida 1 - 10 scal	e where 🏾	L=no diseas	e and 10=0	dead plant.			

	DA	ILY RAIN	FALL A	ND IRRG	ATION, 2	013	
		La	ang Farm,	Cotton Fie	eld		
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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				
TOTAL	4.4	2.6	13.2	5.6	8.7	3.1	0.6
IRRIGA							
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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					
TOTAL	0.0	1.7	1.7	0.0	1.0	1.0	0.0
Rain & Irr	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.
- 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: Soil type:	pH - 6.0 P - 25 K - 40 Ca - 309 Mg - 48 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.

	Ea	rly Emerg	ence Pr	ograms T	est, 2013					
Attapulgus, New CBR field										
	WM <sup>1</sup> LS <sup>2</sup>						TSWV <sup>3</sup>	Yield		
Treatments	App's	Rate	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 Hoodling SC	1 5 B'cast	9.0.07	0.0	0.0	1 0	1 2	2.2	25	5277	
2. Headime SC		9.0 02	0.0	0.0	1.0	1.2	5.5	2.5	3377	
Convoy	3-5	13 11 02								
3. Proline	33 DAP, Banded**	5.7 fl oz	0.0	0.0	2.3	0.8	3.2	1.5	5767	
Convoy	3-5	13 fl oz								
4.Muscle 3.6F	33 DAP,B'cast	7.2 oz	0.0	0.0	5.0	1.3	3.5	5.5	4887	
Convoy	3-5	13 fl oz								
5.Convoy	3-5	13 fl oz	0.0	0.0	3.3	1.1	3.6	1.0	4855	
LSD(P<0.05)			n.s.	0.8	1.9	0.4	0.3	n.s.	n.s.	
*=spray 1 will b	pe at 35 DAP, and sp	oray 1.5 at	t 42 DAF	)						
**=Band the w	idth of the plant an	d applied	in 20 Gl	PA (8003	nozzle).					
***=All plots w	ill be coversprayed	with Brav	0							
Planting Date:	May 21, 2013									
WM <sup>1</sup> =Percent o	of row feet infected	based on	disease	e loci (up	to 12" of	linear r	ow) per j	olot.		
LS <sup>2</sup> =Florida 1-1	0 scale where 1=no	disease a	nd 10=c	lead plar	nt.					
TSWV <sup>3</sup> =Percent	t row feet infected b	based on o	disease	loci (up t	o 12" of l	inear ro	w) per p	lot.		
# 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 C0<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 #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.

- 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											
Attapulgus, New CBR field											
					WM1			LS <sup>2</sup>		TSWV <sup>3</sup>	Yield
Treatment	App's	Pattern	Rate/A	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
	160	(m <0.05)			25		0.4	0.5	0.5		
	LSD	(p <0.05)		n.s.	2.5	n.s.	0.4	0.5	0.5	n.s.	n.s.
*-Fordy/France		prove applied wit	h o cinal	o 0010	nozzla		مصمارين	na o tot	مايرماييم	no of 40	CDA
either in a	band th	prays applied wit	n a singi oot (Trt#	e 8010	nozzie	per row	арріуі	ng a tot	ai volun	ie 01 40	GPA,
**-Early Em		sprays applied wi	ith a cinc	-2), 01 L		st (11t#s	) Mannh	ing a to	tal valu	mo of 7	
-Earry Erro	hand th	sprays applied wi	nii a siiig ant (Trt#		s hroad	e per 10v cast (Trt	v appiy #6.0.10	יוווק a נכ או		ine or z	U GPA,
***=Farly En		e sprays applied y	with a on	-3,87, 01 19 8002		ner row	rannlvi	יי ing a tot	tal volur	ne of 10	GPA
either in a	hand th	e width of the nl	ant (Trt#	(4)  or  1	nozzie	st (Trt#7	7)				, or A,
****All plots	will he	coversprayed wit	h Bravo				· )				
			li biuvo.								
Planting Date: May 21, 2013											
WM <sup>1</sup> =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot											
$LS^2$ -Elorida 1 10 scale where 1-ne disease and 10-dead plant											
$L_{3}$ = FIOTIDA 1-10 Scale where 1=10 disease and 10=dead plant.											
ISMA = Helce	ent row i	ieet infected base	eu on ais	ease lo	oci (up t	0 12. 01	imear	row) pe	er piot.		

# 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.

- 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, 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.

				BAY	ER PRC	PULS	E/SEREI	NADE T	EST, 20	13					
						AT	TAPULG	iUS							
				Plants/f	ť	%	Dead Pla	ants <sup>2</sup>	Plant Width <sup>3</sup>	TSWV⁴	Leaf	Spot⁵	WM <sup>6</sup>	Nema <sup>7</sup>	Yield
Treatments	App's	Rate	4-Jun	11-Jun	18-Jun	4-Jun	11-Jun	18-Jun	18-Jun	13-Aug	30-Aug	30-Sep	30-Sep	30-Sep	lbs/A
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 at	3.2	27	2.8	0.0	0.0	0.0	15.8	1.6	49	91	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													
LSI	D(P<0.05)	î	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	applicatio	ons appli	ed in 3	3.72 GP	A and	mixed	in 2L v	olume	(TP 800	15E flat	fan no	zzle			
W/100 m	esn t-bail		ive at	22 psi). d (4 inc	hoc) di	roctly	over th		with a c	ingle 80	) 10 no	7710			
in a total	sprav vol	ume of 4			iiesj ui	lectry	overti	le low	with a s	ingle ou	-10 110/	2216			
***=All plot	s will be o	coverspra	ayed w	 /ith Bra	vo.										
•															
Planting Dat	te: May 2	1, 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 &amp; 6</sup> Percent o	of row fee	et infecte	d base	ed on d	isease	loci (u	p to 12	" of lin	ear row	) per pl	ot.				
<sup>5</sup> Florida 1-10	<sup>5</sup> Florida 1-10 scale where 1=no disease and 10=dead plant.														
'Visual ratin	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:

- Randomized complete blocks with five replicates. 1.
- 2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
- There are eight foot alleyways between blocks. 3.

- 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  $CO_2$ 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.

1.	Location: Attapu	lgus 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: Soil type:	pH - 6.0 P - 25 K - 40 Ca - 309 Mg - 48 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.

		E	BAYER S	EED TRT	TEST, 20	013				
ATTAPULGUS										
					1			2		
				Plants/ft	:*	% [	Dead Plar	ntsf	Yield	Root knot
Treatments	App's	Rate/A	4-Jun	11-Jun	18-Jun	4-Jun	11-Jun	18-Jun	lbs/A	9/30 <sup>3</sup>
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	45 DAP	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	45 DAP	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	45 DAP	13.7 fl oz								
10. Seed Irt 10		10.0 ()								
SP102000026966	In Furrow	18.0 fl oz	2.5	2.1	2.1	0.0	0.0	0.4	1382	431
SP102000025914	45 DAP	13.7 fl oz		0.2	0.2		0.2	0.7	604	
LSD (P<0.05)			n.s.	0.2	0.3	n.s.	0.2	0.7	694	n.s.
	21 2012									
<sup>1</sup> Stand count is the	21, 2013	morgadia	lante re	r foot of	rowar	1 1000	11 1.000	and 10 1		
$^{2}$ The $\%$ of arrange $^{1}$	<sup>2</sup> The 0/ of emerged plants that was dead or dwing ner relation 4 lune, 11 Julie, and 10 lune.									
<sup>3</sup> Number of the	The % of emerged plants that was dead or dying per plot on 4 June, 11 June, and 18 June.									
Number of M. arer	<i>iaria</i> juveni	ies per 100	J CC of	soii.						

BAYER SEED TRT TEST, 2013											
ATTAPULGUS											
			Plant	Width⁴	Thr	ʻips⁵	TSWV⁵	Leaf	Spot <sup>7</sup>	WM <sup>®</sup>	Nema <sup>9</sup>
Treatments	App's	Rate/A	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	45 DAP	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	45 DAP	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	45 DAP	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	45 DAP	13.7 fl oz									
LSD (P<0.05)	LSD (P<0.05) 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.							ance.				
<sup>6 &amp; 8</sup> Percent of row fe	eet infected	l based on	disease	loci (up	to 12" c	of linear	row) per	plot.			
<sup>7</sup> Florida 1-10 scale w	vhere 1=no	disease an	d 10=de	ead plan	t.						
The % of roots and pods galled by <i>M. arenaria.</i>											

DAILY RAINFALL AND IRRGATION, 2013							
			Attapul	gus, GA			
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
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		
TOTAL	4.7	0.8	4.2	11.8	6.3	3.1	0.6
IRRIG	ATION						
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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			-		
TOTAL	0.0	2.0	2.5	0.5	1.5	1.5	0.0
Rain & Irr	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.
- 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.

1.	Location:	Ponder Farm, CPES, Tifton, GA 31794
2.	Soil Fertility: Soil type:	pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44 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 FUNG	<b>SICIDE T</b>	EST, 20	13				
PONDER FARM, NORTH ORCHARD									
		w	ΙΟΗΙΤΑ						
									Leaf
			Leaf	Inc. <sup>1</sup>	Leaf	Sev. <sup>2</sup>	Ninc <sup>3</sup>	Neo <sup>4</sup>	Defoliation <sup>5</sup>
Treatments	Rate/A	App's	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	.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	.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
8. FungiPhite	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. FungiPhite	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	, , -, , -							
			1						

	PONDER FARM, NORTH ORCHARD								
WICHITA									
			Leaf Inc. <sup>1</sup>		Leaf	Sev. <sup>2</sup>	Ninc <sup>3</sup>	Neo <sup>4</sup>	Leaf Defoliation <sup>5</sup>
Treatments	Rate/A	App's	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
LSD (P<0.05)			7.2	11.1	1.2	0.7	4.3	3.7	15.4
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 assoicated with <i>Neofusicoccum sp</i> .									
<sup>3</sup> Based on a visual assessment of the percent defoilation (0-100) of foliage on whole trees.									

PEC	AN FUNGIC	IDE TEST, 201	.3					
PONDER FARM, NORTH ORCHARD								
	WICH	IITA						
			Nut	t Sev <sup>6</sup>	SecDef <sup>7</sup>			
Treatments	Rate/A	App's	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							

PEC.							
	WICH	HITA			1		
			Nut	t Sev <sup>6</sup>	SecDef <sup>7</sup>		
Treatments	Rate/A	App's	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		
LSD (P<0.05)			13.0	7.5	14.7		

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.
- 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.

1.	Location:	Ponder Farm, CPES, Tifton, GA 31794
2.	Soil Fertility: Soil type:	pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44 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.

	P	ECAN FUNGIO	IDE TES	Г, 2013				
	PO	NDER FARM, I	NORTH C	RCHARE	)			
		DESI	RABLE					
			Leaf	Inc. <sup>1</sup>	Leaf	Sev <sup>2</sup>	Sh. Split <sup>3</sup>	Leaf Ret <sup>4</sup>
Treatments	Rate/A	App's	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							

	F	PECAN FUNGI	CIDE TES	T, 2013								
	PO	NDER FARM,	NORTH C	ORCHAR	D							
	DESIRABLE											
			Leaf	Inc. <sup>1</sup>	Leaf Sev <sup>2</sup>		Sh. Split <sup>3</sup>	Leaf Ret <sup>4</sup>				
Treatments	Rate/A	App's	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											
	2.0t	2.9.4	46.0	17.0	0.0	1.0	F0 1	55.0				
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 Lin 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				
LSD (P<0.05)			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 t	ree (% of	leaflets	with any	scab).						
Leaf Inc. <sup>2</sup> =Leaf scab severity, b	ased on 6-8 t	erminals per tr	ee (% of l	leaflets c	overed w	ith scab).						
<sup>3</sup> Shuck split=the % of shucks visibly split on October 17.												
<sup>4</sup> Based on a visual assessment	of the percer	nt retention (0-	100) of fo	liage on	whole tre	ees.						

PECAN FUNGICIDE TEST, 2013											
	Р	ONDER FARM,	NORTH O	ORCHARD							
		DES	IRABLE								
			Nut	Inc. <sup>3</sup>	Nut	Sev <sup>4</sup>	L. Scorch <sup>5</sup>				
Treatments	Rate/A	App's	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. FungiPhite	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. FungiPhite	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												
	PONDE	R FARM, NORT	TH ORCH	IARD								
DESIRABLE												
				3		4						
			Nut	Inc. <sup>°</sup>	Nut Sev⁴		Leaf Scorch <sup>®</sup>					
Treatments	Rate/A	App's	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 pv	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	<u>२</u> २	99.2	6.8					
LSD (P<0.05)			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.

1.	Location:	Ponder Farm, CPES, Tifton, GA 31794
2.	Soil Fertility: Soil type:	pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44 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 F	UNGICIDE	TEST II,	2013			
		PONDER	FARM, SOL	JTH ORC	HARD			
			DESIRAE	BLE				
			L	eaf Inc. <sup>1</sup>			Leaf sev	<i>.</i> <sup>2</sup>
Treatments	Rate/A	App's	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 4I	6.0 fl oz	1, 3, 5, 7, 9	5511	0011	0.110		1012	1919
+ Flast 400F	25.0 fl.oz	1, 3, 3, 7, 7, 3						
	23.0 11 02							
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 4I	60fl 07	13579	10.0	10.0	11.7	5.5	10.0	11.0
+ Flast 400F	25 0 fl oz	<u>+</u> , 3, 3, 7, 3						
	23.0 11 02							
								0.4
								94

	PECAN FUNGICIDE TEST II, 2013										
	PONDER FARM, SOUTH ORCHARD										
DESIRABLE											
			L	eaf Inc. <sup>1</sup>			Leaf sev. <sup>2</sup>				
Treatments	Rate/A	App's	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			
LSD (P<0.05)			8.7	11.7	10.9	1.6	3.0	4.4			
Leaf Inc. <sup>1</sup> =Leaf scab	incidence, 6	terminals per t	ree (% of le	aflets w/	scab on w	orst leaf).					
Leaf sev. <sup>2</sup> =Leaf scab	severity, 6 s	hoots per tree	(% scab sev	erity on v	worst leaf						

		PECAN I	FUNGICIDE	TEST II,	2013			
		PONDER	FARM, SO	JTH ORC	HARD			
			DESIRA	BLE				
			Sh. split <sup>3</sup>	N	inc <sup>4</sup>	Nut	Sev⁵	Leaf Scorch <sup>6</sup>
Treatments	Rate/A	App's	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 4I	6.0 fl oz	1, 3, 5, 7, 9						
+ Flast 400F	25.0 fl oz	_, 0, 0, 1, 0						
	2010 11 02							
5 Nordox 75WG	6 5 lb	246810	66.0	78.9	100.0	71	16.4	55 1
Super Tin 4I	6.0 fl oz	1 3 5 7 9	00.0	70.5	100.0	7.1	10.1	55.1
+ Flast 400F	25.0 fl.oz	1, 3, 3, 7, 3						
	25.011.02							
6 Sovran 50W	3207	246810	61.0	71 7	100.0	6.6	12 1	24.3
Super Tin 4I	6.0 fl.oz	1 3 5 7 9	01.0	, 1.,	100.0	0.0	16.1	21.5
+ Flast 400E	25.0 fl.oz	1, 3, 3, 7, 3						
	23.01102							
7 Orius 3 6F	8 0 fl 07	2 4 6 8 10	50.0	80.0	100.0	9.1	19.6	20.8
Super Tin /I	6.0 fl oz	1 3 5 7 9	50.0	00.0	100.0	5.4	15.0	20.0
+ Elast 400E	25.0 fl.oz	1, 3, 3, 7, 5						
	23.011.02							
8 Enable	5 () fl oz	246810	51.0	75.6	100.0	85	23.0	41.0
	10.0 fl oz	2, 4, 0, 8, 10	51.0	75.0	100.0	0.5	23.0	41.0
+ Aboullu Supor Tin 41	6.0 fl.oz	12570						
Super TIT 4L	0.0 11 02	1, 5, 5, 7, 9						
	23.011.02							
0 Custadia	0 6 fl oz	246910	60.0	047	100.0	11.0	25.7	27.4
9. Custoula	6.0 fl oz	2, 4, 0, 0, 10	09.0	04.7	100.0	11.9	23.7	57.4
Super TIT 4L	0.01102	1, 5, 5, 7, 9						
+ EIAST 400F	25.0 H 0Z							
10 Custodia	17 0 fl o-	216010	72.0	00 1	06.7	6.0	10.2	21 E
LU. CUSIOUId	17.2 II UZ	2,4,0,0,10	72.0	00.1	50.7	0.0	10.5	51.5
Super TIN 4L		1, 5, 5, 7, 9						
+ EIAST 400F	25.0 H 0Z							
								96

PECAN FUNGICIDE TEST II, 2013										
		PONDER	FARM, SOU		HARD					
					4 <sup>4</sup>	NI +	Sau <sup>5</sup>	Loof Coorch <sup>6</sup>		
Treatments	Rate/A	App's	17-Oct	19-Jul	22-Aug	19-Jul	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		
LSD (P<0.05)			20.0	16.3	4.4	6.3	10.9	11.9		
2										
Shuck split <sup>°</sup> = the %	of shucks vis	ibly split on Oo	tober 17.							
Ninc <sup>4</sup> =Nut scab inci	dence, based	on ratings of 6	5 nut cluste	rs per tre	e (% of nut	ts with ar	ıy scab).			
Nut Sev <sup>5</sup> =Nut scab s	everity, base	d on ratings of	f 6 nut clust	ers per tr	ee (% of so	chuck are	a covered	with scab).		

Nut Sev<sup>3</sup>=Nut scab severity, based on ratings of 6 nut clusters per tree (% of sc 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.

1.	Location:	Ponder Farm, CPES, Tifton, GA 31794
2.	Soil Fertility: Soil type:	pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44 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 F	ARM, SO	UTH ORC	HARD						
		DESIRA	BLE							
			Leaf I	nc.1	Leaf	Sev <sup>2</sup>	% Def.			
Treatments	Method	App's	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								
LSD (P<0.05)			7.8	9.0	1.6	1.7	36.8			
Leaf Inc <sup>1</sup> =Leaf scab incidence, bas	ed on 6 term	inals per t	ree (% of l	eaflets o	n middle le	eaf with any	scab).			
Leaf Sev <sup>2</sup> =Leaf scab severity, ba										
% Def = visual estimate of the 9	% defoliatior	n of whole	e tree.							

BAYER DRIP TEST ON PECAN TEST, 2013											
	PONDER I	ARM, SO	UTH ORC	HARD							
	DESIRABLE										
						Leaf					
			Nut	Sev <sup>3</sup>	Ninc <sup>4</sup>	Position <sup>5</sup>	Yield				
Treatments	Method	App's	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									
LSD (P<0.05)			3.2	12.7	16.9	0.4	15.7				
Nut Sev <sup>3</sup> =Nut scab severity, based	l on 6 nut clu	sters per t	ree (% of	shuck co	vered with	scab).					
Ninc <sup>4</sup> =Nut scab incidence, based	on 6 nut clus	ters per tre	e (% of n	uts with	any scab).						
Leaf Position <sup>5</sup> =Leaf position with	most scab (fr	om base o	f termina	I).							

DAILY RAINFALL AND IRRGATION, 2013 Ponder Farm							
DATE	APR	MAY	JUN	JUL	AUG	SEP	ОСТ
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				
TOTAL	3.1	2.9	11.7	5.9	7.2	2.3	0.4
Irrigation	was applie	d ac poods					
in igation was applied as needed on all trees.							