2017 TEST RESULTS

Peanut & Pecan Fungicide Evaluations

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Memo to: Industry Cooperators

From: Tim Brenneman

Subject: Field Trial Results

Attached are the results of our 2017 field trials on peanuts and pecans. This was a drier year early (April and May) so there was very little early season scab on the pecans. However, frequent rains in June resulted in lots of nut scab as well as leaf spot on peanuts. It was another good year for nematodes and white mold (stem rot), particularly in dry land fields. As usual we had plenty of disease in our non-rotated peanut disease nurseries. Overall it was a good year for disease data on both crops.

I want to acknowledge the hard work of our crew lead by Corey Thompson, Lewis Mullis, and Pat Hilton. Summer workers included Luke Stephenson, Katelyn Harvel, Mattie Coe, and Walker Johnson. The cooperation of other scientists including Dr. Albert Culbreath, Dr. Bob Kemerait, Dr. Corley Holbrook, Dr. Patty Timper, Dr. Bill Branch, Dr. Scott Tubbs, Dr. Scott Monfort, and Dr. Barry Tillman is much appreciated. Graduate students Renjie Cui, Kory Herrington and Jeff Standish were also an important part of these investigations.

Once again we are making this available primarily as an online document available at www.timbrenneman.org by clicking on “Publications” then “2017 Report”. This site also has previous year reports. If you have any problems or any questions feel free to call. Thanks again for your support, and we look forward to cooperating with you again in the future.

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EVALUATION OF IN FURROW TREATMENTS IN TWIN AND SINGLE ROWS FOR CONTROL OF ROOT KNOT NEMATODES (Bayer Velum Total Twin Row Test, 2017)

A. PURPOSE: To evaluate the comparative efficacy of Velum Total when applied in single and twin rows for diseases and nematodes.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. The in furrow spray was applied with a TP 80015E flat fan nozzle w/ a 100 mesh t-ball check valve at 22 psi applying 3.4 GPA.

2. Cover sprays for leaf spot control of Chlorothalonil 720 (1.5 pt/A) were applied on 15 Jun, and 26 Jun. Cover sprays for leaf spot and white mold control of Chlorothalonil 720 (1.5 pt/A) + Provost Opti (8 fl oz) + Convoy (16 oz/A) were applied on 12 Jul, 25 Jul, 9 Aug, 22 Aug and 6 Sept. The 45 DAP treatments were applied with as a chemigation simulation treatment in 0.10 inch of water per acre on 27 Jun.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Woods Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 4 Apr. Rotary till through to subsoil on 13 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility: Soil type:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) tank mix on 20 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 5 Jun.

6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 May. Dimilin 2 L (6 fl oz/A) for worms on 6 Sept.	
7.	Planting Info:	GA-06G, 6 seed/ft (2” deep) in-furrow sprays in (3.6 gal/A) on 10 May.	
8.	Harvest Dates:	Dug – 29 Sept	Picked – 4 Oct

E: SUMMARY:

Not a high pressure test for diseases or nematodes, but enough root knot was present to enable treatment differences to be seen.

BAYER VELUM TOTAL TWIN ROW TEST, 2017

BLACKSHANK FARM, WOODS FIELD

	Row			Plants/ft[1]		% Dead Plants[2]				TSWV[3]
TREATMENTS	**Pat**	**App's**	**RATE**	**23-May**	**30-May**	**23-May**	**30-May**	**6-Jun**	**13-Jun**	**11-Aug**
1. Nontreated	Single			3.3	2.9	0.0	0.0	0.0	0.0	3.0
2. Velum Total	Single	In Furrow	14.0 oz	3.1	2.9	0.0	0.0	0.0	0.0	1.0
3. Velum Total	Single	In Furrow	18.0 oz	3.3	2.7	0.0	0.0	0.1	0.0	1.5
4. Velum Total	Single	In Furrow	14.0 oz	3.4	2.9	0.0	0.0	0.0	0.1	2.5
+ Propulse		**45 DAP (Chem)**	**13.7 fl oz***							
5. Velum Total	Single	In Furrow	18.0 oz	3.6	3.2	0.0	0.0	0.1	0.0	2.0
+ Propulse		**45DAP (Chem)**	**13.7 fl oz***							
6. Nontreated	Double			4.4	4.3	0.0	0.0	0.3	0.4	1.5
7. Velum Total	Double	In Furrow	14.0 oz[1]	4.4	4.2	0.0	0.0	0.3	0.1	2.0
8. Velum Total	Double	In Furrow	18.0 oz[1]	4.3	4.4	0.0	0.1	0.1	0.1	3.0
9. Velum Total	Double	In Furrow	14.0 oz[1]	4.2	4.5	0.0	0.0	0.2	0.0	2.0
+ Propulse		**45 DAP (Chem)**	**13.7 fl oz***							
10. Velum Total	Double	In Furrow	18.0 oz[1]	4.5	4.5	0.0	0.0	0.2	0.2	1.5
+ Propulse		**45 DAP (Chem)**	**13.7 fl oz***							
LSD (P<0.05)				0.4	0.4	n.s.	0.1	n.s.	0.3	n.s.

Plants/ft[1]=Stand count is the number of emerged plants per foot of row on 23 May and 30 May.

% Dead Plants[2]=The % of emerged plants that were dead or dying per plot.

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

**Chemigated simulation (Chem) in 0.10 inches per acre via hose and nurse tank.

[1]All twin row in furrow trt's will have 1/2 the rate of singe row trt's in each of the twin rows. In furrow applications applied in 3.4 GPA singles, 6.8 GPA twins and mixed in 2 L volume.

BAYER VELUM TOTAL TWIN ROW TEST, 2017

BLACKSHANK FARM, WOODS FIELD

TREATMENTS	Row Pat	App's	RATE	Galling Tap Root[4] 29-Sep	Galling pods[4] 29-Sep	WM[5] 29-Sep	Yield lb/A	Root knot[6] 14-Sep	Ring[7] 14-Sep
1. Nontreated	Single			12.5	17.3	4.5	3284	51.5	18.0
2. Velum Total	Single	In Furrow	14.0 oz	5.0	12.3	0.5	3351	30.0	4.0
3. Velum Total	Single	In Furrow	18.0 oz	4.8	1.5	0.0	3020	8.0	4.0
4. Velum Total	Single	In Furrow	14.0 oz	2.5	9.0	0.0	2995	11.0	4.0
+ Propulse		**45 DAP (Chem)**	**13.7 fl oz***						
5. Velum Total	Single	In Furrow	18.0 oz	1.8	4.3	0.5	3984	41.0	5.5
+ Propulse		**45DAP (Chem)**	**13.7 fl oz***						
6. Nontreated	Double			17.8	17.8	3.5	3689	35.0	3.3
7. Velum Total	Double	In Furrow	14.0 oz[1]	3.5	9.0	0.5	4372	17.3	0.8
8. Velum Total	Double	In Furrow	18.0 oz[1]	5.3	10.5	2.0	3926	2.3	3.5
9. Velum Total	Double	In Furrow	14.0 oz[1]	5.5	9.5	0.5	3838	16.0	19.0
+ Propulse		**45 DAP (Chem)**	**13.7 fl oz***						
10. Velum Total	Double	In Furrow	18.0 oz[1]	4.8	8.3	2.0	3904	6.5	0.8
+ Propulse		**45 DAP (Chem)**	**13.7 fl oz***						
LSD (P<0.05)				4.2	6.6	2.5	838	37.1	15.7

Galling[4]=Visual rating of the percent of pods and roots (1-100) with visible damage from rootknot nematode.

WM[5]=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

Rootknot[6]=Number of **M. *arenaria*** juveniles per 100 cc of soil.

Ring[7]=Population ring nematodes per 100 cc of soil.

BAYER VELUM TOTAL TWIN ROW TEST, 2017

BLACKSHANK FARM, WOODS FIELD

TREATMENTS	Row Pat	App's	RATE	IMM	DAM	SMKSS	DOLAC	DOLTON
1. Nontreated	Single			2.5	3.9	69.5	547.7	334.1
2. Velum Total	Single	In Furrow	14.0 oz	2.2	3.1	71.8	580.8	346.8
3. Velum Total	Single	In Furrow	18.0 oz	2.2	3.4	70.7	513.6	341.2
4. Velum Total	Single	In Furrow	14.0 oz	2.0	2.8	71.3	522.9	346.8
+ Propulse		**45 DAP (Chem)**	**13.7 fl oz***					
5. Velum Total	Single	In Furrow	18.0 oz	2.0	2.5	71.9	697.5	349.9
+ Propulse		**45DAP (Chem)**	**13.7 fl oz***					
6. Nontreated	Double			2.6	3.6	70.6	622.8	334.3
7. Velum Total	Double	In Furrow	14.0 oz[1]	2.3	3.8	70.0	729.5	333.5
8. Velum Total	Double	In Furrow	18.0 oz[1]	2.2	4.2	70.3	644.1	330.3
9. Velum Total	Double	In Furrow	14.0 oz[1]	2.3	2.9	71.0	660.2	344.6
+ Propulse		**45 DAP (Chem)**	**13.7 fl oz***					
10. Velum Total	Double	In Furrow	18.0 oz[1]	1.8	3.1	71.7	678.1	343.5
+ Propulse		**45 DAP (Chem)**	**13.7 fl oz***					
LSD (P<0.05)				0.6	1.4	2.1	147.5	18.9

"Peanut grades and values were based on 500 gram sample per plot dried to 10% moisture and graded according to Official Federal-State Inspection Service Method based on $355 per ton.

IMM=the percent immature kernels.

DAM=the percent damaged kernels.

SMKSS=the percent sound mature kernels and sound splits.

DOLAC=crop value (dollars per acre).

DOLTON=crop value (dollars per ton).

EVALUATION OF NEMATICIDES FOR THE CONTROL OF PEANUT ROOTKNOT NEMATODES (ADAMA NEMATODE MANAGEMENT TEST, 2017)

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. The in furrow sprays were applied with a TP80015E flat fan nozzle with a 100 mesh t-ball check valve at 22 psi applying 3.4 GPA.

2. Cover sprays for leaf spot control of Chlorothalanil 720 (1.5 pt/A) were applied on 26 Jun. Cover sprays for leaf spot and white mold control of Chlorothalanil 720 (1.5 pt/A) + Provost Opti (8 fl oz/A) + Convoy (16 fl oz/A) were applied on 12 Jul, 25 Jul, 9 Aug, 22 Aug, 6 Sept and 20 Sept. T-Band applications applied in 3.4 GPA, mixed in 2 L volume. This is a 4-inch band applied over the top of the open furrow after the seed were dropped and before the row is closed on 13 Jun. The broadcast applications were applied before planting and incorporated with a rotary tiller on 12 Jun.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Woods Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 4 Apr. Rotary tiller through to subsoil on 13 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility: Soil type:	pH – 6.4 P – 85 K – 17 Ca – 362 Mg – 48 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) tank mix on 20 Apr.

		POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 11 Jul.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 Jun. Dimilin 2 L, (6 fl oz/A) for worms on 6 Sept.
7.	Planting Info:	GA-06G, TifN/V-High O/L, 6 seed/ft of row on 13 June (2" deep).
8.	Harvest Dates:	Dug – 30 Oct Picked – 3 Nov

E: SUMMARY:

This test was planted very late and there was not enough time for much galling to develop. Some useful data was generated regarding plant stand and application method.

ADAMA NEMATODE MANAGEMENT TEST, 2017

BLACKSHANK FARM, WOODS FIELD

			Plant/ft[1]		% Dead Plants[2]				TSWV[3]	Yield
Treatments	**App's**	**Rate**	**28-Jun**	**5-Jul**	**28-Jun**	**5-Jul**	**11-Jul**	**18-Jul**	**13-Oct**	**lb/A**
GA-06G										
1. Admire Pro	T-Band*	8.5 fl oz	3.1	2.9	0.0	0.1	0.0	0.4	0.6	1274
2. Velum Total	T-Band	18.0 fl oz	2.8	2.7	0.0	0.0	0.0	0.3	0.0	948
3. Admire Pro	T-Band*	8.5 floz	2.7	2.7	0.0	0.1	0.3	0.5	0.9	957
Nimitz 480EC	T-Band	4.5 oz*								
4. Admire Pro	T-Band*	8.5 oz	3.0	2.9	0.0	0.0	0.2	0.9	0.7	927
Nimitz 480EC	T-Band	6.3 oz*								
5. Admire Pro	T-Band*	8.5 fl oz	2.9	2.9	0.0	0.0	0.1	0.4	0.3	797
Nimitz **380EC**	T-Band	5.8 oz*								
6. Admire Pro	T-Band*	8.5 fl oz	2.9	2.8	0.0	0.2	0.3	0.5	0.3	899
Nimitz **380EC**	T-Band	8.2 oz*								
7. Admire Pro	T-Band*	8.5 fl oz	3.0	2.7	0.0	0.0	0.2	0.3	0.6	1201
Nimitz 480EC	B'cast[2]	2.5 pt								
8. Admire Pro	T-Band*	8.5 fl oz	2.7	2.7	0.0	0.0	0.0	0.0	0.6	880
Nimitz **380EC**	B'cast[2]	3.25 pt								
TifN/V-High O/L										
9. Admire Pro	T-Band*	8.5 fl oz	3.0	2.8	0.0	0.0	0.2	0.2	0.0	1164
LSD (P<0.05)			0.3	n.s.	n.s.	0.2	n.s.	0.5	n.s.	384

Plants/ft[1]=Stand count is the number of emerged plants per foot of row on 28 June and 5 July.

% Dead Plants[2]=The % of emerged plants that were dead or dying per plot.

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

[1]**All T-Band applications applied in 3.4 GPA, mixed in 2 L volume. This is a 4-inch band applied over the top of the open furrow after the seed are dropped and before the row is closed.**

[2]The Broadcast app's will be applied before planting and incorporated with a rotary tiller.

ADAMA NEMATODE MANAGEMENT TEST, 2017
BLACKSHANK FARM, WOODS FIELD

Treatments	App's	Rate	Rootknot[4] 24-Oct	Ring[5] 24-Oct	Galling[6] 30-Oct
GA-06G					
1. Admire Pro	T-Band*	8.5 fl oz	48.0	180.1	8.8
2. Velum Total	T-Band	18.0 fl oz	38.9	95.6	2.8
3. Admire Pro	T-Band*	8.5 floz	150.4	158.1	6.0
Nimitz 480EC	T-Band	4.5 oz*			
4. Admire Pro	T-Band*	8.5 oz	210.0	171.0	6.5
Nimitz 480EC	T-Band	6.3 oz*			
5. Admire Pro	T-Band*	8.5 fl oz	144.0	128.9	7.8
Nimitz **380EC**	T-Band	5.8 oz*			
6. Admire Pro	T-Band*	8.5 fl oz	103.1	265.3	7.0
Nimitz **380EC**	T-Band	8.2 oz*			
7. Admire Pro	T-Band*	8.5 fl oz	39.7	159.4	3.0
Nimitz 480EC	B'cast[2]	2.5 pt			
8. Admire Pro	T-Band*	8.5 fl oz	59.0	150.1	6.0
Nimitz **380EC**	B'cast[2]	3.25 pt			
TifN/V-High O/L					
9. Admire Pro	T-Band*	8.5 fl oz	14.9	227.3	0.0
LSD (P<0.05)			133.8	112.3	4.1

Rootknot[4]=Number o *M.arenarie juveniles* per 100 cc of soil.

Ring[5]=Population of ring nematodes per 100 cc of soil.

Galling[6]=Visual rating of the percent of pods and rotts (1-100) with visible damage from rootknot nematode.

OFFICIAL DAILY RAINFALL 2017

BLACKSHANK FARM, WOODS FIELD

Rainfall							
DATE	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**
1		0.1					
2						0.1	
3	0.7				0.1		
4		1.2			0.7		
5	2.7		0.1		0.1		
6			0.2				
7			0.5		1.7		0.2
8				0.2			0.3
9				0.2	0.3		
10				1.2		0.4	
11				0.1		3.1	0.3
12			1.0				
13		0.2	0.5				
14				0.2			
15				0.2			
16				0.4			
17			0.1	0.3			
18			0.2				
19			0.3				
20		0.1	0.9	0.1			
21		0.3	0.1	0.2			
22							0.3
23	0.3	0.5	0.2	1.6			1.0
24		0.2	0.1	0.1			
25			0.5	0.1	0.1		
28			0.1				
29			0.2	0.1			
30			0.2		1.4		
31		0.3			0.8		
TOTAL	3.8	2.6	5.0	4.9	5.3	3.6	2.0

IRRIGATION		**(As Needed)**					
DATE	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**
TOTAL							
Rain & Irr	3.8	2.6	5.0	4.9	5.3	3.6	2.0

SYNGENTA MANAGEMENT TEST, 2017

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. The in furrow spray was applied with a TP 80015E flat fan nozzle w/ a 100 mesh t-ball check valve at 22 psi applying 3.4 GPA.

2. Treatments were applied on 15 Jun, 26 Jun, 11 Jul, 25 Jul, 8 Aug, 22 Aug, and 6 Sept (sprays 1-7), and sprays 1.5, 2.5, 4.5 and 6.5 were applied on 19 Jun, 3 Jul, 31 Jul, and 29 Aug. No cover sprays were applied.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Pond Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 4 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr. Rotary till through to subsoil on 13 Jul.
4.	Soil Fertility: Soil type:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) tank mix on 19 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 5 Jun.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 May. Dimilin 2 L (6 fl oz/A) for worms on 6 Sept.

7. Planting Info: Tifguard, 6 seed/ft (2”deep) on 10 May.

8. Harvest Dates: Dug – 2 Oct Picked – 5 Oct

E: SUMMARY:

There was a lot of deer damage in these plots and the plants did not grow well. Overall yields were very low, but there were some treatment differences for both foliar and soilborne diseases.

SYNGENTA MANAGEMENT TEST (Competitive Comparisons), 2017					
POND FIELD, BLACKSHANK FARM					
			LS[1]	WM[2]	Yield
TREATMENTS	App's	RATE	27-Sep	2-Oct	lb/A
1. Nontreated			6.5	21.6	2231
2. Bravo W'stik	1, 2, 6, 7	1.5 pt	2.3	9.6	2831
Fontelis	3 - 5	16.0 fl oz			
3. Bravo W'stik	1, 6, 7	1.5 pt	2.5	13.6	2480
Provost Opti	2 - 5	8.0 fl oz			
4. Priaxor	1.5	6.0 fl oz	3.1	12.4	2183
Bravo W'stik	3 & 5	1.5 pt			
+ Convoy		32.0 fl oz			
Bravo W'stik	4, 6, & 7	1.5 pt			
5. Priaxor	1.5	6.0 fl oz	3.0	6.0	2902
Bravo W'stik	3 & 7	1.5 pt			
Priaxor	4	8.0 fl oz			
Bravo	5 & 6	1.5 pt			
+ Orius 3.6		7.2 fl oz			
6. Alto	1	5.5 fl oz	2.7	7.2	2572
+ Bravo		1.0 pt			
Bravo	2 & 7	9.5 oz			
Elatus 45WG	3 & 5	3.4 fl oz			
+ Miravis		1.5 pt			
7. Alto	1	5.5 fl oz	2.8	9.6	2559
+ Bravo		1.0 pt			
Elatus 45WG	2.5 & 4.5	9.5 oz			
+ Miravis		3.4 fl oz			
Bravo	6 & 7	1.5 pt			
8. Elatus 45WG	1	7.3 oz	2.4	7.6	2530
+ Bravo		1.5 pt			
Elatus 45WG	2.5 & 4.5	7.3 oz			
+ Miravis		3.4 fl oz			
Bravo	6 & 7	1.5 pt			
9. Alto	1	5.5 fl oz	2.4	8.4	2739
+ Bravo		1.0 pt			
Elatus 45WG	2.5 & 4.5	9.5 oz			
+ Miravis		3.4 fl oz			
Bravo	6.5	1.5 pt			

SYNGENTA MANAGEMENT TEST (Competitive Comparisons), 2017					
POND FIELD, BLACKSHANK FARM					
			LS[1]	WM[2]	Yield
TREATMENTS	**App's**	**RATE**	**27-Sep**	**2-Oct**	**lb/A**
10. Alto	1	5.5 fl oz	2.7	6.8	1994
+ Elatus 45WG		7.3 oz			
Elatus 45WG	2.5 & 4.5	7.3 oz			
+ Miravis		3.4 fl oz			
Bravo W'stik	6.5	1.5 pt			
11. Alto	1 & 6	5.5 fl oz	2.9	10.4	2028
+ Bravo		1.0 pt			
Bravo	2, 4 & 7	1.5 pt			
Ealtus 45WG	3 & 5	9.5 oz			
12. Alto	1	5.5 fl oz	2.2	6.8	2378
+ Bravo		1.0 pt			
Ealtus 45WG	3 & 5	9.5 oz			
+ Miravis		3.4 fl oz			
Bravo	7	1.5 pt			
13. Bravo	1 - 7	1.5 pt	3.6	21.6	2266
LSD (P<0.05)			0.7	8.8	621
LS[1]=Florida scale of 1-10 where 1=no disease and 10=dead plant.					
WM[2]=Percent of row feet infected based on stem rot (up to 12' linear row) per plot.					

EVALUATION OF NEMATICIDES FOR THE CONTROL OF PEANUT ROOTKNOT NEMATODES AND DISEASES (NEMATODE MANAGEMENT TEST I, 2017)

A. PURPOSE: To evaluate the comparative efficacy of experimental treatments for control of nematodes and soilborne diseases.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: GA-06G, GA-14N and TifN/V-High O/L

C. APPLICATION OF TREATMENTS:

3. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. The in furrow spray was applied with a TP 80015E flat fan nozzle w/ a 100 mesh t-ball check valve at 22 psi applying 3.4 GPA.

4. Cover sprays for leaf spot control of chlorothalanil 720 (1.5 pt/A) were applied on 15 Jun and 26 Jun. Cover sprays for leaf spot and white mold control of chlorothalanil 720 (1.5 pt/A) + Provost Opti (8 fl oz/A) + Convoy (16 fl oz/A) were applied on 12 Jul, 25 Jul, 9 Aug, 22 Aug, and 6 Sept. In furrow applications were applied in 3.4 GPA (mixed in 2 L volume) on 15 May. The Propulse was either sprayed in 20 GPA and irrigated with 0.15 inches afterwards or via chemigation with a tank and sprinkler hose in 0.1 inch water on 13 Jul. Broadcast sprays were made at 9:00 A.M. and chemigation at 7:00 to 8:30 A.M on 13 Jul. The AGLogic granules were applied at 2:00 P.M. and irrigation (0.15 inches) started at 2:10 P.M.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Pond Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 4 Apr. Rotary tilled through subsoil on 13 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48
	Soil type:	Tifton loamy sand, 2 – 5% slope.

5.	Herbicides:	PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 19 Apr. POST: Cadre at (4 fl oz/A) + Non Ionic Surfactant (2 pt/gal water) on 5 Jun.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 Jun. Dimilin 2 L, (6 fl oz/A) for worms on 6 Sept.
7.	Planting Info:	GA-06G, GA-14N, TifN/V-High O/L, 6 seed/ft (2" deep) on 15 May.
8.	Harvest Dates:	Dug – 2 Oct Picked – 5 Oct

E: SUMMARY:

This test had very high nematode pressure and showed an excellent treatment response with corresponding yield increases. Other diseases were minimal.

NEMATODE MANAGEMENT TEST I, 2017								
BLACKSHANK FARM, POND FIELD								
			Plants/ft[1]		% Dead Plants[2]			
Treatments	**App's**	**RATE**	**30-May**	**5-Jun**	**30-May**	**5-Jun**	**12-Jun**	**19-Jun**
GA-06G								
1. Admire Pro	In Furrow*	8.5 fl oz	2.9	2.8	0.0	0.0	0.2	0.4
2. Velum Total	In Furrow*	18.0 fl oz	2.9	2.9	0.0	0.0	0.0	0.2
3. Velum Total	In Furrow*	18.0 fl oz	3.0	2.9	0.0	0.0	0.0	0.0
Propulse	**B'cast, 60 DAP****	**13.7 fl oz**						
4. Velum Total	In Furrow*	18.0 fl oz	3.0	2.8	0.0	0.0	0.0	0.2
Propulse	**Chemigated, 60 DAP*****	**13.7 fl oz**						
5. Velum Total	In Furrow*	18.0 fl oz	3.0	2.9	0.0	0.0	0.2	0.2
AgLogic 15G	60 DAP, banded	10.0 lb						
6. AgLogic 15G	In Furrow*	7.0 lb	2.9	2.8	0.0	0.0	0.4	0.0
AgLogic 15G	60 DAP, banded	10.0 lb						
TifNV-HiOL								
7. Admire Pro	In Furrow*	8.5 fl oz	2.8	2.6	0.0	0.0	0.4	1.2
GA-14N								
8. Admire Pro	In Furrow*	8.5 fl oz	2.8	2.7	0.0	0.0	0.8	1.0
LSD (P<0.05)			0.2	0.2	n.s.	n.s.	0.6	0.7

Plants/ft[1]=Stand count is the number of emerged plants per foot of row on 30 May, and 5 June.

% Dead Plants[2]=The % of emerged plants that were dead or dying per plot.

****Apply the Propulse in 20 GPA and irrigated with 0.1-0.5 inches afterwards.**

*****Apply the Propulse via chemigation with tank and sprinkler hose in 0.1 water.**

NEMATODE MANAGEMENT TEST I, 2017								
BLACKSHANK FARM, POND FIELD								
			TSWV[3]	Galling Tap Root[4]	Galling pods[4]	Yield	Root Knot[5]	Ring[6]
Treatments	**App's**	**RATE**	**11-Aug**	**2-Oct**	**2-Oct**	**lb/A**	**14-Sep**	**14-Sep**
GA-06G								
1. Admire Pro	In Furrow*	8.5 fl oz	2.0	44.5	70.0	2769	950.5	38.5
2. Velum Total	In Furrow*	18.0 fl oz	3.2	20.8	33.8	3813	167.0	16.3
3. Velum Total	In Furrow*	18.0 fl oz	1.6	21.3	26.3	3289	208.0	12.8
Propulse	**B'cast, 60 DAP****	**13.7 fl oz**						
4. Velum Total	In Furrow*	18.0 fl oz	3.2	20.8	19.3	3524	131.3	30.8
Propulse	**Chemigated, 60 DAP*****	**13.7 fl oz**						
5. Velum Total	In Furrow*	18.0 fl oz	0.8	10.8	10.8	3641	132.7	25.7
AgLogic 15G	60 DAP, banded	10.0 lb						
6. AgLogic 15G	In Furrow*	7.0 lb	0.8	21.3	22.0	3634	312.8	27.0
AgLogic 15G	60 DAP, banded	10.0 lb						
TifNV-HiOL								
7. Admire Pro	In Furrow*	8.5 fl oz	0.4	0.0	17.5	4082	2.0	25.8
GA-14N								
8. Admire Pro	In Furrow*	8.5 fl oz	2.8	0.0	0.0	3421	8.8	35.5
LSD (P<0.05)			n.s.	13.01	22.6	890	595.9	n.s.
TSWV[3]=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.								
Galling[4]=Visual rating of the percent of pods and roots (1-100) with visible damage from root knot nematode.								
Rootknot[5]=Number of ***M.arenaria juveniles*** per 100 cc of soil.								
Ring[6]=Population of ring nematodes per 100 cc of soil.								

NEMATODE MANAGEMENT TEST I, 2017

BLACKSHANK FARM, POND FIELD

Treatments	App's	RATE	IMM	DAM	SMKSS	DOLAC	DOLTON
GA-06G							
1. Admire Pro	In Furrow*	8.5 fl oz	1.8	3.3	72	478	345
2. Velum Total	In Furrow*	18.0 fl oz	2.1	1.4	73	689	361
3. Velum Total	In Furrow*	18.0 fl oz	1.9	1.6	73	584	356
Propulse	**B'cast, 60 DAP****	**13.7 fl oz**					
4. Velum Total	In Furrow*	18.0 fl oz	2.2	1.3	73	633	359
Propulse	**Chemigated, 60 DAP*****	**13.7 fl oz**					
5. Velum Total	In Furrow*	18.0 fl oz	1.7	1.3	73	652	359
AgLogic 15G	60 DAP, banded	10.0 lb					
6. AgLogic 15G	In Furrow*	7.0 lb	1.7	1.5	74	655	361
AgLogic 15G	60 DAP, banded	10.0 lb					
TifNV-HiOL							
7. Admire Pro	In Furrow*	8.5 fl oz	1.8	1.5	71	717	352
GA-14N							
8. Admire Pro	In Furrow*	8.5 fl oz	2.3	2.1	72	599	350
LSD (P<0.05)			n.s.	1.1	n.s.	161	15

"Peanut grades and values were based on 500 gram sample per plot dried to 10% moisture and graded according to Official Federal-State Inspection Service Method" based on $355 per ton.

IMM=the percent immature kernels.
DAM=the percent damaged kernels.
SMKSS=the percent sound mature kernels and sound splits.
DOLAC=crop value (dollarsper acre).
DOLTON=crop value (dollars per ton).

BAYER PROPULSE IRRIGATION TIMING TEST, 2017

A. PURPOSE: To evaluate the comparative efficacy of Propulse for nematode control when chemigated or sprayed and then irrigated in at different times after application.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles. The 20 GPA broadcast spray was applied, with three TX-SS6 conejet nozzles per row at 40 PSI, and the 40 GPA spray was applied with a single 80-10 nozzle per row at 40 PSI. The in furrow spray was applied with a TP 80015E flat fan nozzle w/ a 100 mesh t-ball check valve at 22 PSI applying 3.4 GPA. The 45 DAP chemigation treatment was applied by diluting the treatment in a tractor-mounted spray tank and watering it in with a hose and a sprinkler head calibrated to deliver a volume of water equivalent to 0.1 inch per acre.

2. Cover sprays for leaf spot control of Chlorothalonil 720 (1.5 pt/A) were applied on 15 Jun, and 26 Jun. Cover sprays for leaf spot and white mold control of Chlorothalonil 720 (1.5 pt/A) + Provost Opti (8 fl oz/A) + Convoy (32 fl oz/A) was applied on 12 Jul, 25 Jul, 9 Aug, 22 Aug and 6 Sept. The 45 DAP sprays were applied on 24 Jun to treatment 3 - 8 at the prescribed times prior to being irrigated with 0.10 inch of water.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Pond Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014 NOTE – To promote nematode development, Common vetch was grown as a winter crop between the 2016 and 2017 peanut crops.
3.	Land Preparation:	Moldboard plowed and marked rows on 4 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr. Rotary till through to subsoil on 13 Apr.

4.	Soil Fertility:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 19 Apr. POST: Cadre at (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 5 Jul.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 May. Dimilin 2 L (6 fl oz/A) for worms on 6 Sept.
7.	Planting Info:	GA-06G, 6 seed/ft (2” deep) 9 May
8.	Harvest Dates:	Dug – 4 Oct Picked – 10 Oct

E: SUMMARY:

This test had moderate nematode pressure and showed an excellent treatment response with corresponding yield increases. Other diseases were minimal.

BAYER PROPULSE IRRIGATION TIMING TEST, 2017						
BLACKSHANK FARM, POND FIELD						
			TSWV[1]	Galling Tap Root[2]	Galling pods[2]	Yield
TREATMENTS	App's	RATE	11-Aug	2-Oct	2-Oct	lb/A
1. Admire Pro	In Furrow*	9.0 fl oz	0.8	31.0	55.0	2876
2. Velum Total	In Furrow*	18.0 fl oz	2.8	15.6	34.0	3988
3. Velum Total	In Furrow*	18.0 fl oz	1.2	16.0	20.4	4169
Propulse	B'cast, 20 GPA, 45 DAP	13.7 fl oz				
	Irrigate Immediately					
4. Velum Total	In Furrow*	18.0 fl oz	2.4	16.6	21.0	4094
Propulse	**B'cast, 20 GPA, 45 DAP**	13.7 fl oz				
	Irrigate 1 hour after app					
5. Velum Total	In Furrow*	18.0 fl oz	5.2	22.0	19.0	4143
Propulse	**B'cast, 20 GPA, 45 DAP**	13.7 fl oz				
	Irrigate 2 hour after app					
6. Velum Total	In Furrow*	18.0 fl oz	2.4	15.2	15.8	4968
Propulse	**B'cast, 20 GPA, 45 DAP**	13.7 fl oz				
	Irrigate 4 hour after app					
7. Velum Total	In Furrow*	18.0 fl oz	1.2	16.0	17.2	4372
Propulse	**B'cast, 20 GPA, 45 DAP**	13.7 fl oz				
	Irrigate 6 hour after app					
8. Velum Total	In Furrow*	18.0 fl oz	6.0	15.6	21.0	4469
Propulse	**B'cast, 20 GPA, 45 DAP**	13.7 fl oz				
	Irrigate 8 hour after app					
9. Velum Total	In Furrow*	18.0 fl oz	3.6	16.4	28.0	4445
Propulse	**Chemigated 0.1", 45 DAP****	13.7 fl oz				
LSD (P<0.05)			3.7	7.7	11.4	1127
TSWV[1]=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.						
Galling[2]=Visual rating of the percent of pods and roots (1-100) with visible damage from root knot nematode.						

BAYER PROPULSE IRRIGATION TIMING TEST, 2017

BLACKSHANK FARM, POND FIELD

TREATMENTS	App's	RATE	IMM	DAM	SMKSS	DOLAC	DOLTON
1. Admire Pro	In Furrow*	9.0 fl oz	2.2	1.8	73	514	356.3
2. Velum Total	In Furrow*	18.0 fl oz	2.1	1.5	73	714	357.8
3. Velum Total	In Furrow*	18.0 fl oz	1.9	1.6	73	749	360.0
Propulse	B'cast, 20 GPA, 45 DAP	13.7 fl oz					
	Irrigate Immediately						
4. Velum Total	In Furrow*	18.0 fl oz	2.1	0.9	72	720	354.7
Propulse	**B'cast, 20 GPA, 45 DAP**	13.7 fl oz					
	Irrigate 1 hour after app						
5. Velum Total	In Furrow*	18.0 fl oz	2.0	1.2	71	726	349.4
Propulse	**B'cast, 20 GPA, 45 DAP**	13.7 fl oz					
	Irrigate 2 hour after app						
6. Velum Total	In Furrow*	18.0 fl oz	2.1	1.1	72	876	354.0
Propulse	**B'cast, 20 GPA, 45 DAP**	13.7 fl oz					
	Irrigate 4 hour after app						
7. Velum Total	In Furrow*	18.0 fl oz	2.0	1.5	72	773	354.6
Propulse	**B'cast, 20 GPA, 45 DAP**	13.7 fl oz					
	Irrigate 6 hour after app						
8. Velum Total	In Furrow*	18.0 fl oz	2.1	0.9	71	778	349.0
Propulse	**B'cast, 20 GPA, 45 DAP**	13.7 fl oz					
	Irrigate 8 hour after app						
9. Velum Total	In Furrow*	18.0 fl oz	1.7	1.2	74	805	361.9
Propulse	**Chemigated 0.1", 45 DAP****	13.7 fl oz					
LSD (P<0.05)			0.5	0.6	n.s.	n.s.	n.s.

"Peanut grades and values were based on 500 gram sample per plot dried to 10% moisture and graded according to Official Federal-State Inspection Service Method based on $355 per ton."

IMM=the percent immature kernels.

DAM=the percent damaged kernels.

SMKSS=the percent sound mature kernels and sound splits.

DOLAC=crop value (dollars per acre).

DOLTON=crop value (dollars per ton).

OFFICIAL DAILY RAINFALL 2017							
BLACKSHANK FARM, POND FIELD							
Rainfall							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1		0.1					
2						0.1	
3	0.7				0.1		
4		1.2			0.7		
5	2.7		0.1		0.1		
6			0.2				
7			0.5		1.7		0.2
8				0.2			0.3
9				0.2	0.3		
10				1.2		0.4	
11				0.1		3.1	0.3
12			1.0				
13		0.2	0.5				
14				0.2			
15				0.2			
16				0.4			
17			0.1	0.3			
18			0.2				
19			0.3				
20		0.1	0.9	0.1			
21		0.3	0.1	0.2			
22							0.3
23	0.3	0.5	0.2	1.6			1.0
24		0.2	0.1	0.1			
25			0.5	0.1	0.1		
28			0.1				
29			0.2	0.1			
30			0.2		1.4		
31		0.3			0.8		
TOTAL	3.8	2.6	5.0	4.9	5.3	3.6	2.0
IRRIGATION		(As Needed)					
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
TOTAL							
Rain & Irr	3.8	2.6	5.0	4.9	5.3	3.6	2.0

HELM AGRO TEST, 2017

A. PURPOSE: To evaluate the comparative efficacy of experimental treatments for control of diseases.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles. The 20 GPA broadcast spray was applied, with three TX-SS6 conejet nozzles per row at 40 PSI

2. Treatments were applied on 15 Jun, 26 Jun, 10 Jul, 25 Jul, 8 Aug, 24, Aug and 6 Sept. No cover sprays were applied to this test.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 12 Apr. Fertilizied with 5-10-15 (500 lb/A) on 12 Apr. Rotary strip till through to subsoil on 13 Apr.
4.	Soil Fertility: Soil type:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr. POST: + Non Ionic Surfactant (0.25% v/v) on 27 Jul, Poast (1.4 pt/A) + Crop Oil (1 pt/A) on 17 Aug.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 May, and on 15 Aug for worms. Dimilin 2 L (6 fl oz/A) for worms on 6 Sept.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) 9 May

8. Harvest Dates: Dug – 4 Oct Picked – 10 Oct

E: SUMMARY:

This was a very good test with good soilborne and foliar disease pressure and separation of treatments, including yield.

HELM AGRO TEST, 2017

BLACKSHANK FARM, IRR/NON FIELD

TREATMENTS	App's	RATE	Leaf Spot[1] 27-Sep	White Mold[2] 29-Sep	Yield lb/A
1. Equus 720	1,2, 7	1.5 pt	4.2	7.8	4302
Helmstar Plus	3 - 6	13.0 fl oz			
2. Equus 720	1,2, 7	1.5 pt	3.1	6.0	4243
Provost	3 - 6	8.0 fl oz			
3. Equus 720	1,2, 7	1.5 pt	4.9	9.5	3911
Artisan	3 - 6	26.0 fl oz			
4. Equus 720	1 - 7	1.5 pt	4.1	22.5	3472
5. Untreated			6.9	32.8	3105
LSD (P<0.05)			0.5	7.6	603

Leaf Spot[1]=Florida 1-10 scale where 1=no disease and 10=dead plant.

White Mold[2]=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

EVALUATION OF NEMATICIDES FOR THE CONTROL OF PEANUT ROOTKNOT NEMATODES (NEMATODE MANAGEMENT TEST II, 2017)

A. PURPOSE: To evaluate the comparative efficacy of experimental treatments for control of nematodes.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with seven replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: GA-06G, TiNV-HiOL, GA-14N.

C. APPLICATION OF TREATMENTS:

1. Equipment: The in furrow spray was applied with a TP 80015E flat fan nozzle w/ a 100 mesh t-ball check valve at 22 psi applying 3.4 GPA.

2. Cover sprays for leaf spot control of Chlorothalonil 720 (1.5 pt/A) were applied on 15 Jun and 26 Jun. Cover sprays for leaf spot and white mold control of Chlorothalanil 720 (1.5 pt/A) + Provost Opti (8 fl oz/A) + Convoy (16 fl oz/A) were applied on 12 Jul, 25 Jul, 9 Aug, 22 Aug and 6 Sept. The in furrow sprays were applied at planting on 15 May. The 60 DAP's were applied on 13 Jul with the chemigation starting at 7:00 A.M. and finishing at 8:30 A.M. The broadcast sprays were applied at 9:00 A.M. and the AgLogic granular at 2:00 P.M., and the irrigation started at 2:10 P.M. at 0.15 inches.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014 NOTE – To promote nematode development, Common vetch was grown as a winter crop between the 2016 and 2017 peanut crops.
3.	Land Preparation:	Moldboard plowed and marked rows on 12 Apr. Rotary strip till through to subsoil 13 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility: Soil type:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr.

		POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 31 May.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 May. Acephate 97 (0.7 lb/A) for worms on 15 Aug. Dimilin 2 L, (6 fl oz/A) for worms on 6 Sept.
7.	Planting Info:	GA-06G, TiNV-HiOL, GA-14N, 6 seed/ft (2" deep) 15 May.
8.	Harvest Dates:	Dug – 28 Sept Picked – 3 Oct

E: SUMMARY:

This test had lower levels of nematodes, but there was still a response to treatments. There were minimal confounding effects of other diseases.

NEMATODE MANAGEMENT TEST II, 2017

BLACKSHANK FARM, IRR/NON FIELD

			Plants/ft[1]		% Dead Plants[2]				TSWV[3]
Treatments	**App's**	**Rate/A**	**30-May**	**5-Jun**	**30-May**	**5-Jun**	**12-Jun**	**19-Jun**	**10-Aug**
GA-06G									
1. Admire Pro	In Furrow*	8.5 fl oz	3.1	3.0	0.0	0.0	0.0	0.0	0.9
2. Velum Total	In Furrow*	18.0 fl oz	3.0	3.0	0.0	0.0	0.0	0.0	1.4
3. Velum Total	In Furrow*	18. fl oz	2.9	2.9	0.0	0.0	0.0	0.2	4.0
Propulse	**B'cast, 60 DAP****	**13.7 fl oz**							
4. Velum Total	In Furrow*	18.0 fl oz	3.0	2.8	0.0	0.0	0.0	0.0	1.7
Propulse	**Chemigated, 60 DAP*****	**13.7 fl oz**							
5. Velum Total	In Furrow*	18.0 fl oz	3.0	2.9	0.0	0.0	0.0	0.0	2.0
AgLogic 15G	60 DAP, banded	10.0 lb							
6. AgiLogic 15G	In Furrow*	7.0 lb	2.9	2.9	0.0	0.0	0.0	0.3	3.1
AgLogic 15g	60 DAP, banded	10.0 lb							
TIFNV-HIOL									
7. Admire Pro	In Furrow*	8.5 fl oz	3.0	2.9	0.0	0.0	0.1	0.3	2.9
GA-14N									
8. Admire Pro	In Furrow*	8.5 fl oz	2.9	3.0	0.0	0.0	0.1	0.1	3.4
LSD (P<0.05)			n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	2.9

***All in furrow applications applied in 3.4 GPA singles, mixed in 2 L volume.**

Plant/ft[1]=Stand count is the number of emerged plants per foot of row on 30 May, and 5 June.

% Dead Plants[2]=The % of emerged plants that were dead or dying per plot.

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

** Apply the Propulse in 20 GPA and iirigate with 0.1-0.5 inches afterwards.

***Apply the Propulse via chemigation with tank and sprinkler hose in 0.1 water.

NEMATODE MANAGEMENT TEST II, 2017									
BLACKSHANK FARM, IRR/NON FIELD									
			Galling Tap Root[4]	Galling pods[4]	Yield	Root Knot[5]	Ring[6]		
Treatments	**App's**	**Rate/A**	**28-Sep**	**28-Sep**	**lb/A**	**15-Sep**	**15-Sep**		
GA-06G									
1. Admire Pro	In Furrow*	8.5 fl oz	17.7	16.6	4789	163.9	62.9		
2. Velum Total	In Furrow*	18.0 fl oz	11.1	10.6	5397	156.1	20.3		
3. Velum Total	In Furrow*	18. fl oz	8.1	7.7	5094	113.7	70.3		
Propulse	**B'cast, 60 DAP****	**13.7 fl oz**							
4. Velum Total	In Furrow*	18.0 fl oz	7.6	4.0	5783	84.9	36.6		
Propulse	**Chemigated, 60 DAP*****	**13.7 fl oz**							
5. Velum Total	In Furrow*	18.0 fl oz	6.9	9.9	5299	93.0	58.3		
AgLogic 15G	60 DAP, banded	10.0 lb							
6. AgiLogic 15G	In Furrow*	7.0 lb	8.6	8.9	4934	136.0	61.0		
AgLogic 15g	60 DAP, banded	10.0 lb							
TIFNV-HIOL									
7. Admire Pro	In Furrow*	8.5 fl oz	1.6	0.3	4799	2.0	41.7		
GA-14N									
8. Admire Pro	In Furrow*	8.5 fl oz	0.4	0.0	4517	1.9	39.4		
LSD (P<0.05)			4.5	3.0	740	136.5	n.s.		
Galling[4]=Visual rating of the percent of pods and roots (1-100) with visible damage from root knot nematode.									
Rootknot[5]=Number of **M. *arenaria* juveniles** per 100 cc of soil.									
Ring[6]=Population ring nematodes per 100 cc of coil.									

SYNGENTA SEED TREATMENT RHIZOCTONIA TEST, 2017

A. PURPOSE: To evaluate the comparative efficacy of fungicides applied for the control of *Rhizoctonia solani*.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

3. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. The in furrow sprays were applied with a TP80015E flat fan nozzle with a 100 mesh t-ball check valve at 22 psi applying 3.4 GPA.

4. Cover sprays for leaf spot control of Chlorothalanil 720 (1.5 pt/A) were applied on 15 Jun, and 26 Jun. Cover sprays for leaf spot and white mold control of Chlorothalanil 720 (1.5 pt/A) + Provost Opti (8 fl oz/A) + Convoy (16 fl oz/A) were applied on 12 Jul, 25 Jul, 9 Aug, 22 Aug, and 6 Sept. Just prior to planting on May 16, 400 ml of autoclaved oats per row were distributed on the soil and sprayed with a mycelial suspension of two *Rhizoctonia solani* AG-4 isolates grown on PDA (1 plate per plot). The planter incorporated this inoculum around the furrow as the peanuts were planted.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 4 Apr. Rotary tiller through subsoil on 13 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility: Soil type:	pH – 6.4 P – 85 K – 17 Ca – 362 Mg – 48 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr.

		POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 31 May.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 Jun. Dimilin 2 L (6 fl oz/A) for worms on 6 Sept.
7.	Planting Info:	Tifguard, 6 seed/ft (3.5” deep) of row on 16 May.
8.	Harvest Dates:	Dug – 28 Sept Picked –3 Oct

E: SUMMARY:

Seed treatments applied did result in better plant stands. The Rhizoctonia inoculum had little effect on initial stands, but did reduce the surviving plant stand as evidenced by the tap root counts at digging.

SYNGENTA SEED TREATMENT RHIZOCTONIA TEST, 2017										
BLACKSHANK FARM, IRR/NON FIELD										
		Inoculated w/	Plant/ft[1]		% Dead Plants[2]				TSWV[3]	Yield
Seed Trt	Seed Trt	Rhizoctonia	30-May	6-Jun	30-May	6-Jun	13-Jun	20-Jun	10-Aug	lb/A
1. As trt	1	YES	2.0	2.0	0.1	2.9	3.1	3.8	6.3	4551
2. As trt	2	YES	3.0	2.9	0.0	0.0	0.1	0.3	3.4	5037
3. As trt	3	YES	2.8	2.7	0.0	0.1	0.2	0.0	2.3	5212
4. As trt	4	YES	2.7	2.8	0.0	0.0	0.3	0.2	1.7	5318
5. As trt	5	YES	2.8	2.7	0.0	0.0	0.1	0.2	1.7	5308
6. As trt	1	NO	2.0	1.9	0.2	1.9	4.0	4.0	2.9	4740
7. As trt	2	NO	2.9	2.7	0.0	0.1	0.0	0.0	1.1	4924
8. As trt	3	NO	2.6	2.7	0.0	0.0	0.2	0.2	3.4	5190
9. As trt	4	NO	2.9	2.8	0.0	0.0	0.0	0.1	3.7	5296
10. As trt	5	NO	2.9	2.8	0.0	0.0	0.1	0.2	2.0	5064
LSD(P<0.05)			0.3	0.3	n.s.	1.0	1.5	1.2	3.3	504

Plant /ft[1]=Stand count is the number of emerged plants per foot of row on 30 May and 6 June .

% dead plants[2]=The % of emerged plants that was dead or dying per plot.

TSWV[3]=Percent of row feet infectecd based on disease loci (up to 12" of linear row) per plot.

****Distributed 400 ml of autoclaved oats PER ROW on the soil and sprayed with a Rhizoctonia suspension from 2 isolates with about 1 PDA plate per plot in the field. The plots are planted directly into this just after spraying the inoculum.**

SYNGENTA SEED TREATMENT RHIZOCTONIA TEST, 2017					
BLACKSHANK FARM, IRR/NON FIELD					
		Inoculated w/	Tap Root Count[4]	Weigts (6 plants) per plot	
Seed Trt	Seed Trt	Rhizoctonia	29-Sep	5-Jun	
1. As trt	1	YES	86.6	55.5	
2. As trt	2	YES	137.9	58.7	
3. As trt	3	YES	140.1	55.7	
4. As trt	4	YES	161.4	58.5	
5. As trt	5	YES	138.4	60.2	
6. As trt	1	NO	123.4	57.6	
7. As trt	2	NO	145.9	59.4	
8. As trt	3	NO	141.3	56.0	
9. As trt	4	NO	166.1	56.8	
10. As trt	5	NO	141.3	60.3	
LSD(P<0.05)			23.0	n.s.	
Tap Root Count=tap roots per plot after digging.					
Weights per plot=weight (g) of 6 plants per plot on 5 Jun.					

ADAMA TEST, 2017

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. The in furrow sprays were applied with a TP80015E flat fan nozzle with a 100 mesh t-ball check valve at 22 psi applying 3.4 GPA.

2. Treatments (1-7) were applied on 15 Jun, 26 Jun, 12 Jul, 25 Jul, 8 Aug, 22 Aug, and 5 Sept. Note that spray 1 & 2 were only Bravo since the ADA 641701 had not arrived.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 12 Apr. Rotary tiller through subsoil on 13 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility: Soil type:	pH – 6.4 P – 85 K – 17 Ca – 362 Mg – 48 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 31 May.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 Jun. Dimilin 2 L, (6 fl oz/A) for worms on 6 Sept.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) on 9 May.

8. Harvest Dates: Dug –28 Sept Picked –3 Oct

E: SUMMARY:

This was an excellent test for both foliar and soilborne diseases with good resolution of treatment differences for disease control and yield.

ADAMA TEST, 2017

IRR/NON FIELD, BLACKSHANK FARM

Treatments	App's	Rate/A	TSWV[1] 25-Aug	LS[2] 27-Sep	WM[3] 28-Sep	Yield lb/A
1. Untreated			4.4	7.5	41.2	2536
2. ADA 641701	1 - 7	3.42 fl oz	5.6	5.7	20.0	3533
3. ADA 641701	1 - 7	6.84 fl oz	4.0	5.0	20.4	3658
4. ADA 641701	1 - 7	10.26 fl oz	2.0	4.6	8.4	4179
5. ADA 641701	1 - 7	13.68 fl oz	2.4	3.9	7.6	4318
6. Bravo	1 - 7	1.5 pt	3.6	4.6	40.4	2734
7. Fontelis	1 - 7	16.0 fl oz	2.4	2.2	7.2	4464
LSD(P<0.05)			n.s.	0.8	11.2	604

TSWV[1]=Percent of row feet infected based on disease loci (up to 12" row) per plot.

Leaf Spot[2]=Florida 1-10 scale where 1=no disease and 10=dead plant.

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

OFFICIAL DAILY RAINFALL 2017							
BLACKSHANK FARM, IRR/NON FIELD							
Rainfall							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1		0.1					
2						0.1	
3	0.7				0.1		
4		1.2			0.7		
5	2.7		0.1		0.1		
6			0.2				
7			0.5		1.7		0.2
8				0.2			0.3
9				0.2	0.3		
10				1.2		0.4	
11				0.1		3.1	0.3
12			1.0				
13		0.2	0.5				
14				0.2			
15				0.2			
16				0.4			
17			0.1	0.3			
18			0.2				
19			0.3				
20		0.1	0.9	0.1			
21		0.3	0.1	0.2			
22							0.3
23	0.3	0.5	0.2	1.6			1.0
24		0.2	0.1	0.1			
25			0.5	0.1	0.1		
28			0.1				
29			0.2	0.1			
30			0.2		1.4		
31		0.3			0.8		
TOTAL	3.8	2.6	5.0	4.9	5.3	3.6	2.0
IRRIGATION		(As Needed)					
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
TOTAL							
Rain & Irr	3.8	2.6	5.0	4.9	5.3	3.6	2.0

EVALUATIONS OF GENOTYPE SUSCEPTIBILITY TO WHITE MOLD
(MULTI-STATE DISEASE EVALUATION TEST, 2017)

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (15ft x 6ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area of with a history continuous peanut production, but the field was tarped and fumigated each spring prior to planting with 100% chloropicrin (300 lb/A). Six plants per plot were inoculated with *Sclerotium rolfsii* at midseason (4 Aug), and length of each disease locus measured after inverting at harvest.
5. Variety: Multiple

C. APPLICATION OF TREATMENTS:

1. Cover sprays for leaf spot control of Chlorothalonil 720 (1.5 pt/A) were applied on 26 Jun, 27 Jul, 6 Sept and 20 Sept.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Banana Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Disc Harrow on 15 March. Tri-est injected 100% Chloropicin at (300 lb/A) and covered with plastic tarp on 10 Apr. Pulled plastic 18 Apr. Moldboard plowed and marked rows on 19 Apr. Subsoil shank ran under each row on 19 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility: Soil type:	pH – 6.4 P – 70 K – 21 Ca – 308 Mg – 42 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) on 19 Apr.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 Jun, 27 Jul, for fire ants.
7.	Planting Info:	Multiple Varieties, 6 seed/ft (2” deep) on 25 May

8. Harvest Dates: Dug –11 Oct Picked – 19 Oct

E: SUMMARY:

Significant white mold developed on inoculated plants and leaf spot developed rapidly midseason to become severe by harvest. Black, rotted pods were also observed and rated after inverting. The symptoms appeared to be Pythium pod rot, and *Pythium sclerotеichum* was isolated from the tissues.

Multi-State Disease Evaluations, 2017								
Blackshank Farm, Banana Field								
	Percent[1]	White Mold[2]		Leaf Spot[3]		Black	Yield	TSWV[4]
Entries	Zeroes	No Zeroes	All	14-Sep	4-Oct	Pods	(lb/A)	25-Aug
GA01	16.7	49.1	42.1	5.0	6.9	32.5	2589	14.7
GA02	4.2	32.7	32.8	4.4	6.8	22.8	3461	10.6
GA03	29.2	50.6	35.0	4.5	6.6	25.8	3487	13.1
GA04	0.0	62.1	62.1	5.6	7.1	24.5	2589	22.2
GA05	8.3	45.1	42.9	5.4	6.8	14.0	2660	21.9
GA06	20.8	22.0	20.0	5.5	6.8	24.0	3969	3.1
GA07	25.0	18.2	14.2	5.1	7.0	10.5	3824	7.2
GA08	33.3	50.1	31.5	4.9	6.6	9.5	2967	7.5
GA09	20.8	39.6	61.9	4.1	6.3	2.0	3354	13.1
GA10	12.5	32.6	29.0	4.8	7.1	9.8	3415	13.1
GA11	12.5	58.5	55.8	4.5	6.6	29.5	2928	7.5
TD1	29.2	22.3	16.5	3.7	4.9	27.0	3521	22.5
TD2	29.2	35.5	17.9	5.4	5.8	23.8	4102	23.8
TD3	58.3	16.3	6.9	3.4	4.8	10.3	4308	23.4
KM1	29.2	28.1	19.4	4.9	5.4	17.0	2940	4.7
KM2	25.0	23.7	17.3	3.1	6.3	3.0	4404	10.3
KM3	33.3	38.2	22.5	4.8	6.6	10.8	4162	18.1
FL1	0.0	120.0	120.0	7.1	8.9	6.0	1984	17.8
FL2	0.0	100.0	100.0	5.5	8.5	17.0	1798	5.6
FL3	12.5	45.0	39.2	4.8	7.0	7.5	2081	22.8
FL4	25.0	20.6	16.0	4.8	6.9	40.5	3533	21.9

Multi-State Disease Evaluations, 2017								
Blackshank Farm, Banana Field								
	Percent[1]	White Mold[2]		Leaf Spot[3]		Black	Yield	TSWV[4]
Entries	Zeroes	No Zeroes	All	14-Sep	4-Oct	Pods	(lb/A)	28-Aug
FL5	8.3	47.5	44.2	6.4	7.6	25.3	2788	9.4
FL6	54.2	14.3	6.3	4.4	6.8	4.0	4225	7.5
FL7	16.7	35.1	30.6	4.3	6.7	5.5	3756	7.8
FL8	29.2	29.9	21.5	5.1	7.3	31.3	2618	15.9
FL9	0.0	84.2	84.2	5.4	7.8	10.3	2328	13.8
FL10	8.3	24.1	22.7	5.9	7.6	17.0	2362	5.3
FL11	16.7	29.3	24.4	4.4	6.6	9.0	2952	17.8
AG1	8.3	34.2	31.0	4.1	6.3	22.0	3170	23.1
AG2	4.2	52.7	51.9	17.6	7.4	11.0	2933	24.7
AG3	0.0	115.4	115.4	7.7	9.4	15.0	1672	11.6
GA-14N	12.5	24.8	22.7	4.3	6.6	33.8	3219	12.2
GA-16HO	12.5	49.3	46.5	5.1	7.7	21.3	3606	15.3
GA-12Y	16.7	38.4	31.9	5.3	6.9	5.3	4158	10.3
AU-NPL17	20.8	26.0	21.7	3.4	5.3	10.0	2178	16.3
TIFNV HIGH O/L	25.0	27.2	20.8	3.9	5.4	24.5	4058	6.9
GA-06G	0.0	90.4	90.4	5.9	8.3	17.8	2386	12.8
GLORUN331	12.5	29.0	26.3	5.9	7.6	19.8	3678	10.9
TUFRUNNER 297	0.0	76.3	76.3	4.8	7.8	17.3	2473	15.9
GA-082549	33.3	33.3	25.0	4.4	5.9	11.0	3025	12.3
GA-13M	0.0	83.8	83.8	8.0	9.1	9.8	2210	9.1
LSD (P<0.05)	19.7	25.2	24.9	4.7	1.0	23.0	925	8.5

[1]Percent of plants inoculated with S. rolfsii that had no disease.

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

[3]Leaf Spot=Florida 1 - 10 scale where 1=no disease and 10=dead plant.

TSWV[4]=Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

OFFICIAL DAILY RAINFALL 2017							
BLACKSHANK FARM, BANANA FIELD							
Rainfall							
DATE	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**
1		0.1					
2						0.1	
3	0.7				0.1		
4		1.2			0.7		
5	2.7		0.1		0.1		
6			0.2				
7			0.5		1.7		0.2
8				0.2			0.3
9				0.2	0.3		
10				1.2		0.4	
11				0.1		3.1	0.3
12			1.0				
13		0.2	0.5				
14				0.2			
15				0.2			
16				0.4			
17			0.1	0.3			
18			0.2				
19			0.3				
20		0.1	0.9	0.1			
21		0.3	0.1	0.2			
22							0.3
23	0.3	0.5	0.2	1.6			1.0
24		0.2	0.1	0.1			
25			0.5	0.1	0.1		
28			0.1				
29			0.2	0.1			
30			0.2		1.4		
31		0.3			0.8		
TOTAL	3.8	2.6	5.0	4.9	5.3	3.6	2.0
IRRIGATION		**(As Needed)**					
DATE	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**
TOTAL							
Rain & Irr	3.8	2.6	5.0	4.9	5.3	3.6	2.0

EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT SEEDLING DISEASES (ARYSTA IN FURROW SEED TRT TEST, 2017)

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: Tifguard (79% germination and 100% *A. niger* contamination)

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. In-furrow sprays were applied in a volume of 3.4 GPA.

2. Cover sprays of chlorothalonil 720 (1.5 pt/A) were applied on 9 Jun, 23, and 29 Aug for sprays 1, 2, and 7. Chlorothalonil 720 (1.5 pt/A) + Convoy (16 fl oz/A) + Provost Opti (8 fl oz/A) were applied on 5 Jul, 19 Jul, 2 Aug, 16 Aug, for sprays 3, 4, 5, and 6.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 17 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 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 (2 pt/A) + Dual Magnum (1.5 pt/A) tank mix on 21 Apr. POST: Cadre (4 oz/A) + Dual Magnum (1.5 pt/A) on 31 May.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 25 May.
7.	Planting Info:	Tifguard, 6 pre-treated seed/ft (3.5” deep) 2 May.

8. Harvest Dates: Dug – 21 Sep Picked – 27 Sep

E: SUMMARY:

The primary pathogen in this test apparently was *Aspergillus niger* which was found in the seed at approximately 100% incidence. Even stands with treated seed were not great, but were much better than nontreated seed which were nearly a 100% loss. In furrow treatments are often effective, but had only small effects in this test on plant survival and yield.

ARYSTA IN FURROW SEED TRT TEST, 2017

LANG FARM, SOUTH FIELD

			Plant/ft[1]		% Dead Plants[2]				TSWV[3]	Tap Root Count[4]	Yield
Seed Trt*	**IF**	**Rate**	**16-May**	**23-May**	**16-May**	**23-May**	**31-May**	**6-Jun**	**25-Aug**	**22-Sep**	**lb/A**
1. Nontrt	None		0.1	0.0	0.0	0.0	39.4	9.8	1.5	0.1	301
2. Nontrt	Abound	6.0 fl oz	0.2	0.2	0.0	0.0	14.9	19.3	1.5	0.3	590
3. Nontrt	Abound	3.0 fl oz	0.1	0.1	0.0	0.0	14.2	16.4	1.5	0.1	349
4. Nontrt	Evito	2. 0 fl oz	0.2	0.2	0.0	1.4	12.9	13.1	3.5	0.3	245
5. Nontrt	Evito	1.0 fl oz	0.2	0.1	0.0	0.0	4.9	4.9	0.5	1.0	315
6. Rancona V PD	None		1.1	1.8	0.0	7.8	10.6	9.7	8.5	3.9	3601
7. Rancona V PD	Abound	6.0 fl oz	1.2	1.9	0.0	6.8	8.9	7.8	9.5	4.7	4183
8. Rancona V PD	Abound	3.0 fl oz	1.1	2.0	0.0	6.5	11.4	7.6	8.0	3.8	3878
9. Rancona V PD	Evito	2.0 fl oz	1.2	2.2	0.0	9.0	9.1	5.1	8.0	3.8	4387
10. Rancona V PD	Evito	1.0 fl oz	1.5	2.1	0.0	5.2	11.6	8.4	5.5	4.0	4249
LSD(P<0.5)			0.4	0.2	n.s.	4.5	9.6	n.s.	2.7	1.5	709

[1]Stand count is the number of emerged plants per foot of row on 16 May and 23 May.

[2]The % of emerged plants that were dead or dying per plot.

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

Tap Root Count[4]=The nunmber of tap roots per foot after digging.

EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT SEEDLING DISEASES (ARYSTA SEED TRT TEST, 2017)

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: Tifguard 79% germination

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. In-furrow sprays were applied in a volum of 3.4 GPA.

2. Cover sprays of chlorothalonil 720 (1.5 pt/A) were applied on 9 Jun, 23, and 29 Aug for sprays 1, 2, and 7. Chlorothalonil 720 (1.5 pt/A) + Convoy (16 fl oz/A) + Provost Opti (8 fl oz/A) were applied on 5 Jul, 19 Jul, 2 Aug, 16 Aug, for sprays 3, 4, 5, and 6.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 17 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 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 (2 pt/A) + Dual Magnum (1.5 pt/A) tank mix on 21 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 31 May.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 25 May.
7.	Planting Info:	Tifguard plant, 6 seed/ft (3.5” deep) 2 May.

8. Harvest Dates: Dug – 21 Sep Picked – 27 Sep

E: SUMMARY:

This was an excellent seed treatment test. The primary pathogen in this test apparently was *Aspergillus niger* which was found in the seed at approximately 100% incidence. Even stands with treated seed were not great, but were much better than nontreated seed which were nearly a 100% loss. The Rhizoctonia inoculations definitely impacted season-long survival of plants (see tap root counts) and final pod yield.

ARYSTA SEED TRT TEST, 2017

LANG FARM, SOUTH FIELD

										Tap Root	
		Inoc.	Plant/ft[1]		% Dead Plants[2]				TSWV[3]	Count[4]	Yield
Seed	Rate	Rhiz	16-May	23-May	16-May	23-May	31-May	6-Jun	25-Aug	21-Sep	(lb/A)
Nontrt		No	0.0	0.1	0.0	0.0	39.4	45.9	1.0	0.2	386
Nontrt		Yes	0.1	0.1	0.0	0.0	40.7	27.6	2.0	0.1	181
Rancona PD	4.0 oz	No	1.3	2.1	0.0	3.9	11.0	10.4	7.5	4.1	4006
Rancona PD	4.0 oz	Yes	1.0	1.7	0.0	10.0	19.1	20.4	5.5	2.9	2686
Dynasty PD	4.0 oz	No	0.9	1.5	0.0	11.8	17.4	16.4	3.0	2.9	3632
Dynasty PD	4.0 oz	Yes	0.8	1.4	0.0	9.8	25.3	26.5	7.5	2.0	2358
LSD(P<0.05)			0.4	0.3	n.s.	6.5	n.s.	n.s.	3.5	0.5	846

[1]Stand count is the number of emerged plants per foot of row on 16 May and 23 May.

[2]The % of emerged plants that were dead or dying per plot.

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

Tap Root Count[4]=The number of tap roots per foot after digging.

All inoculated plots will be inoculated with R. solani AG-4 (isolate RS20133 and Syngenta isolate) grown on PDA (1 plate per plot), macerated in a blender and sprayed in a band over the row (100 ml/row) immediately ahead of planting on top of 300 ml autoclaved oats per row. Planter incorporates the oats in soil.

NEW CULTIVAR HIGH-LOW INPUT TEST, 2017

A. PURPOSE: To evaluate the comparative disease susceptibility and yield of new cultivars to two levels of fungicide input.

B. EXPERIMENTAL DESIGN:

1. Split plot design with whole plots being cultivars and sub-plots being fungicide programs with four replicates.
2. One two-row bed (25ft x 6ft) per sub-plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: Multiple Varieties

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI.

2. Cover sprays of chlorothalonil 720 (1.5 pt/A) were applied to all plots on 8 Jun, 23 Jun, 3 Jul, 19 Jul, 2 Aug, 16 Aug and 29 Aug. Treatment 2 also received Provost and Convoy as described in the table.
3.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 17 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 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 (2 pt/A) + Dual Magnum (1.5 pt/A) tank mix on 21 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 31 May.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 25 May.
7.	Planting Info:	Multiple Varieties, 6 seed/ft (2” deep) 3 May.
8.	Harvest Dates:	Dug – 21 Sep Picked – 27 Sep

E: SUMMARY:

Differences were observed among cultivars in both disease susceptibility and yield potential. Differences were also evident between treatments, but these did not translate into as much yield differential as might be expected.

NEW CULTIVAR HIGH-LOW INPUT TEST, 2017							
LANG FARM, SOUTH FIELD							
				TSWV[1]	LS[2]	WM[3]	Yield
Cultivar	Treatments	App's	Rate/A	17-Aug	19-Sep	22-Sep	lb/A
1. GA-06G	1. Bravo W'stik	1 - 7		8.5	6.7	34.0	3720
	2. Bravo W'stik	1 - 7		3.5	1.7	10.5	3852
	Provost 3.6SC	3 - 6	8.0 fl oz				
	+ Convoy		16.0 fl oz				
LSD(P<0.05)				n.s.	0.4	20.8	n.s.
2. GA-16HO	1. Bravo W'stik	1 - 7		5.0	5.6	23.5	4615
	2. Bravo W'stik	1 - 7		3.0	1.4	13.5	5031
	Provost 3.6SC	3 - 6	8.0 fl oz				
LSD(P<0.05)				n.s.	1.1	9.4	n.s.
3. GA-12y	1. Bravo W'stik	1 - 7		2.5	5.5	16.0	4591
	2. Bravo W'stik	1 - 7		3.0	1.9	11.5	4424
	Provost 3.6SC	3 - 6	8.0 fl oz				
	+ Convoy		16.0 fl oz				
LSD(P<0.05)				n.s.	0.9	n.s.	n.s.
4. AU-NPL 17	1. Bravo W'stik	1 - 7		3.5	5.6	16.0	4327
	2. Bravo W'stik	1 - 7		7.0	1.7	9.0	4526
	Provost 3.6SC	3 - 6	8.0 fl oz				
	+ Convoy		16.0 fl oz				
LSD(P<0.05)				n.s.	0.9	n.s.	n.s.
5. Tufrunner 297	1. Bravo W'stik	1 - 7		2.5	6.8	29.0	4061
	2. Bravo W'stik	1 - 7		4.0	2.2	9.5	4594
	Provost 3.6SC	3 - 6	8.0 fl oz				
	+ Convoy		16.0 fl oz				
LSD(P<0.05)				n.s.	2.5	15.3	n.s.
6. GA-14N	1. Bravo W'stik	1 - 7		3.0	3.7	12.5	4389
	2. Bravo W'stik	1 - 7		7.0	1.5	5.5	4882
	Provost 3.6SC	3 - 6	8.0 fl oz				
	+ Convoy		16.0 fl oz				
LSD(P<0.05)				n.s.	0.2	n.s.	n.s.
7. TifNV-High O/L	1. Bravo W'stik	1 - 7		8.5	4.5	15.0	4588
	2. Bravo W'stik	1 - 7		1.5	2.0	8.0	4967
	Provost 3.6SC	3 - 6	8.0 fl oz				
LSD(P<0.05)	+ Convoy		16.0 fl oz	n.s.	0.7	n.s.	n.s.
8. Florun 331	1. Bravo W'stik	1 - 7		12.0	5.6	13.5	4488
	2. Bravo W'stik	1 - 7		10.0	1.8	7.0	4752
	Provost 3.6SC	3 - 6	8.0 fl oz				
	+ Convoy		16.0 fl oz				
LSD(P<0.05)				n.s.	1.3	n.s.	n.s.

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

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

WM[3]=Percent of row feet infected based on stem rot loci (up to 12" linear row) per plot.

NEW CULTIVAR HIGH-LOW INPUT TEST, 2017								
LANG FARM, SOUTH FIELD								
Cultivar	**Treatments**	**App's**	**Rate/A**	**IMM**	**DAM**	**SMKSS**	**DOLAC**	**DOLTON**
1. GA-06G	1. Bravo W'stik	1 - 7		2.2	1.1	72.9	668	359
	2. Bravo W'stik	1 - 7		2.0	0.6	73.2	694	361
	Provost 3.6SC	3 - 6	8.0 fl oz					
	+ Convoy		16.0 fl oz					
LSD(P<0.05)				n.s.	n.s.	n.s.	n.s.	n.s.
2. GA-16HO	1. Bravo W'stik	1 - 7		2.3	1.1	72.2	820	355
	2. Bravo W'stik	1 - 7		2.4	1.4	72.3	895	355
	Provost 3.6SC	3 - 6	8.0 fl oz					
LSD(P<0.05)				n.s.	n.s.	n.s.	n.s.	n.s.
3. GA-12y	1. Bravo W'stik	1 - 7		3.6	0.6	69.4	789	344
	2. Bravo W'stik	1 - 7		3.2	0.9	69.9	765	346
	Provost 3.6SC	3 - 6	8.0 fl oz					
	+ Convoy		16.0 fl oz					
LSD(P<0.05)				n.s.	n.s.	n.s.	n.s.	n.s.
4. AU-NPL 17	1. Bravo W'stik	1 - 7		3.0	0.5	69.3	743	343
	2. Bravo W'stik	1 - 7		3.1	0.7	70.1	785	347
	Provost 3.6SC	3 - 6	8.0 fl oz					
	+ Convoy		16.0 fl oz					
LSD(P<0.05)				n.s.	n.s.	n.s.	n.s.	n.s.
5. Tufrunner 297	1. Bravo W'stik	1 - 7		2.6	1.1	71.6	719	354
	2. Bravo W'stik	1 - 7		2.0	1.1	72.2	815	355
	Provost 3.6SC	3 - 6	8.0 fl oz					
	+ Convoy		16.0 fl oz					
LSD(P<0.05)				n.s.	n.s.	n.s.	n.s.	n.s.
6. GA-14N	1. Bravo W'stik	1 - 7		3.8	0.7	71.6	779	355
	2. Bravo W'stik	1 - 7		3.8	1.1	71.6	859	352
	Provost 3.6SC	3 - 6	8.0 fl oz					
	+ Convoy		16.0 fl oz					
LSD(P<0.05)				n.s.	n.s.	n.s.	n.s.	n.s.
7. TifNV-High O/L	1. Bravo W'stik	1 - 7		2.6	1.0	70.7	801	349
	2. Bravo W'stik	1 - 7		3.2	0.6	71.1	876	353
	Provost 3.6SC	3 - 6	8.0 fl oz					
LSD(P<0.05)	+ Convoy		16.0 fl oz	n.s.	n.s.	n.s.	n.s.	n.s.
8. Florun 331	1. Bravo W'stik	1 - 7		4.1	0.7	70.0	782	349
	2. Bravo W'stik	1 - 7		2.1	0.9	71.5	838	353
	Provost 3.6SC	3 - 6	8.0 fl oz					
	+ Convoy		16.0 fl oz					
LSD(P<0.05)				n.s.	n.s.	1.4	n.s.	n.s.

"'Peanut grades and values were based on 500 gram sample per plot dried to 10% moisture and graded according to Official Federal-State Inspection Service Method based on $355 per ton."

IMM=the percent immature kernels.

DAM=the percent damaged kernels.

SMKSS=the percent sound mature kernels and sound splits.

DOLAC=crop value (dollars per acre).

DOLTON=crop value (dollars per ton).

EVALUATION OF PEANUT FUNGICIDE PROGRAMS UNDER IRRIGATED CONDITIONS (FMC TEST, 2017)

A. PURPOSE: To evaluate peanut fungicide programs for efficacy and yield under non-irrigated conditions.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 Pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast Boom with three TX-SS6 conejet nozzles per row at 40 PSI.

2. Treatments 1 – 7 were applied on 9 Jun, 23 Jun, 5 Jul, 19 Jul, 2 Aug, 16Aug, and 29 Aug. No cover sprays were applied.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 17 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility:	pH – 6.4 P – 25 K – 40 Ca – 309 Mg – 48
	Soil type:	Tifton loamy sand, 2 - 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) tank mix on 21 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 31 May.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 56 May.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) 3 May.
8.	Harvest Dates:	Dug – 21 Sep Picked – 27 Sep

E: SUMMARY:

Good test for both soilborne and foliar diseases.

FMC TEST, 2017

LANG FARM, SOUTH FIELD

Treatments	App's	RATE/A	TSWV[1] 24-Aug	LEAF SPOT[2] 19-Sep	White Mold[3] 22-Sep	Yield lb/A
1. Nontreated			2	7.7	34.7	3982
2. Bravo	1 - 7	1.5 pt	3.0	5.3	23.0	4530
3. Bravo	1, 2, 4, 6, 7	1.5 pt	1.3	3.4	21.0	4616
F9654-1500SC	3 & 5	5.53 fl oz				
4. Bravo	1, 2, 6, 7	1.5 pt	3.7	2.1	16.7	4817
F9654-1500SC	3 - 5	5.53 fl oz				
5. Bravo	1, 2, 4, 6, 7	1.5 pt	2.3	5.6	20.3	4733
Topguard EQ	3 & 5	7.0 fl oz				
6. Bravo	1, 2, 6, 7	1.5 pt	2.3	5.1	20.0	5049
Topguard EQ	3 - 5	7.0 fl oz				
7. Bravo	1, 2, 4, 6, 7	1.5 pt	1.7	6.8	15.3	4555
Abound	3 & 5	18.0 fl oz				
8. Bravo	1, 2, 4, 6, 7	1.5 pt	1.7	5.8	26.7	4460
Topguard	3 & 5	18.0 fl oz				
LSD(P<0.05)			n.s.	0.8	8.6	560

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

Leaf Spot[2]=Florida 1-10 scale where 1=no disease and 10=dead plant.

WM[3]=Percent of row feet infected based on stem rot loci (up to 12" linear row) per plot.

BAYER PROVOST PROPULSE TEST, 2017

A. PURPOSE: To evaluate the comparative efficacy of Propulse for control of diseases where nematodes are not an issue.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles. The 20 GPA broadcast spray was applied with three TX-SS6 conejet nozzles per row at 40 PSI, and the Propulse treatments washed in with irrigation within 24 hours after application. The in furrow spray was applied with a TP 80015E flat fan nozzle w/ a 100 mesh t-ball check valve at 22 PSI applying 3.4 GPA.

2. Treatment sprays 1 – 7 were applied on 9 Jun, 23 Jun, 5 Jul, 19 Jul, 2 Aug, 17 Aug, and 29 Aug. In furrow was applied at plant on 3 May. No Chlorothalonil cover sprays were applied.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 4 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr. Rotary till through to subsoil on 13 Apr.
4.	Soil Fertility: Soil type:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 19 Apr. POST: Cadre at (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 5 Jul.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 26 May. Dimilin 2 L (6 fl oz/A) for worms.

7. Planting Info: Tifguard, 6 seed/ft (2” deep) 3 May

8. Harvest Dates: Dug – 21 Sep Picked – 27 Sep

E: SUMMARY:

This was a good test for both soilborne and foliar disease with moderate disease pressure and yield response.

BAYER PROVOST PROPULSE TEST, 2017								
LANG FARM, SOUTH FIELD								
			Plants/ft[1]		% Dead Plants[2]			
TREATMENTS	App's	RATE	17-May	24-May	17-May	24-May	31-May	7-Jun
1. Untreated			2.9	2.9	0.0	0.0	1.0	1.8
2. Velum Total	In Furrow*	18.0 fl oz	2.8	2.9	0.0	0.0	0.2	0.1
Propulse	2 **(B'cast wash it in)**	**13.7 fl oz**						
Provost Opti	3 & 5	10.7 fl oz						
Abound	4 & 6	1.5 pt						
+ Bravo		1.5 pt						
Bravo	7	1.5 pt						
3. Absolute	1	3.5 fl oz	2.9	2.9	0.0	0.0	1.3	1.1
Propulse	2 **(B'cast wash it in)**	**13.7 fl oz**						
Provost Opti	3 & 5	10.7 fl oz						
Abound	4 & 6	1.5 pt						
+ Bravo		1.5 pt						
Bravo	7	1.5 pt						
4. Velum Total	In Furrow*	18.0 fl oz	2.8	2.8	0.0	0.0	0.0	0.1
Absolute	1	3.5 fl oz						
Provost Opti	3 & 5	10.7 fl oz						
Abound	4 & 6	1.5 pt						
+ Bravo		1.5 pt						
Bravo	7	1.5 pt						
5.Absolute	1	3.5 fl oz	2.8	2.6	0.0	0.0	1.6	1.5
Provost Opti	3 & 5	10.7 fl oz						
Abound	4 & 6	1.5 pt						
+ Bravo		1.5 pt						
Bravo	2 & 7	1.5 pt						
6.Proline 480SC	In Furrow*	5.7 fl oz	2.7	2.8	0.0	0.0	0.7	0.6
Absolute	1	3.5 fl oz						
Provost Opti	3 & 5	10.7 fl oz						
Abound	4 & 6	1.5 pt						
+ Bravo		1.5 pt						
Bravo	2 & 7	1.5 pt						
7.Proline 490SC	In furrow*	5.7 fl oz	2.6	2.8	0.0	0.0	0.4	0.4
Provost Opti	3 & 5	10.7 fl oz						
Abound	4 & 6	1.5 pt						
+ Bravo		1.5 pt						
Bravo	1,2 & 7	1.5 pt						
8. Bravo	1 - 7	1.5 pt	2.7	2.7	0.0	0.0	1.6	1.3
LSD (P<0.05)			n.s.	n.s.	n.s.	n.s.	1.2	0.9

Plants/ft[1]=Stand count is the number of emerged plants per foot of row on 17 May and 24 May.

% Dead Plants[2]=The % of emerged plants that were dead or dying per plot.

*In furrow applications in 3.4 GPA singles, mixed in 2 L volume.

BAYER PROVOST PROPULSE TEST, 2017									
LANG FARM, SOUTH FIELD									
			TSWV[3]	LS[4]	WM[5]	Yield			
TREATMENTS	**App's**	**RATE**	**17-Aug**	**19-Sep**	**22-Sep**	**lb/A**			
1. Untreated			3.7	6.8	29.0	3907			
2. Velum Total	In Furrow*	18.0 fl oz	1.3	2.4	8.7	5355			
Propulse	2 **(B'cast wash it in)**	**13.7 fl oz**							
Provost Opti	3 & 5	10.7 fl oz							
Abound	4 & 6	1.5 pt							
+ Bravo		1.5 pt							
Bravo	7	1.5 pt							
3. Absolute	1	3.5 fl oz	1.7	2.4	15.0	5371			
Propulse	2 **(B'cast wash it in)**	**13.7 fl oz**							
Provost Opti	3 & 5	10.7 fl oz							
Abound	4 & 6	1.5 pt							
+ Bravo		1.5 pt							
Bravo	7	1.5 pt							
4. Velum Total	In Furrow*	18.0 fl oz	4.7	2.9	12.7	5389			
Absolute	1	3.5 fl oz							
Provost Opti	3 & 5	10.7 fl oz							
Abound	4 & 6	1.5 pt							
+ Bravo		1.5 pt							
Bravo	7	1.5 pt							
5.Absolute	1	3.5 fl oz	5.0	3.0	17.3	5064			
Provost Opti	3 & 5	10.7 fl oz							
Abound	4 & 6	1.5 pt							
+ Bravo		1.5 pt							
Bravo	2 & 7	1.5 pt							
6.Proline 480SC	In Furrow*	5.7 fl oz	1.0	2.6	17.0	5074			
Absolute	1	3.5 fl oz							
Provost Opti	3 & 5	10.7 fl oz							
Abound	4 & 6	1.5 pt							
+ Bravo		1.5 pt							
Bravo	2 & 7	1.5 pt							
7.Proline 490SC	In furrow*	5.7 fl oz	3.3	2.6	12.0	4786			
Provost Opti	3 & 5	10.7 fl oz							
Abound	4 & 6	1.5 pt							
+ Bravo		1.5 pt							
Bravo	1,2 & 7	1.5 pt							
8. Bravo	1 - 7	1.5 pt	3.3	4.2	34.0	4309			
LSD (P<0.05)			3.6	0.5	8.7	575			

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

Leaf Spot[4]=Florida 1-10 scale where 1=no disease and 10=dead plant.

WM[5]=Percent of row feet infected based on stem rot loci (up to 12" linear row) per plot.

*In furrow applications in 3.4 GPA singles, mixed in 2 L volume.

OFFICIAL DAILY RAINFALL 2017							
LANG/RIGDON FARM							
Rainfall							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1		0.1					
2			0.4			0.6	
3	1.7		3.0		0.4		
4		2.2			0.5	0.1	
5	0.1		0.6		0.6		
6			0.2			0.1	
7			0.9		1.3		
8				0.2	0.2		0.3
9					0.1		
10				0.6		0.2	
11						2.8	0.6
12		0.3	0.1		0.1		
13						0.1	
15			0.5	0.3		0.1	
16			0.1	0.6		0.1	0.6
17			0.9	0.3			
19			1.0				
20			1.6			0.1	
21		0.4	0.4	1.5	0.3	0.2	
22		0.1					
23		0.2					0.9
24		0.5					
25			0.1	0.5	0.1		
26							0.1
28							0.1
29				0.2	0.5		
30			0.8		0.1		
31					0.1		
TOTAL	1.8	3.7	10.5	4.0	4.2	4.2	2.5

IRRIGATION							
DATE	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**
2		0.5					
3				0.2			
7				0.5	0.5		
11		0.5					
14					0.5		
15		0.5					
17					0.5		
18		0.5					
21					0.5		
24					0.6		
26		0.3					
28					0.5		
30		0.5					
31				0.6			
TOTAL		2.8		1.3	3.1		
Rain & Irr	1.8	6.5	10.5	5.3	7.3	4.2	2.5

EVALUATION OF VARIOUS FUNGICIDE PROGRAMS FOR THE CONTROL OF PEANUT DISEASES (DUPONT/CONCEPT AG TEST, 2017)

A. PURPOSE: To evaluate various peanut fungicide programs.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 Pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast Boom with three TX-SS6 conejet nozzles per row at 40 PSI. The 21 DAP spray was applied broadcast over the row with a single 8003 nozzle in a spray volume of 20 GPA.

2. Treatment sprays 1-7 were applied on 15 Jun, 22 Jun, 29 Jun, 13 Jul, 27 Jul, 10 Aug, 24 Aug and 7 Sep. The 1.5 treatment was applied on 20 Jun and the 4.5 treatment was applied on 1 Aug. The 21 DAP was applied on 26 May. No cover sprays were applied to this test.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, New Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 17 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility: Soil type:	pH – 5.8 P – 21 K – 89 Ca – 779 Mg – 98 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) tank mix on 21 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 2 Jun.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 25 May.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) 9 May

8. Harvest Dates: Dug – 9 Oct Picked – 17 Oct

E: SUMMARY:

This was a good test for both foliar and soilborne diseases with a generally good response to fungicides. Yields were lower but still reflective of disease efficacy. There were also differences in crown rot that were of interest.

DUPONT CONCEPT AG TEST, 2017												
RIGDON FARM, NEW FIELD												
			Plant/ft[1]		% Dead Plant[2]				Tap Roots[3]	LS[4]	WM[5]	Yield
Treatments	App's	Rate/A	23-May	31-May	23-May	31-May	6-Jun	13-Jun	9-Oct	4-Oct	9-Oct	lb/A
1. Nontreated			2.7	2.4	0.9	5.6	6.0	6.7	.	7.6	51.0	1782
2. Buncha Bugs	IF*	16 fl oz	3.0	2.4	0.3	3.2	3.2	3.4	175.5	3.5	35.5	2701
+ Biovate		16 fl oz										
Bravo W'stik	1 - 7	1.5 pt										
3. Bravo W'stik	2, 4 - 7	1.5 pt	2.7	2.4	0.7	4.6	7.6	8.4	139.8	3.3	18.0	2638
Bravo W'stik	1 & 3	1.5 pt										
+ Calbor		16 fl oz										
4. Aproach Prima	1.5	6.8 fl oz	2.6	2.4	0.4	6.8	8.5	6.6	.	3.7	11.5	3231
+ Induce		0.25%										
Fontelis	3 & 5	16.0 fl oz										
+ Induce		0.25%										
Bravo W'stik	6 & 7	1.5 pt										
5. Priaxor	1.5	4.0 fl oz	2.7	2.2	1.2	5.7	5.8	9.5	.	4.4	20.5	3335
+ Induce		0.25%										
Fontelis	3 & 5	16.0 fl oz										
+ Induce		0.25%										
Orius 3.6F	4	7.2 fl oz										
+ Induce		0.25%										
Bravo W'stik	6 & 7	1.5 pt										
6. Priaxor	1.5	4.0 fl oz	2.7	2.5	0.3	5.9	6.3	7.6	.	4.2	27.5	2978
+ Induce		0.25%										
Fontelis	3 & 5	16.0 fl oz										
+ Induce		0.25%										
Convoy	4	16.0 fl oz										
+ Bravo		1.5 pt%										
Bravo W'stik	6 & 7	1.5 pt										
7. Priaxor	1.5	4.0 fl oz	2.8	2.3	1.0	6.4	3.7	7.2	.	5.4	25.0	3260
+ Induce		0.25%										
Fontelis	3 & 5	10.0 fl oz										
+ Induce		0.25%										
+ Convoy		16.0 fl oz										
Bravo W'stik	4, 6 & 7	1.5 pt%										

DUPONT CONCEPT AG TEST, 2017

RIGDON FARM, NEW FIELD

			Plant/ft[1]		% Dead Plant[2]				Tap Roots[3]	LS[4]	WM[5]	Yield
Treatments	**App's**	**Rate/A**	**23-May**	**31-May**	**23-May**	**31-May**	**6-Jun**	**13-Jun**	**9-Oct**	**4-Oct**	**9-Oct**	**lb/A**
8. Priaxor	1.5	4.0 fl oz	2.5	2.5	0.9	4.5	5.3	5.5	.	3.4	14.0	2927
+ Induce		0.25%										
Fontelis	3 & 4	16.0 fl oz										
+ Induce		0.25%										
Convoy	5	16.0 fl oz										
Bravo		1.5 pt										
Bravo W'stik	6 & 7	1.5 pt										
9. Fontelis	1.5, 3 - 7	16.0 fl oz	2.8	2.4	1.1	6.0	6.8	6.0	.	3.7	16.0	3470
+ Induce		0.25%										
10. Elatus 45W	1.5, 3 - 7	7.3 oz	3.0	2.5	0.8	5.0	3.9	5.9	.	2.8	6.5	3441
+ Induce		1.5 pt										
11. Convoy	1.5, 3 - 7	16.0 fl oz	2.7	2.4	0.7	5.5	6.0	5.4	.	5.5	36.5	2614
+ Bravo		1.5 pt										
12. Priaxor	1.5, 3 - 7	4.0 fl oz	2.7	2.6	1.6	5.0	5.2	7.6	.	3.8	24.5	2940
+ Induce		0.25%										
13. Alto	1.5	5.5 fl oz	2.7	2.3	0.2	5.4	5.9	6.7	.	4.3	13.5	3590
+ Bravo		1.5 pt										
Elatus	3 & 5	9.5 oz										
Bravo W'stik	4, 6 & 7	1.5 pt										
14. Priaxor	1.5	4.0 fl oz	.	.	.	.	.	.	.	3.2	10.5	3406
+ Induce		0.25%										
Fontelis	3 - 5	16.0 fl oz										
+ Induce		0.25%										
Bravo W'stik	6 & 7	1.5 pt										
LSD (P<0.05)			0.3	0.3	1.0	2.8	4.1	3.8	28.1	0.9	12.4	830

Plant/ft[1]=Stand count is the number of emerged plants per foot of row on 23 May and 31 May .

% Dead Plants[2]=The % of emerged plants that was dead or dying per plot.

Tap Roots[3]=Number of tap roots per foot of row after inverting.

Leaf Spot[4]=Florida scale of 1-10 where 1=no disease and 10=dead plant.

WM[5]=Percent of row infected based on stem rot (up to 12"linear row) per plot.

* In furrow applied in 3.4 GPA and mixed in 2 L volume.

DUPONT CONCEPT AG TEST, 2017

RIGDON FARM, NEW FIELD

Treatments	App's	Rate/A	IMM	DAM	SMKSS	DOLAC	DOLTON
1. Nontreated			2.8	1.8	71.7	313.2	351.9
2. Buncha Bugs	IF*	16 fl oz	3.0	2.5	70.3	464.7	343.4
+ Biovate		16 fl oz					
Bravo W'stik	1 - 7	1.5 pt					
3. Bravo W'stik	2, 4 - 7	1.5 pt	2.2	1.9	71.5	494.9	350.1
Bravo W'stik	1 & 3	1.5 pt					
+ Calbor		16 fl oz					
Bravo W'stik	4, 6 & 7	1.5 pt					
LSD (P<0.05)			n.s.	n.s.	n.s.	177.4	n.s.

"Peanut grades and values were based on 500 gram sample per plot dried to 10% moisture and graded according to Official Federal-State Inspection Service Method based on $355 per ton."

IMM=the perenct immature kernels.

DAM=the percent damaged kernels.

SMKSS=the percent sound mature kernels and sound splits.

DOLAC=crop value (dollars per acre).

DOLTON=crop value (dollars per ton).

EVALUATION OF FUNGICIDE PROGRAMS FOR THE CONTROL OF PEANUT SOILBORNE DISEASES (NICHINO TEST, 2017)

A. PURPOSE: To evaluate the efficacy of different programs for southern stem rot (white mold).

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI.

2. No cover sprays were applied to this test. Treatments sprays were applied on 15 Jun, 29 Jun, 13 Jul, 27 Jul, 10 Aug, 24 Aug and 7 Sep.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, New Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 17 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 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 (2 pt/A) + Dual Magnum (1.5 pt/A) tank mix on 21 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 2 Jun.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 25 May.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) 9 May
8.	Harvest Dates:	Dug – 9 Oct Picked –17 Oct

E: SUMMARY:

Moderate levels of disease developed in this study, but overall treatment response was less than anticipated. Yields were also lower, and some normally effective treatments showed little yield response.

NICHINO TEST, 2017												
RIGDON FARM, NEW FIELD												
			Plant/ft[1]		% Dead Plants[2]				Tap Roots[3]	LS[4]	WM[5]	Yield
Treatments	App's	RATE/A	23-May	30-May	23-May	30-May	6-Jun	13-Jun	9-Oct	4-Oct	24-Sep	lb/A
Bravo W'stik	1,2,4,6,7	1.5 pt	2.8	2.4	0.8	5.4	7.6	8.0	3.0	5.7	33.5	2889
Bravo W'stik	3 & 5	1.0 pt										
+ Alto		5.5 fl oz										
Bravo W'stik	1,2,4,6,7	1.5 pt	2.7	2.4	0.1	2.7	3.7	4.7	3.3	5.3	28.0	3292
Bravo W'stik	3 & 5	1.0 pt										
+ Alto		5.5 fl oz										
Buncha Bugs	IF*	16 fl oz										
+ Biovate		16 fl oz										
Bravo W'stik	1,2,4,6,7	1.5 pt	2.7	2.5	0.4	4.0	8.2	8.0	.	6.1	40.0	2834
Bravo W'stik	3 & 5	1.0 pt										
+ Convoy		32 fl oz										
Bravo W'stik	1, 2, 7	1.5 pt	2.8	2.4	1.2	6.4	8.4	9.5	.	5.9	38.5	2712
Bravo W'stik	3 & 5	1.0 pt										
+ Convoy		32 fl oz										
+ Topsin		10 fl oz										
Bravo W'stik	4 & 6	1.0 pt										
+ Orius 3.6F		7.2 fl oz										
Bravo W'stik	1, 2, 7	1.5 pt	2.7	2.4	0.7	4.0	6.5	9.0	.	5.7	35.0	3528
Bravo W'stik	3 & 5	1.0 pt										
+ Convoy		16 fl oz										
+ Topsin		10 fl oz										
Bravo W'stik	4 & 6	1.5 pt										
+ Convoy		16 fl oz										
Bravo W'stik	1,2,4,6,7	1.5 pt	2.8	2.6	0.6	4.6	9.3	7.6	.	5.9	28.5	3257
NNF-1681SC	3 & 5	36 fl oz										
Bravo W'stik	1, 2, 7	1.5 pt	2.7	2.3	0.9	4.3	7.0	9.7	.	6.8	29.5	3408
NNF-1681SC	3 - 7	18 fl oz										
Bravo W'stik	1,2,4,6,7	1.5 pt	2.8	2.4	0.9	5.6	10.7	6.9	.	5.2	20.5	3582
NNF-1681SC	3 - 6	18 fl oz										
+ Bravo		1.0 pt										
Bravo W'stik	1,2,4,6,7	1.5 pt	2.8	2.4	1.2	6.8	9.2	9.5	.	4.1	20.5	4250
Elatus	3 & 5	9.5 oz										

NICHINO TEST, 2017

RIGDON FARM, NEW FIELD

			Plant/ft[1]		% Dead Plants[2]				Tap Roots[3]	LS[4]	WM[5]	Yield
Treatments	**App's**	**RATE/A**	**23-May**	**30-May**	**23-May**	**30-May**	**6-Jun**	**13-Jun**	**9-Oct**	**4-Oct**	**24-Sep**	**lb/A**
Bravo W'stik	1, 2, 7	1.5 pt	2.7	2.4	1.8	6.2	9.4	8.1	.	5.7	37.0	3377
R-10656 20.2SC	3 - 6	1.54 fl oz										
Bravo W'stik	1, 2, 7	1.5 pt	2.7	2.4	0.6	4.6	9.2	7.7	.	4.8	28.0	3038
R-10656 20.2SC	3 - 6	3.08 fl oz										
Bravo W'stik	1, 2, 7	1.5 pt	2.8	2.2	1.2	7.6	9.2	8.5	.	6.5	32.5	2866
Bravo W'stik	3 - 6	1.5 pt										
+ Convoy		16 fl oz										
Bravo W'stik	1, 2, 7	1.5 pt	2.8	2.4	0.5	5.7	8.8	9.7	.	4.2	16.5	4240
Fontelis	3 - 6	24 fl oz										
Nontreated										8.3	26.0	2207
LSD(P<0.5)			n.s.	0.2	1.1	3.1	4.1	4.1	n.s.	0.9	17.9	767

[1]Stand count is the number of emerged plants per foot of row on 23 May and 30 May.

[2]The % of emerged plants that were dead or dying per plot.

Tap Roots[3]=Number of tap roots per foot of row after inverting.

Leaf Spot[4]=Florida scale of 1-10 where 1=no disease and 10=dead plant.

WM[5]=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

IF* = Applied in furrow at planting

EVALUATION OF A CANOPY OPENER TO IMPROVE FUNGICIDE PENETRATION OF THE CANOPY AND CONTROL OF WHITE MOLD
(CANOPY OPENER TEST, 2017)

A. PURPOSE: To evaluate the efficacy of an experimental canopy opener to improve control of white mold by improved fungicide deposition near the crown.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI.

2. Cover sprays of Bravo (1.5 pt/A) were applied on 16 Jun, 30 Jun, 14 Jul, 28 Jul, 11 Aug, 25 Aug, and 8 Sep. Applied spray treatments using a push-type CO_2 sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. The PVC Pipe running 4-6 inches above the soil and ahead of the spray tip served as a canopy opener. Applications were made on 13 Jul and 10 Aug.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, New Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 17 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5pt/A) tank mix on 21 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 2 Jun.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 25 May.

7. Planting Info: Tifguard, planted 6 seed/ft (2” deep) on 9 May.

8. Harvest Dates: Dug – 9 Oct Picked – 16 Oct

E: SUMMARY:

Good leaf spot pressure and difference even though the test was cover sprayed due to the wet weather in June. Significant differences found with application strategy.

CANOPY OPENER (DIRECTED SPRAY) TEST I, 2017

RIGDON FARM, NEW FIELD

Treatments	App's	RATE/A	Nozzle	Boom	Leaf Spot[1] 6-Oct	WM[2] 9-Oct	Yield lb/A
1. Convoy	3 & 5	24 fl oz	TX-SS6	B'cast	5.3	27.2	3247
2. Priaxor	3 & 5	8.0 fl oz	TX-SS6	B'cast	3.4	23.0	3634
3. Convoy	3 & 5	24 fl oz	TX-SS6	Directed	5.5	29.7	3314
4. Priaxor	3 & 5	8.0 fl oz	TX-SS6	Directed	4.8	23.7	3558
5. Convoy	3 & 5	24 fl oz	AI11006-VS	B'cast	5.7	29.3	3065
6. Priaxor	3 & 5	8.0 fl oz	AI11006-VS	B'cast	3.2	24.3	3922
7. Convoy	3 & 5	24 fl oz	AI11006-VS	Directed	5.4	18.7	3691
8. Priaxor	3 & 5	8.0 fl oz	AI11006-VS	Directed	3.0	12.0	4580
9. Nontreated					5.2	42.7	3061
LSD(P<0.05)					0.7	12.0	699

Leaf Spot[1]=Florida scale of 1-10 where 1=no disease and 10=dead plant.

WM[2]=Percent of row feet infected based on stem rot (up to 12" linear row) per plot.

CANOPY OPENER (DIRECTED SPRAY) TEST I, 2017

RIGDON FARM, NEW FIELD

Treatments	App's	RATE/A	Nozzle	Boom	IMM	DAM	SMKSS	DOLAC	DOLTON
1. Convoy	3 & 5	24 fl oz	TX-SS6	B'cast	2.9	2.4	70.9	347	566
2. Priaxor	3 & 5	8.0 fl oz	TX-SS6	B'cast	3.1	1.5	71.7	353	644
3. Convoy	3 & 5	24 fl oz	TX-SS6	Directed	2.7	1.9	72.0	357	620
4. Priaxor	3 & 5	8.0 fl oz	TX-SS6	Directed	2.7	1.8	71.1	349	622
5. Convoy	3 & 5	24 fl oz	AI11006-VS	B'cast	2.8	2.4	71.2	348	533
6. Priaxor	3 & 5	8.0 fl oz	AI11006-VS	B'cast	2.6	1.8	72.8	367	701
7. Convoy	3 & 5	24 fl oz	AI11006-VS	Directed	3.4	1.7	72.1	355	658
8. Priaxor	3 & 5	8.0 fl oz	AI11006-VS	Directed	2.7	1.6	72.5	356	818
9. Nontreated					3.3	2.4	70.9	344	528
LSD(P<0.05)					0.8	n.s.	n.s.	n.s.	128

"Peanut grades and values based on 500 gram sample per plot dried to 10% moisture and grades according to Official Federal-State Inspection Service Method based on $355 per ton."

IMM=the percent immature kernels.
DAM=the percent damaged kernels.
SMKSS=the percent sound mature kernels and sound splits.
DOLAC=crop value (dollars per acre).
DOLTON=crop value (dollars per ton).

BAYER PROPULSE TIMING NEMATODE TEST, 2017

A. PURPOSE: To evaluate the efficacy of Propulse for nematode control when applied at different times.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: GA-06G, GA-14N

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. All in furrow applications applied in 3.4 GPA.

2. Treatment sprays were applied on 12 Jun, 26 Jun, 10 Jul, and 24 Jul. Cover sprays of Bravo (1.5 pt/A) were applied on 16 Jun, 30 Jun, 25 Aug, and 8 Sept. Cover sprays of Bravo (1.5 pt/A) +Convoy (16 oz/A) were applied on 14 Jul, 28 Jul, and 11 Aug.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, Cotton Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 17 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 Apr.
4.	Soil Fertility:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) tank mix on 21 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 2 Jun.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 25 May.
7.	Planting Info:	GA-06G, GA-14N 6 seed/ft (2” deep) on 2 May.

8. Harvest Dates: Dug – 25 Sep Picked – 29 Sep

E: SUMMARY:

This was an excellent test with good nematode and disease pressure and clear differences among treatments in terms of control and yield response.

BAYER PROPULSE TIMING NEMATODE TEST, 2017
LANG FARM, COTTON FIELD

			Plants/ft[1]		% Dead Plants[2]			
TREATMENTS	**App's**	**RATE**	**22-May**	**29-May**	**22-May**	**29-May**	**5-Jun**	**12-Jun**
1. Admire Pro	In Furrow*	8.5 fl oz	3.1	3.0	0.0	0.3	0.1	0.1
2. Velum Total	In Furrow*	18.0 fl oz	3.2	3.1	0.0	0.0	0.1	0.0
3. Velum Total	In Furrow*	18.0 fl oz	3.4	3.0	0.0	0.0	0.2	0.1
Propulse	**B'cast, 30 DAP****	**13.7 fl oz**						
4. Velum Total	In Furrow*	18.0 fl oz	3.1	2.9	0.0	0.0	0.1	0.1
Propulse	**B'cast, 45 DAP****	**13.7 fl oz**						
5. Velum Total	In Furrow*	18.0 fl oz	3.1	2.9	0.0	0.3	0.3	0.4
Propulse	**B'cast, 60 DAP****	**13.7 fl oz**						
6. Velum Total	In Furrow*	**18.0 fl oz**	3.2	2.9	0.0	0.0	0.1	0.2
Propulse	**B'cast, 75 DAP****	**13.7 fl oz**						
7. GA-14N			3.0	2.8	0.0	0.0	1.3	0.2
LSD (P<0.05)			0.2	n.s.	n.s.	0.3	0.6	n.s.

Plants/ft[1]=Stand count is the number of emerged plants per foot of row on 22 May and 29 May.

% Dead Plants[2]= The % of emerged plants that were dead or dying per plot.

BAYER PROPULSE TIMING NEMATODE TEST, 2017

LANG FARM, COTTON FIELD

TREATMENTS	App's	RATE	TSWV[3] 15-Aug	WM[4] 24-Sep	Root Galling[5] 25-Sep	Pod Galling[5] 25-Sep	LS[6] 25-Sep	Yield lb/A
1. Admire Pro	In Furrow*	8.5 fl oz	4.7	36.3	30.5	23.3	6.4	4038
2. Velum Total	In Furrow*	18.0 fl oz	2.3	35.0	18.3	19.3	5.5	4629
3. Velum Total	In Furrow*	18.0 fl oz	4.0	30.3	18.8	13.3	5.4	4672
Propulse	**B'cast, 30 DAP****	**13.7 fl oz**						
4. Velum Total	In Furrow*	18.0 fl oz	3.7	19.3	14.2	7.5	4.7	4924
Propulse	**B'cast, 45 DAP****	**13.7 fl oz**						
5. Velum Total	In Furrow*	18.0 fl oz	3.3	22.3	15.3	11.7	4.5	4895
Propulse	**B'cast, 60 DAP****	**13.7 fl oz**						
6. Velum Total	In Furrow*	**18.0 fl oz**	4.7	21.3	11.5	9.3	4.8	4799
Propulse	**B'cast, 75 DAP****	**13.7 fl oz**						
7. GA-14N			4.0	10.3	0.2	0.0	4.2	4419
LSD (P<0.05)			n.s.	9.9	7.8	6.5	0.6	630

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

WM[4]=Percent if row feet infected on stem rot loci (up to 12" linear row) per plot.

Galling[5]=Visual rating of the percent of pods and roots)1-100) with visible damage from rootknot nematode.

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

EVALUATION OF FUNGICIDES FOR FOLIAR AND SOILBORNE DISEASE CONTROL ON TIFGUARD (BAYER NEMATODE MANAGEMENT TEST, 2017)

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: GA-06G, GA-14N

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. The AgLogic was applied with a push-type applicator applying a 6-8 inch band.

2. Treatments were applied on 3 Jul and 10 Jul for the 50 and 60 DAP treatments. Cover sprays of Bravo (1.5 pt/A) were applied on 16 Jun, 30 Jun, 25 Aug, and 8 Sep. Cover sprays of Bravo (1.5 pt/A) + Convoy (16 oz/A) were applied on 14 Jul, 28 Jul, and 11 Aug.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, Cotton Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 17 Apr.
4.	Soil Fertility: Soil type:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48 Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr. POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/ 100 gal water) on 2 Jul.
6.	Insecticides:	Acephate 97 (0.7 lb/A) for thrips on 25 May.
7.	Planting Info:	GA-06G and Ga-14N, 6 seed/ft (2” deep) 8 May.

8. Harvest Dates: Dug – 25 Sept Picked –29 Sept

E: SUMMARY:

This was an excellent test with good nematode and disease pressure and clear differences among treatments in terms of control and yield response.

BAYER NEMATODE MANAGEMENT TEST, 2017
LANG FARM, COTTON FIELD

			Plant/ft[1]		% Dead Plants[2]				TSWV[3]
Treatments	**App's**	**Rate**	**22-May**	**29-May**	**22-May**	**29-May**	**5-Jun**	**12-Jun**	**15-Aug**
1. Admire Pro	In Furrow*	8.5 f loz	3.1	2.8	0.0	0.0	0.4	0.2	2.3
2. Velum Total	In Furrow*	18.0 fl oz	3.2	3.0	0.0	0.0	0.0	0.1	5.7
3. Velum Total	In Furrow*	18.0 fl oz	3.1	2.9	0.0	0.0	0.2	0.0	2.0
Propulse	**B'cast, 50 DAP****	**13.7 fl oz**							
4. AgLogic 15G	In Furrow*	7.0 lb	3.2	2.8	0.0	0.0	0.4	0.2	3.0
5. AgLogic 15G	In Furrow*	7.0 lb	3.1	2.9	0.2	0.5	1.2	0.2	5.0
AgLogic 15G	50 DAP, banded	10.0 lb							
6. AgLogic 15G	In Furrow*	7.0 lb	3.2	3.0	0.1	0.0	1.1	0.7	1.7
Propulse	**B'cast, 50 DAP****	13.7 fl oz							
7. GA-14N			3.0	2.8	0.0	0.1	1.3	0.3	4.0
LSD (P<0.05)			0.2	0.2	0.2	0.3	1.1	0.4	n.s.

[1]Stand count is the number of emerged plants per foot of row on 22 May and 29 May.

[2]The % of emerged plants that was dead or dying per plot.

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

BAYER NEMATODE MANAGEMENT TEST, 2017								
LANG FARM, COTTON FIELD								
			WM[4]	Yield	LS[5]	Root Galling [6]	Root Knot[7]	Ring[8]
Treatments	**App's**	**Rate**	**24-Sep**	**lb/A**	**25-Sep**	**25-Sep**	**13-Sep**	**13-Sep**
1. Admire Pro	In Furrow*	8.5 f loz	19.3	3801	7.0	25.8	262.7	62.7
2. Velum Total	In Furrow*	18.0 fl oz	27.7	4691	6.2	14.8	215.5	48.3
3. Velum Total	In Furrow*	18.0 fl oz	24.0	5021	4.4	9.7	248.2	35.5
Propulse	**B'cast, 50 DAP****	**13.7 fl oz**						
4. AgLogic 15G	In Furrow*	7.0 lb	24.7	4201	6.8	14.0	131.7	29.0
5. AgLogic 15G	In Furrow*	7.0 lb	26.0	4032	6.9	13.0	146.5	59.8
AgLogic 15G	50 DAP, banded	10.0 lb						
6. AgLogic 15G	In Furrow*	7.0 lb	22.3	4584	6.1	10.3	147.3	95.7
Propulse	**B'cast, 50 DAP****	13.7 fl oz						
7. GA-14N			12.0	4663	4.8	0.0	15.5	76.7
LSD (P<0.05)			11.2	988	0.8	6.3	207.7	60.6
WM[4]=Percent of row feet infected based on stem rot loci (up to 12" linear row) per plot.								
LS[5]=Florida 1-10 scale where 1=no disease and 10=dead plant.								
Root Galling[6]=Visual rating of the percent of roots (1-100) with visible damage from rootknot nematode.								
Rootknot[7]=Number of **M. *arenaria juveniles*** per 100 cc of soil								
Ring[8]=Population of ring nematodes per 100 cc of soil.								

BAYER NEMATODE MANAGEMENT TEST, 2017

LANG FARM, COTTON FIELD

Treatments	App's	Rate	IMM	DAM	SMKSS	DOLAC	DOLTON
1. Admire Pro	In Furrow*	8.5 f loz	1.8	2.0	74.2	691.4	362.9
2. Velum Total	In Furrow*	18.0 fl oz	2.2	2.0	73.7	849.8	360.5
3. Velum Total	In Furrow*	18.0 fl oz	2.5	2.0	72.6	898.0	355.7
Propulse	**B'cast, 50 DAP****	**13.7 fl oz**					
4. AgLogic 15G	In Furrow*	7.0 lb	2.2	1.9	73.4	759.1	359.2
5. AgLogic 15G	In Furrow*	7.0 lb	2.0	1.9	71.8	712.6	351.0
AgLogic 15G	50 DAP, banded	10.0 lb					
6. AgLogic 15G	In Furrow*	7.0 lb	2.2	1.7	72.7	819.1	356.9
Propulse	**B'cast, 50 DAP****	13.7 fl oz					
7. GA-14N			2.9	1.0	72.0	830.7	356.3
LSD (P<0.05)			0.5	0.9	2.0	184.8	11.8

"Peanut grades and values were based on 500 gram sample per plot dried to 10% moisture and graded according to Official Federal-State Inspection Service Method based on $355 per ton."

IMM=the percent immature kernels.

DAM=the percent damaged kernels.

SMKSS=the percent sound mature kernels and sound splits.

DOLAC=crop value (dollars per acre).

DOLTON=crop value (dollars per ton).

EVALUATION OF VARIOUS FUNGICIDE PROGRAMS FOR THE CONTROL OF PEANUT WHITE MOLD WHEN APPLIED VIA CHEMIGATION AND GROUND SPRAYS (CHEMIGATION TEST I, 2017)

A. PURPOSE: To evaluate peanut fungicide programs for control of white mold when applied conventionally, chemigated, or as a directed stream to penetrate the plant canopy.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. The chemigation treatment was applied by diluting the treatment in a tractor-mounted spray tank and watering it in with a hose and a sprinkler head calibrated to deliver a volume of water equivalent to 0.1 inch per acre. The direct stream application was done with a single orifice (D3) at 50 psi applying a stream of spray at 20 GPA directly over the row.

2. Treatment sprays were applied on 7 Jul and 7 Aug. NOTE: #4 skipped by mistake. Cover sprays of Bravo (24 oz/A) were applied on 17 Jun, 1 Jul, 15 Jul, 29 Jul, 12 Aug, 26, and 9 Sep.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, Cotton Field Tifton, GA 31794
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 17 Apr. Fertilized with 5-10-15 (500 lb/A) on 12 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 (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr.

POST: Cadre (4 fl oz/A) + Non Ionic Surfactant (2 pt/100 gal water) on 2 Jun.

6. Insecticides: Acephate 97 (0.7 lb/A) for thrips on 25 May.

7. Planting Info: Tifguard, 6 seed/ft (2" deep) 2 May

8. Harvest Dates: Dug – 25 Sep Picked – 29- Sep

E: SUMMARY:

Significant white mold developed but was not as uniform as desired. Response to the different application methods was not drastically different, but overall response to fungicides was less than anticipated. The test did demonstrate the importance of getting fungicide to the crown of the plants for control of white mold, and the widely different ways of achieving that.

CHEMIGATION TEST I, 2017

LANG FARM, COTTON FIELD

TREATMENTS	App's	Method	RATE	Yield lb/A	WM[1] 24-Sep
1. Untreated				4336	37.2
2. Convoy	3 - 5	Ground	21.0 fl oz	4741	25.6
3. Convoy	3 - 5	Chemigation**	21. 0 fl oz	4081	20.4
4. Convoy	3 - 5	Single Stream	21. 0 fl oz	4606	21.2
5. Elatus 45WG	3 - 5	Ground	7.14 oz	4758	16.0
6. Elatus 45WG	3 - 5	Chemigation**	7.14 oz	4879	14.8
7. Elatus 45WG	3 - 5	Single Stream	7.14 oz	4869	14.8
8. Evito	3 - 5	Ground	5.7 fl oz	4539	30.4
9. Evito	3 - 5	Chemigation**	5.7 fl oz	4967	20.4
10. Evito	3 - 5	Single Stream	5.7 fl oz	4652	17.2
11. Priaxor	3 - 5	Ground	8.0 fl oz	4636	28.0
12. Priaxor	3 - 5	Chemigation**	8.0 fl oz	4731	25.6
13. Priaxor	3 - 5	Single Stream	8.0 fl oz	4291	21.2
14. Fontelis	3 - 5	Ground	16.0 fl oz	4990	19.2
15. Fontelis	3 - 5	Chemigation**	16.0 fl oz	4847	15.5
16. Fontelis	3 - 5	Single Stream	16.0 fl oz	4821	16.0
LSD (P<0.05)				845	8.8

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

**Chemigated simulation in 0.10 inches per acre via tank and hose w/sprinkler head.

OFFICIAL DAILY RAINFALL 2017							
LANG/RIGDON FARM							
Rainfall							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1		0.1					
2			0.4			0.6	
3	1.7		3.0		0.4		
4		2.2			0.5	0.1	
5	0.1		0.6		0.6		
6			0.2			0.1	
7			0.9		1.3		
8				0.2	0.2		0.3
9					0.1		
10				0.6		0.2	
11						2.8	0.6
12		0.3	0.1		0.1		
13						0.1	
15			0.5	0.3		0.1	
16			0.1	0.6		0.1	0.6
17			0.9	0.3			
19			1.0				
20			1.6			0.1	
21		0.4	0.4	1.5	0.3	0.2	
22		0.1					
23		0.2					0.9
24		0.5					
25			0.1	0.5	0.1		
26							0.1
28							0.1
29				0.2	0.5		
30			0.8		0.1		
31					0.1		
TOTAL	1.8	3.7	10.5	4.0	4.2	4.2	2.5

IRRIGATION							
DATE	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**
2		0.5					
3				0.2			
7				0.5	0.5		
11		0.5					
14					0.5		
15		0.5					
17					0.5		
18		0.5					
21					0.5		
24					0.6		
26		0.3					
28					0.5		
30		0.5					
31				0.6			
TOTAL		2.8		1.3	3.1		
Rain & Irr	1.8	6.5	10.5	5.3	7.3	4.2	2.5

EVALUATION OF PEANUT GENOTYPES FOR RESISTANCE TO PEANUT ROOT KNOT NEMATODE, (Bill Branch Genotype Evaluation Test I, 2017)

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: All sprays were applied with a commercial, tractor-mounter sprayer.
2. Cover sprays consisted of Headline (9 oz/A) applied on 1 Jun; Bravo (1.5 pt/A) on 27 Jun; Provost (10 oz/A) was applied on 13 Jul, 24 Jul, 7 Aug and 24 Aug; and Absolute (7 oz/A) on 5 Sep.

D. ADDITIONAL INFORMATION:

1.	Location:	Attapulgus Research & Education Center, Attapulgus, GA (Abney's 2016 field w/ Holbrook)
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 5 May. Manganese (1 pt/A) on 13 Aug, 24 Jul
4.	Soil Fertility: Soil type:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48 Norfolk loamy sand
5.	Herbicides:	PPI: Prowl (1qt/A) on 18 May Valor (3 oz/A) on 18 May, Strongarm (.45 oz/A) on 18 May. POST: Cadre (4 oz/A) was applied on 27 Jun and 13 Jul. Boron (1 qt/A) was applied on 7 Aug and 24 Aug.
6.	Insecticides:	Intrepid Edge (8 oz/A) on 13 Jul and 16 Aug; Bifenture (5 oz/A) on 24 Aug.
7.	Planting Info:	Different varieties, 6 seed/ft (2" deep) 18 May
8.	Harvest Dates:	Dug – 23 Oct Picked – 26 Oct

E: SUMMARY:

Yields were moderate due to severe defoliation, and the nematode pressure was low as evidenced by the low galling on GA-07W. The best indication of nematode resistance is probably the population data which indicates that entry 1, 3 and 6 were highly susceptible. Entry 2 and 3 had some resistance to leaf spot. Entry 11 was very susceptible to leaf spot, but was resistant to root knot, had some resistance to white mold and also excellent yield potential under adverse conditions.

BILL BRANCH NEMATOCIDE EVALUATION TEST I, 2017

ATTAPULGUS, GA, NEW FIELD

VARIETIES	TSWV[1] 21-Sep	Yield lb/A	LS[2] 18-Oct	Root Galling[3] 18-Oct	Rootknot[4] 21-Sep	Ring[5] 21-Sep	WM[6] 18-Oct
1. GA-07W	1.6	4028	6.8	19	226	207	2.8
2. GA-163111	1.2	3178	5.6	1	30	141	16.0
3. GA-163112	2.0	3083	6.1	7	130	195	18.0
4. GA-163113	2.4	3451	7.3	1	39	206	19.2
5. GA-163114	2.0	3349	7.2	13	78	135	23.6
6. GA-163115	2.8	3142	7.6	21	169	164	20.8
7. GA-163116	1.2	3871	7.4	0	44	191	11.6
8. GA-163117	2.4	3314	7.5	14	64	213	27.6
9. GA-163118	0.8	2978	8.0	0	22	128	21.6
10. GA-163119	2.8	3675	7.8	0	27	143	12.8
11. GA9163120	0.4	4616	8.3	0	18	133	8.8
LSD(P<0.05)	n.s.	740	0.7	7	81	n.s.	12.8

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

Leaf Spot[2]=Florida 1-10 scale where 1=no disease and 10=no dead plant.

Root Galling[3]=Visual rating of the percent of roots (1-100) with visible damage from rootknot nematode.

Rootknot[4]=Number of ***M.arenaria juvenile*** per 100 cc of soil.

Ring[5]=Population of ring nematodes per 100 cc of soil.

WM[6]=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

EVALUATION OF PEANUT GENOTYPES FOR RESISTANCE TO PEANUT ROOT KNOT NEMATODE, (Bill Branch Genotype Evaluation Test II, 2017)

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: All fungicides were broadcast over all plots with a conventional sprayer.

3. Cover sprays consisted of Headline (9 oz/A) applied on 1 Jun; Bravo (1.5 pt/A) on 27 Jun; Provost (10 oz/A) was applied on 13 Jul, 24 Jul, 7 Aug and 24 Aug; and Absolute (7 oz/A) on 5 Sep.

D. ADDITIONAL INFORMATION:

1.	Location:	Attapulgus Research & Education Center, Attapulgus, GA (Old Tubbs Field w/ Monfort)
2.	Crop History:	Peanut – 2016, Peanut – 2015, Peanut – 2014
3.	Land Preparation:	Moldboard plowed and marked rows on 5 May. Boron (1 qt/A) on 16 Jun, 27 Jun; Manganese (1.5 qt/A) on 7 Jul, 19 Jul; Sulfur (1 qt/A) on 2 Aug.
4.	Soil Fertility: Soil type:	pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48 Norfolk loamy sand
5.	Herbicides:	PPI: Prowl (1qt/A) on 18 May Valor (3 oz/A) on 18 May, Strongarm (.45 oz/A) on 18 May. POST: Cadre (4 oz/A) was applied on 27 Jun and 13 Jul. Boron (1 qt/A) was applied on 7 Aug and 24 Aug.
6.	Insecticides:	Intrepid Edge (8 oz/A) on 13 Jul and 16 Aug; Bifenture (5 oz/A) on 24 Aug.
7.	Planting Info:	Different varieties, 6 seed/ft (2” deep) 18 May

8. Harvest Dates: Dug – 23 Oct Picked – 26 Oct

E: SUMMARY:

Low yields due to severe defoliation but great separation of nematode resistant and susceptible lines for galling and population counts. Entry 4 had very good leaf spot resistance as well as nematode resistance. Entry 3 had excellent leaf spot resistance but was very susceptible to nematodes.

BILL BRANCH NEMATOCIDE EVALUATION TEST II, 2017

ATTAPULGUS, GA, Tubb's Old FIELD

VARIETIES	TSWV[1] 21-Sep	Yield lb/A	LS[2] 18-Oct	Root Galling[3] 18-Oct	Rootknot[4] 21-Sep	Ring[5] 21-Sep
1. GA-07W	5.2	1914	9.0	42.0	762	312
2. GA-163101	2	2414	9.4	0.0	20	259
3. GA-163102	4.8	2895	6.6	22.0	515	358
4. GA-163103	1.2	2870	7.2	1.0	11	242
5. GA-163104	2.8	2460	8.9	0.0	15	185
6. GA-163105	0.8	2425	9.0	0.0	10	257
7. GA-163106	1.6	2138	8.9	1.6	45	195
8. GA-163107	2	2022	9.3	0.0	14	231
9. GA-163108	1.2	2022	9.0	0.0	22	275
10. GA-163109	2.4	1849	9.1	0.6	20	327
11. GA-163110	1.2	2590	8.9	0.0	28	298
LSD(P<0.05)	3.0	835	n.s.	8.7	264	n.s.

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

Leaf Spot[2]=Florida 1-10 scale where 1=no disease and 10=no dead plant.

Root Galling[3]=Visual rating of the percent of roots (1-100) with visible damage from rootknot nematode.

Rootknot[4]=Number of ***M.arenaria juvenile*** per 100 cc of soil.

Ring[5]=Population of ring nematodes per 100 cc of soil.

OFFICIAL DAILY RAINFALL 2017								
ATTAPULGUS								
Rainfall								
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV
1		0.1						
2			0.4			0.6		
3	1.7		3.0		0.4			
4		2.2			0.5	0.1		
5	0.1		0.6		0.6			
6			0.2			0.1		
7			0.9		1.3			
8				0.2	0.2		0.3	
9					0.1			
10				0.6		0.2		
11						2.8	0.6	
12		0.3	0.1		0.1			
13				0.1		0.1		
15			0.5	0.3		0.1		
16			0.1	0.6		0.1	0.6	
17			0.9	0.3				
19			1.0					
20			1.6			0.1		
21		0.4	0.4	1.4	0.3	0.2		0.2
22		0.1						
23		0.2					0.9	0.1
24		0.5						
25			0.1	0.5	0.1			
28							0.1	
29				0.2	0.5			
30			0.8		0.1			
31					0.1			
TOTAL	1.8	3.7	10.5	4.1	4.2	4.2	2.5	0.3

IRRIGATION								
DATE	**APR**	**MAY**	**JUN**	**JUL**	**AUG**	**SEP**	**OCT**	**NOV**
2			0.5					
5				0.5				
6								0.5
7				0.5				
10		0.5						
12							0.5	
15						0.5		
18		0.5			0.5			
20							0.5	
22						0.5		
23					0.5			
25					0.5			
26	0.5	0.5				0.5		
30			0.5				0.5	
TOTAL	0.5	1.5	1.0	1.0	1.5	1.5	1.5	0.5
Rain & Irr	2.3	5.2	11.5	5.1	5.7	5.7	4.0	0.8

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITA PECAN NORTH ORCHARD (PECAN FUNGICIDE TEST, 2017)

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. Each replication consisted of single-tree treatments.
3. The orchard was established in 1988 with alternating rows of Wichita and desirable trees planted on a 40 ft x 40 ft spacing running north and south. Every other tree in each row was replanted in 2000, and these were the test trees. Alternating trees were replanted in 2008 and were not sprayed, serving as buffer trees. This test used 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 13 Apr, 26 Apr, 10 May, 24 May, 7 Jun, 21 Jun, 5 Jul, 19 Jul, 2 Aug, and 16 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. Herbicides: Roundup (2 qt/A) and Alion (10 oz/A) on 21 and Paraquat (8 oz/A) on 16 Jun.

4. Insecticides: Dimilin 2L (12 oz/A) on 30 Aug.

5. Fertilizer: (100 lb/K), and (60 lb/N/A) on 28 Apr.

6. Harvest Information: Wichita Trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 3 & 9 Nov. A 50 nut sample was collected for yield and quality.

E: Summary:
Very low leaf and stem scab due to early dry weather, but heavier nut scab from June rains developed. Overall a good scab test.

PECAN FUNGICIDE TEST, 2017										
PONDER FARM, WICHITA, NORTH ORCHARD										
			Leaf Inc.[1]	Leaf Sev.[2]	Nut Inc[3]		Nut Sev[4]		Leaf Lesions[5]	Stem Lesions[6]
Treatments	Rate/A	App's	18-Jul	18-Jul	18-Jul	29-Aug	18-Jul	29-Aug	17-Aug	29-Aug
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	4.2	0.7	82.4	96.9	4.7	24.1	18.8	0.1
+ Elast 400F	25.0 fl oz									
EXP 1	4.0 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	2.8	0.6	85.9	96.9	6.6	31.7	17.5	0.0
+ Elast 400F	25.0 fl oz									
EXP 2	6.0 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	3.8	0.7	95.2	100.0	5.7	34.0	18.8	0.0
+ Elast 400F	25.0 fl oz									
Ziram	6.o lb	2, 4, 6, 8, 10								
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	2.9	0.5	73.1	95.6	6.3	18.6	12.0	0.0
+ Elast 400F	25.0 fl oz									
Ziram	6.0 lb	2, 4, 6, 8, 10								
+ Elast 400F	25.0 fl oz									
5. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	4.2	0.7	75.9	98.4	6.3	32.2	20.0	0.0
+ Elast 400F	15.0 fl oz									
Ziram	3.0 lb	2, 4, 6, 8, 10								
+ Elast 400F	25.0 fl oz									
6. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	3.6	0.6	46.1	89.1	1.8	10.5	21.3	0.0
+ Elast 400F	25.0 fl oz									
Amistar Top (=Q Top)	14.0 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
7. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	5.0	0.8	87.8	100.0	7.2	31.1	20.0	0.0
+ Elast 400F	25.0 fl oz									
K-Phite	3.0 qt	2, 4, 6, 8, 10								
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	5.6	0.8	50.5	99.2	2.7	14.0	15.0	0.0
+ Elast 400F	25.0 fl oz									
EXP 3	6.8 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
9. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	3.0	0.6	47.9	71.5	2.3	6.8	11.3	0.0
+ Elast 400F	25.0 fl oz									
EXP 4	13.7 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									

PECAN FUNGICIDE TEST, 2017										
PONDER FARM, WICHITA, NORTH ORCHARD										
			Leaf Inc.[1]	Leaf Sev.[2]	Nut Inc[3]		Nut Sev[4]		Leaf Lesions[5]	Stem Lesions[6]
Treatments	**Rate/A**	**App's**	**18-Jul**	**18-Jul**	**18-Jul**	**29-Aug**	**18-Jul**	**29-Aug**	**17-Aug**	**29-Aug**
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	3.0	0.4	51.0	72.1	2.4	8.7	17.5	0.0
+ Elast 400F	25.0 fl oz									
EXP 5	5.13 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
11. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	7.2	1.1	78.4	89.1	3.9	16.7	22.5	0.1
+ Elast 400F	25.0 fl oz									
Aprpvia Top	10.6 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
12. Elast	50.0 fl oz	1	1.9	0.3	91.5	98.4	6.3	19.1	15.0	0.0
Reliant	64.0 fl oz	2								
+ Orius 3.6F	8.0 fl oz									
+ Humispread	32.0 fl oz									
Abound	12.0 fl oz	3								
+ Humispread	32.0 floz									
Reliant	64.0 fl oz	4								
+ Topsin 4.5FL	20.0 fl oz									
+ Humispread	32.0 fl oz									
Abound	12.0 fl oz	5								
+ Elast 400F	37.0 fl oz									
Quadris Top	14.0 fl oz	6								
+ Humispread	32.0 fl oz									
Ziram	6.0 lb	7								
+ Elast 400F	25.0 fl oz									
+ Reliant	64.0 fl oz									
Quadris Top	14.0 fl oz	8								
+ Humispread	32.0 fl oz									
Ziram	6.0 lb	9								
+ Elast 400F	25.0 fl oz									
+ Reliant	64.0 fl oz									
Abound	12.0 fl oz	10								
+ Enable	8.0 fl oz									
13. Super Tin 4L	6.0 fl oz	1 - 10	6.0	0.9	58.4	89.1	3.6	19.0	12.5	0.0
+ Elast 400F	25.0 fl oz									
14. Nontreated			17.0	2.7	100.0	100.0	75.6	99.8	22.5	0.1
LSD(P<0.05)			4.4	0.7	17.5	11.0	3.3	8.4	n.s.	n.s.

Leaf Inc.[1]=Leaf scab incidence, based on 8 terminals per tree (% of leaflets on middle leaf with scab).

Leaf Sev.[2]=Leaf scab severity, based on middle leaf of 8 terminals per tree.

Nut Inc[3]=Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).

Nut Sev[4]=Nut scab severity, based on 8 nut clusters per tree (% of schuck covered with scab).

Leaf Lesions[5]=Visual rating of the % leaves with lesions from mites or foliar disease.

Stem Lesions[6]=The number of lesions per 3 inches of stem on new wood.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE PECAN NORTH ORCHARD (PECAN FUNGICIDE TEST, 2017)

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. Each replication consisted of single-tree treatments.
3. The orchard was established in 1988 with alternating rows of Wichita and Desirable trees planted on a 40 ft x 40 ft spacing running north and south. Every other tree in each row was replanted in 2000, and these were the test trees. Alternating trees were replanted in 2008 and were not sprayed, serving as buffer trees. This test used Desirable trees only.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.

2. Calendar-based spray treatments (1-10) were applied on 13 Apr, 26 Apr, 10 May, 24 May, 7 Jun, 21 Jun, 5 Jul, 19 Jul, 2 Aug, and 16 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.	Herbicides:	Roundup (2 qt/A) and Alion (10 oz/A) on 21 and Paraquait (8 oz/A) on 16 Jun.
4.	Insecticides:	Dimilin 2L (12 oz/A) on 30Aug
5.	Fertilizer:	(100 lb/K), and (60 lb/N/A) on 28 Apr.
6.	Harvest Information:	Desirable Trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 3 & 9 Nov. A 50 nut sample was collected from each tree on 4 & 10 Nov. to determine yield and quality.

E: Summary:

Very low leaf and stem scab due to early dry weather, but heavier nut scab from June rains developed. Overall a good scab test.

PECAN FUNGICIDE TEST, 2017										
PONDER FARM, DESIRABLE, NORTH ORCHARD										
			Leaf Inc.[1]	Leaf Sev.[2]	Nut Inc[3]		Nut Sev[4]		Leaf Lesions[5]	Stem Lesions[6]
Treatments	Rate/A	App's	18-Jul	18-Jul	18-Jul	29-Aug	18-Jul	29-Aug	27-Aug	29-Aug
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.7	0.1	19.5	77.1	0.6	4.3	3.3	0.0
+ Elast 400F	25.0 fl oz									
EXP 1	4.0 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9		0.0	3.4	73.4	0.3	5.8	2.0	0.0
+ Elast 400F	25.0 fl oz		0.0							
EXP 2	6.0 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	14.6	90.9	0.7	7.8	6.5	0.0
+ Elast 400F	25.0 fl oz									
Ziram	6.o lb	2, 4, 6, 8, 10								
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	0.0	69.0	0.0	3.5	5.8	0.0
+ Elast 400F	25.0 fl oz									
Ziram	6.0 lb	2, 4, 6, 8, 10								
+ Elast 400F	25.0 fl oz									
5. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	0.8	68.8	0.0	4.6	4.8	0.0
+ Elast 400F	15.0 fl oz									
Ziram	3.0 lb	2, 4, 6, 8, 10								
+ Elast 400F	25.0 fl oz									
6. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.5	0.0	0.0	65.1	0.0	2.0	7.3	0.0
+ Elast 400F	25.0 fl oz									
Amistar Top (=Q Top)	14.0 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
7. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	5.7	62.8	0.2	2.8	4.3	0.0
+ Elast 400F	25.0 fl oz									
K-Phite	3.0 qt	2, 4, 6, 8, 10								
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.5	0.1	3.1	68.5	0.0	3.2	11.5	0.0
+ Elast 400F	25.0 fl oz									
EXP 3	6.8 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
9. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	5.2	28.6	0.3	0.9	3.3	0.0
+ Elast 400F	25.0 fl oz									
EXP 4	13.7 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									

PECAN FUNGICIDE TEST, 2017										
PONDER FARM, DESIRABLE, NORTH ORCHARD										
			Leaf Inc.[1]	Leaf Sev.[2]	Nut Inc[3]		Nut Sev[4]		Leaf Lesions[5]	Stem Lesions[6]
Treatments	Rate/A	App's	18-Jul	18-Jul	18-Jul	29-Aug	18-Jul	29-Aug	27-Aug	29-Aug
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	0.0	31.8	0.0	0.9	5.0	0.0
+ Elast 400F	25.0 fl oz									
EXP 5	5.13 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
11. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.0	0.0	2.6	54.9	0.1	2.5	2.0	0.0
+ Elast 400F	25.0 fl oz									
Aprpvia Top	10.6 fl oz	2, 4, 6, 8, 10								
+ Remain	8.0 fl oz									
12. Elast	50.0 fl oz	1	0.0	0.0	5.7	60.4	0.2	1.8	9.8	0.0
Reliant	64.0 fl oz	2								
+ Orius 3.6F	8.0 fl oz									
+ Humispread	32.0 fl oz									
Abound	12.0 fl oz	3								
+ Humispread	32.0 floz									
Reliant	64.0 fl oz	4								
+ Topsin 4.5FL	20.0 fl oz									
+ Humispread	32.0 fl oz									
Abound	12.0 fl oz	5								
+ Elast 400F	37.0 fl oz									
Quadris Top	14.0 fl oz	6								
+ Humispread	32.0 fl oz									
Ziram	6.0 lb	7								
+ Elast 400F	25.0 fl oz									
+ Reliant	64.0 fl oz									
Quadris Top	14.0 fl oz	8								
+ Humispread	32.0 fl oz									
Ziram	6.0 lb	9								
+ Elast 400F	25.0 fl oz									
+ Reliant	64.0 fl oz									
Abound	12.0 fl oz	10								
+ Enable	8.0 fl oz									
13. Super Tin 4L	6.0 fl oz	1 - 10	0.0	0.0	2.1	60.4	0.1	3.0	4.8	0.0
+ Elast 400F	25.0 fl oz									
14. Nontreated			0.5	0.1	90.4	100.0	9.1	67.8	4.5	0.1
LSD(P<0.05)			0.6	0.1	8.8	19.2	1.1	3.2	5.8	0.1

Leaf Inc.[1]=Leaf scab incidence, based on 8 terminals per tree (% of leaflets on middle leaf with scab).

Leaf Sev.[2]=Leaf scab severity, based on middle leaf of 8 terminals per tree.

Nut Inc[3]=Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).

Nut Sev[4]=Nut scab severity, based on 8 nuts clusters per tree (% of schuck covered with scab).

Leaf Lesions[5]=Visual rating of the % leaves with lesions from mites of foliar disease.

Stem Lesions[6]=The number of lesions per 3 inches of stem on new wood.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE PECAN SOUTH ORCHARD (PECAN FUNGICIDE TEST II, 2017)

A. PURPOSE: To evaluate the efficacy of registered and experimental fungicides against pecan 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 ft x 40 ft spacing running north and south. This test used Desirable trees only. Every other row was removed and replanted. These younger trees serve as unsprayed borders, and all treatments were applied to the original trees.

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 (1-21) were applied on 13 Apr, 26 Apr, 10 May, 24 May, 7 Jun, 21 Jun, 5 Jul, 19 Jul, 2 Aug, and 16 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. Herbicides: Roundup (2 qt/A) and Alion (10 oz/A) on 21 and Paraquat (8 oz/A) on 16 Jun.

4. Insecticides: Dimilin 2L (12 oz/A) on 30Aug

5. Fertilizer: (100 lb/K), and (60 lb/N/A) on 28 Apr.

6. Harvest Information: Trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 9 Nov. A 50 nut sample was collected per tree for yield and quality.

E: Summary:

Very low leaf and stem scab due to early dry weather, but heavier nut scab from June rains developed. Overall a good scab test.

PECAN FUNGICIDE TEST II, 2017										
PONDER FARM, DESIRABLE, SOUTH ORCHARD										
			Leaf Inc.[1]	Leaf Sev.[2]	Nut Inc.[3]		Nut Sev[4]		Leaf Lesions[5]	Stem Lesions[6]
Treatments	Rate/A	App's	18-Jul	18-Jul	18-Jul	30-Aug	18-Jul	30-Aug	17-Aug	30-Aug
1. LifeGard WG	4.5 oz	2, 4, 6, 8, 10	29.1	3.9	72.9	94.2	5.0	21.6	8.6	0.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
2. Vacciplant	20.0 fl oz	2, 4, 6, 8, 10	32.9	3.5	43.8	78.8	2.0	12.8	15.8	0.1
+ Abound	8.0 fl oz									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
3. Andiamo	8.5 fl oz	2, 4, 6, 8, 10	27.3	3.0	42.3	64.6	1.7	8.3	8.4	0.0
+ Elast 400F	25.0 fl oz									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
4. Brixen	20 fl oz	2, 4, 6, 8, 10	30.6	4.1	39.4	70.0	2.4	12.5	10.2	0.1
+ Elast 400F	25.0 fl oz									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
5. Minerva Duo	16.0 fl oz	2, 4, 6, 8, 10	35.2	4.2	62.5	69.2	2.2	13.3	5.4	0.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
6. Pyraziflumid 22%SC	3.1 fl oz	2, 4, 6, 8, 10	26.1	2.7	77.7	96.7	3.8	19.9	13.4	0.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
7. Pyraziflumid 22%SC	4.6 fl oz	2, 4, 6, 8, 10	39.0	4.5	68.8	98.8	6.7	17.9	8.4	0.1
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
8. Enable	5.0 fl oz	2, 4, 6, 8, 10	36.3	4.4	73.3	95.0	4.5	17.7	9.4	0.1
+ Elast 400F	25.0 fl oz									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
9. Enable	5.0 fl oz	2, 4, 6, 8, 10	29.7	3.7	59.4	89.1	2.3	18.4	6.8	0.0
+ Abound	10.0 fl oz									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								

PECAN FUNGICIDE TEST II, 2017										
PONDER FARM, DESIRABLE, SOUTH ORCHARD										
			Leaf Inc.[1]	Leaf Sev.[2]	Nut Inc.[3]		Nut Sev[4]		Leaf Lesions[5]	Stem Lesions[6]
Treatments	**Rate/A**	**App's**	**18-Jul**	**18-Jul**	**18-Jul**	**30-Aug**	**18-Jul**	**30-Aug**	**17-Aug**	**30-Aug**
10. Aproach	8.0 fl oz	2, 4, 6, 8, 10	38.5	5.1	77.1	85.0	3.0	15.6	8.6	0.1
+ Induce	0.06 % v/v									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
11. Aproach	12.0 fl oz	2, 4, 6, 8, 10	33.3	4.4	30.0	84.4	1.1	11.8	7.5	0.1
+ Induce	0.06 % v/v									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
12. Aproach	8.0 fl oz	2, 4, 6, 8, 10	38.1	5.0	63.3	88.8	3.1	16.8	7.4	0.1
+ Enable	8.0 fl oz									
+ Induce	0.06% v/v									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
13. Absolute	7.5 oz	2, 4, 6, 8, 10	21.9	2.1	48.1	77.5	1.3	10.1	13.8	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									
14. Luna Sensation	9.0 fl oz	2, 4, 6, 8, 10	25.4	2.6	39.4	81.3	1.7	5.4	4.8	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									
15. Serenade Opti WP	16.0 oz	2, 4, 6, 8, 10	34.0	4.6	49.6	65.4	1.7	8.0	4.0	0.0
+ Absolute	7.5 fl oz									
+ Induce	0.06% v/v									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
16. Topguard EQ	6. 0 fl oz	2, 4, 6, 8, 10	21.4	2.4	63.3	97.5	2.7	13.7	4.3	0.2
+ Induce	0.06% v/v									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
17. Topguard EQ	8.0 fl oz	2, 4, 6, 8, 10	25.4	2.9	50.4	87.5	2.3	13.7	7.0	0.1
+ Induce	0.06% v/v									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									

PECAN FUNGICIDE TEST II, 2017										
PONDER FARM, DESIRABLE, SOUTH ORCHARD										
			Leaf Inc.[1]	Leaf Sev.[2]	Nut Inc.[3]		Nut Sev[4]		Leaf Lesions[5]	Stem Lesions[6]
Treatments	**Rate/A**	**App's**	**18-Jul**	**18-Jul**	**18-Jul**	**30-Aug**	**18-Jul**	**30-Aug**	**17-Aug**	**30-Aug**
18. Rhyme 2.08 SC	7.0 fl oz	2, 4, 6, 8, 10	29.0	2.6	76.0	100.0	4.2	28.0	5.8	0.1
+ Induce	0.06% v/v									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
19. Vacciplant	20.0 fl oz	2, 4, 6, 8, 10	24.6	2.3	65.4	98.5	3.0	22.1	8.2	0.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9								
+ Elast 400F	25.0 fl oz									
20. Super Tin 4L	6.0 fl oz	1 - 10	29.0	2.7	53.8	78.3	3.6	9.1	10.8	0.0
+ Elast 400F	25.0 fl oz									
21. Untreated			58.5	12.2	95.8	100.0	20.6	69.3	14.2	0.1
LSD(P<0.05)			8.9	1.9	18.8	15.7	2.5	6.6	7.9	0.2
Leaf Inc.[1]=Leaf scab incidence, based on 8 terminals per tree (% of leaflets on middle leaf with scab).										
Leaf Sev.[2]=Leaf scab severity, based on middle leaf of 8 terminals per tree.										
Nut Inc.[3]=Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).										
Nut Sev[4]=Nut scab severity, based on 8 nut clusters per tree (% of shuck covered with scab).										
Leaf Lesions[5]=Visual rating of the % leaves with lesions from mites or foliar disease.										
Stem Lesions[6]=The number of lesions per 3 inches of stem on new wood.										

OFFICIAL DAILY RAINFALL 2017							
PONDER FARM							
TY TY, GA							
Rainfall							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1		0.1	0.1			0.1	
2							0.1
3	0.9				0.1		
4		1.5	0.3		1.7		
5	2.0						
6			0.4				
7			0.3		0.1		1.4
8				0.2			0.5
9				0.3			
10						0.3	
11			0.3			2.6	
12			1.0				
13			0.2				
14					0.5		
15			0.2	0.4			
16				0.2			
17			0.1	0.3			
18			0.2				
19			0.4				
20			1.8				
21		0.1					
22							0.3
23	0.2		1.4				1.1
24		0.5	0.2				
25			2.4	0.4			
29			0.5	0.1			
30			0.2		0.3		
31					0.5		
TOTAL	3.1	2.2	9.7	1.8	3.2	2.9	3.3
IRRIGATION		(AS NEEDED)					
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
TOTAL							
Rain & Irr	3.1	2.2	9.7	1.8	3.2	2.9	3.3