

2016 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 2016 field trials on peanuts and pecans. This was a drier year with less vine growth on the peanuts and less early season scab on the pecans. There was enough inoculum from last year and rain showers to result in moderate pecan scab pressure. While we also had significant epidemics of leaf spot in our later peanut trials, it was another great year for 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 John Ray, 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 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 “2016 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, 2016)

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 broadcast in 20 GPA with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a boom with three TX-SS6 conejet nozzles per row at 40 PSI. 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. In furrow sprays were applied in 3.4 GPA (singles) or 6.8 GPA (twins) with a single TP 80015E flat fan nozzle at 22 PSI per row.
2. Cover sprays for leaf spot control of Chlorothalonil 720 (1.5 pt/A) were applied on 8 Jun, 22 Jun, 6 Jul, 20 Jul, 2 Aug, 16 Aug and 30 Aug. Cover sprays for white mold control of Provost (10.7 fl oz/A) were applied on 29 Jun, 20 Jul, 2 Aug, 16 Aug and 30 Aug. Convoy (32 fl oz/A) was applied on 6 Jul, 2 Aug and 16 Aug. The 45 DAP chemigation treatment was applied on 17 Jun. In-furrow sprays were applied at planting on 2 May.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Woods Field, Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
NOTE - To promote nematode development, common vetch was grown as a winter crop between the 2015 and 2016 peanut crops.
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Cultivated 2 Jun. Gypsum broadcast (1200 lb/A) on 27 Jun.

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 21 Apr.
 POST: 24D-B (1.75 @ 17 fl oz/A) on 21 Jul, Select
 Max (16 fl oz/A) + 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, 27 Jul,
 and 17 Aug.
7. Planting Info: GA-06G, 6 seed/ft (2” deep) single, 3 seed/ft twin 2
 May.
8. Harvest Dates: Dug – 23 Sep Picked – 27 Sep

E: SUMMARY:

BAYER VELUM TOTAL TWIN ROW TEST, 2016										
BLACKSHANK FARM, WOODS FIELD										
				Plants/ft ¹		% Dead Plants ²				Thrips ³
TREATMENTS	ROW PAT	App's	RATE	16-May	23-May	16-May	23-May	30-May	6-Jun	3-Jun
1. Nontreated	Single			2.9	3.0	0.0	0.0	1.2	1.2	3.6
2. Velum Total	Single	In Furrow	14.0 oz	3.0	3.1	0.0	0.0	0.0	0.0	1.8
3. Velum Total	Single	In Furrow	18.0 oz	3.1	3.1	0.0	0.0	0.2	0.4	1.4
4. Velum Total	Single	In Furrow	14.0 oz	2.8	3.2	0.0	0.0	1.0	1.0	1.4
+ Propulse		45 DAP	13.7 fl oz*							
5. Velum Total	Single	In Furrow	18.0 oz	3.4	3.2	0.0	0.0	1.0	1.0	1.2
+ Propulse		45DAP	13.7 fl oz*							
6. Nontreated	Double			4.0	4.6	0.0	0.9	1.2	1.4	4.4
7. Velum Total	Double	In Furrow	14.0 oz ⁴	3.7	4.6	0.0	0.0	0.8	0.8	2.2
8. Velum Total	Double	In Furrow	18.0 oz ⁴	4.1	4.4	0.0	0.0	0.8	0.8	1.8
9. Velum Total	Double	In Furrow	14.0 oz ⁴	4.2	4.5	0.0	0.0	0.2	0.4	2.4
+ Propulse		45 DAP	13.7 fl oz*							
10. Velum Total	Double	In Furrow	18.0 oz ⁴	4.1	4.5	0.0	0.0	0.8	0.8	1.8
+ Propulse		45 DAP	13.7 fl oz*							
LSD (P<0.05)				0.4	0.4	n.s.	0.1	n.s.	n.s.	0.7
Plants/ft ¹ =Stand count is the number of emerged plants per foot of row on 16 May, and 23 May.										
% Dead Plants ² =The % of emerged plants that was dead or dying per plot.										
Thrips ³ =Based on a scale of 0-10 (0=no injured, 1=10% leaves injured, 3=30% injured, 4=50% leaves injured, 5=>50% leaves injured and <5% terminal buds injured, 6=>50% leaves injured and 25% terminal buds injured, 7=>50% leaves injured and 50% terminal buds injured, 8=>50% leaves injured and 75% terminal buds injured, 9=>50% leaves injured and 90% terminal buds injured, and 10=dead plant.										
NOTE ⁴ =1/2 of full rate applied in each twin row.										
*Chemigated in 0.1 inches water.										

BAYER VELUM TOTAL TWIN ROW TEST, 2016										
BLACKSHANK FARM, WOODS FIELD										
					Nema Pods ⁵	Nema Roots ⁶				
				WM ⁴			TSWV ⁷	Rootknot ⁸	Ring ⁹	Yield
TREATMENTS	ROW PAT	App's	RATE	23-Sep	23-Sep	23-Sep	10-Aug	8-Sep	8-Sep	lb/A
1. Nontreated	Single			12.0	56.3	71.3	3.2	211	103	2637
2. Velum Total	Single	In Furrow	14.0 oz	2.0	26.3	36.3	4.5	213	93	3250
3. Velum Total	Single	In Furrow	18.0 oz	5.0	22.5	33.8	2.4	324	79	2535
4. Velum Total	Single	In Furrow	14.0 oz	1.5	12.5	30.0	2.0	258	169	3344
+ Propulse		45 DAP	13.7 fl oz*							
5. Velum Total	Single	In Furrow	18.0 oz	2.0	8.8	27.5	1.6	237	117	2914
+ Propulse		45DAP	13.7 fl oz*							
6. Nontreated	Double			6.0	41.3	67.5	1.2	156	46	3238
7. Velum Total	Double	In Furrow	14.0 oz ¹⁰	3.0	28.8	48.8	2.8	274	69	3361
8. Velum Total	Double	In Furrow	18.0 oz ¹⁰	3.0	27.5	42.5	1.2	138	39	3791
9. Velum Total	Double	In Furrow	14.0 oz ¹⁰	1.5	10.0	36.3	0.8	183	60	3884
+ Propulse		45 DAP	13.7 fl oz*							
10. Velum Total	Double	In Furrow	18.0 oz ¹⁰	2.0	12.5	32.5	2.0	200	100	3354
+ Propulse		45 DAP	13.7 fl oz*							
LSD (P<0.05)				5.5	14.8	16.2	1.4	137	97	n.s.
WM ⁴ =Percent of row feet infected based on stem rot loci (up to 12" linear row) per plot. Nema Pods ⁵ =Visual rating of the percent of pods (1-100) with visible damage from root knot nematode. Nema Roots ⁶ =Visual estimate of the % of roots with galls. TSWV ⁷ =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot. Rootknot ⁸ =Number of M.arenarie juveniles per 100 cc of soil. Ring ⁹ =Population of ring nematodes per 100 cc of soil. NOTE ¹⁰ =1/2 of full rate applied in each twin row.										

NEMATODE MANAGEMENT TEST I, 2016

- A. **PURPOSE:** To evaluate nematocide efficacy and the susceptibility of peanut lines to root knot nematode.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with seven replicates.
 2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
 3. There are eight foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
 5. Variety: GA-06G, TifNV-High O/L, GA-14N
- C. **APPLICATION OF TREATMENTS:**
1. Equipment: Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three 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 8 Jun, 22 Jul, 6 Aug, 20 Jul, 2 Aug, 16 Aug, and 30 Aug. Cover sprays for white mold control of Provost (10.7 fl oz) were applied on 29 Jun, 20 Jul, 2 Aug, 16 Aug, and 30 Aug. Convoy (32 oz/A) was applied on 6 Jul, 2 Aug and 16 Aug. The 45 DAP chemigation treatment was applied on 17 Jun.
- D. **ADDITIONAL INFORMATION:**
1. Location: Blackshank Farm, Woods Field Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated 2 Jun.
 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 21 Apr. Telon injected (4.5 gal/A) sealed and irrigated on 28 Apr.
POST: Spray 24D-B 1.75 at (17 fl oz/A) on 21 Jul. Select Max (16 fl oz/A) + 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, 21 Jul, and 17 Aug.
7. Planting Info: GA-06G, TifNV-High O/L, GA-14N, 6 seed/ft (2" deep) infurrow sprays in (3.6 gal/A) on 9 May.
8. Harvest Dates: Dug – 4 Oct Picked – 10 Oct

E: SUMMARY:

NEMATODE MANAGEMENT TEST I, 2016									
BLACKSHANK FARM, WOODS FIELD									
			Plants/ft ¹		% Dead Plants ²				Thrips ³
Treatments	App's	RATE	23-May	30-May	23-May	30-May	6-Jun	13-Jun	3-Jun
GA-06G									
1. Nontreated			3.2	3.9	0.0	0.0	0.0	0.0	2.3
2. Velum Total	In Furrow	18.0 oz	3.2	3.7	0.0	0.0	0.3	0.3	1.1
3. Telone	PP Injected	4.5 gal	3.0	3.7	0.0	0.9	0.3	0.3	1.7
4. Velum Total	In Furrow	18.0 oz	3.3	3.7	0.0	0.0	0.0	0.3	1.0
+ Telone	PP Injected	4.5 gal							
5. Velum Total	In Furrow	18.0 oz	3.3	3.7	0.0	0.0	0.0	0.1	1.0
+ Telone	PP Injected	4.5 gal							
+ Propulse	45 DAP	13.7 fl oz*							
TifN/V-High O/L									
6. Nontreated			3.4	3.6	0.0	0.0	0.0	0.1	2.4
GA-14N									
7. Nontreated			3.1	3.9	0.0	0.0	0.0	0.1	2.0
LSD (P<0.05)			0.2	n.s.	n.s.	n.s.	n.s.	n.s.	0.5
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 was dead or dying per plot.									
Thrips ³ =Based on a scale of 0-10 (0=no injured, 1=10% leaves injured, 3=30% injured, 4=50% leaves injured, 5=>50% leaves injured and <5% terminal buds injured, 6=>50% leaves injured and 25% terminal buds injured, 7=>50% leaves injured and 50% terminal buds injured, 8=>50% leaves injured and 75% terminal buds injured, 9=>50% leaves injured and 90% terminal buds injured, and 10=dead plant.									
*Chemigated in 0.1 inches water.									

NEMATODE MANAGEMENT TEST I, 2016								
BLACKSHANK FARM, WOODS FIELD								
			TSWV ⁴	RootKnot ⁵	Ring ⁶	Galling ⁷	WM ⁸	Yield
Treatments	App's	RATE	10-Aug	8-Sep	8-Sep	4-Oct	4-Oct	lb/A
GA-06G								
1. Nontreated			4.0	34	77	19	6.6	3807
2. Velum Total	In Furrow	18.0 oz	2.9	27	66	10	1.4	4335
3. Telone	PP Injected	4.5 gal	4.6	11	157	7	4.6	3689
4. Velum Total	In Furrow	18.0 oz	5.1	28	117	5	3.0	4364
+ Telone	PP Injected	4.5 gal						
5. Velum Total	In Furrow	18.0 oz	4.6	4	148	2	2.0	4443
+ Telone	PP Injected	4.5 gal						
+ Propulse	45 DAP	13.7 fl oz*						
TifN/V-High O/L								
6. Nontreated			2.0	1	146	0	2.0	4469
GA-14N								
7. Nontreated			5.1	1	159	0	1.4	4200
LSD (P<0.05)			n.s.	25	73	6	3.5	789
TSWV ⁴ =Percent of row feet infected based on loci (up to 12" linear row) per plot.								
Rootknot ⁵ =Number of M.arenarie juveniles per 100 cc of soil.								
Ring ⁶ =Population of ring nematodes per 100 cc of soil.								
Galling ⁷ =Visual rating of the percent of pods and roots (1-100) with visible damage from root knot nematodes.								
WM ⁸ =Percent of row feet infected based on loci (up to 12" linear row) per plot.								

NEMATODE MANAGEMENT TEST I, 2016							
BLACKSHANK FARM, WOODS FIELD							
Treatments	App's	RATE	IMM	SMKSS	DAM	DOLAC	DOLTON
GA-06G							
1. Nontreated			3.1	69.4	3.6	632.1	333.2
2. Velum Total	In Furrow	18.0 oz	2.7	70.3	3.3	737.9	340.5
3. Telone	PP Injected	4.5 gal	3.4	68.3	4.3	606.1	321.3
4. Velum Total	In Furrow	18.0 oz	2.9	68.4	4.3	704.0	317.5
+ Telone	PP Injected	4.5 gal					
5. Velum Total	In Furrow	18.0 oz	2.9	69.5	3.4	738.5	330.3
+ Telone	PP Injected	4.5 gal					
+ Propulse	45 DAP	13.7 fl oz*					
TifN/V-High O/L							
6. Nontreated			3.1	64.9	4.6	661.5	298.6
GA-14N							
7. Nontreated			3.3	66.9	5.2	618.6	296.3
LSD (P<0.05)			n.s.	3.9	1.9	n.s.	35.8
"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."							

EVALUATION OF NEMATICIDES FOR THE CONTROL OF PEANUT ROOTKNOT NEMATODES (ADAMA NEMATODE MANAGEMENT TEST, 2016)

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 CO₂ 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 750 (1.5 pt/A) were applied on 8 Jun, 22 Jun, 6 Jul, 20 Jul, 2 Aug, 16 Aug, and 30 Aug. Cover sprays for white mold control of Provost (10.7 fl oz/A) were applied on 29 Jun, 20 Jul, 2 Aug, 16 Aug, and 30 Aug. Convoy (32 fl oz/A) were applied on 6 Jul, 2 Aug and 16 Aug. In Furrow sprays were applied at planting on 4 May.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Woods Field Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr.
Gypsum broadcast (1200 lb/A) on 27 Jun.
Cultivated on 2 Jun.
4. Soil Fertility: pH – 6.4 P – 85 K – 17 Ca – 362 Mg – 48
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr.
POST: 24 D-B 1.75 at (17 fl oz/A) on 21 Jul.
Select Max (16 fl oz/A) + 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, 27 Jul, and 17 Aug.
7. Planting Info: GA-06G, TifN/V-High O/L, 6 seed/ft (2" deep) of row on 4 May.
8. Harvest Dates: Dug – 20 Sep Picked – 23 Sep

E: SUMMARY:

ADAMA NEMATODE MANAGEMENT TEST, 2016										
BLACKSHANK FARM, WOODS FIELD										
Treatments	Variety	App's	Rate	Plants/ft ¹		% Dead Plants ²				Thrips ³
				18-May	25-May	18-May	25-May	1-Jun	8-Jun	3-Jun
1. Nontreated	GA-6G			2.9	3.5	0.0	0.0	0.0	0.0	3.6
2. Velum Total	GA-6G	IF ⁴	14.0 oz	3.0	3.4	0.0	0.0	0.0	0.0	1.1
3. Nimitz 480EC	GA-6G	IF ⁴	12.5 oz*	2.1	2.7	0.0	0.0	0.0	0.1	3.3
4. Nimitz 480EC	GA-6G	IF ⁴	8.9 oz*	2.5	3.3	0.0	0.0	0.0	0.3	3.3
5. Nimitz 480EC	GA-6G	IF ⁴	6.3 oz*	2.8	3.4	0.0	0.0	0.0	0.0	2.9
6. Nimitz 480EC	Ga-06G	IF ⁴	4.5 oz*	2.6	3.4	0.0	0.0	0.1	0.4	2.9
7. Nontreated	Tifn/V-Hi O/L			2.9	3.9	0.0	0.0	0.0	0.0	3.6
LSD (P<0.05)				0.2	0.4	n.s.	n.s.	n.s.	0.4	0.8
Plants/ft ¹ =Stand count is the number of emerged plants per foot of row on 18 May, and 25 May.										
% Dead Plants ² =The % of emerged plants that was dead or dying per plot.										
Thrips ³ =Based on a scale of 0-10 (0=no injured, 1=10% leaves injured, 3=30% injured, 4=50% leaves injured, 5=>50% leaves injured and <5% terminal buds injured, 6=>50% leaves injured and 25% terminal buds injured, 7=>50% leaves injured and 50% terminal buds injured, 8=>50% leaves injured and 75% terminal buds injured, 9=>50% leaves injured and 90% terminal buds injured, and 10=dead plant.										
NOTE ⁴ = In furrow application in 3.4 GPA of water.										

ADAMA NEMATODE MANAGEMENT TEST, 2016									
BLACKSHANK FARM, WOODS FIELD									
				TSWV ⁴	WM ⁵	Galling ⁶	Yield	Root	
				10-Aug	20-Sep	20-Sep	lb/A	Knot ⁷	Ring ⁸
Treatments	Variety	App's	Rate					7-Sep	7-Sep
1. Nontreated	GA-6G			3.1	6.3	33.2	2102	113	30
2. Velum Total	GA-6G	IF ⁹	14.0 oz	2.9	1.1	24.1	2685	114	83
3. Nimitz 480EC	GA-6G	IF ⁹	12.5 oz*	2.6	4.3	27.1	2491	182	67
4. Nimitz 480EC	GA-6G	IF ⁹	8.9 oz*	2.9	6.7	30.4	2333	116	84
5. Nimitz 480EC	GA-6G	IF ⁹	6.3 oz*	2.0	4.3	31.9	2345	164	93
6. Nimitz 480EC	Ga-06G	IF ⁹	4.5 oz*	2.0	6.3	34.9	1911	162	46
7. Nontreated	Tifn/V-Hi O/L			1.4	2.6	0.7	4287	9	76
LSD (P<0.05)				n.s.	4.2	10.0	861	103.0	n.s.
TSWV ⁴ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.									
WM ⁵ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.									
Galling ⁶ =Visual rating of the percent of pods and roots (1-100) with visible damage from root knot nematode.									
Rootknot ⁷ =Number of M. arenaria juveniles per 100 cc of soil.									
Ring ⁸ =Population of ring nematodes per 100 cc of soil.									
NOTE ⁹ =In furrow application in 3.4 GPA of water.									

DAILY RAINFALL AND IRRIGATION, 2016
BLACKSHANK FARM, POND FIELD

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	2.8				0.4	0.6	
2	0.5	0.2			0.5	4.7	
3		0.2					
4				0.1	1.0		
6	0.1		2.4				
7	0.1						
8					1.9		
9					0.2		
12	0.2				0.3		
13					0.7	0.7	
14	1.2				0.2		
15	0.2						
16			0.2				
17		0.9	0.6	1.3			
18							
19		0.2				0.1	
21					0.3		
23					0.5		
24				0.1			
29			0.6		0.2		
30	1.3		0.1	1.9	0.1		
Total	6.4	1.5	3.9	3.4	6.3	6.1	0.0
IRRIGATION							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
3							0.5
7							
10		0.3					
11				0.6			
14				0.4			
16			0.4				
18					0.5		
25				0.5	0.5		
26		0.3					
27	0.5						
28	0.4						
29				0.5	0.6		
Total	0.9	0.6	0.4	2.0	1.6	0.0	0.5
Rain & Irr	7.3	2.1	4.3	5.4	7.9	6.1	0.5

NEMATODE MANAGEMENT TEST II, 2016

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: GA-06G, GA-14N and TifN/V-High O/L

C. **APPLICATION OF TREATMENTS:**

1. Equipment: Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three 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, Chlorothalonil 720 (1.5 pt/A) were applied on 8 Jun, 22 Jun, 6 Jul, 20 Jul, 2 Aug, 16 Aug, and 30 Aug. Cover Sprays for white mold control of Provost (10.7 fl oz/A) were applied on 29 Jun, 20 Jul, 2 Aug, 16 Aug, and 30 Aug. Convoy (32 fl oz/A) was applied on 6 Jul, 2 Aug, and 16 Aug. The 45 DAP chemigation treatments were applied on 17 Jun.

D. **ADDITIONAL INFORMATION:**

1. Location: Blackshank Farm, Pond Field Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated 2 Jun.
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 21 Apr. Telone injected (4.5 gal/A) sealed and irrigated on 28 Apr.
POST: 24 D-B 1.75 at (17 fl oz/A) on 21 Jul.
Select Max (16 fl oz/A) + 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, 27 Jul, and 17 Aug. | |
| 7. | Planting Info: | GA-06G, GA-15N, TifN/V-High O/L, 6 seed/ft (2" deep) on 9 May. | |
| 8. | Harvest Dates: | Dug – 4 Oct | Picked – 10 Oct |

E: SUMMARY:

NEMATODE MANAGEMENT TEST II, 2016									
BLACKSHANK FARM, POND FIELD									
CULTIVAR AND TREATMENTS	App's	RATE	Plants/ft ¹		% Dead Plants ²				Thrips ³
			23-May	30-May	23-May	30-May	6-Jun	13-Jun	2-Jun
GA-06G									
1. Nontreated			2.9	3.2	0.0	0.0	0.0	0.4	3.6
2. Velum Total	In Furrow	18.0 oz	3.3	3.3	0.0	0.0	0.0	0.0	1.4
3. Telone	PP Injected	4.5 gal	3.3	3.0	0.0	0.0	0.4	1.0	3.0
4. Velum Total + Telone	In Furrow PP Injected	18.0 oz 4.5 gal	3.3	3.1	0.0	0.0	0.0	0.2	1.2
5. Velum Total + Telone + Propulse	In Furrow PP Injected 45 DAP*	18.0 oz 4.5 gal 13.7 fl oz	3.2	3.0	0.0	0.0	0.0	0.0	1.0
TifN/V-High O/L									
6. Nontreated			3.1	2.9	0.0	0.0	0.0	0.2	3.6
GA-14N									
7. Nontreated			3.2	3.3	0.0	0.0	0.0	0.4	3.0
LSD (P<0.05)			0.3	n.s.	n.s.	n.s.	0.3	0.8	0.6
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 was dead or dying per plot.									
Thrips ³ =Based on a scale of 0-10 (0=no injured, 1=10% leaves injured, 3=30% injured, 4=50% leaves injured, 5=>50% leaves injured and <5% terminal buds injured, 6=>50% leaves injured and 25% terminal buds injured, 7=>50% leaves injured and 50% terminal buds injured, 8=>50% leaves injured and 75% terminal buds injured, 9=>50% leaves injured and 90% terminal buds injured, and 10=dead plant.									
*Chemigated in 0.1 inches of water.									

NEMATODE MANAGEMENT TEST II, 2016								
BLACKSHANK FARM, POND FIELD								
CULTIVAR AND TREATMENTS	App's	RATE	TSWV ⁴ 5-Aug	Root Knot ⁵ 8-Sep	Ring ⁶ 8-Sep	Galling ⁷ 4-Oct	WM ⁸ 4-Oct	Yield lb/A
GA-06G								
1. Nontreated			5.6	288	58	74.0	5.6	2530
2. Velum Total	In Furrow	18.0 oz	6.8	415	84	53.0	4.8	2616
3. Telone	PP Injected	4.5 gal	6.4	59	31	19.6	2.0	3556
4. Velum Total + Telone	In Furrow PP Injected	18.0 oz 4.5 gal	3.6	513	129	24.0	4.8	4275
5. Velum Total + Telone + Propulse	In Furrow PP Injected 45 DAP*	18.0 oz 4.5 gal 13.7 fl oz	7.2	286	106	16.0	3.2	4054
TifN/V-High O/L								
6. Nontreated			2.4	18	97	1.6	2.0	4178
GA-14N								
7. Nontreated			7.2	6	73	1.6	1.6	3719
LSD (P<0.05)			3.7	406	93	10.3	n.s.	848
TSWV ⁴ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.								
Root Knot ⁵ =Number of <i>M.arenaria</i> juveniles per 100 cc of soil.								
Ring ⁶ =Populations of ring nematode per 100 cm ³ of soil.								
Galling ⁷ =Visual rating of the percent of pods and roots (1-100) with visible damage from root knot nematodes.								
WM ⁸ =Percent of row feed infected based on disease loci (up to 12" linear row) per plot.								

NEMATODE MANAGEMENT TEST II, 2016							
BLACKSHANK FARM, POND FIELD							
CULTIVAR AND TREATMENTS	App's	RATE	IMM 5-Aug	DAM 8-Sep	SMKSS 8-Sep	Dolac 4-Oct	Dolton 4-Oct
GA-06G							
1. Nontreated			3.5	2.2	77.9	528.5	383.2
2. Velum Total	In Furrow	18.0 oz	2.2	1.8	72.4	460.7	355.0
3. Telone	PP Injected	4.5 gal	2.3	1.7	72.2	585.6	354.1
4. Velum Total + Telone	In Furrow PP Injected	18.0 oz 4.5 gal	3.5	1.5	80.1	809.0	396.0
5. Velum Total + Telone + Propulse	In Furrow PP Injected 45 DAP*	18.0 oz 4.5 gal 13.7 fl oz	3.3	1.6	79.9	795.1	393.1
TifN/V-High O/L							
6. Nontreated			3.3	1.4	69.2	802.8	342.6
GA-14N							
7. Nontreated			2.1	1.3	70.3	612.7	643.5
LSD (P<0.05)			n.s.	n.s.	4.9	152.9	23.2
"Peanut grades and values were based on a 500 gram sample per plot dried to 10% moisture and graded according to official Federal-State Inspection Service method."							

BAYER PROPULSE/VELUM TOTAL TEST I, 2016

A. PURPOSE: To evaluate the comparative efficacy of experimental treatments for control of 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 CO₂ 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 8 Jun, 22 Jun, 6 Jul, 20 Jul, 2 Aug, 16 Aug and 30 Aug. Cover sprays for white mold control of Provost (10.7 fl oz/A) were applied on 29 Jun, 20 Jul, 2 Aug, 16 Aug and 30 Aug. Convoy (32 fl oz/A) was applied on 6 Jul, 2 Aug and 16 Aug. The 45 DAP sprays were applied on 20 Jun to treatment 5 & 6 and then immediately irrigated with 0.18". Treatments 3, 4 and 7 were applied the same day, but after the irrigation event.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Pond Field, Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
NOTE – To promote nematode development, Common vetch was grown as a winter crop between the 2015 and 2016 peanut crops.
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated 2 Jun.

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 21 Apr.
 POST: 24D-B (1.75 @ 17 fl oz/A) on 21 Jul, Select
 Max (16 fl oz/A) + 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, 27 Jul,
 and 17 Aug.
7. Planting Info: GA-06G, 6 seed/ft (2” deep) 3 May
8. Harvest Dates: Dug – 4 Oct Picked – 10 Oct

E: SUMMARY:

BAYER PROPULSE/VELUM TOTAL TEST I, 2016								
BLACKSHANK FARM, POND FIELD								
			Plants/ft ¹		% Dead Plants ²			
TREATMENTS	App's	RATE	17-May	24-May	17-May	24-May	31-May	7-Jun
1. Admire Pro	In Furrow*	9.0 fl oz	2.7	3.4	0.0	0.0	0.4	0.4
2. Velum Total	In Furrow*	18.0 fl oz	2.9	3.7	0.0	0.0	0.2	0.6
3. Velum Total	In Furrow*	18.0 fl oz	2.9	3.4	0.0	0.0	0.0	0.2
Propulse	B'cast 20 GPA, 45 DAP**	13.7 fl oz						
4. Velum Total	In Furrow*	18.0 oz	2.8	3.6	0.0	0.0	0.2	0.2
Propulse	B'cast 40 GPA, 45 DAP**	13.7 fl oz						
5. Velum Total	In Furrow*	18.0 oz	2.9	3.5	0.0	0.0	0.0	0.4
+ Propulse	B'cast 20 GPA, 45 DAP***	13.7 fl oz						
6. Velum Total		18.0 oz	2.7	3.8	0.0	0.0	0.4	0.6
+ Propulse	B'cast 20 GPA, 45 DAP***	13.7 fl oz						
7. Velum Total	In Furrow*	18.0 oz	2.8	3.6	0.0	0.0	0.0	0.2
Propulse	Chemigated 0.1", 45 DAP**	13.7 fl oz						
LSD (P<0.05)			n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
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 was dead or dying per plot.								
**Treatment 3, 4 and 7 applied AFTER an irrigation event (0.1-0.2 inches).								
***Treatment 5 and 6 applied BEFORE an irrigation event (0.1-0.2 inches).								

BAYER PROPULSE/VELUM TOTAL TEST I, 2016								
BLACKSHANK FARM, POND FIELD								
			TSWV ³	Rotknot ⁴	Ring ⁵	Galling ⁶	WM ⁷	Yield
TREATMENTS	App's	RATE	5-Aug	8-Sep	8-Sep	4-Oct	4-Oct	lb/A
1. Admire Pro	In Furrow*	9.0 fl oz	6.4	287	18	85.0	12.4	3308
2. Velum Total	In Furrow*	18.0 fl oz	12.4	159	43	46.0	8.4	3908
3. Velum Total	In Furrow*	18.0 fl oz	8.4	305	31	45.0	10.4	3948
Propulse	B'cast 20 GPA, 45 DAP**	13.7 fl oz						
4. Velum Total	In Furrow*	18.0 oz	10.4	333	36	42.0	5.2	3824
Propulse	B'cast 40 GPA, 45 DAP**	13.7 fl oz						
5. Velum Total	In Furrow*	18.0 oz	9.2	249	8	42.0	5.6	4356
+ Propulse	B'cast 20 GPA, 45 DAP***	13.7 fl oz						
6. Velum Total	In Furrow*	18.0 oz	9.6	234	29	39.0	6.4	4415
+ Propulse	B'cast 20 GPA, 45 DAP***	13.7 fl oz						
7. Velum Total	In Furrow*	18.0 oz	6.4	296	42	58.0	7.2	3754
Propulse	Chemigated 0.1",45 DAP**	13.7 fl oz						
LSD (P<0.05)			4.5	157	n.s.	23.0	5.2	822
TSWV ³ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.								
Rootknot ⁴ =Number of <i>M.arenarie juveniles</i> 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 roots (1-100) with visible damage from root knot nematodes.								
WM ⁷ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.								
**Treatments 3,4 and 7 applied AFTER an irrigation event (0.1-0.2 inches).								
***Treatments 5 and 6 applied BEFORE an irrigation event (0.1-0.2 inches).								

BAYER PROPULSE/VELUM TOTAL TEST IV, 2016

A. PURPOSE: To evaluate the comparative efficacy of experimental treatments for control of 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 and 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. 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 8 Jun, 22 Jun, 6 Jul, 20 Jul, 2 Aug, 16 Aug and 30 Aug. Cover sprays for white mold control of Provost (10.7 fl oz/A) were applied on 29 Jun, 20 Jul, 2 Aug, 16 Aug and 30 Aug. Convoy (32 fl oz/A) was applied on 6 Jul, 2 Aug and 16 Aug. The 45 DAP sprays was applied chemigated on 20 Jun. In furrow sprays were applied at planting on 3 May.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Pond Field, Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
NOTE – To promote nematode development, Common vetch was grown as a winter crop between The 2015 and 2016 peanut crops.
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated 2 Jun.
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 21 Apr.

POST: 24D-B (1.75 @ 17 fl oz/A) on 21 Jul, Select Max (16 fl oz/A) + 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, 27 Jul, and 17 Aug.
7. Planting Info: GA-06G, 6 seed/ft (2" deep) 3 May
8. Harvest Dates: Dug – 4 Oct Picked – 10 Oct

E: SUMMARY:

BAYER PROPULSE/VELUM TOTAL TEST IV, 2016								
BLACKSHANK FARM, POND FIELD								
			Plants/ft ¹		% Dead Plants ²			
TREATMENTS	App's	RATE	17-May	24-May	17-May	24-May	31-May	7-Jun
Trt 1-5 Cultivar GA-06G								
1. Admire Pro	In Furrow*	9.0 fl oz	3.0	3.4	0.0	0.0	0.0	0.0
2. Velum Total	In Furrow*	14.0 fl oz	2.9	3.6	0.0	0.0	0.2	0.4
3. Velum Total	In Furrow*	18.0 fl oz	2.9	3.6	0.0	0.0	0.2	0.2
4. Velum Total	In Furrow*	14.0 fl oz	2.9	3.5	0.0	0.0	0.0	0.4
Propulse	Chemigated 0.1", 45 DAP**	13.7 fl oz						
5. Velum Total	In Furrow*	18.0 oz	2.8	3.5	0.0	0.0	0.0	0.2
+ Propulse	Chmigated 0.1", 45 DAP**	13.7 fl oz						
Trt 6 Cultivar GA-14N								
6. Admire pro		9.0 fl oz	2.9	3.6	0.0	0.0	0.0	0.4
LSD (P<0.05)			n.s.	n.s.	n.s.	n.s.	n.s.	n.s.
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 was dead or dying per plot.								

BAYER PROPULSE/VELUM TOTAL TEST IV, 2016									
BLACKSHANK FARM, POND FIELD									
			Thrips ³	TSWV ⁴	Rootknot ⁵	Ring ⁶	Galling ⁷	WM ⁸	Yield
TREATMENTS	App's	RATE	2-Jun	5-Aug	8-Sep	8-Sep	4-Oct	4-Oct	lb/A
Trt 1-5 Cultivar GA-06G									
1. Admire Pro	In Furrow*	9.0 fl oz	2.0	4.4	528	38	82.0	12.4	2726
2. Velum Total	In Furrow*	14.0 fl oz	2.2	5.2	386	41	55.0	10.4	3140
3. Velum Total	In Furrow*	18.0 fl oz	1.8	4.4	459	59	47.0	8.8	2841
4. Velum Total	In Furrow*	14.0 fl oz	2.0	3.6	383	33	47.0	8.4	3885
Propulse	Chemigated 0.1", 45 DAP**	13.7 fl oz							
5. Velum Total	In Furrow*	18.0 oz	1.4	2.0	560	50	42.0	5.2	2853
+ Propulse	Chmigated 0.1", 45 DAP**	13.7 fl oz							
Trt 6 Cultivar GA-14N									
6. Admire pro		9.0 fl oz	1.2	4.4	5	28	1.6	5.2	3956
LSD (P<0.05)			0.8	n.s.	333	n.s.	15.3	4.9	539
Thrips ³ =Based on a scale of 0-10 (0=no injured, 1=10% leaves injured, 3=30% injured, 4=50% leaves injured, 5=>50% leaves injured and <5% terminal buds injured, 6=>50% leaves injured and 25% terminal buds injured, 7=>50% leaves injured and 50% terminal buds injured, 8=>50% leaves injured and 75% terminal buds injured, 9=>50% leaves injured and 90% terminal buds injured, and 10=dead plant.									
TSWV ⁴ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.									
Rootknot ⁵ =Number of <i>M.arenarie juveniles</i> per 100 cc of soil.									
Ring ⁶ =Population of ring nematodes per 100 cc of soil.									
Galling ⁷ =Visual rating of the percent of pods and roots (1-100) with visible damage from root knot nematodes.									
WM ⁸ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.									

DAILY RAINFALL AND IRRIGATION, 2016
BLACKSHANK FARM, POND FIELD

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	2.8				0.4	0.6	
2	0.5	0.2			0.5	4.7	
3		0.2					
4				0.1	1.0		
6	0.1		2.4				
7	0.1						
8					1.9		
9					0.2		
12	0.2				0.3		
13					0.7	0.7	
14	1.2				0.2		
15	0.2						
16			0.2				
17		0.9	0.6	1.3			
18							
19		0.2				0.1	
21					0.3		
23					0.5		
24				0.1			
29			0.6		0.2		
30	1.3		0.1	1.9	0.1		
Total	6.4	1.5	3.9	3.4	6.3	6.1	0.0
IRRIGATION							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
3							0.5
7			0.5				
10		0.3					
11				0.6			
16			0.4				
18					0.5		
20			0.2				
25				0.5			
26		0.3			0.6		
27	0.5						
28	0.4						
29				0.3	0.6		
Total	0.9	0.6	1.1	1.4	1.7	0.0	0.5
Rain & Irr	7.3	2.1	5.0	4.8	8.0	6.1	0.5

BAYER PROPULSE/VELUM TOTAL TEST V, 2016

- A. **PURPOSE:** To evaluate the comparative efficacy of experimental treatments for control of nematodes.
- 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
- 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 8 Jun, 22 Jun, 6 Jul, 20 Jul, 2 Aug, 16 Aug and 30 Aug. Cover sprays for white mold control of Provost (10.7 fl oz/A) were applied on 29 Jun, 20 Jul, 2 Aug, 16 Aug and 30 Aug., Convoy (32 fl oz/A) was applied on 6 Jul, 2 Aug and 16 Aug. The in furrow sprays were applied at planting on 4 May.
- D. **ADDITIONAL INFORMATION:**
1. Location: Blackshank Farm, Irr/Non Field, Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
NOTE – To promote nematode development, Common vetch was grown as a winter crop between the 2015 and 2016 peanut crops.
 3. Land Preparation: Moldboard plowed and marked rows on 20 Apr.
Gypsum broadcast (1200 lb/A) on 27 Jun.
Cultivated 1 Jun.
 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 21 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 21 Jul, Select Max (16 fl oz/A) + 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, 27 Jul,
and 17 Aug.

7. Planting Info: GA-06G, 6 seed/ft (2" deep) 4 May

8. Harvest Dates: Dug – 12 Oct Picked – 17 Oct

E: SUMMARY:

BAYER PROPULSE/VELUM TOTAL TEST V, 2016								
BLACKSHANK FARM, IRR NON FIELD								
			Plants/ft ¹		% Dead Plants ²			
TREATMENTS	App's	RATE	18-May	25-May	18-May	25-May	1-Jun	8-Jun
1. Admire Pro	In Furrow*	10.5 fl oz	3.3	3.3	0.0	0.1	0.7	1.0
2. Velum Total	In Furrow*	14.0 fl oz	3.5	3.4	0.0	0.1	0.3	0.5
3. Velum Total	In Furrow*	18.0 fl oz	3.4	3.2	0.0	0.1	0.8	0.8
4. Admire Pro + Propulse	In Furrow*	10.5 fl oz 10.0 fl oz	3.1	3.3	0.0	0.0	0.0	0.0
5. Admire Pro + Propulse	In Furrow*	10.5 fl oz 12.0 fl oz	3.1	3.3	0.0	0.0	0.0	0.0
6. Admire Pro + Propulse	In Furrow*	10.5 fl oz 13.7 fl oz	2.9	3.3	0.0	0.0	0.0	0.0
7. Admire Pro + Luna Priviledge + Proline	In Furrow*	10.5 fl oz 4.0 fl oz 2.8 fl oz	3.4	3.4	0.0	0.0	0.0	0.0
8. Admire Pro + Luna Priviledge + Proline	In Furrow*	10.5 fl oz 5.0 fl oz 3.5 fl oz	3.2	3.4	0.0	0.1	0.2	0.2
9. Admire Pro + Luna Priviledge + Proline	In Furrow*	10.5 fl oz 6.0 fl oz 4.2 fl oz	3.2	3.2	0.0	0.0	0.0	0.0
LSD (P<0.05)			0.4	n.s.	n.s.	n.s.	n.s.	0.9
Plants/ft ¹ =Stand count is the number of emerged plants per foot of row on 18 May, and 25 May.								
% Dead Plants ² =The % of emerged plants that was dead or dying per plot.								

BAYER PROPULSE/VELUM TOTAL TEST V, 2016								
BLACKSHANK FARM, IRR NON FIELD								
			TSWV ³	WM ⁴	Yield	Rootknot ⁵	Ring ⁶	Galling ⁷
TREATMENTS	App's	RATE	5-Aug	12-Oct	lb/A	12-Sep	12-Sep	12-Oct
1. Admire Pro	In Furrow*	10.5 fl oz	9.0	11.0	4542	29	8	9.5
2. Velum Total	In Furrow*	14.0 fl oz	8.0	12.7	4238	63	5	10.0
3. Velum Total	In Furrow*	18.0 fl oz	10.7	12.0	4298	21	7	5.8
4. Admire Pro + Propulse	In Furrow*	10.5 fl oz 10.0 fl oz	10.3	11.3	4908	87	14	7.0
5. Admire Pro + Propulse	In Furrow*	10.5 fl oz 12.0 fl oz	5.3	10.0	4579	62	5	8.3
6. Admire Pro + Propulse	In Furrow*	10.5 fl oz 13.7 fl oz	7.6	8.0	4817	113	13	5.8
7. Admire Pro + Luna Priviledge + Proline	In Furrow*	10.5 fl oz 4.0 fl oz 2.8 fl oz	11.4	12.0	4618	40	15	9.3
8. Admire Pro + Luna Priviledge + Proline	In Furrow*	10.5 fl oz 5.0 fl oz 3.5 fl oz	9.0	9.7	4381	83	7	10.3
9. Admire Pro + Luna Priviledge + Proline	In Furrow*	10.5 fl oz 6.0 fl oz 4.2 fl oz	5.6	9.0	4696	92	6	10.2
LSD (P<0.05)			n.s.	n.s.	n.s.	86	n.s.	4.4
TSWV ³ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.								
WM ⁴ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.								
Rootknot ⁵ =Number of <i>M. arenarie juveniles</i> per 100 cc of soil.								
Ring ⁶ =Population of ring nematodes per 100 cc of soil.								
Galling ⁷ =Visual rating of the percent of pods and roots (1-100) with visible damage from rootknot nematode.								

EVALUATION OF A CANOPY OPENER FOR IMPROVED CONTROL OF PEANUT
WHITE MOLD (CANOPY OPENER (DIRECTED SPRAY) TEST I, 2016)

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 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:

1. Equipment: Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI.
2. Cover sprays of Chlorothalonil 720 (1.5 pt/A) were applied on 8 Jun, 22 Jun 6 Jul, 20 Jul 2 Aug, 16 Aug, and 30 Aug. Applied spray treatments using a push-type CO₂ 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 11 Aug.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Irr/Non Field Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated 1 Jun.
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 21 May.
POST: 24D-B (1.75 @ 17 fl oz/A) on 21 Jul, Select Max (16 fl oz/A) + 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, 27 Jul and 16 Aug.
7. Planting Info: Tifguard, 6 seed/ft (2" deep) 2 May.
8. Harvest Dates: Dug – 12 Oct Picked – 17 Oct

E: SUMMARY:

CANOPY OPENER (DIRECTED SPRAY) TEST I, 2016							
BLACKSHANK FARM, IRR NON FIELD							
					TSWV ¹	WM ²	Yield
TREATMENTS	App's	RATE	Nozzle	Boom	29-Aug	12-Oct	lb/A
1. Convoy	3 & 5	24 fl oz	TX-SS6	B'cast	5.0	18.6	3643
2. Priaxor	3 & 5	8.0 fl oz	TX-SS6	B'cast	6.0	11.4	4310
3. Convoy	3 & 5	24 fl oz	TX-SS6	Directed	7.7	20.3	3784
4. Priaxor	3 & 5	8.0 fl oz	TX-SS6	Directed	11.7	9.7	4381
5. Convoy	3 & 5	24 fl oz	AI11006-VS	B'cast	5.0	15.1	3738
6. Priaxor	3 & 5	8.0 fl oz	AI11006-VS	B'cast	9.7	7.7	4205
7. Convoy	3 & 5	24 fl oz	AI11006-VS	Directed	8.0	19.7	3602
8. Priaxor	3 & 5	8.0 fl oz	AI11006-VS	Directed	9.0	10.6	4191
9. Nontreated					7.0	32.3	3033
LSD (P<0.05)					4.8	5.7	382
TSWV ¹ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.							
WM ² =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.							

CANOPY OPENER (DIRECTED SPRAY) TEST I, 2016									
BLACKSHANK FARM, IRR NON FIELD									
TREATMENTS	App's	RATE	Nozzle	Boom	Imm	DAM	SMKSS	DOLAC	DOLTON
1. Convoy	3 & 5	24 fl oz	TX-SS6	B'cast	2.2	3.0	69.6	613.3	337.0
2. Priaxor	3 & 5	8.0 fl oz	TX-SS6	B'cast	2.5	3.2	69.1	717.4	332.4
3. Convoy	3 & 5	24 fl oz	TX-SS6	Directed	2.0	4.0	68.0	608.2	321.2
4. Priaxor	3 & 5	8.0 fl oz	TX-SS6	Directed	2.2	2.6	69.3	730.6	334.5
5. Convoy	3 & 5	24 fl oz	AI11006-VS	B'cast	2.4	3.4	71.7	648.6	346.5
6. Priaxor	3 & 5	8.0 fl oz	AI11006-VS	B'cast	2.9	2.5	69.5	715.8	340.2
7. Convoy	3 & 5	24 fl oz	AI11006-VS	Directed	2.4	3.2	68.1	592.0	329.9
8. Priaxor	3 & 5	8.0 fl oz	AI11006-VS	Directed	2.5	3.0	69.8	697.4	339.1
9. Nontreated					2.6	3.2	69.5	510.4	335.8
LSD (P<0.05)					0.6	1.0	3.0	80.4	16.5
"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."									

EVALUATION OF FUNGICIDE PROGRAMS FOR THE CONTROL OF PEANUT SOILBORNE DISEASES (RHIZOCTONIA TEST, 2016)

A. PURPOSE: To evaluate the efficacy of different programs for Rhizoctonia limb rot.

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-12Y

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI.
2. Cover sprays for leaf spot control of Chlorothalonil 720 (1.5 pt/A) were applied on 8 Jun, 22 Jun, 6 Jul, 20 Jul, 2 Aug, 16 Aug and 30 Aug. Spray treatment, broadcast in (20 gal/A) were applied on 5 Jul, 20 Jul, 4 Aug, and 31 Aug. All plots except treatment # 1 were inoculated with R. solani oat grain inoculum in Jul just after spray # 3.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Irr/Non Field Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr.
Gypsum broadcast (1200 lb/A) on 27 Jun.
Cultivated 1 Jun.
4. Soil Fertility: pH – 6.4 P – 85 K – 17 Ca – 362 Mg – 48
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 May.
POST: 24D-B (1.75 @ 17 fl oz/A) on 21 Jul, Select Max (16 fl oz/A) + 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, 27 Jul and 16 Aug.
7. Planting Info: GA-12Y, 6 seed/ft (2" deep) 2 May
8. Harvest Dates: Dug – 12 Oct Picked – 17 Oct

E: SUMMARY:

RHIZOCTONIA TEST, 2016						
BLACKSHANK FARM, IRR NON FIELD						
			TSWV ¹	WM ²	Rhizoctonia ³	Yield
TREATMENTS	App's	RATE	19-Aug	12-Oct	12-Oct	lb/A
1. Untreated, Not inoculated			2.8	18.8	13.9	3337
2. Untreated			3.2	23.6	19.9	3828
3. Convoy	3 - 5	21.0 fl oz	1.2	12.4	10.6	4252
4. Elatus 45WG	3 - 5	7.14 oz	2.4	4.8	3.8	4073
5. Provost	3 - 5	10.2 fl oz	1.2	5.2	6.1	4597
6. Fontelis	3 - 5	16.0 fl oz	2.0	8.4	7.8	3866
7. Abound	3 - 5	16.0 fl oz	4.0	5.6	7.0	4073
8. Priaxor	3 - 5	8.0 fl oz	0.8	6.0	3.8	4377
9. EXP 7	3 & 5	2.0 fl oz	2.8	3.6	7.5	3915
10. EXP 7	3 - 5	1.33 fl oz	1.2	4.4	6.3	4143
LSD (P<0.05)			2.9	7.5	3.8	716
TSWV ¹ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.						
WM ² =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.						
Rhizoctonia ³ =Visual estimate after inverting of the % of vines colonized with R. solani.						

DAILY RAINFALL AND IRRIGATION, 2016							
BLACKSHANK FARM, IRR/NON FIELD							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	2.8				0.4	0.6	
2	0.5	0.2			0.5	4.7	
3		0.2					
4				0.1	1.0		
6	0.1		2.4				
7	0.1						
8					1.9		
9					0.2		
12	0.2				0.3		
13					0.7	0.7	
14	1.2				0.2		
15	0.2						
16			0.2				
17		0.9	0.6	1.3			
18							
19		0.2				0.1	
21					0.3		
23					0.5		
24				0.1			
29			0.6		0.2		
30	1.3		0.1	1.9	0.1		
Total	6.4	1.5	3.9	3.4	6.3	6.1	0.0
IRRIGATION							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
2					0.3		
3							0.5
4					0.4		
10		0.3					
11				0.6			0.4
15				0.6			
18					0.5		
22						0.5	
29				0.5	0.6		
Total	0.0	0.3	0.0	1.7	1.8	0.5	0.9
Rain & Irr	6.4	1.8	3.9	5.1	8.1	6.6	0.9

EVALUATIONS OF GENOTYPE SUSCEPTIBILITY TO WHITE MOLD
(MULTI-STATE DISEASE EVALUATION TEST, 2016)

- 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 (3 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 for leaf spot on 15 Jun, 13 Jul and 28 Jul.
- D. ADDITIONAL INFORMATION:
1. Location: Blackshank Farm, Banana Field, Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Disc Harrow on 15 March. Tri-est injected 100% Chloropicrin at (300 lb/A) and covered with plastic tarp on 14 Apr. Pulled plastic 22 Apr. Moldboard plowed and marked rows on 25 Apr. Subsoil shank ran under each row on 25 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun.
 4. Soil Fertility: pH – 6.4 P – 70 K – 21 Ca – 308 Mg – 42
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) on 25 Apr.
 6. Insecticides: Acephate 97 (0.7 lb/A) for thrips on 8 Jun, 28 Jul, and 17 Aug.
 7. Planting Info: Multiple Varieties, 6 seed/ft (2” deep) on 19 May

8. Harvest Dates: Dug –13 Oct Picked – 18 Oct

E: SUMMARY:

MULTI-STATE DISEASE EVALUATION, 2016							
BLACKSHANK FARM, BANANA FIELD							
	TSWV ¹	LEAF SPOT ²		WHITE MOLD ³		Percent ⁴	YIELD
CULTIVAR	31-Aug	21-Sep	11-Oct	NO ZEROES	ALL	Zeroes	(LB/A)
GA01	27.5	2.7	5.8	93.1	93.1	0.0	2026
GA02	16.7	3.4	5.3	70.0	70.0	0.0	3284
GA03	15.8	2.4	4.4	58.0	55.4	4.2	3957
GA04	16.7	2.9	5.9	46.8	45.4	4.2	4283
GA05	19.1	3.3	5.8	41.7	41.7	0.0	4441
GA06	18.3	2.7	5.8	51.6	46.3	8.3	4557
GA07	15.0	3.9	7.4	59.0	59.0	0.0	3678
GA08	19.1	2.7	5.1	52.1	52.1	0.0	3107
GA09	35.8	2.8	5.1	63.5	63.5	0.0	3163
GA10	12.5	2.1	4.5	39.5	38.1	4.2	4540
GA11	25.8	2.3	4.7	39.4	39.4	0.0	4213
TD1	21.6	2.9	5.0	23.0	20.6	12.5	4646
TD2	20.0	2.9	5.9	28.1	24.0	12.5	4784
TD3	17.5	2.1	5.0	36.6	30.2	16.7	4712
TD4	24.1	2.2	4.0	25.6	24.0	8.3	3993
TD5	30.0	2.6	5.0	33.0	28.6	12.5	4758
TD6	22.5	2.8	5.4	14.5	11.7	20.8	4395
KM1	15.0	2.6	4.9	25.8	23.8	8.3	4189
KM2	4.2	2.1	3.5	10.1	5.8	45.8	4927
KM3	11.7	3.8	6.5	51.1	49.2	4.2	4421
FL1	35.8	2.6	5.0	44.4	44.4	0.0	4175
FL2	8.3	2.9	6.1	26.4	24.7	8.3	4876
FL3	15.8	2.9	5.6	49.7	49.7	0.0	3511
FL4	35.8	4.0	7.4	61.7	61.7	0.0	2599
FL5	27.5	2.8	6.2	48.5	48.5	0.0	3550
FL6	20.8	2.6	5.5	72.5	68.1	4.2	3732
FL7	22.5	3.1	5.5	53.8	53.8	0.0	3405
FL8	27.5	2.6	6.9	27.7	25.1	8.3	5389
FL9	16.7	2.9	6.1	37.3	37.3	0.0	4855
AG1	17.5	2.8	4.8	53.6	44.6	16.7	4516
AG2	30.0	2.9	6.3	42.7	41.3	4.2	4489
AG3	27.5	3.7	8.1	120.4	120.4	0.0	1348
GA-14N	16.7	2.8	5.3	22.7	21.5	8.3	4247
GA-13M	15.0	4.6	9.0	57.5	57.5	0.0	3497
GA-12Y	4.2	2.6	6.5	30.8	32.5	8.3	4833
TUFRUNNER 511	24.1	5.1	9.5	56.7	54.2	8.3	3766
TIFNV HIGH O/L	10.0	2.4	4.6	27.8	26.5	8.3	5348
GA-06G	19.1	2.9	7.8	54.0	54.0	0.0	3465
FLORUN 157	45.8	3.8	6.6	54.6	54.6	0.0	2439
TUFRUNNER 297	19.1	3.4	7.8	49.6	44.6	8.3	4271
FLORUN 107	29.1	3.0	6.8	52.9	52.9	0.0	2926
LSD (P<0.05)	10.4	0.7	1.1	21.8	21.4	11.7	916

TSWV¹=Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

Leaf Spot²=Florida 1-10 scale where 1=no disease and 10=dead plant.

White Mold³=Average length of the white mold "hit" (cm) calculated with and without "0's".

⁴Percent of plants inoculated with *S. rolf sii* that had no disease.

DAILY RAINFALL AND IRRIGATION, 2016							
BLACKSHANK FARM, BANANA FIELD							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	2.8			0.0	0.4	0.6	
2	0.5	0.2			0.5	4.7	
3		0.2					
4				0.1	1.0		
6	0.1		2.4				
7	0.1						
8					1.9		
9					0.2		
12	0.2				0.3		
13					0.7	0.7	
14	1.2				0.2		
15	0.2						
16			0.2				
17		0.9	0.6	1.3			
18							
19		0.2				0.1	
21					0.3		
23					0.5		
24				0.1			
29			0.6		0.2		
30	1.3		0.1	1.9	0.1		
Total	6.4	1.5	3.9	3.4	6.3	6.1	0.0
IRRIGATION							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
3					0.5		0.6
4					0.5		
7				0.5			
11				0.6			0.5
13			0.4				
14				0.4			
18					0.6		
22						0.5	
25				0.5			
26		0.5					
29				0.6	0.7		
Total	0.0	0.5	0.4	2.6	2.3	0.5	1.1
Rain & Irr	6.4	2.0	4.3	6.0	9.6	6.6	1.1

Bayer Provost-Propulse Test III, 2016

- A. **PURPOSE:** To evaluate the comparative efficacy of Bayer products on foliar and soilborne peanut diseases with no nematode pressure.
- 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 broadcast in 20 GPA with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a boom with three TP-SS6 conejet nozzles per row at 40 PSI. 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. In furrow sprays were applied in 3.4 GPA (singles) with a single TP 80015E flat fan nozzle at 22 psi per row.
 2. No cover sprays were applied to this test. Treatments were made on 9 Jun, 22 Jun, 6 Jul, 19 Jul, 2 Aug, 16 Aug and 31 Aug. The chemigation treatments were applied 19 Jul, and the in-furrow sprays were applied at planting on 6 May.
- D. **ADDITIONAL INFORMATION:**
1. Location: Lang Farm, South Field Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Moldboard plowed and marked rows on 20 Apr.
Gypsum broadcast (1200 lb/A) on 27 Jun.
Cultivated 1 Jun.
 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 21 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 21 Jul, Select Max (16 fl oz/A) + 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, 27 Jul,
and 17 Aug.

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

8. Harvest Dates: Dug – 27 Sep Picked – 3 Oct

E: SUMMARY:

BAYER PROVOST PROPULSE TEST III, 2016								
LANG FARM, SOUTH FIELD								
TREATMENTS	App's	RATE	Plants/ft ¹		% Dead Plants ²			
			20-May	27-May	20-May	27-May	3-Jun	10-Jun
1. Bravo 720	1 - 7	1.5 pt	3.3	3.7	0.0	0.0	0.2	0.2
2. Brovo	1, 2 & 7	1.5 pt	3.3	3.6	0.0	0.1	0.2	0.6
Provost	3 - 6	10.7 fl oz						
3. Bravo	1, 2 & 7	1.5 pt	2.9	3.6	0.0	0.0	0.2	0.6
Provost	3 & 5	10.7 fl oz						
Abound	4 & 6	18.0 fl oz						
4. Velum Total	In Furrow*	18.0 fl oz	3.0	3.7	0.0	0.0	0.0	0.0
Bravo	1, 2 & 7	1.5 pt						
Provost	3 & 5	10.7 fl oz						
Abound	4 & 6	18.0 fl oz						
5. Proline	In Furrow*	5.7 fl oz	3.0	3.5	0.0	0.0	0.0	0.0
Bravo	1, 2 & 7	1.5 pt						
Provost	3 & 5	10.7 fl oz						
Abound	4 & 6	18.0 fl oz						
6. Velum Total	In furrow*	18.0 fl oz	2.9	3.4	0.0	0.0	0.6	0.6
+ Proline	In furrow*	5.7 fl oz						
Bravo	1, 2 & 7	1.5 pt						
Provost	3 & 5	10.7 fl oz						
Abound	4 & 6	18.0 fl oz						
7. Velum Total	In Furrow*	18.0 fl oz	3.0	3.4	0.0	0.0	0.0	0.2
Bravo	1, 2, & 7	1.5 pt						
Provost	3 & 5	10.7 fl oz						
Abound	4 & 6	18.0 fl oz						
Propulse	4, Chemigated 0.1"***	13.7 fl oz						
8. Absolute	1 & 2	3.5 oz	3.1	3.6	0.0	0.0	0.0	0.0
Provost	3 & 5	10.7 fl oz						
Abound	4 & 6	18.0 fl oz						
Bravo	7	1.5 pt						
9. Velum Total	In Furrow*	18.0 fl oz	3.0	3.6	0.0	0.0	0.0	0.0
Absolute	1 & 2	3.5 oz						
Provost	3 & 5	10.7 fl oz						
Abound	4 & 6	18.0 fl oiz						
Bravo	7	1.5 pt						
LSD (P<0.05)			0.3	n.s.	n.s.	0.1	0.5	n.s.
Plants/ft ¹ =Stand count is the number of emerged plants per foot of row on 20 May and 27 May.								
% Dead Plants ² =The % of emerged plants that was dead or dying per plot.								

BAYER PROVOST PROPULSE TEST III, 2016							
LANG FARM, SOUTH FIELD							
TREATMENTS	App's	RATE	Thrips ³ 3-Jun	Leaf Spot ⁴ 22-Sep	TSWV ⁵ 10-Aug	WM ⁶ 27-Sep	Yield lb/A
1. Bravo 720	1 - 7	1.5 pt	4.6	3.0	5.6	45.6	3011
2. Brovo	1, 2 & 7	1.5 pt	4.6	3.1	5.6	29.6	3239
Provost	3 - 6	10.7 fl oz					
3. Bravo	1, 2 & 7	1.5 pt	4.8	3.0	8.4	17.6	3759
Provost	3 & 5	10.7 fl oz					
Abound	4 & 6	18.0 fl oz					
4. Velum Total	In Furrow*	18.0 fl oz	2.8	2.8	9.2	19.6	3641
Bravo	1, 2 & 7	1.5 pt					
Provost	3 & 5	10.7 fl oz					
Abound	4 & 6	18.0 fl oz					
5. Proline	In Furrow*	5.7 fl oz	4.0	3.0	6.8	19.2	3631
Bravo	1, 2 & 7	1.5 pt					
Provost	3 & 5	10.7 fl oz					
Abound	4 & 6	18.0 fl oz					
6. Velum Total	In furrow*	18.0 fl oz	2.2	3.1	9.6	15.2	3837
+ Proline	In furrow*	5.7 fl oz					
Bravo	1, 2 & 7	1.5 pt					
Provost	3 & 5	10.7 fl oz					
Abound	4 & 6	18.0 fl oz					
7. Velum Total	In Furrow*	18.0 fl oz	2.6	3.0	8.0	13.2	4234
Bravo	1, 2, & 7	1.5 pt					
Provost	3 & 5	10.7 fl oz					
Abound	4 & 6	18.0 fl oz					
Propulse	4, Chemigated 0.1"***	13.7 fl oz					
8. Absolute	1 & 2	3.5 oz	4.2	3.1	4.0	28.4	3584
Provost	3 & 5	10.7 fl oz					
Abound	4 & 6	18.0 fl oz					
Bravo	7	1.5 pt					
9. Velum Total	In Furrow*	18.0 fl oz	2.8	3.1	3.6	20.8	3811
Absolute	1 & 2	3.5 oz					
Provost	3 & 5	10.7 fl oz					
Abound	4 & 6	18.0 fl oiz					
Bravo	7	1.5 pt					
LSD (P<0.05)			1.2	n.s.	n.s.	10.7	656
Thrips ³ =Based on a scale of 0-10 (0=no injured, 1=10% leaves injured, 3=30% injured, 4=50% leaves injured, 5=>50% leaves injured and <5% terminal buds injured, 6=>50% leaves injured and 25% terminal buds injured, 7=>50% leaves injured and 50% terminal buds injured, 8=>50% leaves injured and 75% terminal buds injured, 9=>50% leaves injured and 90% terminal buds injured, and 10=dead plant.							
Leaf Spot ⁴ =Florida 1-10 scale where 1=no disease and 10=dead plant.							
TSWV ⁵ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.							
WM ⁶ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.							

EVALUATION OF PEANUT FUNGICIDE PROGRAMS UNDER NONIRRIGATED CONDITIONS (SYNGENTA/DUPONT IRRIGATION TEST I, 2016)

- A. PURPOSE: To evaluate peanut fungicide programs for efficacy and yield under nonirrigated conditions.
- 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 CO₂ 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 with one 8003 nozzle in a volume of 20 GPA.
 2. Treatments were applied on 9 Jun, 22 Jun, 6 Jul, 19 Jul, 2 Aug, 16 Aug, and 31Aug, 1.5 spray was applied on 15 Jun and 4.5 spray on 27 Jul. No cover sprays were applied. The 21 DAP spray was applied on 26 May.
- D. ADDITIONAL INFORMATION:
1. Location: Lang Farm, South Field Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated on 1 Jun.
 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) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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 27 Jul.
7. Planting Info: Tifguard, 6 seed/ft (2" deep) 6 May.
8. Harvest Dates: Dug – 27 Sep Picked – 3 Oct

E: SUMMARY:

SYNGENTA DUPONT IRRIGATED TEST I, 2016 TABLE						
LANG FARM, SOUTH FIELD						
			TSWV ¹	Leaf Spot ²	WM ³	Yield
TREATMENTS	App's	RATE	18-Aug	22-Sep	27-Sep	lb/A
1. Nontreated			5.5	4.0	56.0	2391
2. Bravo W'stik	1, 2, 6, 7	1.5 pt	7.5	2.8	29.0	3675
Fontelis	3 - 5	16.0 fl oz				
3. Bravo W'stik	1, 6, 7	1.5 pt	5.5	2.7	35.5	3161
Provost	2 - 5	8.0 fl oz				
4. Priaxor	1.5	6.0 fl oz	4.5	2.8	19.0	3775
Bravo W'stik	5 & 6	1.5 pt				
+ Orius 3.6F		7.2 fl oz				
Priaxor	4	8.0 fl oz				
Bravo W'stik	3 & 7	1.5 pt				
5. Elatus 45WG	1, 3 & 5	7.3 oz	7.0	2.8	12.0	3727
Bravo W'stik	2, 4, 6, & 7	1.5 pt				
6. Alto	1 & 6	5.5 fl oz	5.0	2.9	13.5	3981
+ Bravo		1.0 pt				
Bravo	2, 4, & 7	1.5 pt				
Elatus 45WG	3 & 5	9.5 oz				
7. Alto	1 & 6	5.5 fl oz	3.5	2.7	12.5	3875
+ Bravo		1.0 pt				
Bravo	2 & 7	1.5 pt				
Elatus 45WG	3 & 4.5	9.5 oz				
8. Elatus 45WG	21 DAP B'cast & 3	9.5 oz	5.0	2.7	10.5	3431
Alto	1.5	5.5 fl oz				
+ Bravo		1.5 pt				
Bravo W'stik	4 - 7	1.5 pt				
9. Alto	1 & 7	5.5 fl oz	6.5	2.8	8.5	4298
+ Bravo		1.0 pt				
Elatus 45WG	3 & 5	9.5 oz				
+ A19649		3.42 fl oz				
10. Alto	1.5	5.5 fl oz	5.0	3.0	10.5	3902
+ Bravo		1.5 pt				
Elatus 45WG	3 & 4.5	9.5 oz				
+ A19649		3.42 fl oz				
Bravo W'stik	6 & 7	1.5 pt				
Continued on next page						

SYNGENTA DUPONT IRRIGATED TEST I, 2016 TABLE						
LANG FARM, SOUTH FIELD						
			TSWV ¹	Leaf Spot ²	WM ³	Yield
TREATMENTS	App's	RATE	18-Aug	22-Sep	27-Sep	lb/A
11. Elatus 45WG	1 & 5	7.3 oz	6.5	2.5	9.0	3974
A19649		3.42 fl oz				
Bravo W'stik	2, 4, 6 & 7	1.5 pt				
Elatus 45WG	3	7.3 oz				
12. Alto	1	5.5 fl oz	5.5	2.8	5.5	3598
+ Bravo		1.5 pt				
Bravo	2 & 7	1.5 pt				
Elatus 45WG	3 & 5	9.5 oz				
+ A19649		3.42 fl oz				
13. Aproach 2.08	1 & 2	5.5 fl oz	4.5	2.6	13.5	3581
+ Alto		5.5 fl oz				
+ Induce		0.25%				
Fontelis	3 - 5	16.0 fl oz				
Bravo W'stik	6 & 7	1.5 pt				
14. Aproach Prima	1 & 2	6.8 fl oz	4.5	2.7	17.5	3479
+ Induce		0.25%				
Fontelis	3 - 5	16.0 fl oz				
Bravo W'stik	6 & 7	1.5 pt				
15. Priaxor	1 & 2	4.0 fl oz	2.0	2.7	14.5	3865
+ Induce		0.25%				
Elatus 45WG	3 - 5	7.3 oz				
Bravo W'stik	6 & 7	1.5 pt				
16. Priaxor	1 & 2	4.0 fl oz	4.0	2.8	7.5	4234
+ Induce		0.25%				
Elatus 45WG	3 & 5	9.5 oz				
Bravo	4	1.0 pt				
+ Alto		1.5 fl oz				
Bravo W'stik	6 & 7	1.5 pt				
			5.4	0.2	12.4	638
TSWV ¹ =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.						
Leaf ² Spot=Florida scale of 1-10 where 1=no disease and 10=dead plant.						
WM ³ =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.						

NEW CULTIVAR HIGH-LOW INPUT TEST, 2016

- A. **PURPOSE:** To evaluate the comparative disease susceptibility and yield of new cultivars to two levels of fungicide input.
- 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: Multiple Varieties
- C. **APPLICATION OF TREATMENTS:**
1. Equipment: Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI.
 2. Cover sprays for leaf spot control of Chlorothalonil 720 (1.5 pt/A) were applied on 9 Jun, 22 Jun, 6 Jul, 20 Jul, 2 Aug, 16 Aug, and 31 Aug. Treatment # 2 spray of Provost (10.7 fl oz/A) was applied on 6 Jul, 20 Jul, 2 Aug, 16 Aug and 31 Aug. Also Convoy (32 fl oz/A) was applied on 2 Aug, and 16 Aug.
- D. **ADDITIONAL INFORMATION:**
1. Location: Lang Farm, South Field Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated 1 Jun.
 4. Soil Fertility: pH – 5.8 P – 21 K – 89 Ca – 779 Mg – 98
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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 27 Jul.
7. Planting Info: Multiple Varieties, 6 seed/ft (2" deep) 6 May.
8. Harvest Dates: Dug – 27 Sep Picked – 3 Oct

E: SUMMARY:

NEW CULTIVAR HIGH-LOW INPUT TEST, 2016						
LANG FARM, SOUTH FIELD						
				TSWV ¹	WM ²	Yield
Cultivar	Treatments	App's	Rate/A	10-Aug	27-Sep	lb/A
1. GA-06G	1. Bravo W'stik	1 - 7		5.0	53.5	2378
	2. Bravo W'stik	1 - 7				
	Provost 3.6SC	3 - 6	8.0 fl oz	6.5	18.0	3659
LSD(P<0.05)				n.s.	4.0	1258
2. GA-12Y	1. Bravo W'stik	1 - 7		2.0	21.5	3328
	2. Bravo W'stik	1 - 7				
	Provost 3.6SC	3 - 6	8.0 fl oz	0.5	6.5	3745
LSD(P<0.05)				n.s.	13.9	n.s.
3. Tufunner 511	1. Bravo W'stik	1 - 7		8.0	34.5	3485
	2. Bravo W'stik	1 - 7				
	Provost 3.6SC	3 - 6	8.0 fl oz	9.0	12.5	4289
LSD(P<0.05)				n.s.	n.s.	497
4. GA-13M	1. Bravo W'stik	1 - 7		3.0	49.5	3203
	2. Bravo W'stik	1 - 7				
	Provost 3.6SC	3 - 6	8.0 fl oz	6.5	11.0	3630
LSD(P<0.05)				3.0	33.6	n.s.
5. Tufunner 297	1. Bravo W'stik	1 - 7		4.0	46.0	3219
	2. Bravo W'stik	1 - 7				
	Provost 3.6SC	3 - 6	8.0 fl oz	3.5	22.5	3842
LSD(P<0.05)				n.s.	n.s.	n.s.
6. GA-14N	1. Bravo W'stik	1 - 7		11.5	29.5	3456
	2. Bravo W'stik	1 - 7				
	Provost 3.6SC	3 - 6	8.0 fl oz	10.0	12.0	3765
LSD(P<0.05)				n.s.	n.s.	115
7. TifNV-High O/L	1. Bravo W'stik	1 - 7		2.5	31.5	3616
	2. Bravo W'stik	1 - 7				
	Provost 3.6SC	3 - 6	8.0 fl oz	0.5	10.5	4147
LSD(P<0.05)				n.s.	n.s.	n.s.
8. Florun 157	1. Bravo W'stik	1 - 7		9.5	36.5	2689
	2. Bravo W'stik	1 - 7				
	Provost 3.6SC	3 - 6	8.0 fl oz	11.0	19.0	2887
LSD(P<0.05)				n.s.	9.5	n.s.
TSWV ¹ =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.						
WM ² =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.						

EVALUATION OF TWO CULTIVARS AND FUNGICIDES FOR THE CONTROL OF PEANUT DISEASES (SYNGENTA SEED TREATMENT TEST, 2016)

A. PURPOSE: To evaluate the comparative efficacy of different levels of input for white mold and leaf spot on GA-06G and Tifguard peanuts.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. The banded spray was applied in a narrow band (about 6 inches) directly over the row with a single 8003 nozzle in a spray volume of 20 GPA.
2. Cover sprays for leaf spot control of Chlorothalonil 720 (1.5 pt/A) were applied on 9 Jun, 22 Jun, 6 Jul, 19 Jul, 2 Aug, 16 Aug, and 31 Aug. Cover sprays for white mold control of Provost (10.7 fl oz/A) were applied on 6 Jul, 20 Jul, 2 Aug, 16 Aug, and 31 Aug. Convoy (32 fl oz/A) was applied on 2 Aug and 16 Aug. All inoculated plots were inoculated with R. Solani at 4" band at row just before plant on 10 May.

D. ADDITIONAL INFORMATION:

1. Location: Lang Farm, South Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated 1 Jun.
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 21 Apr.

POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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 27 Jul.
- 7. Planting Info: Tifguard 6 seed/ft (3.5" deep) 10 May.
- 8. Harvest Dates: Dug – 27 Sep Picked – 4 Oct

E: SUMMARY:

SYNGENTA SEED TRT TEST I, 2016												
LANG FARM, SOUTH FIELD												
Seed Trt	IF	Rate	Plant/ft ¹		% Dead Plants ²				Plant wt ³	Thrips ⁴	TSWV ⁵	Yield lb/A
			24-May	31-May	24-May	31-May	7-Jun	14-Jun				
1. As trt	None		1.3	1.3	0.0	3.9	1.4	2.6	5.8	4.3	6.8	2993
2. As trt	None		3.4	3.3	0.0	0.0	0.4	0.3	6.0	3.3	8.3	4332
3. As trt	None		3.3	3.1	0.0	0.0	0.1	0.1	6.5	3.4	10.8	4539
4. As trt	None		3.4	3.4	0.0	0.1	0.1	0.6	5.8	3.0	6.5	4175
5. As trt	Abound	8.7 fl oz	3.4	3.3	0.0	0.0	0.1	0.1	5.7	3.0	8.8	4260
6. As trt	A21617	18.0 fl oz	2.9	2.7	0.0	0.4	0.5	0.5	6.0	2.4	12.5	4237
7. As trt	A21617	18.0 fl oz	3.2	3.2	0.0	0.0	0.3	0.0	6.6	2.1	10.3	4732
8. As trt	A21617	18.0 fl oz	3.4	3.3	0.0	0.0	0.1	0.3	6.4	1.8	10.8	4474
D(P<0.05)			0.4	0.3	n.s.	0.8	0.6	0.7	n.s.	0.5	4.0	388
¹ Stand count is the number of emerged plants per foot of row on 24 May and 31 May. ² The % of emerged plants that was dead or dying per plot. Plant wt ³ = the weight in grams of 5 plants without roots. Thrips ⁴ =Based on a scale of 0-10 (0=no injured, 1=10% leaves injured, 3=30% injured, 4=50% leaves injured, 5=>50% leaves injured and <5% terminal buds injured, 6=>50% leaves injured and 25% terminal buds injured, 7=>50% leaves injured and 50% terminal buds injured, 8=>50% leaves injured and 75% terminal buds injured, 9=>50% leaves injured and 90% terminal buds injured, and 10=dead plant. TSWV ⁵ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.												
NOTE:Data are means of plots inoculated at planting with Rhizoctonia and these are inoculated (no significant differences or interactions).												

EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT SEEDLING DISEASES (ARYSTA IN FURROW SEED TRT TEST, 2016)

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 77% germination.

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. In-furrow sprays were applied in a volume of 3.4 GPA.
2. Cover sprays for leaf spot control of Chlorothalonil 720 (1.5 pt/A) were applied on 9 Jun, 22 Jun, 6 Jul, 20 Jul, 2 Aug, 16 Aug, and 31 Aug. Cover sprays for white mold control of Provost (10.7 fl oz/A) were applied on 6 Jul and 20 Jul, 2 Aug, 16 Aug, and 31 Aug. Convoy (32 fl oz/A) on 2 Aug and 16 Aug.

D. ADDITIONAL INFORMATION:

1. Location: Lang Farm, South Field Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated 1 Jun.
4. Soil Fertility: pH – 5.8 P – 21 K – 89 Ca – 779 Mg – 98
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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 17 Jul.
7. Planting Info: Tifguard, 6 pre-treated seed/ft (3.5" deep) 10 May.
8. Harvest Dates: Dug – 27 Sep Picked – 4 Oct

E: SUMMARY:

ARYSTA IN FURROW SEED TRT TEST, 2016									
LANG FARM, SOUTH FIELD									
Seed Trt*	In Furrow	Rate	Plant/ft ¹		% Dead Plants ²				TSWV ³
			24-May	31-May	24-May	31-May	7-Jun	14-Jun	
1. Nontrt	None	0	1.1	1.1	0.0	6.2	6.2	7.4	8.0
2. Nontrt	Abound	6 oz	1.4	1.3	0.0	5.6	6.4	6.7	10.0
3. Nontrt	Abound	3 oz	1.2	1.3	0.0	4.9	4.9	6.1	11.5
4. Nontrt	Evito	2 oz	1.3	1.3	0.0	4.0	4.4	5.3	15.5
5. Nontrt	Evito	1 oz	1.1	1.1	0.0	9.3	9.3	10.2	12.0
6. Rancona V PD	None	0	3.4	3.4	0.0	0.0	0.2	0.5	7.5
7. Rancona V PD	Abound	6 oz	3.4	3.4	0.0	0.0	0.1	0.1	5.0
8. Rancona V PD	Abound	3 oz	3.4	3.5	0.0	0.0	0.0	0.0	6.5
9. Rancona V PD	Evito	2 oz	3.5	3.5	0.0	0.1	0.1	0.1	6.0
10. Rancona V PD	Evito	1oz	3.2	3.4	0.0	0.5	0.5	0.5	10.0
LSD(P<0.5)			0.3	0.3	n.s.	3.0	2.7	2.6	4.8
¹ Stand count is the number of emerged plants per foot of row on 24 May and 31 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" linear row) per plot.									
*Seed Trt applied at 4 oz/100 lb.									

ARYSTA IN FURROW SEED TRT TEST, 2016					
LANG FARM, SOUTH FIELD					
			Tap Root Count ⁴	Yield	
Seed Trt*	In Furrow	Rate	27-Sep	lb/A	
1. Nontrt	None	0	0.9	2599	
2. Nontrt	Abound	6 oz	1.0	3023	
3. Nontrt	Abound	3 oz	1.0	2781	
4. Nontrt	Evito	2 oz	1.0	2913	
5. Nontrt	Evito	1 oz	1.3	2315	
6. Rancona V PD	None	0	1.8	4205	
7. Rancona V PD	Abound	6 oz	1.9	3793	
8. Rancona V PD	Abound	3 oz	2.0	4298	
9. Rancona V PD	Evito	2 oz	1.6	4138	
10. Rancona V PD	Evito	1oz	1.7	3938	
LSD(P<0.05)			0.6	660	
Tap Root Count ⁴ =The number of tap roots per foot after digging.					

EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT SEEDLING DISEASES (ARYSTA SEED TRT TEST, 2016)

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 77% germination

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. In-furrow sprays were applied in a volum of 3.4 GPA.
2. Cover sprays for leaf spot control of Chlorothalonil 720 (1.5 pt/A) were applied on 9 Jun, 22 Jun, 6 Jul, 20 Jul, 2 Aug, 16 Aug, and 31 Aug. Cover sprays for white mold control of Provost (10.7 fl oz/A) were applied on 6 Jul and 20 Jul, 2 Aug, 16 Aug and 31 Aug. Convoy (32 fl oz/A) on 2 Aug and 16 Aug.

D. ADDITIONAL INFORMATION:

1. Location: Lang Farm, South Field Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated 1 Jun.
4. Soil Fertility: pH – 5.8 P – 21 K – 89 Ca – 779 Mg – 98
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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 27 Jul.
7. Planting Info: Tifguard plant, 6 seed/ft (3.5" deep) 10 May.
8. Harvest Dates: Dug – 27 Sep Picked – 4 Oct

E: SUMMARY:

ARYSTA SEED TRT TEST, 2016										
LANG FARM, SOUTH FIELD										
Seed/Inoc*	Rate	Plant/ft ¹		% Dead Plants ²				TSWV ³	Tap Root Count ⁴	Yield lb/A
		24-May	31-May	24-May	31-May	7-Jun	14-Jun			
1. Nontrt/None		0.5	0.6	0.0	10.3	10.9	3.3	6.0	0.5	1774
2. Nontrt		0.7	0.6	0.0	6.1	8.1	3.0	5.5	0.4	1455
3. Rancona V PD	4.0 oz	3.5	3.5	0.0	0.4	0.6	1.3	3.5	1.5	3264
4. Dynasty PD	4.0 oz	3.2	3.5	0.0	0.0	0.1	1.3	3.5	1.4	3314
5. Rancona V PD	4.0 oz	3.6	3.3	0.0	0.2	0.2	1.5	4.5	1.6	3499
+ ALS 1603	8.3 g									
LSD(P<0.05)		0.4	0.2	n.s.	6.1	5.1	1.3	n.s.	0.5	608
¹ Stand count is the number of emerged plants per foot of row on 24 May and 31 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" linear row) per plot. Tap Root Count ⁴ =The number of tap roots per foot after digging.										
* All the treatments (except treatment 1) were inoculated with <i>Rhizoctonia solani</i> . Isolate RS20133 was grown on PDA, blended in water, and sprayed in a band over the row immediately ahead of planting.										

DAILY RAINFALL AND IRRIGATION, 2016							
LANG FARM, SOUTH FIELD							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1		0.6					
2					0.2	4.9	
3		0.2			1.1	0.4	
4	0.2	0.3			0.8		
6			0.8				
7			1.9				
8					0.8		
9					0.2		
14					0.6	0.4	
15	1.2						
16			0.3				
17				2.3			
18		1.5					
19							
20		0.1	0.4				
21					0.5		
24				0.1			
29			0.3				
30			0.1				
31					0.2		
TOTAL	1.4	2.9	3.8	2.4	4.4	5.7	0.0
IRRIGATION							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1					0.5		
2			0.7				
12		0.4					
13		0.4					
14				0.7			
16		0.6					
23		0.7					
24			0.7				
25				0.6			
30			0.7		0.5		
TOTAL	0.0	2.1	2.1	1.3	1.0	0.0	0.0
RAIN & IRR	1.4	5	5.9	4.7	5.4	5.7	0.0

EVALUATION OF PEANUT FUNGICIDE PROGRAMS UNDER NONIRRIGATED
CONDITIONS (FMC-Adjuvant Plus-Helm TEST, 2016)

- A. PURPOSE: To evaluate peanut fungicide programs for efficacy and yield under nonirrigated conditions.
- 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 CO₂ 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 were applied on 13 Jun, 27 Jun, 11 Jul, 25 Jul, 8 Aug, 22Aug, and 5 Sep. No cover sprays were applied.
- D. ADDITIONAL INFORMATION:
1. Location: Rigdon Farm, New Field Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Moldboard plowed and marked rows on 20 Apr.
Gypsum broadcast (1200 lb/A) on 27 Jun.
Cultivated on 2 Jun.
 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) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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 27 Jul.

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

8. Harvest Dates: Dug – 27 Sep Picked – 4 Oct

E: SUMMARY:

FMC - ADJUVANT PLUS - HELM TEST, 2016								
RIGDON FARM, NEW FIELD								
			TSWV ¹	Leaf Spot ²	WM ³	Yield		
Treatments	App's	RATE/A	19-Jun	21-Sep	9-Jan	lbA		
1. Nontreated			7.5	3.2	62.0	2849		
2. Bravo W'stik	1, 2, 4, 6, 7	1.5 pt	7.0	2.4	61.5	3107		
Topguard EQ	3 & 5	6.0 fl oz						
3. Bravo W'stik	1, 2, 4, 6, 7	1.5 pt	6.0	2.5	59.0	3074		
Topguard EQ	3 & 5	7.0 fl oz						
4. Bravo W'stik	1, 2, 4, 6, 7	1.5 pt	7.5	2.4	64.0	2927		
Topguard EQ	3 & 5	8.0 fl oz						
5. Bravo W'stik	1, 2, 4, 6, 7	1.5 pt	7.0	2.2	52.0	3199		
Alto	3 & 5	5.5 oz						
+ Abound		18 fl oz						
6. Bravo	1, 2, 7	1.5 pt	6.5	2.4	43.0	3794		
Helmstar Plus	3 - 6	13.0 fl oz						
7. Bravo	1, 2, 7	1.5 pt	8.0	2.1	39.5	3891		
Custodia	3 - 6	15.5 fl oz						
8. Bravo	1, 2, 7	1.5 pt	3.5	2.4	46.0	3266		
Provost	3 - 6	8.0 fl oz						
9. Bravo	1, 2, 7	1.5 pt	4.0	2.9	34.0	4026		
Artisan	3 - 6	26.0 fl oz						
10. Bravo	1 - 7	1.5 pt	4.5	2.6	52.0	3340		
11. Bravo	1 - 7	1.5 pt	5.0	2.3	48.5	3180		
+ 88-710		125 g						
12. Bravo	1 - 7	1.5 pt	4.5	2.6	51.5	2577		
+ ACM941		125 g						
13. ACM941	1 - 7	125 g	6.5	3.5	55.5	3026		
14. 88-710	1 - 7	125 g	3.5	3.2	69.0	2725		
LSD(P<0.05)			n.s.	0.4	14.1	686		
TSWV ¹ =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.								
Leaf ² Spot=Florida scale of 1-10 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.								

EVALUATION OF FUNGICIDE PROGRAMS FOR THE CONTROL OF PEANUT SOILBORNE DISEASES (NICHINO TEST, 2016)

- 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 CO₂ 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 27 Jun, 11 Jul, 25 Jul, 8 Aug, 22 Aug and 5 Sep.
- D. ADDITIONAL INFORMATION:
1. Location: Lang Farm, New Field Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun.
 4. Soil Fertility: pH – 5.8 P – 21 K – 89 Ca – 779 Mg – 98
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 20 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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 27 Jul.
 7. Planting Info: Tifguard, 6 seed/ft (2" deep) 9 May

8. Harvest Dates: Dug – 27 Sep Picked – 4 Oct

E: SUMMARY:

NICHINO TEST, 2016						
RIGDON FARM, NEW FIELD						
			TSWV ¹	Leaf Spot ²	WM ³	Yield
Treatments	App's	RATE/A	19-Jun	21-Sep	27-Sep	lb/A
1. Priaxor	2	8.0 fl oz	5.0	2.6	34.0	4034
Alto 100	3 & 5	8.0 fl oz				
+ Bravo		16.0 fl oz				
Bravo	4, 6, & 7	24.0 fl oz				
2. Priaxor	2	8.0 fl oz	4.0	2.4	15.0	4278
Alto 100	3 & 5	8.0 fl oz				
+ Bravo		16.0 fl oz				
+ Convoy		32.0 fl oz				
Bravo	4, 6, & 7	24.0 fl oz				
3. Priaxor	2	8.0 fl oz	5.5	2.7	5.0	4263
NNF-1680 SC	3 & 5	40.5 fl oz				
Bravo	7	24.0 fl oz				
4. Priaxor	2	8.0 fl oz	3.5	2.4	6.5	3836
NNF-1680 Sc	3 & 5	40.5 fl oz				
Bravo	4, 6, & 7	24.0 fl oz				
5. Priaxor	2	8.0 fl oz	6.5	2.6	12.5	4205
Alto 100	3 & 5	8.0 fl oz				
+ Bravo		16.0 fl oz				
+ Convoy		16.0 fl oz				
Bravo	4 & 6	24.0 fl oz				
+ Convoy		16.0 fl oz				
Bravo	7	24.0 fl oz				
6. Priaxor	2	8.0 fl oz	3.5	2.7	17.0	3711
Convoy	3 & 5	32.0 fl oz				
+ Bravo		24.0 fl oz				
Bravo	4, 6, & 7	24.0 fl oz				
7. Priaxor	2	8.0 fl oz	5.0	2.7	9.0	4497
Elatus	3 & 5	9.5 oz				
Bravo	4, 7 & 7	24.0 fl oz				
LSD (P<0.05)			n.s.	n.s.	13.5	n.s.
TSWV ¹ =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.						
Leaf ² Spot=Florida scale of 1-10 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.						

EVALUATION OF A CANOPY OPENER TO IMPROVE FUNGICIDE PENETRATION OF
THE CANOPY AND CONTROL OF WHITE MOLD
(CANOPY OPENER (DIRECTED SPRAY) TEST II, 2016)

- 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 CO₂ 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 (24 oz/A) were applied on 17 Jun, 1 Jul, 15 Jul, 29 Jul, 12 Aug, 26 Aug, and 9 Sep. Applied spray treatments using a push-type CO₂ 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 26 Jul and 24 Aug.
- D. ADDITIONAL INFORMATION:
1. Location: Rigdon Farm, New Field Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Moldboard plowed and marked rows on 20 Apr.
Gypsum broadcast (1200 lb/A) on 27 Jun.
Cultivated 1 Jun.
 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 21 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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 2 May.
7. Planting Info: Tifguard , planted 6 seed/ft (2" deep) on 9 May.
8. Harvest Dates: Dug – 28 Sep Picked – 4 Oct

E: SUMMARY:

CANOPY OPENER (DIRECTED SPRAY) TEST II, 2016								
RIGDON FARM, NEW FIELD								
					WM ¹	Yield		
Treatments	App's	RATE/A	Nozzle	Boom	28-Sep	lb/A		
1. Convoy	3 & 5	24 fl oz	TX-SS6	B'cast	13.3	4242		
2. Priaxor	3 & 5	8.0 fl oz	TX-SS6	B'cast	27.3	4459		
3. Convoy	3 & 5	24 fl oz	TX-SS6	Directed	13.0	4270		
4. Priaxor	3 & 5	8.0 fl oz	TX-SS6	Directed	16.3	4420		
5. Convoy	3 & 5	24 fl oz	AI11006-VS	B'cast	16.7	4666		
6. Priaxor	3 & 5	8.0 fl oz	AI11006-VS	B'cast	33.7	4255		
7. Convoy	3 & 5	24 fl oz	AI11006-VS	Directed	13.3	4317		
8. Priaxor	3 & 5	8.0 fl oz	AI11006-VS	Directed	12.7	4758		
9. Nontreated					61.7	2978		
LSD(P<0.05)					11.4	663		
WM ¹ =Percent of row feet infected based on stem rot loci (up to 12" linear row) per plot.								

EVALUATION OF NEMATODE MANAGEMENT TEST, 2016

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO₂ pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three TX-SS6 conejet nozzles per row at 40 PSI. All in furrow applications applied in 3.4 GPA singles. Nimitz was applied in a 12" band just ahead of planting in 40 GPA with a single 80-10 nozzle per row.
2. Cover sprays of Bravo (24 oz/A) were applied on 17 Jun, 1 Jul and 9 Sep. Convoy (16 oz/A) on 15 Jul and 26 Jul. Provost (8 fl oz/A) on 12 Aug. Convoy (24 oz/A) on 9 Aug. The in furrow sprays were applied at planting on 5 May.

D. ADDITIONAL INFORMATION:

1. Location: Rigdon Farm, Cotton Field Tifton, GA 31794
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
3. Land Preparation: Moldboard plowed and marked rows on 20 Apr. Gypsum broadcast (1200 lb/A) on 27 Jun. Cultivated 1 Jun.
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 1 May.
POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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.
7. Planting Info: TifN/V-High O/L, GA-06G, and GA-14N, 6 seed/ft (2" deep) on 5 May.
8. Harvest Dates: Dug – 26 Sep Picked – 30 Sep

E: SUMMARY:

NEMATODE MANAGEMENT TEST, 2016								
LANG FARM, COTTON FIELD								
			Plants/ft ¹		% Dead Plants ²			
Cultivar and Treatments	App's	Rate/A	19-May	26-May	19-May	26-May	2-Jun	9-Jun
GA-06G								
1. Nontreated			3.0	3.3	0.0	0.0	0.1	0.4
2. Velum Total	In Furrow	14.0 oz	3.2	3.5	0.0	0.0	0.0	0.0
3. Velum Total	In Furrow	18.0 oz	3.1	3.4	0.0	0.0	0.0	0.0
4. Nimitz 480	In Furrow	12.5 oz	2.6	3.0	0.0	0.0	0.7	1.1
5. Nimitz 480	Banding @pre-plant	12.5 oz	3.1	3.5	0.0	0.0	0.0	0.0
TIFN/V-High O/L								
6. Velum Total	In Furrow	18.0 oz	3.4	3.9	0.0	0.0	0.0	0.1
7. Nontreated			3.3	3.9	0.0	0.0	0.0	0.0
GA-14N								
8. Velum Total	In Furrow	18.0. oz	2.9	3.4	0.0	0.0	0.0	0.0
9. Nontreated			3.1	3.5	0.0	0.0	0.4	0.4
LSD (P<0.05)			0.3	0.3	n.s.	n.s.	0.5	0.5
1=All in furrow applications applied in 3.4 GPA singles, mixed in 2 L volume.								
¹ Stand count is the number of emerged plants per foot of row on 19 May, and 26 May.								
² The % of emerged plants that was dead or dying per plot.								

NEMATODE MANAGEMENT TEST, 2016									
LANG FARM, COTTON FIELD									
			Thrips ³	TSWV ⁴	Galling ⁵	WM ⁶	YIELD	Rootknot ⁷	Ring ⁸
Cultivar and Treatments	App's	Rate/A	2-Jun	10-Aug	26-Sep	26-Sep	lb/A	12-Sep	12-Sep
GA-06G									
1. Nontreated			4.3	4.9	61.4	53.4	1685	213	86
2. Velum Total	In Furrow	14.0 oz	1.4	8.6	30.7	55.4	2042	199	81
3. Velum Total	In Furrow	18.0 oz	1.3	4.9	32.9	49.7	1927	180	101
4. Nimitz 480	In Furrow	12.5 oz	3.7	3.7	38.6	40.6	2379	174	157
5. Nimitz 480	Banding @ pre-plant	12.5 oz	4.1	3.7	32.9	49.7	2260	167	37
TIFN/V-High O/L									
6. Velum Total	In Furrow	18.0 oz	1.1	2.9	0.7	44.9	4389	34	82
7. Nontreated			4.6	0.9	1.0	40.6	4188	20	46
GA-14N									
8. Velum Total	In Furrow	18.0. oz	1.3	7.4	0.0	22.0	4252	5	86
9. Nontreated			4.4	6.3	0.0	30.3	3749	4	71
LSD (P<0.05)			0.5	3.5	16.0	10.5	586	137	94
Thrips ³ =Based on a scale of 0-10 (0=no injured, 1=10% leaves injured, 3=30% injured, 4=50% leaves injured, 5=>50% leaves injured and <5% terminal buds injured, 6=>50% leaves injured and 25% terminal buds injured, 7=>50% leaves injured and 50% terminal buds injured, 8=>50% leaves injured and 75% terminal buds injured, 9=>50% leaves injured and 90% terminal buds injured, and 10=dead plant.									
TSWV ⁴ =Percent of row feet infected based on disease 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 root knot nematode.									
WM ⁶ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.									
Rootknot ⁷ =Number of <i>M.arenarie juveniles</i> per 100 cc of soi.									
Ring ⁸ =Populations of ring nematode per 100 cc of soil.									

EVALUATION OF FUNGICIDES FOR FOLIAR AND SOILBORN DISEASE CONTROL ON TIFGUARD (CERTIS TEST, 2016)

- 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 CO₂ 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. Belt-pack spray treatments were applied on 13 Jun, 27 Jun, 11 Jul, 25 Jul, 8 Aug, 22 Aug, and 5 Sep. No cover sprays were applied to this test.
- D. ADDITIONAL INFORMATION:
1. Location: Rigdon Farm, Cotton Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Moldboard plowed and marked rows on 20 Apr.
Gypsum broadcast (1200 lb/A) on 27 Jun.
Cultivated 2 Jun
 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 20 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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 27 Jul.

7. Planting Info: Tifguard, 6 seed/ft (2" deep) 9 May.
8. Harvest Dates: Dug – 12 Oct Picked –16 Oct

E: SUMMARY:

CERTIS TEST, 2016						
RIGDON FARM, COTTON FIELD						
			Leaf Spot ¹	TSWV ²	WM ³	Yield
Treatments	App's	RATE	21-Sep	22-Aug	26-Sep	lb/A
1. Bravo	1 - 7	1.5 pt	2.7	5.2	63.6	2866
2. CX-10250	1 - 7	1.0 oz	4.3	8.4	61.6	2924
3. CX-10250	1, 3, 5, 7	1.0 oz	3.8	8.0	64.0	2865
Bravo	2, 4, 6	1.5 pt				
4. Nontreated			4.9	9.2	61.6	2926
LSD(P<0.05)			0.3	n.s.	ns.	n.s.
Leaf Spot ¹ =Florida 1-10 scale where 1=no disease and 10=dead plant. TSWV ² =Percent of row feet infected based on disease loci (up to 12" linear row) per plot. WM ³ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.						

EVALUATION OF FUNGICIDE PROGRAMS FOR THE CONTROL OF PEANUT DISEASES UNDER IRRIGATION (SYNGENTA/DUPONT IRRIGATION TEST II, 2016)

- A. PURPOSE: To evaluate experimental peanut fungicide programs in irrigated fields.
- 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 CO₂ 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 13 Jun, 27 Jun, 11 Jul, 25 Jul, 8 Aug, 22 Aug and 5 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, Cotton Field Tifton, GA 31794
 2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Disc Harrow on 26 Mar. Moldboard plowed and marked rows on 9 Apr. Gypsum broadcast (1000 lb/A) on 15 Jun.
 4. Soil Fertility: pH – 5.8 P – 21 K – 89 Ca – 779 Mg – 98
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 20 Apr.
POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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 27 Jul.
7. Planting Info: Tifguard, 6 seed/ft (2" deep) 9 May
8. Harvest Dates: Dug – 12 Oct Picked – 16 Oct

E: SUMMARY:

SYNGENTA DUPONT IRRIGATED TEST II, 2016 TABLE						
RIGDON FARM, COTTON FIELD						
			Leaf Spot ¹	TSWV ²	WM ³	YIELD
TREATMENTS	App's	RATE	21-Sep	22-Aug	26-Sep	lb/A
1. Nontreated			3.9	9.5	45.5	3663
2. Bravo W'stik	1, 2, 6, 7	1.5 pt	2.6	7.0	33.0	4668
Fontelis	3 - 5	16.0 fl oz				
3. Bravo W'stik	1, 6, 7	1.5 pt	2.9	4.0	55.0	4026
Provost	2 - 5	8.0 fl oz				
4. Priaxor	1.5	6.0 fl oz	2.3	6.5	40.0	4019
Bravo W'stik	5 & 6	1.5 pt				
+ Orius 3.6F		7.2 fl oz				
Priaxor	4	8.0 fl oz				
Bravo W'stik	3 & 7	1.5 pt				
5. Elatus 45WG	1, 3 & 5	7.3 oz	2.5	4.5	16.0	4658
Bravo W'stik	2, 4, 6, & 7	1.5 pt				
6. Alto	1 & 6	5.5 fl oz	2.4	6.0	23.5	5313
+ Bravo		1.0 pt				
Bravo	2, 4, & 7	1.5 pt				
Elatus 45WG	3 & 5	9.5 oz				
7. Alto	1 & 6	5.5 fl oz	2.4	6.0	23.5	5327
+ Bravo		1.0 pt				
Bravo	2 & 7	1.5 pt				
Elatus 45WG	3 & 4.5	9.5 oz				
8. Elatus 45WG	21 DAP B'cast & 3	9.5 oz	2.3	3.0	11.0	5473
Alto	1.5	5.5 fl oz				
+ Bravo		1.5 pt				
Bravo W'stik	4 - 7	1.5 pt				
9. Alto	1 & 7	5.5 fl oz	2.9	7.0	26.5	5311
+ Bravo		1.0 pt				
Elatus 45WG	3 & 5	9.5 oz				
+ A19649		3.42 fl oz				
10. Alto	1.5	5.5 fl oz	2.9	2.5	20.5	5250
+ Bravo		1.5 pt				
Elatus 45WG	3 & 4.5	9.5 oz				
+ A19649		3.42 fl oz				
Bravo W'stik	6 & 7	1.5 pt				
Continued on next page						

SYNGENTA DUPONT IRRIGATED TEST II, 2016 TABLE						
RIGDON FARM, COTTON FIELD						
			Leaf Spot ¹	TSWV ²	WM ³	YIELD
TREATMENTS	App's	RATE	21-Sep	22-Aug	26-Sep	lb/A
11. Elatus 45WG	1 & 5	7.3 oz	2.4	2.0	17.5	4660
A19649		3.42 fl oz				
Bravo W'stik	2, 4, 6 & 7	1.5 pt				
Elatus 45WG	3	7.3 oz				
12. Alto	1	5.5 fl oz	2.8	3.5	18.5	4668
+ Bravo		1.5 pt				
Bravo	2 & 7	1.5 pt				
Elatus 45WG	3 & 5	9.5 oz				
+ A19649		3.42 fl oz				
13. Aproach 2.08	1 & 2	5.5 fl oz	2.8	6.5	23.5	4887
+ Alto		5.5 fl oz				
+ Induce		0.25%				
Fontelis	3 - 5	16.0 fl oz				
Bravo W'stik	6 & 7	1.5 pt				
14. Aproach Prima	1 & 2	6.8 fl oz	2.7	4.5	31.0	4962
+ Induce		0.25%				
Fontelis	3 - 5	16.0 fl oz				
Bravo W'stik	6 & 7	1.5 pt				
15. Priaxor	1 & 2	4.0 fl oz	2.3	4.0	12.5	5104
+ Induce		0.25%				
Elatus 45WG	3 - 5	7.3 oz				
Bravo W'stik	6 & 7	1.5 pt				
16. Priaxor	1 & 2	4.0 fl oz	2.6	4.5	17.5	4885
+ Induce		0.25%				
Elatus 45WG	3 & 5	9.5 oz				
Bravo	4	1.0 pt				
+ Alto		1.5 fl oz				
Bravo W'stik	6 & 7	1.5 pt				
			0.5	5.1	11.5	1241
Leaf ¹ Spot=Florida scale of 1-10 where 1=no disease and 10=dead plant. TSWV ² =Percent of row feet infected based on disease loci (up to 12" linear row) per plot. WM ³ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.						

EVALUATION OF VARIOUS FUNGICIDE PROGRAMS FOR THE CONTROL OF
PEANUT WHITE MOLD WHEN APPLIED VIA CHEMIGATION AND GROUND SPRAYS
(CHEMIGATION TEST I, 2016)

- A. PURPOSE: To evaluate peanut fungicide programs for control of white mold when applied conventionally or chemigated.
- 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 CO₂ 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. Treatment sprays were applied on 11 Jul, 25 Jul, and Aug. 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 – 2015, Peanut – 2014, Peanut – 2013
 3. Land Preparation: Moldboard plowed and marked rows on 20 Apr.
 Gypsum broadcast (1200 lb/A) on 27 Jun.
 Cultivated 1 Jun.
 4. Soil Fertility: pH – 5.8 P – 21 K – 89 Ca – 779 Mg – 98
 Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/A) 4 inches + Dual Magnum (1.5 pt/A) tank mix on 21 Apr.
 POST: 24D-B (1.75 @ 17 fl oz/A) on 22 Jul, Select Max (16 fl oz/A) + 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.
7. Planting Info: Tifguard, 6 seed/ft (2" deep) 9 May
8. Harvest Dates: Dug – 26 Sep Picked – 30- Sep

E: SUMMARY:

CHEMIGATION TEST I, 2016						
LANG FARM, COTTON FIELD						
				TSWV ¹	WM ²	YIELD
TREATMENTS	App's	Method	RATE	18-Aug	26-Sep	lb/A
1. Untreated				0.4	29.2	3494
2. Convoy	3 - 5	Ground	21.0 fl oz	5.6	21.6	4370
3. Convoy	3 - 5	Chemigation**	21. 0 fl oz	4.8	16.4	4206
4. Elatus 45WG	3 - 5	Ground	7.14 oz	6.0	9.2	5372
5. Elatus 45WG	3 - 5	Chemigation**	7.14 oz	3.2	7.4	5589
6. Evito	3 - 5	Ground	5.7 fl oz	5.6	16.2	4372
7. Evito	3 - 5	Chemigation**	5.7 fl oz	5.2	13.4	4873
8. Priaxor	3 - 5	Ground	8.0 fl oz	4.0	19.4	4720
9. Priaxor	3 - 5	Chemigation**	8.0 fl oz	12.0	7.8	5144
10. Fontelis	3 - 5	Ground	16.0 fl oz	4.8	10.2	4843
11. Fontelis	3 - 5	Chemigation**	16.0 fl oz	5.6	9.0	5012
LSD (P<0.05)				4.9	4.9	895
TSWV ¹ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.						
WM ² =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.						
Ground sprays applied in 20 GPA and chemigation in 0.10 inch of water.						

DAILY RAINFALL AND IRRIGATION, 2016							
RIGDON FARM, COTTON FIELD							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1		0.6					
2					0.2	4.9	
3		0.2			1.1	0.4	
4	0.2	0.3			0.8		
6			0.8				
7			1.9				
8					0.8		
9					0.2		
14					0.6	0.4	
15	1.2						
16			0.3				
17				2.3			
18		1.5					
19							
20		0.1	0.4				
21					0.5		
24				0.1			
29			0.3				
30			0.1				
31					0.2		
TOTAL	1.4	2.9	3.8	2.4	4.4	5.7	0.0
IRRIGATION							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
7				0.6			
15				0.4			
24			0.3				
29			0.3	0.5			
TOTAL	0.0	0.0	0.6	1.5	0.0	0.0	0.0
RAIN & IRR	1.4	2.9	4.4	3.9	4.4	5.7	0.0

EVALUATION OF PEANUT GENOTYPES FOR RESISTANCE TO PEANUT ROOT KNOT NEMATODE, (Bill Branch Genotype Evaluation Test I, 2016)

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: Midseason spray treatments were applied with a CO₂ 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. Spray Treatments of Priaxor (8 oz/A) was applied on 16 Jun, and 27 Jun. Cover spray of Provost (10 oz/A) was applied on 7 Jul, 19 Jul and 2 Aug. Custodia (15.5 oz/A) was applied on 16 Aug. Bravo (1.5 pt/A) was applied on 29 Aug.

D. ADDITIONAL INFORMATION:

1. Location: Attapulgis Research & Education Center, Attapulgis, GA
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
3. Land Preparation: Moldboard plowed and marked rows on 5 May. Manganese (2 qt/A) on 31 Aug.
4. Soil Fertility: pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48
Soil type: Norfolk loamy sand
5. Herbicides: PPI: Prowl (1qt/A) on 18 May Valor (3 oz/A) on 18 May, Strongarm (0.45 oz/A) on 18 May, Roundup (1 qt/A) on 18 May. Boron (1 qt/A) was applied on 27 Jun. Manganese (1.5 qt/A) was applied on 7 Jul and 19 Jul.
POST: Select (12 oz/A) on 25 Jul, and Select (16 oz/A) on 17 Aug.
6. Insecticides: Intrepid Edge (8 oz/A) on 2 Aug.

7. Planting Info: Different varieties, 6 seed/ft (2" deep) 17 May

8. Harvest Dates: Dug – 11 Oct Picked – 18 Oct

E: SUMMARY:

BILL BRANCH GENOTYPE EVALUATION TEST I, 2016								
ATTAPULGUS, GA, NEW FIELD								
			TSWV ¹	GallingPods ²	Yield	Galling Roots ²	Rootknot ³	Ring ⁴
VARIETIES	App's	Rate	9-Sep	11-Oct	lb/A	11-Oct	9-Sep	9-Sep
1. GA-07W			2.0	26.2	3968	38.0	653	23
2. GA-152701			1.6	18.2	5431	22.5	493	55
3. GA-152702			4.8	22.6	5181	44.0	325	31
4. GA-152703			0.8	0.0	5471	0.4	18	54
5. GA-152704			2.4	17.2	4739	35.0	354	26
6. GA-152705			1.2	5.6	4681	11.0	163	20
7. GA-152706			1.6	14.4	4235	27.0	536	38
8. GA-152707			0.8	11.2	4226	19.0	532	61
9. GA-152708			1.2	10.4	4211	19.0	553	43
10. GA-152709			0.0	14.2	3996	30.0	291	30
LSD(P<0.05)			2.2	12.5	796	16.2	380	39
TSWV ¹ =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.								
Galling ² =Visual rating of the percent of pods and roots (1-100) with visible damage from rootknot nematodes.								
Roots=The % of roots with visible galling after digging.								
Rootknot ³ =Number of <i>M. arenarie</i> juveniles per 100 cc of soil.								
Ring ⁴ =Population of ring nematodes per 100 cc of soil.								

EVALUATION OF PEANUT GENOTYPES FOR RESISTANCE TO PEANUT ROOT KNOT NEMATODE, (Bill Branch Genotype Evaluation Test II, 2016)

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.
2. Cover sprays of Priazor (8 oz/A) was applied on 16 Jun and 27 Jun, Provost (10 pt/A) was applied on 7 Jul, 19 Jul and 2 Aug. Custodia (15.5 oz/A) was applied on 16 Aug. Bravo (1.5 pt/A) was applied on 29 Aug.

D. ADDITIONAL INFORMATION:

1. Location: Attapulgis Research & Education Center, Attapulgis, GA
2. Crop History: Peanut – 2015, Peanut – 2014, Peanut – 2013
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: pH – 6.0 P – 25 K – 40 Ca – 309 Mg – 48
Soil type: Norfolk loamy sand
5. Herbicides: PPI: Prowl (1qt/A) on 18 May Valor (3 oz/A) on 18 May, Strongarm (0.45 oz/A) on 18 May, Roundup (1 qt/A) on 18 May. Boron (1 qt/A) was applied on 27 Jun. Manganese (1.5 qt/A) was applied on 7 Jul and 19 Jul.
POST: Select (12 oz/A) on 25 Jul, and Select (16 oz/A) on 17 Aug
POST: Select (12 oz/A) on 25 Jul, and Select (16 oz/A) on 17 Aug.

6. Insecticides: Intrepid Edge (8 oz/A) on 2 Aug.
7. Planting Info: Different varieties, 6 seed/ft (2" deep) 17 May
8. Harvest Dates: Dug – 18 Oct Picked – 25 Oct

E: SUMMARY:

BILL BRANCH GENOTYPE EVALUATION TEST II, 2016								
ATTAPULGUS, GA, Tubb's Old FIELD								
	TSWV ¹	Galling Roots ²	Galling Pods ²	Yield	Rootknot ³	Ring ⁴		
VARIETIES	9-Sep	6-Oct	6-Oct	lb/A	9-Sep	9-Sep		
1. GA-07W	2.8	79.0	70.0	2051	885	57		
2. GA-122706	6.0	85.0	64.0	2754	597	59		
3. GA-152507	2.0	92.0	60.0	2270	437	76		
4. GA-152511	4.4	0.6	0.6	5766	3	72		
5. GA-152512	1.2	75.0	70.0	2977	797	92		
6. GA-152516	4.8	76.0	76.0	2521	758	59		
7. GA-152517	0.4	58.0	65.0	3046	831	85		
8. GA-152518	4.8	79.0	73.0	2399	856	74		
9. GA-152519	0.8	43.0	37.0	3564	537	98		
10. GA-152520	1.2	67.6	48.0	3208	686	55		
LSD(P<0.05)	3.9	25.2	23.3	1259	342	n.s.		
TSWV ¹ =Percent of row feet infected based on disease loci (up to 12" of linear row) per plot. Galling ² =Visual rating of the percent of pods and roots (1-100) with visible damage from root knot nematodes. Root Knot ³ =Number of <i>M.arenaria</i> juveniles per 100 cc of soil. Ring ⁴ =Populations of ring nematode per 100 cm ³ of soil.								

DAILY RAINFALL AND IRRIGATION, 2016							
Attapulgis FARM, Attapulgis, GA							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	4.3					1.0	
2	1.0	0.8				1.4	
3		0.5					
4						0.3	
5			0.1		1.8		
6	0.2		5.3				
7					0.1		
9					0.4		
10					0.9		
11				0.4		2.0	
12				0.2	0.3		
13	0.8					0.1	
14	0.3			1.6			
15				0.6			2.1
16			0.3	0.1			0.1
17		0.2		0.9	0.1		
18		0.6		0.2	0.3	0.4	
19		0.1				0.4	
20		0.9			0.8		
21				0.1	0.1		
22				0.5			
25	0.2						
26			0.1	0.1			
27	0.2						
28	0.1						
29			0.1		0.1		
31			0.1	0.8			
Total	7.0	3.0	5.9	5.6	4.9	5.5	2.2
IRRIGATION							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1				0.5	0.5		
2			0.5				
4							0.5
5	0.5						
6		0.5				0.5	
7				0.5			
10		0.5					0.5
11				0.5			
12		0.5					
13			0.5			0.5	
17			0.5				
18		0.5					
22						0.5	
23			0.5				
25				0.5	0.5		
26		0.5					
28		0.5					
29	0.5					0.5	
31					0.5		
Total	1.0	3.0	2.0	2.0	1.5	2.0	1.0
Rain & Irr	8.0	6.0	7.9	7.6	6.4	7.5	3.2

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITA PECAN NORTH ORCHARD (PECAN FUNGICIDE TEST, 2016)

- 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 from each tree to determine yield and quality.
- E: **Summary:**

PECAN FUNGICIDE TEST, 2016									
PONDER FARM, WICHITA, NORTH ORCHARD									
Treatments	Rate/A	App's	Leaf Inc. ¹	Leaf Sev. ²	NIN ³		NSEV ⁴		Neofusicoccum ⁵
			26-Jul	26-Jul	26-Jul	19-Sep	26-Jul	19-Sep	22-Sep
1. EXP 1	3.0 fl oz	2, 4, 6, 8, 10	15.0	1.3	54.4	91.7	2.8	22.1	2.3
+ Latron B-1956	8.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
2. EXP 1	5.0 fl oz	2, 4, 6, 8, 10	18.5	1.6	51.7	89.1	2.1	16.0	2.8
+ Latron B-1956	8.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
3. EXP 2	7.0 fl oz	2, 4, 6, 8, 10	26.4	2.0	60.7	96.9	3.1	25.9	3.5
+ Latron B-1956	8.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
4. EXP 3	5.0 fl oz	2, 4, 6, 8, 10	18.2	1.7	69.0	92.2	3.5	22.0	3.3
+ Latron B-1956	8. fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
5. EXP 3	8.5 fl oz	2, 4, 6, 8, 10	16.0	1.5	46.1	84.0	1.8	13.0	1.3
+ Latron B-1956	8.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
6. Merivon	5.5 fl oz	2, 4, 6, 8, 10	18.7	1.6	75.0	100.0	5.3	51.3	3.3
+ Latron B-1956	8.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
7. Quadris Top	14.0 fl oz	2, 4, 6, 8, 10	14.3	1.2	58.9	89.1	3.2	12.7	1.3
+ Remain	8.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
8. EXP 4	11.0 fl oz	2, 4, 6, 8, 10	22.1	2.1	83.6	88.5	4.6	24.8	4.5
+ Remain	8.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
continued on next page									

PECAN FUNGICIDE TEST, 2016									
PONDER FARM, WICHITA, NORTH ORCHARD									
Treatments	Rate/A	App's	Leaf Inc. ¹	Leaf Sev. ²	NIN ³		NSEV ⁴		Neofusicoccum ⁵
			26-Jul	26-Jul	26-Jul	19-Sep	26-Jul	19-Sep	22-Sep
9. EXP 4	13.7 fl oz	2, 4, 6, 8, 10	21.0	2.1	71.2	78.4	4.4	13.8	2.8
+ Remain	8.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
10. ExP 5	5.13 fl oz	2, 4, 6, 8, 10	17.2	1.6	67.5	94.3	3.4	21.6	2.3
+ Remain	8.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
11. Aprovia Top	10.6 fl oz	2, 4, 6, 8, 10	28.4	3.2	54.4	80.2	2.8	24.5	3.8
+ Remain	8.0 fl oz								
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9							
+ Elast 400F	25.0 fl oz								
12. Super Tin 4L	6.0 fl ox	1, 3, 5, 7, 9	31.2	3.2	90.0	98.4	8.6	41.1	6.0
+ Elast 400F	25.0 fl oz								
13. Super Tin 4L	6.0 fl oz	1 - 10	42.0	4.5	87.2	100.0	11.3	44.8	7.5
+ Elast 400F	25.0 fl oz								
14. Nontreated			68.0	6.8	100.0	97.3	45.2	99.3	14.3
LSD(P<0.05)			9.5	1.0	18.1	12.6	4.1	10.3	3.8
Leaf Inc. ¹ =Leaf scab incidence, based on 8 terminals per tree (% of leaflets on middle leaf with any scab).									
Leaf Sev. ² =Leaf scab severity, based o 8 terminals per tree (% of leaflets covered with scab).									
NIN ³ =Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).									
NSEV ⁴ =Nut scab severity, based on ratings of 8 nuts clusters per tree (% of schuck area covered with scab).									
Neofusicoccum ⁵ =Visual estimate of the % of terminals on the tree with symptomatic leaves.									

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE PECAN NORTH ORCHARD (PECAN FUNGICIDE TEST, 2016)

- 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 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:** 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:**

PECAN FUNGICIDE TEST, 2016								
PONDER FARM, DESIRABLE, NORTH ORCHARD								
			Leaf Inc. ¹	Leaf Sev. ²	NIN ³		NSEV ⁴	
Treatments	Rate/A	App's	26-Jul	26-Jul	26-Jul	19-Sep	26-Jul	19-Sep
1. EXP 1	3.0 fl oz	2, 4, 6, 8, 10	7.3	0.8	29.9	96.9	1.3	31.4
+ Latron B-1956	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
2. EXP 1	5.0 fl oz	2, 4, 6, 8, 10	13.4	1.2	30.7	83.1	1.1	11.3
+ Latron B-1956	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
3. EXP 2	7.0 fl oz	2, 4, 6, 8, 10	9.9	1.3	25.0	96.9	0.8	22.8
+ Latron B-1956	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
4. EXP 3	5.0 fl oz	2, 4, 6, 8, 10	9.8	1.2	26.6	96.9	0.8	21.6
+ Latron B-1956	8. fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
5. EXP 3	8.5 fl oz	2, 4, 6, 8, 10	9.6	1.1	14.8	84.4	0.6	11.0
+ Latron B-1956	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
6. Merivon	5.5 fl oz	2, 4, 6, 8, 10	7.3	0.8	21.4	100.0	0.7	52.7
+ Latron B-1956	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
7. Quadris Top	14.0 fl oz	2, 4, 6, 8, 10	7.6	0.5	27.1	72.4	0.7	16.1
+ Remain	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
8. EXP 4	11.0 fl oz	2, 4, 6, 8, 10	10.6	1.1	30.2	96.9	1.1	18.4
+ Remain	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							

PECAN FUNGICIDE TEST, 2016								
PONDER FARM, DESIRABLE, NORTH ORCHARD								
			Leaf Inc. ¹	Leaf Sev. ²	NIN ³		NSEV ⁴	
Treatments	Rate/A	App's	26-Jul	26-Jul	26-Jul	19-Sep	26-Jul	19-Sep
9. EXP 4	13.7 fl oz	2, 4, 6, 8, 10	8.1	0.8	17.7	92.2	0.4	21.5
+ Remain	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
10. ExP 5	5.13 fl oz	2, 4, 6, 8, 10	9.6	1.3	29.7	86.5	1.0	14.3
+ Remain	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
11. Aprovia Top	10.6 fl oz	2, 4, 6, 8, 10	10.2	1.1	21.9	78.1	0.8	17.5
+ Remain	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
12. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	13.4	1.2	49.2	96.9	1.8	29.9
+ Elast 400F	25.0 fl oz							
13. Super Tin 4L	6.0 fl oz	1 - 10	8.3	0.8	40.1	96.9	1.1	36.2
+ Elast 400F	25.0 fl oz							
14. Nontreated			24.0	2.8	84.4	100.0	6.0	86.9
LSD(P<0.05)			5.7	0.7	18.9	12.8	1.0	9.2
Leaf Inc. ¹ =Leaf scab incidence, based on 8 terminals per tree (% of leaflets on middle leaf with any scab).								
Leaf Sev. ² =Leaf scab severity, based o 8 terminals per tree (% of leaflets covered with scab).								
NIN ³ =Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).								
NSEV ⁴ =Nut scab severity, based on ratings of 8 nuts clusters per tree (% of schuck area covered with scab).								

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE PECAN SOUTH ORCHARD (PECAN FUNGICIDE TEST II, 2016)

- A. **PURPOSE:** To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a standard commercial cultivar.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with five replicates.
 2. Each replication consisted of single-tree treatments.
 3. The orchard was established in 1988 planted on a 40 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: Desirable Trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 9 Nov. A 50 nut sample was collected from each tree on 10 Nov to determine yield and quality.
- E: **Summary:**

PECAN FUNGICIDE TEST II, 2016								
PONDER FARM, DESIRABLE, SOUTH ORCHARD								
Treatments	Rate/A	App's	Leaf Inc. ¹	Leaf Sev. ²	Nut Inc. ³		Nut Sev. ⁴	
			26-Jul	26-Jul	26-Jul	20-Sep	26-Jul	20-Sep
1. Rampart	96.0 fl oz	2, 4, 6, 8, 10	16.5	1.7	51.3	86.3	2.3	9.2
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
2. KFD-86-02	6.0 lb	2, 4, 6, 8, 10	15.9	1.3	31.7	82.5	1.6	6.5
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
3. KFD-86-02	3.0 lb	2, 4, 6, 8, 10	16.3	1.5	32.5	80.8	2.2	10.5
+ 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. Ziram	3.0 lb	2, 4, 6, 8, 10	16.4	2.1	61.3	95.0	2.9	13.1
+ 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	14.5	1.6	48.8	93.8	2.3	23.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
6. SA-0040309	20.0 fl oz	2, 4, 6, 8, 10	16.4	1.8	52.1	86.3	2.3	13.1
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
7. Andiamo	8.0 fl oz	2, 4, 6, 8, 10	17.6	1.7	70.4	97.5	4.4	16.1
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
8. Andiamo Duo	36.0 fl oz	2, 4, 6, 8, 10	11.5	1.6	36.9	83.8	1.5	9.7
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
9. Quadris Top	14.0 fl oz	2, 4, 6, 8, 10	13.3	1.4	35.0	71.3	1.4	6.8
+ Induce	0.06% v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
10. Ph-D 11.3 WG	6.2 oz	2, 4, 6, 8, 10	14.9	1.8	53.8	95.0	2.8	16.2
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
11. Ph-D 11.3 WG	6.2 oz	2, 4, 6, 8, 10	21.6	2.6	52.5	92.5	4.2	15.8
+ Orius 3.6F	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							

PECAN FUNGICIDE TEST II, 2016								
PONDER FARM, DESIRABLE, SOUTH ORCHARD								
Treatments	Rate/A	App's	Leaf Inc. ¹	Leaf Sev. ²	Nut Inc. ³		Nut Sev. ⁴	
			26-Jul	26-Jul	26-Jul	20-Sep	26-Jul	20-Sep
1. Rampart	96.0 fl oz	2, 4, 6, 8, 10	16.5	1.7	51.3	86.3	2.3	9.2
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
2. KFD-86-02	6.0 lb	2, 4, 6, 8, 10	15.9	1.3	31.7	82.5	1.6	6.5
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
3. KFD-86-02	3.0 lb	2, 4, 6, 8, 10	16.3	1.5	32.5	80.8	2.2	10.5
+ 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. Ziram	3.0 lb	2, 4, 6, 8, 10	16.4	2.1	61.3	95.0	2.9	13.1
+ 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. Monerva Duo	16.0 fl oz	2, 4, 6, 8, 10	14.5	1.6	48.8	93.8	2.3	23.0
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
6. SA-0040309	20.0 fl oz	2, 4, 6, 8, 10	16.4	1.8	52.1	86.3	2.3	13.1
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
7. Andiamo	8.0 fl oz	2, 4, 6, 8, 10	17.6	1.7	70.4	97.5	4.4	16.1
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
8. Andiamo Duo	36.0 fl oz	2, 4, 6, 8, 10	11.5	1.6	36.9	83.8	1.5	9.7
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
9. Quadris Top	14.0 fl oz	2, 4, 6, 8, 10	13.3	1.4	35.0	71.3	1.4	6.8
+ Induce	0.06% v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
10. Ph-D 11.3 WG	6.2 oz	2, 4, 6, 8, 10	14.9	1.8	53.8	95.0	2.8	16.2
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
11. Ph-D 11.3 WG	6.2 oz	2, 4, 6, 8, 10	21.6	2.6	52.5	92.5	4.2	15.8
+ Orius 3.6F	8.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							

PECAN FUNGICIDE TEST II, 2016								
PONDER FARM, DESIRABLE, SOUTH ORCHARD								
Treatments	Rate/A	App's	Leaf Inc. ¹	Leaf Sev. ²	Nut Inc. ³		Nut Sev ⁴	
			26-Jul	26-Jul	26-Jul	20-Sep	26-Jul	20-Sep
12. Serenade Opti WP	16.0 oz	2, 4, 6, 8, 10	13.7	1.6	33.5	76.3	1.5	6.3
+ 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							
13. Absolute	7.5 oz	2, 4, 6, 8, 10	14.4	1.6	50.0	95.0	2.5	15.0
+ 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	5.0 fl oz	2, 4, 6, 8, 10	16.4	1.6	38.8	85.0	2.2	25.3
+ Induce	0.06% v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
15. Luna Sensation	9.0 fl oz	2, 4, 6, 8, 10	13.8	1.7	60.8	78.8	5.0	18.4
+ Induce	0.06% v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
16. Enable	8.0 fl oz	2, 4, 6, 8, 10	16.7	1.9	67.1	95.0	3.8	30.9
+ 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	14.7	1.5	39.6	87.5	2.0	8.9
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
18. Enable	5.0 fl oz	2, 4, 6, 8, 10	15.6	1.7	34.0	84.2	1.6	13.0
+Abound	10.0 fl oz							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+ Elast 400F	25.0 fl oz							
19. Super Tin 4L	6.0 fl oz	1 - 10	13.2	1.5	49.0	91.3	1.5	14.3
+ Elast 400F	25.0 fl oz							
20. Super Tin 4L	6.0 fl oz	1 - 10	21.7	2.4	32.1	87.5	1.1	11.3
+ EXP 6	25.0 fl oz							
21. Untreated			23.6	3.2	98.8	100.0	14.0	67.0
LSD(P<0.05)			5.3	0.8	20.0	13.6	1.9	6.7
Leaf Inc. ¹ =Leaf scab incidence, based on 8 terminals per tree (% of leaflets on middle leaf with any scab).								
Leaf Sev. ² =Leaf scab severity, based on 8 clusters per tree (% of leaflets covered with scab).								
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 ratings of 8 nut clusters per tree (% of shuck area covered with scab).								

DAILY RAINFALL AND IRRIGATION, 2016							
Ponder FARM, TyTy, GA							
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	3.0				0.1	0.5	
2	0.3	0.1			0.1	4.1	
3		0.5					
4			0.1	0.4			
5					0.6		
6	0.1		3.9				
7	0.1						
8					0.6		
9					0.1		
10					0.1		
11							
12	0.2						
13					0.6	0.4	
14	1.8				0.1		
15	0.1		0.2				
16			0.1				
17		1.5		0.5			
18				0.2			
19		0.3			1.1	0.1	
20		0.1					
21				0.3	0.1		
22							
23					0.2		
24							
25							
26						0.8	
27			0.1				
28							
29			0.1				
30			0.4				
31							
Total	5.6	2.6	4.7	1.5	3.6	5.8	0.0
IRRIGATION		As Needed					
DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
Rain & Irr	5.6	2.6	4.7	1.5	3.6	5.8	0.0