

Date: Jan. 8, 2013
Memo to: Industry Cooperators
From: Tim Brenneman
Subject: Field Trial Results

Attached are the results of our 2012 field trials on peanuts and pecans. This year started out very warm in the winter, but was fairly normal at planting. Although dry early, frequent rains in the latter part, followed by a dry fall for harvest resulted in some very good crops and reasonable levels of disease. Overall it was a good year for disease data on peanuts, and there was enough pecan scab to evaluate treatments.

I want to acknowledge the hard work of our crew lead by Russ Griffin, Lewis Mullis, and Pat Hilton. Summer workers included Miranda Goodman, Sam Pennington, Kyle Brown, and Justin Batchelor. 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. Tom Ingram and Wendy Tsai, both M.S. students in my lab, also played an important part of these investigations.

Once again we are making this available primarily as an online document, and it can be found at www.tomatospottedwiltinfo.org by clicking on “Publications”, and “2012 Field Trial Results on Diseases of Peanuts and Pecans”. If you have any problems or any questions feel free to call. We have printed a few bound copies and can send you one upon request, but the entire book is available as a pdf file. Thanks again for your support, and we look forward to cooperating with you again in the future.

TABLE OF CONTENTS

2012 PEANUT TESTS

BLACKSHANK FARM (WOODS and POND FIELD)

Nematocide/Genotypes Test.....	5
Sipcam Test.....	8
Dupont Test.....	11

BLACKSHANK FARM (IRR/NONIRRIGATED FIELD)

Early Emergence Twin Row Test.....	14
Proline In-Furrow Early Emergence Test.....	16
Proline Volume and Banding Test.....	18

BLACKSHANK FARM (BANANA FIELD)

Multi-State Disease Evaluation Test.....	20
CBR Evaluation Test.....	24
Blackshank Daily Rainfall.....	27

LANG FARM (SOUTH FIELD)

Loveland Test.....	28
Multiple Company Test I.....	31
Early Emergence Programs Test.....	34
Proline Volume and Banding Test II.....	36
Nichino Test II.....	38
Lang (South Field) Daily Rainfall.....	40

RIGDON FARM (NEW FIELD)

Syngenta Seed Trt Test II 41
Miscellaneous Biologicals Test 43
MANA Test 46
Rigdon (New Field) Daily Rainfall 48

RIGDON FARM (COTTON FIELD)

Nematicide Test 49
Nichino Test I 51
Rigdon (Cotton Field) Daily Rainfall 53

ATTAPULGUS FARM

Bayer Propulse Test 54
Miscellaneous Fungicide Test 56
Attapulugus Daily Rainfall 58

PLAINS

Nontrt Proline In-Furrow Early Emergence Test 59
Proline In-Furrow Early Emergence Test II 61
Early Emergence Programs Test 63
Plains Daily Rainfall 65

2012 PECAN TESTS

PONDER FARM

Chemical Desirable Fungicide Test..... 66

Chemical Wichita Fungicide Test 69

Pecan Fungicide Test II..... 72

Ponder Daily Rainfall..... 75

EVALUATION OF NEMATOCIDES AND GENOTYPES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES AND NEMATODES

- A. **PURPOSE:** To evaluate the efficacy of nematocides and genotypes for the control of root knot nematode on GA-07W, and compare it to the nematode resistance in several genotypes of peanut.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: GA-06G and Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.T-band, at cracking and early post sprays were applied as described in the footnotes.
 2. Cover sprays of Chlorothalonil 720 (1.5 pts/A) were applied on 4 Jun, 19 Jun, 2 Jul, 16 Jul, 31 Jul, 27 Aug and on 16 Aug added Tilt (2 oz/A). Convoy 40 SC for white mold control (1.5 pt/A) was applied on 18 Jun, and 17 Jul. The dates for other sprays were PPIs 27 Apr, at plants 27 Apr, 45 DAP 13 Jun, and 75 DAP 12 Jul.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Blackshank Farm, Woods Field Tifton, GA 31794
 2. **Crop History:** Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. **Land Preparation:** Field was deep turned and rows marked 16Apr.
 4. **Soil Fertility:** pH-6.55 P-161.1 K-58.3 Ca-708 Mg-90.7
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25pt/A) 18 Apr.
POST: Cadre 70DF, (1.44 dry oz/A) 21 Jun
Cultivated for weeds on 4 June.
 6. **Insecticides:** Acephate 97, (0.7 lb/A) for thrips 8 May
 7. **Nematicides:** None except treatments
 8. **Planting Info:** GA-06G and Tifguard, 6 seed/ft, 1.5" ft deep on 27 Apr
 9. **Harvest Dates:** Dug – 8 Oct Picked – 12 Oct

E: SUMMARY: None of the treatments reduced nematode damage or populations on the susceptible cultivar, whereas the nematode-resistant lines all had greatly reduced damage, higher yields, and lower final nematode populations. Some also had a greatly improved level of white mold resistance also.

Nematocide/Genotypes Test, 2012								
Blackshank, Woods Field								
Treatments	Cultivars	App's	Rate/A	Plants	TSWV ³	Plant	Leaf	Nematode ⁶
				per ft ¹			Injury ⁵	8-Oct
				17-May	30-Jul	Width ⁴	30-Jul	
1. Nontreated	GA-07W			3.0	0.8	55.6	1.4	35.0
2. Temik	GA-07W	Band @ plant	10.0 lb	.	0.4	55.0	1.2	34.7
Temik		Band @ 45 DAP	10.0 lb					
3. GOS Neem 7-Way + Spray Clean 80/20	GA-07W	PPI*	2.0 qt 1.0 pt	.	2.0	55.6	2.8	30.6
4. GOS Neem 7-Way + Spray Clean 80/20	GA-07W	PPI*	2.0 qt 1.0 pt	.	0.0	53.8	2.0	40.9
GOS Neem 7-Way + Spray Clean 80/20		45 DAP*	1.0 qt 1.0 pt					
5. GOS Neem 7-Way + Spray Clean 80/20	GA-07W	PPI*	2.0 qt 1.0 pt	.	0.8	55.2	3.4	27.9
GOS Neem 7-Way + Spray Clean 80/20		45 DAP*	1.0 qt 1.0 pt					
GOS Neem 7-Way + Spray Clean 80/20		75 DAP*	1.0 qt 1.0 pt					
6. Nontreated	Branch (2)			3.1	0.8	.	3.0	1.2
7. Nontreated	Branch (3)			3.6	1.2	.	1.6	0.0
8. Nontreated	Branch (4)			3.0	1.2	.	0.8	0.0
9. Nontreated	Branch (5)			3.0	0.4	.	2.0	0.0
10. Nontreated	Branch (6)			3.0	0.4	.	2.0	5.8
LSD (P<0.05)				0.5	n.s.	n.s.	1.5	4.9
* "Early post" applications applied in a narrow band (2-4 inches) directly over the row with a single 8010 nozzle in a total spray volume of 40 GPA.								
** "PPI" applications applied in a 14" band applied to the bed and incorporated with the rototiller before planting; apply directly over the row with a single 8010 nozzle in a total spray volume of 40 GPA. "45 DAP" and "75 DAP" applications applied in a 14" band over each row of growing peanuts.								
¹ Stand count is the number of emerged plants per foot of row on 17 May.								
² The % of emerged plants that was dead or dying per plot on 17 May.								
³ Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.								
⁴ Average plant width (measure in cm), mean of 6 plants per plot.								
⁵ Leaf injury is the % of leaves with phytotoxicity on a scale of 0-100% with 0=no injury.								
⁶								
<i>continued on next page</i>								

Nematocide/Genotypes Test, 2012

Blackshank, Woods Field

Treatments	Cultivars	App's	Rate/A	White Mold ⁷	Rootknot ⁸		Ring ⁸		Yield lb/A
				8-Oct	7-May	10-Sep	7-May	10-Sep	
1. Nontreated	GA-07W			62.4	1.4	108.4	1.4	23.4	1963
2. Temik	GA-07W	Band @ plant	10.0 lb	68.0	.	156.2	.	27.4	1922
Temik		Band @ 45 DAP	10.0 lb						
3. GOS Neem 7-Way	GA-07W	PPI*	2.0 qt	62.5	.	177.8	.	17.2	1609
+ Spray Clean 80/20			1.0 pt						
4. GOS Neem 7-Way	GA-07W	PPI*	2.0 qt	62.5	.	96.8	.	12.6	1580
+ Spray Clean 80/20			1.0 pt						
GOS Neem 7-Way		45 DAP*	1.0 qt						
+ Spray Clean 80/20			1.0 pt						
5. GOS Neem 7-Way	GA-07W	PPI*	2.0 qt	60.0	.	132.0	.	22.4	1783
+ Spray Clean 80/20			1.0 pt						
GOS Neem 7-Way		45 DAP*	1.0 qt						
+ Spray Clean 80/20			1.0 pt						
GOS Neem 7-Way		75 DAP*	1.0 qt						
+ Spray Clean 80/20			1.0 pt						
6. Nontreated	Branch (2)			41.2	2.4	32.6	4.0	16.4	2730
7. Nontreated	Branch (3)			15.2	0.8	7.0	1.2	16.0	3421
8. Nontreated	Branch (4)			3.2	3.2	4.4	0.6	16.6	3880
9. Nontreated	Branch (5)			19.2	1.0	1.6	0.8	11.6	2898
10. Nontreated	Branch (6)			10.8	4.4	47	1.6	18.6	2538
LSD (P<0.05)				20.1	n.s.	64.9	n.s.	n.s.	918

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

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

⁷Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

⁸Number of nematodes per 100CC of soil.

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

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. There were 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 CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. In furrow sprays were applied 3.72 GPA using a TP 80015E nozzle at 22 PSI. The Early Emergence spray was applied in a 4 inch band at 40.0 GPA using a single 8010 nozzle per row.
2. 30 DAP sprays were applied on 25 May. Treatment sprays 1-7 were done on 4 Jun, 19 Jun, 3 Jul, 16 Jul, 31 Jul, 15 Aug, and 27 Aug., and in furrow sprays on 30 Apr. No cover-sprays applied to this test.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Pond Field Tifton, GA 31794
2. Crop History: Peanut - 2011, Peanut - 2010, Peanut - 2009
3. Land Preparation: Moldboard plowed and marked rows on 16Apr.
4. Soil Fertility: pH-6.61 P-95.2 K-62.4 Ca-723 Mg-94.8
Soil type: Tifton loamy sand, 2 - 5 % slope
5. Herbicides: PPI: Sonalan (2 pt/A) + Dual Magnum (1.25 pt/A) on 18Apr.
POST: Cadre 70 DF (1.44 oz/A) on 21 Jun.
Cultivated for weeds on 4 June.
6. Insecticides: Acephate 97 (0.7 lb/A) for thrips on 8 May.
7. Planting Info: Tifguard, 6 seed/ft, 1.5" deep on 30 Apr.
8. Harvest Dates: Dug - 28 Sep Picked - 8 Oct

E: SUMMARY: This was a good test for white mold and leaf spot. The early emergence banded sprays also showed a benefit for white mold management.

Sipcam Test, 2012										
Blackshank Farm, Pond Field										
Treatments	App's	Rate/A	TSWV ¹	WM ²		Plant	Leaf Injury ⁴	Leaf Spot ⁵		Yield
			26-Jul	2-Aug	28-Sep	Width ³	30-Jul	10-Sep	28-Sep	lb/A
1. Actinogrow AG	In Furrow	3.0 oz **	0.0	6.4	35.2	62.6	0.6	.	4.2	3920
Echo 720	1.5	1.0 pt								
+ Eminent 125SL		7.2 oz								
Muscle ADV	3 - 6	2.0 pt								
Echo 720	7	1.5 pt								
2. Echo 720	1.5	12 oz	0.0	6.0	22.8	.	0.6	.	4.0	4466
+ Eminent 125SL		5.4 oz								
Muscle ADV	3 - 6	2.0 pt								
Echo 720	7	1.5 pt								
3. Echo 720	1.5	1.0 pt	0.0	4.0	45.2	61.4	1.0	.	3.7	3305
+ Eminent 125SL		7.2 oz								
Muscle ADV	3 - 6	2.0 pt								
Echo 720	7	1.5 pt								
4. Echo 720	1.5	1.0 pt	0.4	4.4	24.8	.	0.6	.	3.9	4565
+ Eminent 125SL		4.0 oz								
Muscle ADV	3 - 6	2.0 pt								
Echo 720	7	1.5 pt								
5. SA-0040301	1.5	2.0 pt	0.4	6.8	47.2	.	0.4	.	4.3	3711
Muscle ADV	3 - 6	2.0 pt								
Echo 720	7	1.5 pt								
6. Headline SC	1.5	9.0 fl oz	0.0	5.6	48.0	.	0.6	2.8	3.7	3595
Muscle ADV	3 - 6	2.0 pt								
Echo 720	7	1.5 pt								
<i>continued on next page</i>										

Sipcam Test, 2012

Blackshank Farm, Pond Field

Treatments	App's	Rate/A	TSWV ¹			WM ²		Plant	Leaf Injury ⁴		Leaf Spot ⁵		Yield
			26-Jul	2-Aug	28-Sep	Width ³	30-Jul	10-Sep	28-Sep	lb/A			
7. Proline	30 DAP	5.7 fl oz *	0.8	1.2	16.8	.		0.4	3.0	4.0		4519	
Muscle ADV	3 - 6	2.0 pt											
Echo 720	7	1.5 pt											
8. Headline SC	30 DAP	9.0 fl oz *	0.4	3.6	34.0	.		0.4	2.9	4.0		3880	
Muscle ADV	3 - 6	2.0 pt											
Echo 720	7	1.5 pt											
9. Echo 720	1 - 7		0.4	21.6	46.0	.		0.4	3.2	4.1		3508	
LSD (P<0.05)			n.s.	8.0	13.9	n.s.		n.s.	n.s.	0.3		907	
* Early emergence sprays in a 4 inch band with a single 8003 nozzle per row applying a total volume of 20 GPA.													
**In furrows applied in 3.72 GPA and mixed in a 2 L volume.													
¹ & ² Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.													
³ Average plant width (measure in cm), mean of 6 plants per plot.													
⁴ Leaf injury is the % of leaves with phytotoxicity on a scale of 0-100% with 0=no injury.													
⁵ Florida 1 - 10 scale where 1=no disease and 10=dead plant.													

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

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. There 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 CO₂ 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 4 Jun, 19 Jun, 2 Jul, 16 Jul, 31 Jul, 22 and Aug. In furrow applications applied in 3.72 GPA and mixed in 2 L volume. (TP 80015E flat fan nozzle w/100 mesh t-ball check valve at 22 psi) on 30 Apr. and 21 DAP applied in a narrow band (4 inches) over the row, spray volume of 15 GPA) on 21 May. There were no Bravo cover sprays.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Pond Field Tifton, GA 31794
2. Crop History: Peanut - 2011, Peanut - 2010, Peanut - 2009
3. Land Preparation: Moldboard plowed and marked rows on 16 Apr.
4. Soil Fertility: pH-6.61 P-95.2 K-62.4 Ca-723 Mg-94.8
Soil type: Tifton loamy sand, 2 - 5 % slope
5. Herbicides: PPI: Sonalan (2 pt/A)+Dual Magnum (1.25 pt/A) 18 Apr.
POST: Cadre 70 DF (1.44 oz/A) on 21 Jul
Cultivated for weeds on 4 June.
6. Insecticides: Acephate 97 (0.7 lb/A) for thrips on 8 May
7. Planting Info: Tifguard, 6 seed/ft, 1.5" deep on 30 Apr
8. Harvest Dates: Dug - 28 Sep Picked - 8 Oct

E: SUMMARY: Severe disease pressure developed that overwhelmed some treatments. The test site also had poor drainage and was very wet for the latter part of the year, stressing plants and making management difficult.

Dupont Test, 2012
Blackshank, Farm, Pond Field

Treatments	App's	Rate	Plants/ft ¹			% Dead Plants ²			TSWV ³	WM ⁴		Leaf Injury ⁵	Leaf Spot ⁶	Yield lb/A
			10-May	21-May	31-May	10-May	21-May	31-May		26-Jul	2-Aug				28-Sep
1. Fontelis	In Furrow *	16 fl oz	2.4	3.0	2.4	0.0	0.0	0.0	0.0	18.4	50.0	0.4	5.1	3473
Bravo WS	1 - 7	1.5 pt												
2. Fontelis	In Furrow *	20 fl oz	2.7	2.9	2.4	0.0	0.0	0.4	1.6	24.4	65.2	0.8	4.9	3154
Bravo WS	1 - 7	1.5 pt												
3. Proline	In Furrow *	5.7 fl oz	2.4	3.1	2.4	0.0	0.0	0.0	0.0	11.2	53.2	0.6	4.6	3502
Bravo WS	1 - 7	1.5 pt												
4. Fontelis	21 DAP, 4" Band**	1.78 fl oz (16 oz b'cast)	.	.	.	0.0	0.0	0.0	0.0	14.0	33.2	0.6	3.9	4484
Bravo WS	1, 2, 4, 6, 7	1.5 pt												
Fontelis	3 & 5	16 fl oz												
5. Fontelis	21 DAP, 4" Band **	2.23 fl oz (20 oz b'cast)	.	.	.	0.0	0.0	0.0	0.0	10.8	39.2	1.0	4.1	4008
Bravo WS	1, 2, 4, 6, 7	1.5 pt												
Fontelis	3 & 5	16 fl oz												
6. Fontelis	21 DAP, 4" Band **	1.78 fl oz (16 oz b'cast)	.	.	.	0.0	0.0	0.0	0.4	20.0	65.5	0.4	4.1	3142
Bravo WS	1 - 7	1.5 pt												
7. Fontelis	21 DAP, 4" Band **	2.23 fl oz (20 oz b'cast)	.	.	.	0.0	0.0	0.0	0.0	25.2	72.4	0.6	4.1	2527
Bravo WS	1 - 7	1.5 pt												
8. Proline	In Furrow *	5.7 fl oz	2.6	3.2	2.4	0.0	0.0	0.0	0.4	16.8	61.2	0.4	4.3	3247
+ Fontelis		16 fl oz												
Bravo WS	1 - 7	1.5 pt												
9. Proline	In Furrow *	5.7 fl oz	2.5	3.3	2.4	0.0	0.0	0.0	0.0	18.0	52.0	0.6	4.5	3264
Fontelis	21 DAP, 4" Band **	1.78 fl oz (16 oz b'cast)												
Bravo WS	1 - 7	1.5 pt												
10. Proline	21 DAP, 4" Band **	5.7 fl oz	.	.	.	0.0	0.0	0.0	0.8	11.2	56.4	1.2	4.4	3093
Bravo WS	1 - 7	1.5 pt												
11. Bravo WS	1 - 7	1.5 pt	.	.	.	0.0	0.0	0.0	1.6	18.4	55.6	0.8	4.8	2550
LSD (P<0.05)			n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	1.4	n.s.	18.014	n.s.	0.7	1104

*In Furrow applications applied in 3.72 GPA and mixed in 2 L volume. (TP 80015E flat fan nozzle w/100 mesh t-ball check valve at 23 psi).

**All 21 DAP treatments were applied in a narrow band (4 inches) over the row, spray volume of 15 GPA.

¹Stand count is the number of emerged plants per foot of row on 10 May, 21 May, and 31 May.

²The % of emerged plants that was dead or dying per plot on 10 May, 21 May, and 31 May.

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

⁵Leaf injury is the % of leaves with phytotoxicity on a scale of 0-100% with 0=no injury.

⁶Florida 1 - 10 scale where 1=no disease and 10=dead plant.

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

- A. **PURPOSE:** To evaluate the comparative efficacy of Proline applied in various ways at early emergence to twin and single row peanuts for the control of foliar and soil borne diseases.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with seven replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing. The twin rows were spaced at 36 inches outside, and 8 inches between twins.
 3. There are eight foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
 5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. Equipment: Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. In furrow sprays were applied 3.72 GPA using a TP 80015E nozzle at 22 PSI. The Early Emergence spray was applied in a 4 inch band at 40.0 GPA using a single 8010 nozzle per row.
 2. There were cover sprays of Chlorothalonil 720 (1.5 pt/A) on 4 Jun, 19 Jun, 2 Jul, 16 Jul, 31 Jul, 27 Aug and added Tilt (2 fl oz/A) on 16 Aug. Early Emergence 21 DAP sprays were applied on 25 May.
- D. **ADDITIONAL INFORMATION:**
1. Location: Blackshank Farm, Irr/Non Field Tifton, GA 31794
 2. Crop History: Peanut - 2011, Peanut - 2010, Peanut – 2009
 3. Land Preparation: Moldboard plowed and marked rows on 16 Apr.
 4. Soil Fertility: pH-6.08 P-74.8 K-114.3 Ca-792 Mg-110.2
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. Herbicides: PPI: Sonalan (2 pt/A) + Dual Magnum (1.25 pt/A) on 18 April.
POST: Cadre 70DF (1.44 oz/A) on 28 Jun.
Basagran (2pt/A) + crop oil (1 pt/A) on 22 May.
 6. Insecticides: Acephate 97 (0.7 lb/A) for thrips on 10 May.

7. Planting Info: Tifguard, single row, 6 seed/ft on 2 row/bed (6" bed) and twin row, 3 seed/ft on 4 row/bed (6" bed, 1.5" deep) 30 April
8. Harvest Dates: Dug - 24 Sep Picked - 27 Sep

E: SUMMARY: Early emergence sprays had a significant effect on white mold in single row peanuts, but did not on the twin rows under lower disease pressure.

Early Emergence Twin Row Test, 2012						
Blackshank Farm, Irr/Non Field						
Treatments	App's	Rate/A	Row Spacing	WM ¹		Yield lb/A
				17-Aug	24-Sep	
1. Nontreated			Single	21.4	48.3	4144
2. Proline	EE, 40 GPA	5.7 fl oz	Single	14.6	34.9	4900
3. Nontreated			Twin	16.3	36.0	4771
4. Proline	EE, 40 GPA	5.7 fl oz	Twin	14.9	33.4	4883
5. Proline	EE, 20 GPA	5.7 fl oz	Twin	16.0	34.0	4700
6. Proline	EE, 40 GPA	5.7 fl oz	Twin	13.1	35.1	4970
7. Proline	EE, 20 GPA	5. fl oz	Twin	12.6	36.3	5153
LSD (P<0.05)				n.s.	10.0	640
Trt # 2=Use the 40 GPA boom, spray a band the width of the plants.						
Trt # 4=Raise 40 GPA boome to cover both rows of each twin.						
Trt # 5=Raise 20 GPA boom to cover both rows of each twin.						
Trt # 6=Turn the 40 GPA boom so nozzles are 28 inches and spray outside + inside row of each of 2 passes per plot.						
Trt # 7=Turn the 20 GPA boom so nozzles are 28 inches and spray outside + inside row on each of 2 passes per plot.						
¹ Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.						

EVALUATION OF PROLINE FORMULATIONS APPLIED EARLY EMERGENCE

- 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 nine replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There are eight foot alleyways between blocks.
 4. Plots were 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 80015E flat fan nozzle w/100 mesh t-ball check valve at 22 psi) on at plant 30 Apr. 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 30 May. Treatments (3-7) were applied on 2 Jul, 16 Jul, 31 Jul, 16 Aug, and 27 Aug.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Blackshank Farm, Irr/Non Field Tifton, GA 31794
 2. **Crop History:** Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. **Land Preparation:** Moldboard plowed on 16 Apr.
 4. **Soil Fertility:** pH6.08 P-74.8 K-114.3 Ca-792 Mg-110.2
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. **Herbicides:** PPI: Sonalan (2 pt/A) + Dual Magnum (1.25 pt/A) on 18 April.
POST: Cadre 70DF (1.44 oz/A) on 28 Jun
Basagran 2 pt/A + crop oil 1 pt/A on 22 May
Cultivated for weeds on 4 Jun.
 6. **Insecticides:** Acephate 97 (0.7 lb/A) sprayed for thrips 10 May.
 7. **Planting Info:** Tifguard, 6 seed/ft, 1.5" deep on 30 Apr.
 8. **Harvest Dates:** Dug - 24 Sep Picked - 27 Sep
- E. **SUMMARY:** This was an excellent test showing the benefits of early emergence sprays in addition to midseason applications of fungicides for white mold.

Proline In Furrow-Early Emergence Test I, 2012

Blackshank Farm, Irr/Non Field

Treatments	App's	Rate	Plants/ft ¹		% Dead Plants ²		TSWV ³	WM ⁴		Leaf Spot ⁵	Yield
			25-May	1-Jun	25-May	1-Jun	1-Aug	19-Jul	10-Aug	10-Sep	lb/A
1. Bravo WS	3 - 7	1.5 pt	.	.	0.0	0.0	2.6	9.7	36.3	4.0	2975
2. Proline	30 DAP **	5.7 fl oz	.	.	0.0	0.0	3.7	4.0	24.9	3.1	3477
Bravo WS	3 - 7	1.5 pt									
3. Proline	In Furrow *	5.7 fl oz	2.9	2.8	0.0	0.0	3.1	6.9	28.6	3.6	3613
Bravo WS	3 - 7	1.5 pt									
4. Convoy	3 & 5	26 fl oz	.	.	0.0	0.0	2.6	2.6	5.2	3.9	4331
+ Bravo WS		1.5 pt									
Bravo WS	4, 6, & 7	1.5 pt									
5. Proline	30 DAP **	5.7 fl oz	.	.	0.0	0.0	3.7	0.6	3.1	3.3	5256
Convoy	3 % 5	26 fl oz									
+ Bravo WS		1.5 pt									
Bravo WS	4, 6, & 7	1.5 pt									
6. Proline	In Furrow *	5.7 fl oz	2.9	2.8	0.0	0.0	2.3	0.7	3.0	4.0	4908
Convoy	3 & 5										
+ Bravo WS		1.5 pt									
Bravo WS	4, 6, & 7	1.5 pt									
7. Bravo WS	3 - 7	1.5 pt	.	.	0.0	0.0	4.0	.	.	.	.
8. Proline	30 DAP **	5.7 fl oz	.	.	0.0	0.0	0.0	.	.	.	.
Bravo WS	3 - 7	1.5 pt									
9. Proline	In Furrow *	5.7 fl oz	2.8	2.8	0.0	0.0	0.0	.	.	0.0	.
Bravo WS	3 - 7	1.5 pt									
LSD (P<0.05)			n.s.	n.s.	n.s.	n.s.	n.s.	4.3	9.5	0.3	932

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

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

¹Stand count is the number of emerged plants per foot of row on 25 May, and 1 June.

²The % of emerged plants that was dead or dying per plot on 25 May, and 1 June.

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

⁵Florida 1 - 10 scale where 1=no disease and 10=dead plant.

EARLY EMERGENCE SPRAY VOLUME AND BANDING TEST

- A. **PURPOSE:** To evaluate the comparative efficacy of Proline applied early emergence in different spray volumes and banding.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with nine replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There are eight foot alleyways between blocks.
 4. Plots were in an area with a history of continuous peanut production.
 5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** The early season spray was applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles 20 May in 40, 20, and 10 GPA. The Early Emergence spray was applied in a 4 inch band at 40.0 GPA using a single 8010 nozzle per row.
 2. Plots (treatments 4 -7) were traveled by tractor and cover sprayed with Chlorothalonil 720 (1.5 pt/A) on 16 Jul, 31 Jul, 16 Aug, and 27 August. 30 DAP sprays were applied on 25 May.
- D. **ADDITIONAL INFORMATION:**
- 1: **Location:** Blackshank Farm, Irr/Non Field Tifton, GA 31794
 2. **Crop History:** Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. **Land Preparation:** Moldboard plowed and marked rows on 16 Apr.
 4. **Soil Fertility:** pH-6.08 P-74.8 K-114.3 Ca-792 Mg110.2
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) 18 Apr
POST: Cadre 70DF (1.44 oz/A) on 28 Jun
Basagran (2 pt/A) + crop oil (1 pt/A) on 22 May.
Cultivated for weeds on 4 June.
 6. **Insecticides:** Acephate 97 (0.7 lb/A) sprayed for thrips 10 May.
 7. **Planting Info:** Tifguard, 6 seed/ft, 1.5" deep on 30 Apr
 8. **Harvest Dates:** Dug – 24 Sep Picked - 27 Sep

E: SUMMARY: Due to later white mold epidemics in 2012, the early sprays had minimal effects. However, they did reduce leaf spot severity, and in some cases increased yield compared to the broadcast applications.

Proline Volume and Banding Test, 2012									
Blackshank Farm, Irr/Non Field									
Treatments	App's	Pattern	Rate/A	TSWV ¹	WM ²			Leaf Spot ³	Yield
				3-Aug	28-Jun	20-Jul	10-Aug	10-Sep	lb/A
1. Nontreated				4.7	0.2	4.7	22.7	5.4	3514
2. Proline	30 DAP	BAND, 40 GPA *	5.7 fl oz	5.3	0.0	3.3	19.3	4.5	4146
3. Proline	30 DAP	BAND, 20 GPA **	5.7 fl oz	4.0	0.0	2.4	16.7	4.5	4101
4. Proline	30 DAP	BAND, 10 GPA ***	5.7 fl oz	3.6	0.0	3.6	20.4	4.4	3930
5. Proline	30 DAP	B'CAST, 40 GPA *	5.7 fl oz	5.8	0.0	3.6	18.2	4.5	3207
6. Proline	30 DAP	B'CAST, 20 GPA *	5.7 fl oz	5.6	0.0	6.0	22.7	4.6	3314
7. Proline	30 DAP	B'CAST, 10 GPA ***	5.7 fl oz	4.9	0.0	4.7	23.1	4.4	3269
LSD (P<0.05)				n.s.	n.s.	n.s.	n.s.	0.5	708
*Early emergence sprays applied with a single 8010 nozzle per row applying a total volume of 40 GPA, either in a band the width of the plant (Trt# 2),or broadcast (Trt # 5).									
**Early emergence sprays applied with a single 8003 nozzle per row applying a total volume of 20 GPA, either in a band the width of the plant (Trt# 3),or broadcast (Trt # 6).									
***Early emergence sprays applied with a single 8002 nozzle per row applying a total volume of 10 GPA, either in a band the width of the plant (Trt# 4),or broadcast (Trt # 7).									
1 & 2 Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.									
3 Florida 1 - 10 scale where 1=no disease and 10=dead plant.									

EVALUATION OF CULTIVARS AND BREEDING LINES FOR DISEASE RESISTANCE

A. **PURPOSE:** To evaluate the relative susceptibility of peanut breeding lines and cultivars to major peanut diseases in Georgia.

B. **EXPERIMENTAL DESIGN:**

1. Randomized complete blocks with four replicates.
2. One two-row bed (15 x 6 ft) per plot, 36-inch row spacing.
3. There were eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production, but fumigated prior to planting with methyl bromide (400 lb/A MBC 33, tarped). Six plants per plot were inoculated with *Sclerotium rolfsii* at midseason, and length of each disease locus measured at digging.
5. Variety: Multiple varieties

C. **APPLICATION OF TREATMENTS:**

1. This test was sprayed with Chlorothalonil 720 (1.5 pt/A) for leaf spot on 19 Jun, 16 Jul, and 27 Aug and added Tilt (2 fl oz/A) on 16 Aug.

D. **ADDITIONAL INFORMATION:**

1. Location: Blackshank Farm, Tifton, GA 31794
2. Crop History: Peanut - 2011, Peanut - 2010, Peanut - 2009
3. Land Preparation: Moldboard plowed and marked rows on 6 Apr and subsoiled 4 May.
4. Soil Fertility: pH-6.62 P62.4 K102.7 Ca-877 Mg130.6
Soil type: Tifton loamy sand, 2 - 5 % slope
5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) on 7 May.
POST: Cadre 70DF (1.44 oz/A) on 21 Jun.
6. Insecticides: Acephate 97, (0.7 lb/A) for thrips on 31 May and for fire ants on 6 Aug.
7. Planting Info: Tifguard, 6 seed/ft on 17 May.
8. Harvest Dates: Dug – 17 Oct Picked – 23 Oct

E. **SUMMARY:** Good levels of white mold and leaf spot developed, separating known resistant and susceptible lines.

Multi-State Disease Evaluations, 2012

Blackshank Farm, Banana Field

Advanced Lines	TSWV ¹	Percent ²	White Mold ³		Leaf Spot ⁴	Yield Loss
	22-Aug	Zeroes	No Zeroes	All	8-Oct	(lb/A)
1. C1805-3-43	3.7	16.7	41.9	34.3	3.8	4659
2. C1805-2-9	3.3	20.8	39.5	32.1	5.3	4646
3. C1804-240-7	4.5	20.8	39.4	31.5	4.8	3812
4. C1804-2-31-38	3.3	8.3	49.3	45.4	4.8	4005
5. C1804-38-7	8.3	20.8	55.6	45.2	5.6	3908
6. C1804-191-15	7.0	25.0	45.3	31.9	4.2	3787
7. C1804-38-4	4.5	12.5	46.4	37.2	5.7	3473
8. C1804-291-4	5.4	20.8	23.7	19.0	4.3	4707
9. C1804-292-2	9.5	8.3	40.5	37.1	5.8	3642
10. 235B	6.6	16.7	42.7	35.4	4.8	4005
11. 240B	7.8	8.3	26.4	25.2	3.7	3545
12. 594B	9.5	4.2	39.8	37.9	5.0	3727
13. 4-65-5	6.2	41.7	32.5	18.8	4.7	4525
14. 4-90-5	7.0	20.8	41.9	33.3	5.4	3945
15. 4-223-5	5.8	8.3	38.5	35.5	5.0	4308
16. 4-228-5	5.0	33.3	39.0	27.9	4.9	4477
17. 4-241-5	7.8	29.2	40.8	29.2	5.0	3594
18. 4-336-3	8.7	50.0	23.9	12.1	5.3	4671
19. 4-339-3	6.6	25.0	34.6	27.1	6.0	3884
20. 4-341-1	Poor stand					
21. 4-364-2	5.8	33.3	25.4	17.3	4.1	3485

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Multi-State Disease Evaluations, 2012

Blackshank Farm, Banana Field

Advanced Lines	TSWV ¹	Percent ²	White Mold ³		Leaf Spot ⁴	Yield Loss
	22-Aug	Zeroes	No Zeroes	All	8-Oct	(lb/A)
22. 4-418-2	7.4	16.7	34.6	29.0	4.3	4247
23. 4-428-1	16.5	29.2	28.0	20.0	3.4	3606
24. 4-530-4	4.5	16.7	37.7	30.0	5.2	4114
25. 192-T	26.4	50.0	34.2	19.0	3.9	2747
26. UF11301	14.4	16.7	33.7	29.0	6.1	4538
27. UF12302	10.7	29.2	32.9	22.8	4.8	3485
28. UF12303	7.0	20.8	51.4	38.8	5.2	3812
29. UFT312	5.4	25.0	38.4	29.6	4.8	3521
30. UFT113	2.5	4.2	52.1	49.8	5.0	3231
31.0 200X2-2-B2-7-1-1	7.0	45.8	42.1	23.1	4.5	4816
32.0200X1-2-B2-7-1-2	11.1	58.3	21.9	10.2	4.3	4429
33. MRS - 35	16.1	25.0	31.9	24.8	4.9	5034
34. MRS - 18	27.2	12.5	44.3	40.0	4.8	3364
35. ASP - 03	18.2	0.0	59.2	59.2	6.7	2989
36. ASUS - 06	8.7	33.3	51.3	34.2	4.6	4888
37. ASUS - 18	9.9	29.2	29.3	20.8	4.5	4622
38. ASUS - 25	12.0	29.2	45.1	31.7	3.5	4586
39. GA-09B	8.3	8.3	46.1	42.7	7.3	3630
40. Florida 07	6.6	16.7	42.4	35.2	5.3	4659
41. Bailey	8.3	45.8	20.0	12.1	4.9	4102
42. Georgia Greener	11.1	20.8	48.6	38.3	5.8	3110
continued on next page						

Multi-State Disease Evaluations, 2012

Blackshank Farm, Banana Field

Advanced Lines	TSWV ¹	Percent ²	White Mold ³		Leaf Spot ⁴	Yield Loss
	22-Aug	Zeroes	No Zeroes	All	8-Oct	(lb/A)
43. GA-06G	10.7	25.0	34.2	28.3	6.2	3993
44. Tifguard	5.4	8.3	45.6	42.1	4.5	3727
45. GA-07W	10.7	12.5	42.0	36.9	5.8	3896
46. Georgia Green	16.5	8.3	54.6	49.0	6.5	3267
47. York	14.9	66.7	15.8	4.8	3.5	4671
48. GA-10T	11.6	25.0	35.8	26.0	5.2	3703
49. Florun 107	14.0	16.7	51.6	42.7	5.3	3618
50. Titan	8.3	4.2	47.5	53.8	7.1	2239
LSD (P<0.05)	15.9	51.6	28.5	31.5	1.9	1678

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

²Percent of plants inoculated with *S. rolfisii* that had no disease.

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

⁴Florida 1 - 10 scale where 1=no disease and 10=dead plant.

EVALUATION OF CULTIVAR SUSCEPTIBILITY TO CYLINDROCLADIUM BLACK ROT

- A. **PURPOSE:** To evaluate the comparative susceptibility of genotypes to *Cylindrocladium* black rot.
- B. **EXPERIMENTAL DESIGN:**
1. Split plot, with whole plots being cultivars and sub-plots being inoculated versus non-inoculated with *C. parasiticum* (two replicates).
 2. One two-row bed (25 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: Multiple varieties
- C. **APPLICATION OF TREATMENTS:**
1. Plots were inoculated on 30 May with CBR slurry from a hand sprayer and immediately watered in. Coversprays with Chlorothalonil 720, (1.5 pts/A) for leafspot control were applied on 4 Jun. 19 Jun, 2 Jul, 16 Jul, 31 Jul, 27 Aug, and added Tilt (2 fl oz/A) on 16 Aug. Convoy (1.5 pt/A) for white mold control on 18 Jun and 17 Jul. Proline (5.7 fl oz/A) 4" band for CBR, noninoculated plots on 4 Jun and 12 Jul.
- D. **ADDITIONAL INFORMATION:**
- 1: Location: Blackshank Farm, Tifton, GA 31794
 2. Crop History: Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. Land Preparation: Moldboard plowed and fumigated prior to planting with methyl bromide (400 lb/A MBC 33, tarped) on 6 Apr. Beds were marked and subsoiled 4 May.
 4. Soil Fertility: pH-6.62 P-62.4 K-102.7 Ca-877 Mg-130.6
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. Herbicides: PPI: Sonalan EC (2 pt/A)+Dual Magnum(1.25 pt/A) 7 May
POST: Cadre 70DF (1.44 oz/A) 21 Jun
 6. Insecticides: Acephate 97 (0.7 lb/A) for thrips on 31 May for thrips and 6 Aug for fireants.
 7. Planting Info: Tifguard, 6 seed/ft on 17 May
 8. Harvest Dates: Dug – 17 Oct Picked – 23 Oct
- E: **SUMMARY:** Lots of CBR developed, but the infections were mainly at the crown area of the plants, making the results difficult to interpret.

CBR CULTIVAR TEST, 2012

BLACKSHANK FARM, BANANA FIELD

Cultivars	TSWV ¹	Inoculated with CBR ²		Yield (lb/A)	NonInoc.	Yield Loss (lb/A)
	22-Aug	CBR (Inc. 1)	CBR (Sev 2)		Yield (lb/A)	
1. C1805-3-43	2.5	57.8	50.0	4525	4404	121
2. C1805-2-9	10.7	52.8	50.0	3751	5881	-2130
3. C1804-240-7	9.9	47.9	37.5	3098	4646	-1548
4. C1804-2-31-38	14.9	33.0	20.0	4066	4719	-653
5. C1804-38-7	21.5	59.4	52.5	3557	5300	1743
6. C1804-191-15	9.9	38.0	40.0	3001	5034	-2033
7. C1804-38-4	13.2	61.1	50.0	3194	5106	-1912
8. C1804-291-4	14.0	54.5	70.0	2662	4550	-1888
9. C1804-292-2	19.8	72.6	82.5	2130	4477	-2347
10. 235B	8.3	46.2	37.5	3993	4961	-968
11. 240B	16.5	47.9	50.0	2856	3872	-1016
12. 594B	9.9	57.8	57.5	2977	5179	-2202
13. 4-65-5	13.2	56.1	60.0	2565	4235	-1670
14. 4-90-5	9.9	56.1	47.5	3098	4961	-1863
15. 4-223-5	15.7	57.8	50.0	4211	4429	-218
16. 4-228-5	6.6	75.9	67.5	2396	4574	-2178
17. 4-241-5	9.1	59.4	47.5	3364	4792	-1428
18. 4-336-3	7.4	54.5	55.0	3122	4695	-1573
39. GA-09B	14.0	64.4	60.0	3872	5905	-2333
41. Bailey	2.5	57.8	55.0	3049	4235	-1186
42. Georgia Greer	8.3	56.1	52.5	3775	4961	-1186
43. GA-06G	14.9	52.8	50.0	3654	4864	-1210
48. GA-10T	13.2	34.7	42.5	3267	4017	-750
49. Florun 107	13.2	51.2	42.5	3799	5808	-2009
LSD (P<0.05)	11.3	16.8	23.8	1081	1094	

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

²Percent of all plants in each plot with CBR symptoms after digging.

CBR CULTIVAR TEST, 2012				
BLACKSHANK FARM, BANANA FIELD				
	TSWV¹	Non-Inoculated with CBR²		
Cultivars	22-Aug	CBR (Harvest)	CBR Sev	Yield (lb/A)
1. C1805-3-43	5.0	0.0	0.0	4404
2. C1805-2-9	5.8	0.0	0.0	5881
3. C1804-240-7	2.5	0.0	0.0	4646
4. C1804-2-31-38	9.9	0.0	0.0	4719
5. C1804-38-7	7.4	0.0	0.0	5300
6. C1804-191-15	8.3	0.0	0.0	5034
7. C1804-38-4	3.3	1.7	0.0	5106
8. C1804-291-4	9.9	0.0	0.0	4550
9. C1804-292-2	13.2	0.0	0.0	4477
10. 235B	2.5	0.0	0.0	4961
11. 240B	11.6	0.0	0.0	3872
12. 594B	3.3	0.0	0.0	5179
13. 4-65-5	14.9	0.0	0.0	4235
14. 4-90-5	8.3	0.0	0.0	4961
15. 4-223-5	5.0	0.0	0.0	4429
16. 4-228-5	3.3	0.0	0.0	4574
17. 4-241-5	2.5	0.0	0.0	4792
18. 4-336-3	11.6	0.0	0.0	4695
39. GA-09B	4.1	0.0	0.0	5905
41. Bailey	6.6	0.0	0.0	4235
42. Georgia Green	14.9	0.0	0.0	4961
43. GA-06G	3.3	0.0	0.0	4864
48. GA-10T	6.6	0.0	0.0	4017
49. Florun 107	12.4	0.0	2.5	5808
LSD (P<0.05)	10.7	1.0	1.5	1094

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

²Percent of all plants in each plot with CBR symptoms after digging.

OFFICIAL DAILY RAINFALL, 2012

Tifton, GA

Rainfall

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1			0.1	0.5		0.9	0.1
2				0.1	0.5		0.5
3							0.5
4	0.1						0.4
5	0.1		0.5		0.2	0.4	
6		0.1		0.1			
7			0.3		1.4		
8					5.7	1.1	
9		0.2	0.3	0.2	0.5		
10			1.6	0.4			
11			0.4	0.1	0.2		
13		0.3					
14		0.6		0.4			
15		0.2			0.1		
16		1.2					
17		0.4		2.3	0.3	0.3	
18	0.7					0.4	
19				2.0	1.9		
20					0.1		
21	0.3						
23			1.1		1.2		
24			0.7	0.4			
26			0.4				
27				0.2	0.4		
29					0.8	0.7	
30		0.2				0.1	
Total	1.1	3.1	5.2	6.6	13.3	3.8	1.5

Irrigation

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT

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

- A. **PURPOSE:** To evaluate the comparative effects of various spray adjuvants on the efficacy of labeled fungicides for the control of southern stem rot and leaf spot on peanut.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There 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 CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet Tx-SS6 nozzles per row at 40 PSI.
 2. Treatments (1-7) were applied on 8 Jun, 20 Jun, 29 Jun, 10 Jul, 24 Jul, 7 Aug and 27 Aug. This test was not coversprayed.
- D. **ADDITIONAL INFORMATION:**
- 1: **Location:** Lang Farm, South Field Tifton, GA 31794
 2. **Crop History:** Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. **Land Preparation:** Moldboard plowed and marked rows on 15 Apr.
 4. **Soil Fertility:** pH- 6.2 P-33 K-68 Ca-831 Mg-102
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) on 17 Apr
POST: Cadre 70DF (1.44 oz/A) on 28 Jun
Cultivated for weeds on 8 Jun.
 6. **Insecticides:** Acephate 97 (0.7 lb/A) for thrips on 10 May.
 7. **Planting Info:** Tifguard, 6 seed/ft on 2 May.
 8. **Harvest Dates:** Dug – 24 Sep Picked – 28 Sep
- E: **SUMMARY:** This test had reasonable leaf spot and white mold pressure. Although differences in disease were evident among treatments, yields were not affected as much as expected.

Loveland Test, 2012
Lang Farm, South Field

Treatments	App's	Rate/A	WM ¹		Leaf Spot ²	Yield
			3-Aug	24-Sep	17-Sep	lb/A
1. Bravo W'stick Orius 3.6F	1, 6, 7 2 - 5	1.5 pt 7.2 fl oz	6.0	27.0	4.3	3361
2. Bravo W'stick	1 - 7	1.5 pt	12.5	44.5	2.9	3695
3. Bravo W'stick LI-6355 + LI-1079	1, 6, 7 2 - 5	1.5 pt 5.7 fl oz 0.25%	14.5	39.0	2.9	3579
4. Bravo W'stick LI-6355 + LI-6262	1, 6, 7 2 - 5	1.5 pt 5.7 fl oz 0.25%	5.5	31.0	3.0	4058
5. Bravo W'stick LI-6355 + Orius 3.6F + LI-1079	1, 6, 7 2 - 5	1.5 pt 3.8 fl oz 7.2 fl oz 0.25%	3.0	10.5	3.3	4392
6. Bravo W'stick LI-6355 + Orius 3.6F + LI-1079	1, 6, 7 2 - 5	1.5 pt 4.5 fl oz 7.2 fl oz 0.25%	1.5	15.5	2.8	4102
7. Bravo W'stick LI-6355 + Orius 3.6F + LI-6262	1, 6, 7 2 - 5	1.5 pt 4.5 fl oz 7.2 fl oz 0.25%	3.0	9.5	3.2	4196
8. Bravo W'stick LI-6355 + Convoy + LI-1079	1, 6, 7 2 - 5	1.5 pt 3.8 fl oz 10 fl oz 0.25%	1.5	12.0	3.4	3790
9. Bravo W'stick LI-6355 + Convoy + LI-1079	1, 6, 7 2 - 5	1.5 pt 3.8 fl oz 13 fl oz 0.25%	1.5	24.0	3.7	4131

continued on next page

Loveland Test, 2012
Lang Farm, South Field

Treatments	App's	Rate/A	WM ¹		Leaf Spot ²	Yield
			3-Aug	24-Sep	17-Sep	lb/A
10. Bravo W'stick LI-6355 + LI-1079 + LI-6337	1, 2, 6, 7 3, 4, 5	1.5 pt 5.7 fl oz 0.25% v/v 2.0 pt	9.0	28.0	2.7	3819
11. Bravo W'stick Orius 3.6F + LI-1079	1, 6, 7 2 - 5	1.5 pt 7.2 fl oz 0.25%	5.0	39.0	4.5	2919
12. Bravo W'stick Convoy + LI-1079	1, 6, 7 2 - 5	1.5 pt 13 fl oz 0.25%	5.0	39.0	5.3	2701
13. Bravo W'stick LI-EXP #1 Orius 3.6F + LI-1079	1, 6, 7** 1 - 4** 2 - 5**	1.5 pt 2.0 pt 7.2 fl oz 0.25%	3.0	16.5	3.5	3957
14. Bravo W'stick LI-EXP #2 Orius 3.6F + LI-1079	1, 6, 7** 1 - 4** 2 - 5**	1.5 pt 2.0 pt 7.2 fl oz 0.25%	6.0	33.0	3.8	3325
15. Bravo W'stick LI-EXP #3 Orius 3.6F + LI-1079	1, 6, 7** 1 - 4** 2 - 5**	1.5 pt 2.0 pt 7.2 fl oz 0.25%	4.0	28.0	3.8	3877
16. Bravo W'stick LI-EXP #4 Orius 3.6F + LI-1079	1, 6, 7** 1 - 4** 2 - 5**	1.5 pt 2.0 pt 7.2 fl oz 0.25%	3.5	37.5	3.5	3507
LSD (P<0.05)			8.3	19.8	0.7	822.7

****NOTE that some dates have 2 products mixed!**

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

²Florida 1 - 10 scale where 1=no disease and 10=dead plant.

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

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental fungicides for the control of southern stem rot on Tifguard peanut.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. 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 CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet Tx-SS6 nozzles per row at 40 PSI. In furrow sprays
 2. **Treatments (1-7)** were applied on 8 Jun, 19 Jun, 28 Jun, 9 Jul, 23 Jul, 7 Aug, and 27 Aug. Spray 1.5 was 11 Jun and 30 DAP was sprayed on 25 May. This test was not coversprayed.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Lang Farm, South Field Tifton, GA 31794
 2. **Crop History:** Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. **Land Preparation:** Moldboard plowed and marked rows on 15 Apr.
 4. **Soil Fertility:** pH-6.2 P-33 K-68 Ca-831 Mg-102
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25pt/A) on 17 Apr.
POST: Cadre 70DF (1.44 oz/A) on 28 Jun.
Cultivated for weeds on 8 Jun.
 6. **Insecticides:** Acephate 97 (0.7 lb/A) for thrips on 10 May.
 7. **Planting Info:** Tifguard, 6 seed/ft, 1.5" deep on 2 May.
 8. **Harvest Dates:** Dug – 24 Sep Picked –28 Sep
- E. **SUMMARY:**

Severe white mold and moderate leaf spot pressure were both present in this trial.

Multiple Company Test I, 2012

Lang Farm, South Field

Treatments	App's	Rate/A	WM ¹		Leaf Injury ²	Leaf Spot ³		Yield
			31-Jul	24-Sep	30-Jul	10-Sep	17-Sep	lb/A
1. Bravo	1 - 7	1.5 pt	19.2	64.0	1.6	2.5	3.2	2904
2. Headline SC	1.5	9.0 oz	6.8	39.6	0.6	.	2.8	3990
Convoy	3 & 5	13 fl oz						
+ Bravo		1.0 pt						
+ Topsin		5.0 fl oz						
Convoy	4	13 fl oz						
+ Bravo		1.5 pt						
Convoy	6	13 fl oz						
+ Headline Sc		6.0 fl oz						
Bravo	7	1.5 pt						
3. Headline SC	1.5	9.0 oz	5.2	44.0	2.0	.	3.3	3839
Artisan	3 & 5	16 fl oz						
+ Bravo		1.0 pt						
Artisan	4 & 6	16 fl oz						
+ Topsin		5.0 fl oz						
Bravo	7	1.5 pt						
4. Bravo	1, 2, 6, 7	1.5 pt	6.4	31.2	1.2	.	2.9	3787
Fontelis	3 - 5	16 fl oz						
5. Bravo	1, 2, 7	1.5 pt	7.6	42.0	3.8	.	3.7	3247
Fungi-Phite	3 - 6	2.0 qt						
+ Muscle 3.6F		7.2 oz						
6. Bravo	1, 2, 7	1.5 pt	7.6	60.0	1.4	.	3.6	2956
Manco-Phite (Reload)	3 - 6	1.5 lb						
+ Muscle 3.6F		7.2 oz						
7. Bravo	1, 2, 7	1.5 pt	4.8	37.6	1.6	.	3.7	3798
Pencozeb	3 - 6	1.5 lb						
+ Muscle 3.6F		7.2 oz						
8. Bravo	1, 2, 7	1.5 pt	8.0	57.6	1.8	.	3.0	3014
Bravo	3 - 6	1.5 lb						
+ Muscle 3.6F		7.2 oz						
<i>continued on next page</i>								

Multiple Company Test I, 2012

Lang Farm, South Field

Treatments	App's	Rate/A	WM ¹		Leaf Injury ²	Leaf Spot ³		Yield
			31-Jul	24-Sep	30-Jul	10-Sep	17-Sep	lb/A
9. Bravo	1, 2, 7	1.0 pt	26.8	57.2	1.2	.	3.4	3706
+ Koverall 75W		2.0 lb						
Koverall 75W	3 - 6	2.0 lb						
+ Topguard		14 fl oz						
10. Headline SC	1.5	9.0 oz	12.4	54.4	1.2	.	3.0	3131
Bravo	3 - 6	1.0 pt						
+ Muscle 3.6F		7.2 oz						
Bravo	7	1.5 pt						
11. Headline SC	1.5*	9.0 oz	6.8	47.6	1.2	.	3.2	3212
Bravo	3 - 6	1.0 pt						
+ Muscle 3.6F		7.2 oz						
Bravo	7	1.5 pt						
12. Proline	30 DAP*	5.7 fl oz	29.6	63.2	1.2	2.9	3.4	3003
Bravo	4 - 7	1.5 pt						
13. Proline	30 DAP**	5.7 fl oz	28.0	70.0	1.2	3.9	3.5	2753
Bravo	4 - 7	1.5 pt						
14. Headline Sc	30 DAP*	9.0 fl oz	26.0	65.2	1.0	3.1	3.6	2689
Bravo	4 - 7	1.5 pt						
15. Headline SC	30 DAP**	9.0 fl oz	40.4	75.6	1.2	3.4	4.0	2265
Bravo	4 - 7	1.5 pt						
16. Nontreated			18.4	84.4	1.6	5.5	6.8	2178
LSD (P<0.05)			13.5	18.8	1.1	0.7	0.6	781

* Band the width of the plant and applied in 20 GPA (8003 nozzle).

**Applied B'cast, but still with the 20 GPA boom with one 8003 nozzle per row.

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

²Leaf injury is the % of leaves with phytotoxicity on a scale of 0-100% with 0=no injury.

³Florida 1 - 10 scale where 1=no disease and 10=dead plant.

EARLY EMERGENCE PROGRAMS FUNGICIDE TRIAL

- 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 six replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There are eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** Midseason spray treatments were applied with a CO₂ 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.
 2. **Treatments (1-7)** were applied on 8 Jun, 19 Jun, 28 Jun, 9 Jul, 23 Jul, 7 Aug, and 27 Aug. Application 1.5 was applied on 11 Jun, and the 30 DAP was sprayed on 25 May. This test was not coversprayed.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Lang Farm, South Field Tifton, GA 31794
 2. **Crop History:** Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. **Land Preparation:** Moldboard plowed and marked rows on 25Apr.
 4. **Soil Fertility:** pH-6.2 P-33 K-68 Ca-831 Mg-102
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) on 17 Apr
POST: Cadre 70DF (1.44 oz/A) on 28 Jun.
Cultivated for weeds on 8 Jun.
 6. **Insecticides:** Acephate 97 (0.7 lb/A) for thrips on 10 May
 7. **Planting Info:** Tifguard, 6 seed/ft on 2 May
 8. **Harvest Dates:** Dug-24 Sep Picked-28 Sep
- E. **SUMMARY:** The early season sprays gave some additional control of white mold compared to the standard Convoy program, but did not result in higher yields.

Early Emergence Programs Test, 2012							
Lang Farm, South Field							
Treatments	App's	Rate/A	WM ¹			Leaf Spot ²	Yield
			29-Jun	23-Jul	11-Aug	11-Sep	lb/A
1. Bravo	1 - 7	1.5 pt	0.0	20.7	44.3	3.6	2681
2. Headline SC	1.5	9.0 oz	0.3	2.3	9.3	3.4	3582
Convoy	3 - 5	13 fl oz					
+ Bravo		1.5 pt					
Bravo	6 & 7	1.5 pt					
3. Proline	30 DAP*	5.7 fl oz	0.3	3.7	8.7	3.5	3417
Convoy	3 - 5	13 fl oz					
+ Bravo		1.5 pt					
Bravo	6 & 7	1.5 pt					
4. Muscle 3.6F	1	7.2 oz	0.0	2.0	8.0	3.5	3678
+ Bravo		1.0 pt					
Bravo	2, 6, & 7	1.5 pt					
Convoy	3 - 5	13 fl oz					
+ Bravo		1.5 pt					
5. Bravo	1, 2, 6, & 7	1.5 pt	0.0	7.7	13.7	3.5	3427
Convoy	3 - 5	13 fl oz					
+ Bravo		1.5 pt					
LSD (P<0.05)			n.s.	4.4	6.2	0.1	390

NOTE: Spray 1 will be at 35 DAP, and spray 1.5 at 42 DAP.
***Band the width of the plant and applied in 20 GPA (8003 nozzle).**

¹Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.
²Florida 1 - 10 scale where 1=no disease and 10=dead plant.

EARLY EMERGENCE SPRAY VOLUME AND BANDING TEST

- 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 six replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. The early emergence sprays were applied as described in the table.
 2. Chlorothalonil cover sprays 4-7 were applied on 16 Jul, 31 Jul, 7 Aug and 27 Aug. The 30 DAP was sprayed on 30 May.
- D. **ADDITIONAL INFORMATION:**
- 1: **Location:** Lang Farm, South Field Tifton, GA 31794
 2. **Crop History:** Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. **Land Preparation:** Moldboard plowed and marked rows on 27Apr.
 4. **Soil Fertility:** pH-6.29 P-33 K-68 Ca-831 Mg-102
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt//A) on 17 Apr.
POST: Cadre 70 DF, (1.44 oz/A) on 28 Jun.
Cultivated for weeds on 8 Jun.
 6. **Insecticides:** Acephate 97 (0.7 lb/A) for thrips on 10 May.
 7. **Planting Info:** Tifguard, 6 seed/ft, 1.5" deep on 2 May
 8. **Harvest Dates:** Dug - 24 Sep Picked – 28 Sep
- E: **SUMMARY:** The early season sprays all reduced leaf spot severity, but did not affect white mold or yields.

Proline Volume and Banding Test II, 2012								
Lang Farm, South Field								
Treatments	App's	Pattern	Rate/A	27-Jun	WM ¹		Leaf Spot ²	Yield lb/A
					23-Jul	11-Aug		
1. Nontreated				0.0	12.7	30.0	4.4	2885
2. Proline	30 DAP *	BAND, 40 GPA	5.7 fl oz	0.0	14.3	38.0	3.7	2923
3. Proline	30 DAP **	BAND, 20 GPA	5.7 fl oz	0.0	17.3	33.3	3.9	3170
4. Proline	30 DAP ***	BAND, 10 GPA	5.7 fl oz	0.3	11.7	33.3	3.9	2870
5. Proline	30 DAP *	B'CAST, 40 GPA	5.7 fl oz	0.7	12.0	37.7	3.9	2483
6. Proline	30 DAP *	B'CAST, 20 GPA	5.7 fl oz	0.0	13.5	40.5	3.9	2817
7. Proline	30 DAP ***	B'CAST, 10 GPA	5.7 fl oz	0.0	12.0	37.0	3.7	3086
LSD (P<0.05)				n.s.	n.s.	n.s.	0.3	516
*Early emergence sprays applied with a single 8010 nozzle per row applying a total volume of 40 GPA, either in a band with the width of the plant (Trt # 2), or broadcast (Trt # 5).								
**Early emergence sprays applied with a single 8003 nozzle per row applying a total volume of 20 GPA, either in a band with the width of the plant (Trt # 1), or broadcast (Trt # 6).								
***Early emergence sprays applied with a single 8002 nozzle per row applying a total volume of 10 GPA, either in a band with the width of the plant (Trt # 4), or broadcast (Trt # 7).								
¹ Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.								
² Florida 1 - 10 scale where 1=no disease and 10=dead plant.								

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

A. PURPOSE: To evaluate the effects of spray timing on fungicides applied for the control of southern stem rot (white mold).

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: All specified treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a volume of 20 GPA. The 30, 40 and 60 DAP treatment's were sprayed the width of the plants with a single 8003 nozzle; the other applications were with a broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.
2. Chlorothalonil cover sprays were applied on 8 June, 19 June, 2 Jul, 16 July, 31 Jul, 7 August, and 27 Aug. The 30 DAP spray was applied on 30 May, 40 DAP on 11 Jun, 60 DAP on 2 Jul, 75 DAP 17 Jul, 90 DAP on 30 Jul, and 105 DAP on 14 Aug.

D. ADDITIONAL INFORMATION:

- 1: Location: Lang Farm, South Field Tifton, GA 31794
2. Crop History: Peanut – 2011, Peanut – 2010, Peanut – 2009
3. Land Preparation: Moldboard plowed and marked rows on 27 Apr.
4. Soil Fertility: pH-6.2 P-33 K-68 Ca-831 Mg-102
Soil type: Tifton loamy sand, 2 – 5 % slope
5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) on 17 Apr.
POST: Cadre 70 DF (1.44 oz/A) on 28 Jun.
Cultivated for weeds on 8 Jun.
6. Insecticides: Acephate 97, (0.7 lb/A) for thrips on 10 May.
7. Planting Info: Tifguard, 6 seed/ft, 1.5" deep on 2 May
8. Harvest Dates: Dug – 24 Sep Picked – 28 Sep

E: SUMMARY: Differences were seen in terms of white mold efficacy related to spray timings, but these differences were not as evident in terms of yield as would be expected.

Nichino Test II, 2012					
Lang Farm, South Field					
Treatments	App's	Rate/A	WM ¹		Yield lb/A
			1-Aug	24-Sep	
1. Nontreated			37.2	22.8	2707
2. Convoy	30 DAP*	32 fl oz	12.4	20.8	3218
3. Convoy	40 DAP*	32 fl oz	0.4	16.8	3235
4. Convoy	60 DAP*	32 fl oz	1.2	14.0	3624
5. Convoy	30 DAP*	48 fl oz	5.6	19.2	3229
6. Convoy	40 DAP*	48 fl oz	1.6	14.4	3298
7. Convoy	60 DAP*	48 fl oz	0.8	8.0	3415
8. Convoy	30 DAP*	64 fl oz	3.6	11.2	3311
9. Convoy	40 DAP*	64 fl oz	1.2	12.8	3688
10. Convoy	60 DAP*	64 fl oz	0.0	6.8	3502
11. Convoy	60, 75, 90 & 105 DAP	13 fl oz	2.4	9.2	3833
12. Convoy	40, 60, 75 & 90 DAP	13 fl oz	8.0	15.6	3194
13. Convoy	30 DAP*	32 fl oz	2.4	12.4	3909
Convoy	60, 75, 90 & 105 DAP	13 fl oz			
14. Proline	30 DAP*	9.0 fl oz	2.0	7.6	3793
Convoy	60, 75, 90 & 105 DAP	13 fl oz			
15. Headline SC	30 DAP*	9.0 fl oz	2.0	9.2	3822
Convoy	60, 75, 90 & 105 DAP	13 fl oz			
16. Headline SC	30 DAP**	9.0 fl oz	1.6	8.4	3607
Convoy	60, 75, 90 & 105 DAP	13 fl oz			
LSD (P<0.05)			6.1	5.7	657
*30, 40 & 60 DAP app's are in a band the width of the plant and applied in 20 GPA (8003 nozzle).					
The other applications are boardcast with the normal 20 GPA boom					
**Applied B'cast, but still with the 20 GPA boom with one 8003 nozzle per row.					
¹ Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.					

DAILY RAINFALL AND IRRIGATION, 2012							
LANG FARM, SOUTH FIELD							
TIFTON, GA							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1				0.5			1.1
3	0.1				0.5		
4							0.8
5				0.1			
6		0.1	0.3		0.3	0.2	
7			0.5				
8					7.7	0.6	
9		0.2	1.6				
10					0.3		
11			0.4				
12				0.4			
13		0.3					
14		0.3					
16		0.5					
17		0.7		0.4	0.1	0.4	
18	0.7					1.1	
19				0.9	1.9		
22				0.1	0.2		
24			1.3		0.8		
25				0.5			
26				0.3			
27		0.2			0.8		
28				0.2			
29		0.3				0.5	
31					3.4		
Total	0.8	2.6	2.8	3.3	16.0	2.8	1.8
IRRIGATION							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
4		0.6	0.6	0.6			
8		0.6					
11		0.6		0.6			
13				0.5			
16				0.5			
21		0.5					
25		0.5					
29			0.6				
30		0.7					
Total	0.0	3.5	1.2	2.2	0.0	0.0	0.0
Rain + Irrigation							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
Total	0.8	6.1	4.0	5.5	16.0	2.8	1.8

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

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Cover sprays were applied by tractor.
2. Cover sprays of Chlorothalonil (1.5 pt/A) were applied on 29 May, 12 Jun, 26 Jun, 10 Jul, 24 Jul, 7 Aug, and 21 Aug. Convoy (1.5 pt/A) was applied for white mold control on 18 Jun and 17 Jul.

D. ADDITIONAL INFORMATION:

- 1: Location: Lang Farm, New Field Tifton, GA 31794
2. Crop History: Cotton – 2011, Soybeans - 2010, Cotton - 2009
3. Land Preparation: Moldboard plowed and marked rows on 26 Apr.
4. Soil Fertility: pH-5.8 P-21 K-89 Ca-779 Mg-98
Soil type: Tifton loamy sand, 2 - 5 % slope
5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum
(1.25 pt/A) on 17 Apr.
POST: Basagran (2 pt/A) + crop oil (1 pt/A) 21 May.
Cultivated for weeds on 5 Jun.
24 DB 175, (1 pt/A) on 19 Jul.
Select 2E, (14 fl oz/A) + crop oil (2 pt/A) on 19 Jul.
6. Insecticides: Acephate 97, (0.7 lb/A) for thrips on 10 May.
7. Planting Info: GA-06G, 6 seed/ft on 1 May
8. Harvest Dates: Dug – 3 Oct Picked – 9 Oct

E: SUMMARY: Plant counts indicated significant differences in stand that translated into yield differences.

Syngenta Seed Trt Test, 2012						
Rigdon Farm, New Field						
Treatments	Plants/ft ¹		% Dead Plants ²	TSWV ³	Plant	Yield
	1-Jun	3-Oct	1-Jun	27-Jul	Width ⁴	lb/A
1. Cruiser 70WS	2.0	2.2	10.2	8.0	83.5	3935
2. Dynasty PD + Cruiser	2.8	3.6	0.7	5.5	81.9	5089
3. A16148 (1X) + Cruiser	2.5	3.4	2.4	3.0	82.3	4799
4. A16148 (2X) + Cruiser	2.5	4.0	0.6	6.5	82.8	4879
5. A16148 (4X) + Cruiser	2.3	2.9	1.5	4.5	78.9	4821
6. A16148 (1X) + Cruiser + Dynasty	2.4	3.8	0.2	7.0	86.0	4523
7. A16148 (2X) + Cruiser + Dynasty	2.6	3.5	0.2	1.5	84.3	4821
8. A16148 (4X) + Cruiser + Dynasty	2.4	3.3	0.0	4.0	85.9	4901
LSD (P<0.05)	0.3	0.8	2.3	6.1	4.0	1027
¹ Stand count is the number of emerged plants per foot of row on 1 June.						
² The % of emerged plants that was dead or dying per plot on 1 June.						
³ Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.						
⁴ Average plant width (measure in cm), mean of 6 plants per plot.						

EVALUATION OF MISCELLANEOUS BIOLOGICAL FUNGICIDES

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental fungicides applied to peanuts.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. Details of other applications are in the Table footnotes.
 2. **Cover sprays of Bravo (1.5 pt/A)** were applied on 29 May, 12 Jun, 26 Jun, 10 Jul, 24 Jul, 7 Aug, and 21 Aug. **Sprayed timed treatments of 7 DAP** on 8 May, 14 DAP on 15 May, 28 DAP on 29 May, 45 DAP on 12 Jun, 49 DAP on 18 Jun, 50 DAP on 18 Jun, 59 DAP on 27 Jun, and 73 DAP on 12 Jul. In furrow treatment was applied 1 May.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Lang Farm, New Field Tifton, GA 31794
 2. **Crop History:** Cotton - 2011, Soybeans - 2010, Cotton – 2009
 3. **Land Preparation:** Moldboard plowed and marked rows on 26 Apr.
 4. **Soil Fertility:** pH-5.8 P-21 K-89 Ca-779 Mg-98
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. **Herbicides:** PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) 17 April
POST: Basagran (2 pt oz/A) + crop oil (1pt/A) 21 May.
Cultivated for weeds on 5 Jun
24 DB 175, (1 pt/A) on 19 Jul
Select 2E (14 fl oz/A) + crop oil (2 pt/A) on 19 Jul
 6. **Insecticides:** Acephate 97 (0.7 lb/A) for thrips on 10 May
 7. **Planting Info:** Tifguard, 6 seed/ft, 1.5” deep on 1 May

8. Harvest Dates: Dug – 3 Oct Picked – 9 Oct

E. SUMMARY: No differences were seen in plant stand and growth. Significant white mold occurred, and the conventional fungicides generally provided the best control, but there was more variability in the data than expected.

Miscellaneous Biologicals Test, 2012														
Rigdon Farm, New Field														
Treatments	App's	Rate/A	Plants/ft ¹			% Dead Plants ²			WM ³		TSWV ⁴	Plant Width ⁵	Leaf Injury ⁶	Yield
			11-May	21-May	1-Jun	11-May	21-May	1-Jun	20-Aug	3-Oct	27-Jul	9-Jul	30-Jul	lb/A
1. Serenade Soil	In Furrow *	64.0 fl oz	2.7	3.1	3.1	0.0	0.0	0.0	12.8	33.2	1.6	84.1	4.4	4594
2. Serenade Soil	In Furrow *	32.0 fl oz	2.6	3.1	3.0	0.0	0.0	0.0	7.4	21.2	2.8	86.0	2.8	5280
3. Serenade Soil	In Furrow *	32.0 fl oz	2.6	3.1	3.2	0.0	0.0	0.0	5.4	17.2	1.4	85.4	4.4	5111
Serenade Soil	50 DAP	32.0 fl oz												
4. Abound	In Furrow *	8.7 fl oz	2.5	3.1	3.1	0.0	0.0	0.0	4.4	19.2	2.8	86.2	3.2	4838
5. MBI-10620	In Furrow *	14.5 fl oz	2.4	2.8	2.9	0.0	0.0	0.0	5.0	21.2	1.8	85.0	2.2	4426
MBI-10620	14 & 28 DAP	8 fl oz												
+ Induce		0.25%												
6. MBI-10620	45 DAP	8 fl oz	.	.	.	0.0	0.0	0.0	3.4	16.4	1.8	84.4	3.0	4948
+ Induce		0.25%												
MBI-10620	59 & 73 DAP	8 fl oz												
+ Induce		0.25%												
7. MBI-10620	45 & 73 DAP	4 fl oz	.	.	.	0.0	0.0	0.0	1.4	6.8	2.6	83.3	2.6	5471
+ Induce		0.25%												
+ Convoy		16 fl oz												
8. MBI-10620	45, 59, 73 DAP	4 fl oz	.	.	.	0.0	0.0	0.0	0.0	6.0	1.6	83.5	3.4	5413
+ Provost		7 fl oz												
+ Induce		0.25%												
9. Actinovate AG	In Furrow *	6 oz	2.7	3.0	3.2	0.0	0.0	0.0	8.8	29.2	2.2	85.4	4.2	4629
Actinovate AG	7, 28, 49 DAP **	6 oz												

continued on next page

Miscellaneous Biologicals Test, 2012

Rigdon Farm, New Field

Treatments	App's	Rate/A	Plants/ft ¹			% Dead Plants ²			WM ³		TSWV ⁴	Plant Width ⁵	Leaf Injury ⁶	Yield
			11-May	21-May	1-Jun	11-May	21-May	1-Jun	20-Aug	3-Oct	27-Jul	9-Jul	30-Jul	lb/A
10. Actinovate	In Furrow *	6 oz	2.6	3.0	3.2	0.0	0.0	0.0	4.0	16.4	1.2	86.4	2.4	5303
+ Actigard 50W		0.05 oz												
Actinovate AG	7, 29, 49 DAP **	6 oz												
+ Actigard 50W		0.5 oz												
11. Convoy	45 & 73 DAP	32.0 fl oz	.	.	.	.	.	.	2.6	2.8	2.2	86.2	2.8	5686
12. Provost	45, 59, 73 DAP	7 fl oz	.	.	.	.	.	.	1.4	8.8	0.6	85.7	3.0	5518
13. Nontreated			2.2	2.9	3.1	0.0	0.0	0.0	3.4	17.6	1.4	83.8	3.4	5134
LSD (P<0.05)			0.3	0.2	0.3	n.s.	n.s.	n.s.	6.5	18.0	n.s.	n.s.	2.1	884

*In furrows applied in 3.72 GPA and mixed in a 2 L volume.

**Applied in a band the width of the peanuts in 40 GPA (single 8010 nozzle/row)

¹Stand count is the number of emerged plants per foot of row on 11 May, 21 May, and 1 June.

²The % of emerged plants that was dead or dying per plot on 11 May, 21 May, and 1 June.

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

⁵Average plant width (measure in cm), mean of 6 plants per plot.

⁶Leaf injury is the % of leaves with phytotoxicity on a scale of 0-100% with 0=no injury.

EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

- A. **PURPOSE:** To evaluate the efficacy of labeled and experimental fungicides for the control of peanut soilborne and foliar diseases.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. Equipment: Spray treatments were applied with a CO₂ pressurized belt pack sprayer using a 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 sprays 1, 2 and 7 on 29 May, 12 Jun, and 21 Aug. Specific treatments (3-6) were applied on 26 Jun, 10 Jul, 24 Jul, and 7 Aug.
- D. **ADDITIONAL INFORMATION:**
1. Location: Land Farm, New Field Tifton, GA 31794
 2. Crop History: Cotton - 2011, Soybeans - 2010, Cotton - 2009
 3. Land Preparation: Moldboard plowed and marked rows on 26 Apr.
 4. Soil Fertility: pH-5.8 P-21 K-89 Ca-779 Mg-98
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) 17 Apr
POST: Basagran (2 pt/A) on 21 May
Cultivated for weeds on 5 Jun
24 DB 175, (1 pt/A) on 19 Jul
Select 2E (14 fl oz/A) + crop oil (2 pt/A) on 19 Jul
 6. Insecticides: Acephate 97 (0.7 lb/A) for thrips on 10 May
 7. Planting Info: Tifguard, 6 seed/ft, 1.5" deep on 1 May
 8. Harvest Dates: Dug - 3 Oct Picked - 9 Oct
- E. **SUMMARY:** Obvious differences were present in leaf spot control. White mold levels were lower in this rotated field and the data were not definitive.

MANA Test, 2012						
Rigdon Farm, New Field						
Treatments	App's	Rate/A	WM ¹		Leaf Spot ²	Yield
			20-Aug	3-Oct	2-Oct	lb/A
1. Equus 720	3 - 6	1.5 pt	4.0	13.0	5.4	4129
2. MCW 710-SC	3 - 6	3,9 fl oz	4.0	13.3	6.3	4714
3. MCW 710-SC	3 - 6	7.9 fl oz	6.3	10.0	5.0	5076
4. MCW 710-SC	3 - 6	11.6 fl oz	2.3	7.0	5.1	4869
5. MCW 710-SC	3 - 6	15.5 fl oz	3.3	5.7	4.0	5401
6. MCW-710-EC	3 - 6	7.8 fl oz	5.7	14.7	6.1	4821
7. MCW-710-EC	3 - 6	15.5 fl oz	5.7	14.0	5.7	4521
8. MCW-710-EC	3 - 6	23.2 fl oz	4.3	10.7	4.7	5409
9. MCW-710-EC	3 - 6	31.0 fl oz	4.7	11.7	4.3	4821
10. Abound + Orius 3.6F	3 - 6	3.7 fl oz 3.6 fl oz	6.0	8.7	5.9	5111
11. Abound + Orius 3.6F	3 - 6	5.6 fl oz 5.4 fl oz	3.7	9.0	5.4	5455
12. Orius 3.6F	3 - 6	7.2 fl oz	6.0	15.0	6.2	4990
13. Abound 2.08	3 - 6	24.5 fl oz	1.3	6.7	3.8	5264
LSD (P<0.05)			n.s.	n.s.	1.5	868

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

²Florida 1 - 10 scale where 1=no disease and 10=dead plant.

DAILY RAINFALL AND IRRIGATION, 2012							
RIGDON FARM, NEW FIELD							
TIFTON, GA							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1				0.5			1.1
3	0.1				0.5		
4							0.8
5				0.1			
6		0.1	0.3		0.3	0.2	
7			0.5				
8					7.7	0.6	
9		0.2	1.6				
10					0.3		
11			0.4				
12				0.4			
13		0.3					
14		0.3					
16		0.5					
17		0.7		0.4	0.1	0.4	
18	0.7					1.1	
19				0.9	1.9		
22				0.1	0.2		
24			1.3		0.8		
25				0.5			
26				0.3			
27		0.2			0.8		
28				0.2			
29		0.3				0.5	
31					3.4		
Total	0.8	2.6	2.8	3.3	16.0	2.8	1.8
IRRIGATION							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
2	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Total	0.0	0.8	0.0	0.0	0.0	0.0	0.0
Rain + Irrigation							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
Total	0.8	3.4	2.8	3.3	16.0	2.8	1.8

LANG/RIGDON NEMATICIDE TRIAL

- A. **PURPOSE:** To evaluate the comparative efficacy of nematicides on peanut root knot nematode.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There are eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: GA-07W
- C. **APPLICATION OF TREATMENTS:**
1. All plots were coversprayed with Chlorothalonil 720 (1.5 pt/A) on 13 Jun, 27 Jun, 11 July, 25 July, 8 August, 22 August and 5 Sep. At plant and in furrow treatments were applied 14 May, and the 21 DAP on 16 Jun and 45 DAP on 27 Jun. Convoy was applied for white mold control on 18 Jun and 17 Jul.
- D. **ADDITIONAL INFORMATION:**
1. Location: Lang Farm, Cotton Field Tifton, GA 31794
 2. Crop History: Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. Land Preparation: Moldboard plowed and marked rows on 26 Apr.
 4. Soil Fertility: pH-6.3 P-95 K-62 Ca-733 Mg-71
Soil type: Tifton loamy sand, 2 - 5 % slope
 5. Herbicides: PPI: Sonalan (2 pt/A) + Dual Magnum (1.25 pt/A), 17 April
 6. Insecticides: Acephate 97 (0.7 lb/A) for thrips on 31 May
 7. Planting Info: GA-07W, 6 seed/ft, on 14 May
 8. Harvest Dates: Dug – 3 Oct Picked – 9 Oct
- E. **SUMMARY:** Severe nematode damage was present in this test. None of the treatments reduced nematode populations or gall ratings below those in the nontreated plots, although there were some yield differences among treatments.

Devgen Test, 2012
Rigdon Farm, Cotton Field

Treatments	App's	Rate	Plants/ft ¹			% Dead Plants ²			TSWV ³	Plant	Leaf Injury ⁵	Nematode ⁶	Yield
			24-May	4-Jun	14-Jun	24-May	4-Jun	14-Jun	3-Aug	Width ⁴	30-Jul	7-Oct	lb/A
1. Nontreated			1.8	2.7	3.1	0.0	0.0	0.0	0.7	59.1	0.2	202.5	2798
2. Temik	Band @ plant	10.0 lb	.	.	.	0.0	0.0	0.0	2.0	61.6	0.2	148.3	3674
	Temik	Band @ 45DAP											
3. RDL-29	T-Band @ plant	3.0 pt	.	.	.	0.0	0.0	0.0	1.0	50.8	1.0	220.0	1926
	RDL-29	45 DAP											
4. RDL-29	early post (21 DAP)	3.0 pt	.	.	.	0.0	0.0	0.0	1.0	52.5	0.3	170.8	2406
	RDL-29	45 DAP											
5. BioAct DC	IF	10 fl oz	1.6	2.5	3.0	0.0	0.0	0.0	0.3	57.1	0.3	150.8	3398
6. BioAct DC	IF	10 fl oz	1.8	2.7	3.2	0.0	0.0	0.0	1.7	55.6	0.2	179.0	3267
	Temik	Band @ plant											
	Temik	Band @ 45 DAP											
7. Nontreated			2.0	2.5	3.2	0.0	0.0	0.0	0.3	58.2	0.5	161.7	3248
LSD (P<0.05)			0.3	n.s.	0.2	n.s.	n.s.	n.s.	n.s.	5.8	0.6	n.s.	1351

***"Early post" applications applied in a narrow band (4") directly over the row w/a single 8010 nozzle in a total spray volume of 40 GPA.

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

****IF" is in furrow applied in 3.7 GPA.

¹Stand count is the number of emerged plants per foot of row on 24 May, 4 June, and 14 June.

²The % of emerged plants that was dead or dying per plot on 24 May, 4 June, and 14 June.

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

⁴Average plant width (measure in cm), mean of 6 plants per plot.

⁵Leaf injury is the % of leaves with phytotoxicity on a scale of 0-100% with 0=no injury.

EVALUATION OF VARIOUS FUNGICIDES APPLIED MIDSEASON AND EARLY EMERGENCE FOR THE CONTROL OF PEANUT SOILBORNE AND FOLIAR 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 (25 x 6 ft) per plot, 36-inch row spacing.
 3. There are eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: Tifguard
- C. APPLICATION OF TREATMENTS:
1. Equipment: Midseason spray treatments were applied with a CO₂ 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 13 Jun, 27 Jun, 11 Jul, 25 Jul, 8 Aug, 22 Aug and 5 Sep. The 20 DAP spray was applied on 4 Jun, 40 DAP on 21 Jun, 60 DAP on 12 Jul, 75 DAP 30 Jul, 90 DAP on 14 Aug, and 105 DAP on 28 Aug.
- D. ADDITIONAL INFORMATION:
- 1: Location: Lang Farm, Cotton Field Tifton, GA 31794
 2. Crop History: Peanut – 2011, Peanut – 2010, Peanut – 2009
 3. Land Preparation: Moldboard plowed and marked rows on 27 Apr.
 4. Soil Fertility: pH–6.2 P–33 K–68 Ca–831 Mg–102
Soil type: Tifton loamy sand, 2 – 5 % slope
 5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.25 pt/A) on 17 Apr.
POST: Cadre 70 DF (1.44 oz/A) on 28 Jun.
 6. Insecticides: Acephate 97, (0.7 lb/A) for thrips on 31 May.
 7. Planting Info: Tifguard, 6 seed/ft, 1.5” deep on 14 May
 8. Harvest Dates: Dug – 3 Oct Picked – 9 Oct
- E: SUMMARY: Severe white mold developed and there were clear differences in treatment timings.

Nichino Test I, 2012
Rigdon Farm, Cotton Field

Treatments	App's	Rate/A	WM ¹		Yield lb/A
			17-Aug	3-Oct	
1. Nontreated			52.4	66.0	3868
2. Convoy	20 DAP*	32 fl oz	9.6	42.8	3589
3. Convoy	40 DAP*	32 fl oz	0.4	28.8	4565
4. Convoy	60 DAP*	32 fl oz	6.4	31.6	4652
5. Convoy	20 DAP*	48 fl oz	7.6	32.8	4193
6. Convoy	40 DAP*	48 fl oz	2.0	32.4	4617
7. Convoy	60 DAP*	48 fl oz	2.8	24.4	4583
8. Convoy	20 DAP*	64 fl oz	4.0	30.4	4861
9. Convoy	40 DAP*	64 fl oz	0.8	13.6	4896
10. Convoy	60 DAP*	64 fl oz	1.6	12.8	5947
11. Convoy	60, 75, 90 & 105 DAP	13 fl oz	9.6	30.0	5326
12. Convoy	40, 60, 75 & 90 DAP	13 fl oz	2.4	28.4	5181
13. Convoy	20 DAP*	32 fl oz	4.4	22.8	4919
Convoy	60, 75, 90 & 105 DAP	13 fl oz			
14. Proline	20 DAP*	5.7 fl oz	2.8	10.8	4914
Convoy	60, 75, 90 & 105 DAP	13 fl oz			
LSD (P<0.05)			5.3	12.3	1060

*20, 40 & 60 DAP app's are in a band the width of the plant and applied in 20 GPA (8003 nozzle).
The other applications are broadcast with the normal 20 GPA boom.

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

DAILY RAINFALL AND IRRIGATION, 2012							
RIGDON FARM, COTTON FIELD							
TIFTON, GA							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1				0.5			1.1
3	0.1				0.5		
4							0.8
5				0.1			
6		0.1	0.3		0.3	0.2	
7			0.5				
8					7.7	0.6	
9		0.2	1.6				
10					0.3		
11			0.4				
12				0.4			
13		0.3					
14		0.3					
16		0.5					
17		0.7		0.4	0.1	0.4	
18	0.7					1.1	
19				0.9	1.9		
22				0.1	0.2		
24			1.3		0.8		
25				0.5			
26				0.3			
27		0.2			0.8		
28				0.2			
29		0.3				0.5	
31					3.4		
Total	0.8	2.6	2.8	3.3	16.0	2.8	1.8
IRRIGATION							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
11				0.6			
Total	0.0	0.0	0.0	0.6	0.0	0.0	0.0
Rain + Irrigation							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
Total	0.8	2.6	2.8	3.9	16.0	2.8	1.8

EVALUATION OF VARIOUS FUNGICIDES AND TIMINGS FOR THE CONTROL OF CYLINDROCLADIUM BLACK ROT AND WHITE MOLD (NEW FIELD)

- A. **PURPOSE:** To evaluate the comparative efficacy of various fungicides against peanut soil borne diseases
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
 2. One two- row bed (25 x 6 ft) per plot, 36 inch row spacing
 3. Eight foot alleyways between blocks
 4. Plots were established in an area with a history of CBR and white mold.
 5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule. Belt-pack spray treatments (3-6) were applied on 11 Jul, 25 Jul, 13 Aug, and 23 Aug. The 21 DAP was applied 6 June and in furrows were applied on 16 May.
 2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band and the in furrow sprays a single 80015E at 22 psi applying 3.7 GPA.
- D. **ADDITIONAL INFORMATION:**
1. Location: Attapulcus Research & Education Center, Attapulcus,GA
 2. Crop History: Peanut - 2011, Peanut 2010, Peanut - 2009
 3. Land Preparation: Moldboard plowed on 6 May and marked rows on 10 May
 4. Soil Fertility: pH – 6.0 P - 25 K - 40 Ca - 309 Mg -48
Soil type: Norfolk loamy sand
 5. Herbicides: PPI: Prowl (1qt/A), Valor (3oz/A) Strongarm (45oz/A) on 17 May
POST: Cadre (4 oz/A) on 23 Jul
 6. Insecticides: Lambda (5 oz/A) 25 Jul. Orthene 75C (10 oz/A) 1 Jun.
 7. Planting Info: Tifguard, 6 seed/ft, 1.5” deep on 16 May
 8. Harvest Dates: Dug – 9 Oct Picked – 15 Oct
- E. **SUMMARY:** Moderate white mold developed but there was no CBR present. The mid-season Provost applications gave the best control of white mold and yield response

Bayer Propulse Test, Attapulcus, 2012
Attapulcus New Field

Treatments	App's	Rate	Plants/ft ¹			% Dead Plants ²			Plant	TSWV ⁴	WM ⁵	CBR ⁶	Yield	
			24-May	4-Jun	13-Jun	24-May	4-Jun	13-Jun	Width ³	30-Aug	5-Sep	9-Oct	9-Oct	lb/A
1. Nontreated			1.3	2.8	2.7	0.0	0.0	0.0	58.1	0.8	10.8	28.0	0.0	4873
2. Propulse	In Furrow*	13.7 fl oz	0.7	2.8	2.8	0.0	0.0	0.0	55.4	2.0	0.8	6.4	0.0	5831
Provost	3 - 6	10.7 fl oz												
3. Proline	In Furrow*	5.7 fl oz	0.6	2.8	2.7	0.0	0.0	0.0	53.5	1.2	1.2	8.4	0.0	5878
Provost	3 - 6	10.7 fl oz												
4. Propulse	21 DAP**	13.7 fl oz	.	.	.	0.0	0.0	0.0	.	1.2	1.6	5.6	0.0	5605
Provost	3 - 6	10.7 fl oz												
5. Proline	21 DAP**	5.7 fl oz	.	.	.	0.0	0.0	0.0	.	0.4	2.4	8.8	0.0	5727
Provost	3 - 6	10.7 fl oz												
6. Propulse	In Furrow*	13.7 fl oz	0.6	2.9	2.8	0.0	0.0	0.0	55.9	2.0	7.6	24.8	0.0	5494
7. Proline	In Furrow*	5.7 fl oz	0.8	2.8	2.7	0.0	0.0	0.0	54.4	1.2	8.4	22.4	0.0	5227
8. Propulse	21 DAP**	13.7 fl oz	.	.	.	0.0	0.0	0.0	.	2.4	6.8	16.8	0.0	5645
9. Proline	21 DAP**	5.7 fl oz	.	.	.	0.0	0.0	0.0	.	1.6	7.6	23.2	0.0	4919
10. Provost	3 - 6	10.7 fl oz	.	.	.	0.0	0.0	0.0	.	0.4	0.4	6.0	0.0	5698
LSD (P<0.05)			0.3	n.s.	n.s.	n.s.	n.s.	n.s.	4.2	n.s.	5.5	12.2	n.s.	794

¹Stand count is the number of emerged plants per foot of row on 24 May, 4 June, and 13 June.

²The % of emerged plants that was dead or dying per plot on 24 May, 4 June, and 13 June.

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

^{4, 5 & 6}Percent of row feet infected based on disease loci (up to 12" o linear row) per plot.

EARLY EMERGENCE MISCELLANEOUS FUNGICIDE TEST I

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental peanut fungicides applied early emergence
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There are eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. All plots were traveled by tractor and cover sprayed with Provost (10.7 oz/A) on an approximately 2-week schedule, 25 Jul, 13 Aug, and 24 Aug. 30 DAP were applied on 14 Jun and 60 DAP were applied on 11 Jul.
 2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band
- D. **ADDITIONAL INFORMATION:**
- 1: **Location:** Attapulgus Research and Education Center, Attapulgus, GA
 2. **Crop History:** Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. **Land Preparation:** Moldboard plowed 6 May, marked rows on 15 May
 4. **Soil Fertility:** pH – 6.0 P - 48 K - 37 Ca - 320 Mg - 41
Soil type: Norfolk loamy sand, 2 - 5 % slope
 5. **Herbicides:** PPI: Prowl (1qt/A), Valor (3oz/A), Strongarm (.45oz/A) was applied on 24 May
POST: Cadre (4 oz/A) on 23 Jul
 6. **Insecticides:** Orthene 75 (10 oz/A) on 1 Jun. Lambda CY (5 oz/A) on 25 Jul and 17Aug.
 7. **Planting Info:** Tifguard, 6 seed/ft, 1.5” deep on 24 May
 9. **Harvest Dates:** Dug – 9 Oct Picked - 15 Oct
- E: **SUMMARY:**

Miscellaneous Fungicide Test, Attapulcus, 2012

Attapulcus, Old CBR Field

Treatments	App's	Rate/A	WM ¹				Leaf Spot ²	CBR ³	Yield
			10-Jul	9-Aug	28-Aug	9-Oct	20-Sep	9-Oct	lb/A
1. Nontreated			0.0	0.0	15.2	11.2	4.5	0.8	5227
2. Manco-Phite (Reload)	30 DAP Band, 20 GPA	1.5 lb	.		.	8.0	3.9	0.4	4641
Manco-Phite (Reload)	60 DAP B'cast, 20 GPA	1.5 lb							
3. Fungi-phite	30 DAP Band, 20 GPA	1.0 qt	.		.	25.2	4.4	0.0	4414
Fungi-phite	60 DAP B'cast, 20 GPA	1.0 qt							
4. Proline	30 DAP Band, 40 GPA	5.7 fl oz	0.0	0.0	0.8	20.4	3.3	0.4	4455
5. Proline	30 DAP Band, 20 GPA	5.7 fl oz	0.0	3.2	2.0	12.8	3.5	0.0	5024
6. Proline	30 DAP Band, 10 GPA	5.7 fl oz	0.0	2.4	5.2	11.6	3.4	0.0	4908
7. Proline	30 DAP B'case, 40 GPA	5.7 fl oz	0.0	2.8	9.2	14.0	3.3	0.0	4972
8. Proline	30 DAP B'cast, 20 GPA	5.7 fl oz	0.0	2.0	4.4	19.2	3.7	0.0	5169
9. Proline	30 DAP B'cast, 10 GPA	5.7 fl oz	0.0	5.6	6.8	15.2	3.4	0.0	5158
10. Propulse	30 DAP Band, 20 GPA	13.7 fl oz	.	.	.	10.8	3.0	0.0	5314
LSD (P<0.05)			n.s.	3.7	6.1	10.2	0.6	0.7	708

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

²Florida 1 - 10 scale where 1=no disease and 10=dead plant.

OFFICIAL DAILY RAINFALL, 2012							
Attapulgus, GA							
Rainfall							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1			0.5	0.1			0.5
2				0.1			
3	0.5						0.2
4							0.1
5			0.3		4.0	0.6	
6		0.1	0.2	0.2	1.4		
7		0.7			1.4		
8					1.3	0.4	
9		0.5	0.2	1.1	1.3		
10			0.3	0.7	0.6		
11			0.3	0.4			
13		0.3					
14		0.6	2.2		0.4		
17				0.7	0.5	0.7	
18	0.7					1.4	0.2
19				2.3	0.1		
20				0.4	1.2		
21	0.4						
24			0.7				
25			1.0	0.1			
26				1.1			
27				0.3	0.1		
28		0.1					
29		0.0			2.3	0.5	
30		0.1				0.4	
31		0.1		1.0			
Total	1.6	0.3	5.7	8.6	14.4	4.1	0.9
Irrigation							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
5			0.5				0.5
13						0.5	
17		0.5					
19						0.5	
20			0.5				
21		0.5	0.5				
24		0.5					
28						0.5	
31		0.5					
Total	0.0	2.0	1.5	0.0	0.0	1.5	0.5
Rain + Irrigation							
	Apr	May	Jun	Jul	Aug	Sep	Oct
	0.0	2.0	1.5	0.0	0.0	1.5	0.5

NONTRT PROLINE IN FURROW EARLY EMERGENCE TEST, PLAINS

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental peanut fungicides when applied at early emergence.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There are eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: Nontreated 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, 5 Jul, 16 Jul, and Bravo (24 oz/A) was sprayed on 20 Jun, 30 Jul, 13 Aug, and 27 Aug. Ultra Blazer (1.5 pt/A), and Butyrec (1 pt/A) on 5 Jul. Solubor (1 lb/A) was sprayed on 20 Jun. 21 DAP applied on 13 Jun. In furrow were applied on 23 May.
 2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band
- D. **ADDITIONAL INFORMATION:**
- 1: **Location:** Southwest Georgia Branch Station, Plains, GA 31780
 2. **Crop History:** Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. **Land Preparation:** Prior to planting fertilized (300 lbs/A) 7-20-20 on 15 Mar. Moldboard plowed and marked rows on 16 Mar
 4. **Soil Fertility:** pH – 6.3 P - 58 K - 247 Ca - 957 Mg - 239
Soil type: Greenville sandy clay
 5. **Herbicides:** PPI: Sonalan (1 qt/A), Dual Magnum (1 pt/A), Strongarm (0.45 oz/A) was applied on 15 May
POST:
 6. **Insecticides:** No in furrow insecticide applied. Parazone (8 oz/A) was applied on 7 Jun.
 7. **Planting Info:** Nontreated Tifguard, 6 seed/ft, 2.5” deep on 23 May
 8. **Harvest Dates:** Dug – 16 Oct Picked - 22 Oct

E: SUMMARY: Nontreated, marginal quality seed, and deep planting made this a high pressure test. The in furrow Abound was the best treatment for obtaining a plant stand and thus higher yields.

NONTRT PROLINE IN FURROW-EARLY EMERGENCE TEST, 2012

PLAINS, CBR FIELD

Treatments	App's	Rate	Plants/ft ¹			% Dead Plants ²			Plant	TSWV ⁴	WM ⁵	CBR ⁶	Yield
			31-May	12-Jun	20-Jun	31-May	12-Jun	20-Jun	Width ³	12-Sep	17-Oct	17-Oct	lb/A
1. Nontreated			0.2	1.0	0.9	0.0	0.0	5.5	27.2	2.7	2.3	0.2	3098
2. Proline	21 DAP	5.7 fl oz	0.3	1.0	0.9	0.0	0.0	1.1	28.2	1.3	4.0	0.2	3533
3. Proline	In Furrow	5.7 fl oz	0.2	1.2	1.2	0.0	0.0	0.2	29.6	1.2	4.0	0.5	3678
4. Abound	InFurrow	6.0 fl oz	0.3	1.5	1.7	0.0	0.0	0.0	31.0	0.8	5.7	0.7	4792
5. Abound	21 DAP	11.6 fl oz	0.2	0.9	1.0	0.0	0.0	1.8	26.4	2.7	2.3	0.3	2759
LSD (P<0.05)			n.s.	0.3	0.4	n.s.	n.s.	2.9	2.5	n.s.	n.s.	n.s.	1175

¹Stand count is the number of emerged plants per foot of row on 31 May, 12 June and 20 June.

²The % of emerged plants that was dead or dying per plot on 31 May, 12 June and 20 June.

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

^{4, 5 & 6} Percent of row feet infected based on disease loci (up to 12" o linear row) per plot.

PROLINE IN FURROW EARLY EMERGENCE TEST II, PLAINS

- 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 six replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There are eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: GA-06G
- C. **APPLICATION OF TREATMENTS:**
1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule, 5 Jul, 16 Jul, and Bravo (24 oz/A) was sprayed on 20 Jun, 30 Jul, 13 Aug, and 27 Aug. Ultra Blazer (1.5 pt/A), and Butyrec (1 pt/A) on 5 Jul. Solubor (1 lb/A) was sprayed on 20 Jun. 21 DAP applied on 13 Jun. In furrow were applied on 2 May, 30 DAP on 22 Jun, 60 DAP on 23 Jul, 90 DAP on 22 Aug.
 2. The early emergence sprays utilized a single 80-10 nozzle applying 40 GPA in a 4 inch band
- D. **ADDITIONAL INFORMATION:**
1. Location: Southwest Georgia Branch Station, Plains, GA 31780
 2. Crop History: Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. Land Preparation: Prior to planting fertilized (300 lbs/A) 7-20-20 on 15 Mar. Moldboard plowed and marked rows on 16 Mar
 4. Soil Fertility: pH - 6.3 P - 58 K - 247 Ca - 957 Mg - 239
Soil type: Greenville sandy clay
 5. Herbicides: PPI: Sonalan (1 qt/A), Dual Magnum (1 pt/A), Strongarm (0.45 oz/A) was applied on 15 May
POST:
 6. Insecticides: No in furrow insecticide applied. Parazone (8 oz/A) on 7 Jun.
 7. Planting Info: Nontreated Tifguard, 6 seed/ft, 1.5" deep on 23 May
 8. Harvest Dates: Dug - 16 Oct Picked - 22 Oct

E: SUMMARY:

Proline In Furrow-Early Emergence Test II, 2012															
Plains, CBR Field															
Treatments	App's	Rate	Plants/ft ¹			% Dead Plants ²			WM ³				TSWV ⁴	CBR ⁵	Yield
			31-May	12-Jun	20-Jun	31-May	12-Jun	20-Jun	24-Jul	8-Aug	29-Aug	17-Oct	12-Sep	17-Oct	lb/A
1. Nontreated			0.9	2.1	2.2	0.0	0.0	0.0	0.0	3.7	12.7	7.7	1.7	0.0	5324
2. Proline	30 DAP	5.7 fl oz	.	.	.	0.0	0.0	0.0	0.0	2.3	4.3	3.7	2.3	0.0	6195
3. Proline	In Furrow	5.7 fl oz	0.3	2.0	2.2	0.0	0.0	0.0	0.0	1.3	6.7	2.7	1.7	0.0	5566
4. Convoy	60 & 90 DAP	26 fl oz	.	.	.	0.0	0.0	0.0	0.0	1.0	1.7	2.3	0.0	0.0	5566
5. Proline	30 DAP	5.7 fl oz	.	.	.	0.0	0.0	0.0	0.0	0.0	3.0	1.0	3.7	0.2	5711
Convoy	60 & 90 DAP	26 fl oz													
6. Proline	In Furrow	5.7 fl oz	0.3	2.2	2.2	0.0	0.0	0.0	0.0	0.7	4.0	2.0	1.3	0.0	6147
Convoy	60 & 90 DAP	26 fl oz													
7. Nontreated			.	.	.	.	.	.	.	.	.	2.7	1.7	0.0	2952
8. Proline	30 DAP	5.7 fl oz	.	.	.	.	.	.	.	.	.	1.7	1.0	0.0	2856
9. Proline	In Furrow	5.7 fl oz	0.3	2.0	2.0	.	.	.	.	.	.	3.0	0.3	0.2	3098
LSD (P<0.05)			0.2	n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	2.1	5.8	3.0	1.8	n.s.	785

¹Stand count is the number of emerged plants per foot of row on 31 May, 12 June and 20 June.

²The % of emerged plants that was dead or dying per plot on 31 May, 12 June and 20 June.

^{3, 4 & 5}Percent of row feet infected based on disease loci (up to 12" o linear row) per plot.

EARLY EMERGENCE PROGRAMS TEST, PLAINS

- A. **PURPOSE:** To evaluate the comparative efficacy of labeled and experimental peanut fungicides when applied at early emergence.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
 2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
 3. There are eight foot alleyways between blocks.
 4. Plots were established in an area with a history of continuous peanut production.
 5. Variety: GA-06G
- C. **APPLICATION OF TREATMENTS:**
1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule, 5 Jul, 16 Jul, and Bravo (24 oz/A) was sprayed on 20 Jun, 30 Jul, 13 Aug, and 27 Aug. Ultra Blazer (1.5 pt/A), and Butyrec (1 pt/A) on 5 Jul. Solubor (1 lb/A) was sprayed on 20 Jun. 30 DAP on 22 Jun. Belt-pack spray treatments (3-5) were applied on 20 Jul, 3 Aug and 17 Aug. Spray 1.5 was applied on 29 Jun.
 2. The early emergence sprays utilized a single 8003 nozzle applying 20 GPA in a 4 inch band
- D. **ADDITIONAL INFORMATION:**
1. Location: Southwest Georgia Branch Station, Plains, GA 31780
 2. Crop History: Peanut - 2011, Peanut - 2010, Peanut - 2009
 3. Land Preparation: Prior to planting fertilized (300 lbs/A) 7-20-20 on 15 Mar. Moldboard plowed and marked rows on 16 Mar
 4. Soil Fertility: pH - 6.3 P - 58 K - 247 Ca - 957 Mg - 239
Soil type: Greenville sandy clay
 5. Herbicides: PPI: Sonalan (1 qt/A), Dual Magnum (1 pt/A), Strongarm (0.45 oz/A) was applied on 15 May
POST:
 6. Insecticides: No in furrow insecticide applied. Parazone (8 oz/A) on 7 Jun.
 7. Planting Info: Nontreated Tifguard, 6 seed/ft. 1.5" deep on 23 May
 8. Harvest Dates: Dug - 16 Oct Picked - 22 Oct

E: SUMMARY:

There was very little disease present in this test.

Early Emergence Programs Test, Plains, 2012							
Plains, CBR Field							
Treatments	App's	Rate/A	TSWV ¹		WM ²		Yield lb/A
			12-Sep	18-Jul	8-Aug	29-Aug	
1. Nontreated			2.0	0.0	1.3	3.7	5905
2. Headline SC Convoy	1.5 3 - 5	9.0 oz 13 fl oz	1.3	0.0	0.0	2.3	6340
3. Proline Convoy	30 DAP* 3 - 5	5.7 fl oz 13 fl oz	0.3	0.0	0.0	1.7	6534
4. Muscle 3.6F Convoy	1 3 - 5	7.2 oz 13 fl oz	0.7	0.0	0.7	0.0	5808
5. Convoy	3 - 5	13 fl oz	2.0	0.0	0.0	2.0	6050
LSD (P<0.05)			1.2	n.s.	1.1	3.4	n.s.
¹ Percent of row feet infected based on disease loci (up to 12" o linear row) per plot.							
² Percent of row feet infected based on disease loci (up to 12" o linear row) per plot.							

OFFICIAL DAILY RAINFALL, 2012							
PLAINS, GA							
<u>Rainfall</u>							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1				0.4	0.1	0.1	0.6
2				0.1	0.5		
3				0.2		1.1	
4						0.1	
5	0.3		0.3	0.6		0.1	
6		0.1	0.1	0.4	0.3	0.2	
7		0.1		0.2		0.2	
8						0.5	
9				0.6			
10			0.9	0.2	0.3		
11			0.4		0.2		
13		0.4					
14			0.8	0.1	0.1		
17				0.2		0.4	
18	0.6					0.5	
19					0.1		
20					0.1		
21	0.7						
24			0.1				
26				0.5			
27				0.6	0.1		
28		0.2					
29		0.1			0.1	0.2	
30		0.3				0.6	
Total	1.5	1.1	2.7	3.9	1.8	4.0	0.6
<u>Irrigation</u>							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
3				1.0			
13				1.0			
16				1.0			
18			1.0				
21					1.0		
24		1.0					
25				1.0			
26			1.0	1.0			
28					1.0		
31		1.0		1.0			
Total	0.0	3.0	2.0	6.0	2.0	0.0	0.0
<u>Rain + Irrigation</u>							
	Apr	May	Jun	Jul	Aug	Sep	Oct
	1.5	4.1	4.7	9.9	3.8	4.0	0.6

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE PECAN
(NORTH BLOCK, 2012)

- A **PURPOSE:** To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a susceptible cultivar.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
 2. Each replication consisted of single-tree treatments.
 3. The orchard was established in 1988 with alternating rows of Wichita and Desirable trees planted on a 40 x 40 ft spacing running north and south. Trees used in this test were replanted in 2000 on the same spacing with every other tree being replanted (alternate trees serve as buffers). This test used Desirable trees only.
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.
 2. Calendar-based spray treatments (1 - 10) were applied on 27 Mar, 10 Apr, 24 Apr, 8 May, 22 May, 5 Jun, 19 Jun, 3 Jul, 17 July, and 31 Jul.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Ponder Farm, CPES, Tifton, GA 31794
 2. **Soil Fertility:** pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44
 Soil type: Tifton loamy sand, 2 - 5 % slope
 3. **Herbicide strips:** Roundup (1 qt/A) + Surflan (2qt/A) on 22 Mar,
 Roundup (1qt/A) on 15 May, Roundup (1qt/A) +
 Valor (6oz/A) on 25 Jul and Gramoxone (1 qt/A) on
 8 Aug.
 4. **Insecticides:** None
 5. **Harvest Information:** Wichita 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:**

Dry weather early lead to a very low level of scab until late season after shell hardening.

PECAN FUNGICIDE TEST, 2012							
PONDER FARM, NORTH ORCHARD, DESIRABLE							
Treatments	Rate/A	App's	Leaf Inc. ¹	Nut Inc. ²		Nut Sev ³	
			5-Jun	24-Aug	1-Oct	24-Aug	1-Oct
1. Absolute 500SC + Induce Super Tin 4L + Elast 400F	5.0 fl oz 0.06% v/v 6.0 fl oz 25.0 fl oz	2, 4, 6, 8, 10 1, 3, 5, 7, 9	0.0	0.0	4.2	0.0	0.2
2. Quash 50WG + EXP A (4 lb/gal) Super Tin 4L + Elast 400F	3.0 oz 3.0 fl oz 6.0 fl oz 25.0 fl oz	2, 4, 6, 8, 10 1, 3, 5, 7, 9	0.0	0.0	0.0	0.0	0.0
3. Quadris Top 2.71 Super Tin 4L + Elast 400F	10 fl oz 6.0 fl oz 25.0 fl oz	2, 4, 6, 8, 10 1, 3, 5, 7, 9	0.0	0.0	8.3	0.0	0.7
4. BAS70004F + Latron B-1956 Super Tin 4L + Elast 400F	4.6 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	2, 4, 6, 8, 10 1, 3, 5, 7, 9	0.0	0.0	22.9	0.0	1.1
5. LBG-61 4.1L LBG-61 4.1L Super Tin 4L + Elast 400F	2.0 pt 2.5 pt 6.0 fl oz 25.0 fl oz	2 & 4 6, 8, 10 1, 3, 5, 7, 9	0.0	0.0	2.1	0.0	0.0
6. Merivon + Latron B-1956 Super Tin 4L + Elast 400F	4.0 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	2, 4, 6, 8, 10 1, 3, 5, 7, 9	3.5	4.3	8.3	1.0	0.6
7. Merivon + Latron B-1956 Super Tin 4L + Elast 400F	5.5 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	2, 4, 6, 8, 10 1, 3, 5, 7, 9	0.0	0.0	0.0	0.0	0.0
8. Merivon + Latron B-1956 Super Tin 4L + Elast 400F	6.5 oz 0.06% v/v 6.0 fl oz 25.0 fl oz	2, 4, 6, 8, 10 1, 3, 5, 7, 9 2, 4, 6, 8, 10	0.0	0.0	8.3	0.0	0.4
			0.0	0.0	4.2	0.0	0.2
Leaf Inc. ¹ =Leaf scab incidence, based on 6 terminals per tree (% of leaflets on middle leaf with any scab).							
Nut Inc. ² =Nut scab incidence, based on 6 nut clusters per trtt (% of nuts with any scab).							
Nut Sev. ³ =Nut scab severity, based on 6 nut clusters per tree (% of shuck covered with scab).							
SPRAY DATES: March 27, April 10, April 24, May 8, May 22, June 5, June 19, July 3, July 17, and July 31							

PECAN FUNGICIDE TEST, 2012							
PONDER FARM, NORTH ORCHARD, DESIRABLE							
Treatments	Rate/A	App's	Leaf Inc. ¹	Nut Inc. ²		Nut Sev ³	
			5-Jun	24-Aug	1-Oct	24-Aug	1-Oct
Super Tin 4L + Elast 400F	6.0 fl oz 25.0 fl oz	1, 3, 5, 7, 9					
10. ProPhyt 4L Super Tin 4L + Elast 400F	2.5 pt 6.0 fl oz 25.0 fl oz	1 - 3, 5, 7, 9 4, 6, 8, 10	0.0	0.0	9.3	0.0	0.5
11. Sovran + Orius 3.6F Sovran + Orius 3.6F Super Tin 4L + Elast 400F	3.2 oz 4.0 fl oz 3.2 oz 8.0 fl oz 6.0 fl oz 25.0 fl oz	2, 4 6, 8, 10 1, 3, 5, 7, 9	0.0	0.0	0.0	0.0	0.0
12. Agri Tin 4F + Phostrol	6.0 fl oz 2.5 pt	1 - 10	0.9	4.0	4.0	0.6	0.8
13. Super Tin 4L + Elast 400F	6.0 fl oz 25.0 fl oz	1 - 10	0.0	0.0	0.0	0.0	0.0
14. Nontreated			0.0	65.2	73.9	7.2	43.7
LSD (P<0.05)			1.5	8.6	13.9	1.6	5.3
Leaf Inc. ¹ =Leaf scab incidence, based on 6 terminals per tree (% of leaflets on middle leaf with any scab).							
Nut Inc. ² =Nut scab incidence, based on 6 nut clusters per trtt (% of nuts with any scab).							
Nut Sev. ³ =Nut scab severity, based on 6 nut clusters per tree (% of shuck covered with scab).							
SPRAY DATES: March 27, April 10, April 24, May 8, May 22, June 5, June 19, July 3, July 17, and July 31							

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITA PECAN
(NORTH BLOCK, 2012)

- A **PURPOSE:** To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a standard commercial cultivar.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with four replicates.
 2. Each replication consisted of single-tree treatments.
 3. The orchard was established in 1988 with alternating rows of Wichita and Desirable trees planted on a 40 x 40 ft spacing running north and south. Trees used in this test were replanted in 2000 on the same spacing with every other tree being replanted (alternate trees serve as buffers). This test used Wichita trees only.
- C. **APPLICATION OF TREATMENTS:**
1. **Equipment:** All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.
 2. Calendar-based spray treatments (1 - 10) were applied on 27 Mar, 10 Apr, 24 Apr, 8 May, 22 May, 5 Jun, 19 Jun, 3 Jul, 17 July, and 31 Jul.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Ponder Farm, CPES, Tifton, GA 31794
 2. **Soil Fertility:** pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44
 Soil type: Tifton loamy sand, 2 - 5 % slope
 3. **Herbicide strips:** Roundup (1 qt/A) + Surflan (2qt/A) on 22 Mar,
 Roundup (1qt/A) on 15 May, Roundup (1qt/A) + Valor (6oz/A)
 on 25 Jul and Gramoxone (1 qt/A) on 8 Aug.
 4. **Insecticides:** None
 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:** Moderate to heavy scab developed on this very susceptible cultivar with all treatments doing a good job of control.

PECAN FUNGICIDE TEST, 2012							
PONDER FARM, NORTH ORCHARD, WICHITA							
Treatments	Rate/A	App's	Leaf Inc. ¹	Nut Inc. ²		Nut Sev ³	
			5-Jun	16-Jul	24-Aug	16-Jul	24-Aug
1. Absolute 500SC	5.0 fl oz	2, 4, 6, 8, 10	1.3	0.0	0.0	0.0	0.0
+ Induce	0.06% v/v						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
2. Quash 50WG	3.0 oz	2, 4, 6, 8, 10	4.3	0.0	13.9	0.0	0.5
+ EXP A (4 lb/gal)	3.0 fl oz						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
3. Quadris Top 2.71	10 fl oz	2, 4, 6, 8, 10	0.3	0.0	0.0	0.0	0.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
4. BAS70004F	4.6 oz	2, 4, 6, 8, 10	0.6	3.5	0.0	0.1	0.0
+ 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						
5. LBG-61 4.1L	2.0 pt	2 & 4	1.0	7.6	47.2	0.5	8.5
LBG-61 4.1L	2.5 pt	6, 8, 10					
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
6. Merivon	4.0 oz	2, 4, 6, 8, 10	0.3	17.4	53.9	0.8	7.3
+ 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	5.5 oz	2, 4, 6, 8, 10	1.3	0.0	24.1	0.0	2.8
+ 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. Merivon	6.5 oz	2, 4, 6, 8, 10	0.0	4.2	16.7	0.3	3.6
+ 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						
Leaf Inc. ¹ =Leaf scab incidence, based on 6 terminals per tree (% of leaflets on middle leaf with any scab).							
Nut Inc. ² =Nut scab incidence, based on 6 nut clusters per trtt (% of nuts with any scab).							
Nut Sev. ³ =Nut scab severity, based on 6 nut clusters per tree (% of shuck covered with scab).							
SPRAY DATES: March 27, April 10, April 24, May 8, May 22, June 5, June 19, July 3, July 17, and July 31							

PECAN FUNGICIDE TEST, 2012							
PONDER FARM, NORTH ORCHARD, WICHITA							
Treatments	Rate/A	App's	Leaf Inc. ¹	Nut Inc. ²		Nut Sev ³	
			5-Jun	16-Jul	24-Aug	16-Jul	24-Aug
9. Luna Sensation	5.0 fl oz	2, 4, 6, 8, 10	1.0	0.0	10.4	0.0	1.2
+ Induce	0.06% v/v						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
10. ProPhyt 4L	2.5 pt	1 - 3, 5, 7, 9	0.0	0.0	2.8	0.0	0.1
Super Tin 4L	6.0 fl oz	4, 6, 8, 10					
+ Elast 400F	25.0 fl oz						
11. Sovran	3.2 oz	2, 4	0.0	0.0	0.0	0.0	0.0
+ Orius 3.6F	4.0 fl oz						
Sovran	3.2 oz	6, 8, 10					
+ Orius 3.6F	8.0 fl oz						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
12. Agri Tin 4F	6.0 fl oz	1 - 10	0.0	0.0	18.9	0.0	1.3
+ Phostrol	2.5 pt						
13. Super Tin 4L	6.0 fl oz	1 - 10	0.6	0.0	0.0	0.0	0.0
+ Elast 400F	25.0 fl oz						
14. Nontreated			0.8	95.8	75.0	33.6	46.0
LSD (P<0.05)			2.3	7.6	19.8	4.5	7.7
Leaf Inc. ¹ =Leaf scab incidence, based on 6 terminals per tree (% of leaflets on middle leaf with any scab).							
Nut Inc. ² =Nut scab incidence, based on 6 nut clusters per trtt (% of nuts with any scab).							
Nut Sev. ³ =Nut scab severity, based on 6 nut clusters per tree (% of shuck covered with scab).							
SPRAY DATES: March 27, April 10, April 24, May 8, May 22, June 5, June 19, July 3, July 17, and July 31							

PECAN FUNGICIDE TEST II (DESIRABLE, SOUTH BLOCK, 2012)

A. **PURPOSE:** To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a standard commercial cultivar.

B. **EXPERIMENTAL DESIGN:**

1. Randomized complete blocks with five replicates.
2. Each replication consisted of single-tree treatments.
3. The orchard was established in 1988 planted on a 40 x 40 ft spacing running north and south. This test consisted of Desirable trees only.

C. **APPLICATION OF TREATMENTS:**

1. **Equipment:** All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.
2. **Calendar-based spray treatments (1 - 10)** were applied on 28 Mar, 11 Apr, 25 Apr, 9 May, 23 May, 6 Jun, 20 Jun, 4 Jul, 18 July, and 1 Aug.

D. **ADDITIONAL INFORMATION:**

1. **Location:** Ponder Farm, CPES, Tifton, GA 31794
2. **Soil Fertility:** pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44
Soil type: Tifton loamy sand, 2 - 5 % slope
3. **Herbicide strips:** Roundup (1 qt/A) + Surflan (2qt/A) on 22 Mar, Roundup (1qt/A) on 15 May, Roundup (1qt/A) + Valor (6oz/A) on 25 Jul and Gramoxone (1 qt/A) on 8 Aug.
4. **Insecticides:** None
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:**

This orchard is more crowded, and some leaf scab as well as later season nut scab developed such that relative efficacy of treatments was evident.

PECAN FUNGICIDE TEST II, 2012							
PONDER FARM, SOUTH ORCHARD, DESIRABLE							
Treatments	Rate/A	App's	Leaf Inc. ¹	Nut Inc. ²		Nut Sev ³	
			10-Jun	27-Aug	2-Oct	27-Aug	2-Oct
1. Nutri-phite	32 oz	2, 4, 6, 8, 10	0.0	0.0	0.0	0.0	0.0
+ Super Tin 4L	8 fl oz						
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	0.0	0.0	6.7	0.0	0.5
+ Elast 400F	25.0 fl oz						
3. Serenade	6 qt	1 - 10	2.0	57.8	33.3	7.3	17.0
4. Serenade	6.0 qt	1 - 10	3.4	76.7	83.3	13.3	36.3
+ Kocide 3000	1.75 lb						
5. Kocide 3000	1.75 lb	1 - 10	3.7	70.0	86.7	11.2	27.8
6. Fungi-phyte	32 oz	2, 4, 6, 8, 10	1.1	0.0	10.0	0.0	1.9
+ Super Tin 4L	8 fl oz						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
7. Quash 50WG	3.0 oz	2, 4, 6, 8, 10	0.0	1.1	20.0	0.1	1.2
+ EXP A (4 lb/gal)	3.0 fl oz						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
8. EXP A (4 lb/gal)	3.0 fl oz	2, 4, 6, 8, 10	0.0	0.0	10.0	0.0	3.2
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
9. Actinovate AG	6.0 fl oz	1 - 10	0.0	73.3	46.7	9.2	26.9
+ Nufilm P	4.0 fl oz						
10. Actinovate AG	6.0 oz	1 - 4	2.1	61.7	61.7	10.5	14.7
+ Nufilm P	4.0 fl oz						
Actinovate AG	3.0 oz	5 - 10					
+ Nufilm P	4.0 fl oz						
11. Sovran 50W	3.2 oz	1 & 2	0.0	2.5	3.3	0.2	0.5
Topguard 1.04	14.0 fl oz	3, 5, 7, 9					
Elast 400F	50.0 fl oz	4, 6, 8, 10					

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

Nut Inc.²=Nut scab incidence, based on 6 nut clusters per trtt (% of nuts with any scab).

Nut Sev.³=Nut scab severity, based on 6 nut clusters per tree (% of shuck covered with scab).

SPRAY DATES: March 28, April 11, April 25, May 9, May 23, June 6, June 20, July 4, July 18, and August 1.

PECAN FUNGICIDE TEST II, 2012							
PONDER FARM, SOUTH ORCHARD, DESIRABLE							
Treatments	Rate/A	App's	Leaf Inc. ¹	Nut Inc. ²		Nut Sev ³	
			10-Jun	27-Aug	2-Oct	27-Aug	2-Oct
12. Enable	8.0 fl oz	1, 3, 5, 7, 9	1.8	0.0	10.0	0.0	0.7
Elast 400F	50 fl oz	2, 4, 6, 8, 10					
13. Topguard 1.04	14.0 fl oz	1, 3, 5, 7, 9	0.6	16.7	3.3	1.0	0.2
Elast 400F	50 fl oz	2, 4, 6, 8, 10					
14. Super Tin 4L	12.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	13.3	0.0	1.4
Elast 400F	50.0 fl oz	2, 4, 6, 8, 10					
15. Enable 2F	4.0 fl oz	1 - 10	0.6	0.0	6.7	0.0	0.7
+ Elast 400F	25.0 fl oz						
16. Kphyte	64 oz	2, 4, 6, 8, 10	0.0	0.0	0.0	0.0	0.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+ Elast 400F	25.0 fl oz						
17. Nontreated			2.3	83.3	100.0	22.7	64.8
LSD (P<0.05)			2.2	14.2	16.0	3.5	8.9

Leaf Inc.¹=Leaf scab incidence, based on 6 terminals per tree (% of leaflets on middle leaf with any scab).
Nut Inc.²=Nut scab incidence, based on 6 nut clusters per trtt (% of nuts with any scab).
Nut Sev.³=Nut scab severity, based on 6 nut clusters per tree (% of shuck covered with scab).

SPRAY DATES: March 28, April 11, April 25, May 9, May 23, June 6, June 20, July 4, July 18, and August 1.

OFFICIAL DAILY RAINFALL, 2012							
TY TY, GA							
<u>Rainfall</u>							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1			0.1	0.2			1.2
2				0.1	0.4	1.0	0.6
3					0.5		0.4
4							0.2
5	0.1		0.1	0.8	1.0		
6		0.2	0.1		0.9		
7			0.3		1.1		
8					2.7	0.5	
9		0.2	0.3	0.2	0.1		
10			1.5	0.4			
11			0.5	0.1	0.1		
13		0.4					
14		0.1		0.4			
15		0.6					
16		0.5			0.4		
17				2.3	0.5	0.3	
18	0.8					1.1	0.1
19					0.9		
20					0.1		
21	0.2						
23			0.3		0.5		
24			0.4	0.9			
25			0.3				
27				0.7	0.3		
29		0.2			1.1	0.4	
30		0.2				0.1	
Total	1.0	2.4	3.7	6.0	10.5	3.3	2.5
NOTE: Irrigation was applied as needed on all trees.							