

2020 TEST RESULTS



Peanut & Pecan Fungicide Evaluations

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Memo to: Industry Cooperators

From: Tim Brenneman

Subject: Field Trial Results

This was a very different year as we worked under strict Covid restrictions and were not able to do as much as we normally do. However, we did as much as we possibly could under the circumstances. The weather cooperated and we had a good year for growing both crops and diseases! Attached are the results of our 2020 field trials on peanuts and pecans.

I want to acknowledge the hard work of our crew lead by Lewis Mullis, Corey Thompson, and Jessica Bell. Summer workers included Marissa Lee, Chris Termunde, and Kelsey Steller. 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 Logan Moore and Walker Johnson 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 “2020 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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BAYER NEMATOCIDE TEST, 2020

- A. PURPOSE: To evaluate management programs for peanut root knot nematodes
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with seven replicates.
 2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
 3. There are eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
 5. Variety: GA-06G and untreated TifNV-HiOL.
- C. APPLICATION OF TREATMENTS:
1. Equipment: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens. Treatment sprays applied at 40 PSI at 2.5 MPH in 20 GPA using a CO2 unit with four ITT 11002 tips and 50 mesh ball check screens.
 2. Cover sprays: Chlorothalonil (1.5 pt/a) was applied for leaf spot control on June 11, June 25, July 9, July 22, Aug. 19, and Sep. 15, and Miravis (3.4 fl oz/a) was applied on 3 Aug. and 3 Sep. Elatus 45 WG (9.5 oz/a) was applied for white mold control on 9 July and 3 Aug., and Convoy (32 fl oz/a) was applied on 19 Aug.
 3. Treatment sprays: In furrow sprays were applied at planting on 22 May. Sixty DAP sprays were applied on 21 July, where treatments 3 and 4 were irrigated 0.6 inches. Treatment 5 was sprayed on 21 July but not washed in.
- D. ADDITIONAL INFORMATION:
1. Location: Blackshank Farm, Woods Field Tifton, GA 31794
31.500814° N, 83.546653° W
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Fertilizer (5-10-15) was broadcast at 600 lb/a on March 23. On Apr. 11, field was deep turned, beds marked 6 ft, and fertilizer turned under.
 4. Soil Fertility: pH – 6.30, P – 38.8, K – 13.3, Ca – 171, Mg – 18.1
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Tank mix of Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) on 13 May. Rototilled to incorporate.
POST: Strongarm (0.45 dry oz/a) on 26 June. Tank

mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 20 July. Tank mix of Fusilade DX (20 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 4 Sep.

6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 8 June.
Acephate 97 (0.75 lb/a) for worms on 3 Sep.
7. Planting Info: GA-06G and untreated TifNV-HiOL, 6 seed/ft (2" deep) in single rows on 22 May.
8. Harvest Dates: Dug – Sep. 30 Picked – 7 Oct.

E: SUMMARY:

This test was not definitive due to the low nematode numbers present, although there were indications of reduced galling with the Velum + Propulse as we have seen in the past. There were reductions in galling from the combined in furrow and broadcast sprays, but there were no differences in yield. The TifNV-HiOL was essentially immune to root knot as expected.

BAYER NEMATOCIDE TEST, 2020						
BLACKSHANK, WOODS FIELD						
				% Dead		
			Plants/ft ¹	Plants ²	Root-Knot ³	Ring ⁴
Treatments	App's	Rate	5-Jun	5-Jun	14-Sep	14-Sep
GA-06G						
1. Untreated	-	-	2.4	0.0	33.0	130.0
2. Velum	In furrow*	6.5 fl oz	2.5	0.0	65.4	127.4
3. Velum	In furrow*	6.5 fl oz	2.5	0.0	2.7	67.6
Propulse	60 DAP (wash in)**	13.6 fl oz				
4. Propulse	60 DAP (wash in)**	13.6 fl oz	2.5	0.0	66.6	110.7
5. Velum	In furrow*	6.5 fl oz	2.4	0.0	41.6	87.3
Propulse	60 DAP (Not Washed In)	13.6 fl oz				
TifNV-HiOL						
6. Untreated	-	-	2.5	0.0	1.3	97.6
LSD(P<0.05)			N. S.	N. S.	64.2	N. S.
*In furrow applications applied in 3.4 GPA singles, mixed in 2 L. volume.						
** The washed in application will be made just prior to an irrigation event. Treatment 5 will be applied just after that event when the foliage is relatively dry.						
Plant/ft ¹ =Stand count is the number of emerged plants per foot of row on June 5.						
% Dead Plants ² = The % of emerged plants that was dead or dying per plot.						
Root-knot ³ = Number of M. arenaria juvenile per 100 cc of soil.						
Ring ⁴ = Population of ring nematodes per 100 cc of soil.						

BAYER NEMATOCIDE TEST, 2020					
BLACKSHANK, WOODS FIELD					
			Root	Pod	
			Galling ⁵	Galling ⁵	Yield
Treatments	App's	Rate	30-Sep	30-Sep	lb/A
GA-06G					
1. Untreated	-	-	16.7	13.4	2659
2. Velum	In furrow*	6.5 fl oz	13.6	13.6	2863
3. Velum	In furrow*	6.5 fl oz	7.0	4.9	2834
Propulse	60 DAP (wash in)**	13.6 fl oz			
4. Propulse	60 DAP (wash in)**	13.6 fl oz	17.6	13.6	2663
5. Velum	In furrow*	6.5 fl oz	7.3	6.6	2946
Propulse	60 DAP (Not Washed In)	13.6 fl oz			
TifNV-HiOL					
6. Untreated	-	-	0.0	0.0	3041
LSD(P<0.05)			6.8	6.3	N. S.
*In furrow applications applied in 3.4 GPA singles, mixed in 2 L. volume.					
** The washed in application will be made just prior to an irrigation event. Treatment					
Galling ⁵ = Visual rating of the percent of pods and roots (1-100) with visible damage from					
root-knot nematode.					

BAYER WHITE MOLD TEST I, 2020

- A. PURPOSE: To evaluate the efficacy of different programs for southern stem rot (White Mold).
- 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

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.
2. Treatment sprays: In furrow sprays were applied at planting on 22 May. Treatment sprays 1-7 were applied on 25 June, 8 July, 21 July, 4 Aug., 17 Aug., 1 Sep., and 15 Sep. No cover sprays were applied to this test.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Woods Field Tifton, GA 31794
31.501098° N, 83.546771° W
2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 11 Apr.
4. Soil Fertility: pH – 5.8 P – 48.4 K – 12.9 Ca – 158 Mg – 15.1
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 13 May. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) on 26 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 20 July. Tank mix of Fusilade DX (20 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 4 Sep.
6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 8 June. Acephate 97 (0.75 lb/a) for worms on 3 Sep.
7. Planting Info: GA-06G, 6 seed/ft (2" deep) on 22 May.
8. Harvest Dates: Dug – 30 Sep. Picked – 5 Oct.

E. SUMMARY:

This trial had low to moderate leaf spot and white mold pressure. All treatments generally performed well with little difference among them. There was some nematode damage as well, and the treatments with potential activity (ie. 2 and 3) and the most appropriate control (trt 5) were evaluated. These treatments did reduce galling, and numerically increased yield, but overall plant growth and pod yields in this field were very poor.

BAYER WHITE MOLD TEST I, 2020						
BLACKSHANK FARM, WOODS FIELD						
				% Dead		
			Plants/ft ¹	Plants ²	WM ³	LS ⁴
Trt	App's	Rate	5-Jun	5-Jun	25-Sep	30-Sep
1. Untreated	-	-	2.6	0.0	21.4	6.1
2. Velum	In furrow*	6.5 fl oz	-	-	9.4	4.2
Absolute	2	3.5 fl oz				
Propulse	3 (wash in)**	13.6 fl oz				
Provost Silver	4 & 6	13.0 fl oz				
Excalia	5	2.5 oz				
+ Bravo		1.5 pt				
Bravo	7	1.5 pt				
3. Velum	In furrow*	6.5 fl oz	2.5	0.0	6.0	4.1
Absolute	2	3.5 fl oz				
Excalia	3 & 5	2.5 oz				
+ Bravo		1.5 pt				
Provost Silver	4 & 6	13.0 fl oz				
Bravo	7	1.5 pt				
4. Bravo	1 & 7	1.5 pt	-	-	9.7	4.1
Absolute	2	3.5 fl oz				
Excalia	3 & 5	2.5 oz				
+ Bravo		1.5 pt				
Provost Silver	4 & 6	13.0 fl oz				
5. Proline	In furrow*	5.7 fl oz	2.3	0.0	6.0	3.8
Absolute	2	3.5 fl oz				
Excalia	3 & 5	2.5 oz				
+ Bravo		1.5 pt				
Provost Silver	4 & 6	13.0 fl oz				
Bravo	7	1.5 pt				
6. Bravo	1-7	1.5 pt	-	-	13.1	4.1
LSD(P<0.05)			N. S.	N. S.	5.9	0.6
* In furrow applications applied in 3.4 GPA singles, mixed in 2 L volume.						
** The washed in application was made just prior to an irrigation event.						
Plant/ft ¹ =Stand count is the number of emerged plants per foot of row on June 5.						
% Dead Plants ² = The % of emerged plants that was dead or dying per plot.						
White Mold ³ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.						
Leaf Spot ⁴ =Florida 1 - 10 scale where 1=no disease and 10=dead plant.						

**BAYER WHITE MOLD TEST I, 2020
BLACKSHANK FARM, WOODS FIELD**

			Root Galling ⁵ 30-Sep	Pod Galling ⁵ 30-Sep	Yield lb/A
Trt	App's	Rate			
1. Untreated	-	-			1087
2. Velum	In furrow*	6.5 fl oz	14.0	21.0	1610
Absolute	2	3.5 fl oz			
Propulse	3 (wash in)**	13.6 fl oz			
Provost Silver	4 & 6	13.0 fl oz			
Excalia	5	2.5 oz			
+ Bravo		1.5 pt			
Bravo	7	1.5 pt			
3. Velum	In furrow*	6.5 fl oz	10.1	19.3	1564
Absolute	2	3.5 fl oz			
Excalia	3 & 5	2.5 oz			
+ Bravo		1.5 pt			
Provost Silver	4 & 6	13.0 fl oz			
Bravo	7	1.5 pt			
4. Bravo	1 & 7	1.5 pt			1390
Absolute	2	3.5 fl oz			
Excalia	3 & 5	2.5 oz			
+ Bravo		1.5 pt			
Provost Silver	4 & 6	13.0 fl oz			
5. Proline	In furrow*	5.7 fl oz	27.9	30.1	1299
Absolute	2	3.5 fl oz			
Excalia	3 & 5	2.5 oz			
+ Bravo		1.5 pt			
Provost Silver	4 & 6	13.0 fl oz			
Bravo	7	1.5 pt			
6. Bravo	1-7	1.5 pt			1365
LSD(P<0.05)					315
* In furrow applications applied in 3.4 GPA singles, mixed in 2 L volume.					
** The washed in application was made just prior to an irrigation event.					
Galling ⁵ = Visual rating of the percent of pods and roots (1-100) with visible damage from root-knot nematode.					

SEED LOT X SEET TRT X IN FURROW TEST II, 2020

- A. PURPOSE: To evaluate the effects of seed treatments and in furrow sprays of Propulse on seedling diseases, plant stands, and pod yield with different seed lots.
- 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: TUFRunner 297.
- C. APPLICATION OF TREATMENTS:
1. Equipment: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
 2. Cover sprays: Chlorothalonil (1.5 pt/a) was applied for leaf spot control on June 11, June 25, July 9, July 22, Aug. 19, and Sep. 15, and Miravis (3.4 fl oz/a) was applied on 3 Aug. and 3 Sep. Elatus 45 WG (9.5 oz/a) was applied for white mold control on 9 July and 3 Aug., and Convoy (32 fl oz/a) was applied on 19 Aug.
 3. Treatment sprays: In furrow sprays were applied at planting on 22 May.
- D. ADDITIONAL INFORMATION:
1. Location: Blackshank Farm, Woods Field Tifton, GA 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Fertilizer (5-10-15) was broadcast at 600 lb/a on March 23. On Apr. 11, field was deep turned, beds marked 6 ft, and fertilizer turned under.
 4. Soil Fertility: pH – 6.30, P –38.8, K – 13.3, Ca – 171, Mg – 18.1
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Tank mix of Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) on 13 May. Rototilled to incorporate.
POST: Strongarm (0.45 dry oz/a) on 26 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 20 July. Tank mix of Fusilade DX (20 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 4 Sep.

6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 8 June.
Acephate 97 (0.75 lb/a) for worms on 3 Sep.
7. Planting Info: TUFRunner 297, 6 seed/ft (2" deep) in single rows on 22 May.
8. Harvest Dates: Dug – Sep. 30 Picked – 5 Oct.

E: SUMMARY:

Both seed lots used had a significantly higher standard germination when treated with Rancona versus Dynasty. The cold germination test was more variable, but more difference in plant stand was expected than what was observed. The seed were heavily infested with *Aspergillus flavus* (in excess of 90%) and a low level of *A. niger*, which was reflected by the low level of crown rot. Many of the *A. flavus* isolates were found to be resistant to azoxystrobin, and this apparently explains the differential response between Dynasty and Rancona in the lab. The resulting plant stands in the field were

SEED LOT X IN FURROW X SEED TRT TEST II, 2020

BLACKSHANK, WOODS FIELD

Seed Trt	IF Treatment	IF Rate	Plant/ft ¹		% Dead Plants ²		
			5-Jun	11-Jun	5-Jun	11-Jun	25-Jun
Florida #1 Seed							
1. Rancona V PD*	None	-	1.3	1.8	0.0	0.0	0.3
2. Rancona V PD*	Propulse	13.7 fl oz	1.3	1.7	0.0	0.0	0.7
3. Dynasty PD*	None	-	1.4	1.6	0.0	0.0	1.7
4. Dynasty PD*	Propulse	13.7 fl oz	1.5	1.9	0.0	0.0	0.3
Florida #2 Seed							
5. Rancona V PD*	None	-	2.2	2.6	0.0	0.0	2.4
6. Rancona V PD*	Propulse	13.7 fl oz	1.8	2.6	0.0	0.0	1.1
7. Dynasty PD*	None	-	2.1	2.3	0.0	0.0	1.8
8. Dynasty PD*	Propulse	13.7 fl oz	2.0	2.4	0.0	0.0	0.2
LSD(P<0.05)			0.3	0.3	N. S.	N. S.	1.3

*Seed trt rates were all applied at 4.0 oz/100 lbs.

NOTE: Florida seed #1 = seed lot H19-482-24, #2 = seed lot H19-482-25.

Cold germs: Florida #1 Rancona = 25 and Dynasty = 29; Florida #2 Rancona = 69 and Dynasty = 54.

Regular germs: Florida #1 Rancona = 51 and Dynasty = 21; Florida #2 Rancona = 76 and Dynasty = 33.

Plant/ft¹ = Stand count is the number of emerged plants per foot of row on June 5 and 11.

% Dead Plants² = The % of emerged plants that were dead or dying per plot.

SEED LOT X IN FURROW X SEED TRT TEST II, 2020					
BLACKSHANK, WOODS FIELD					
Seed Trt	IF Treatment	IF Rate	TSWV ³ 28-Aug	Roots/ft ⁴ 1-Oct	Yield lb/A
Florida #1 Seed					
1. Rancona V PD*	None	-	4.0	1.5	2249
2. Rancona V PD*	Propulse	13.7 fl oz	5.7	1.7	2307
3. Dynasty PD*	None	-	4.0	1.3	1850
4. Dynasty PD*	Propulse	13.7 fl oz	4.3	1.6	2220
Florida #2 Seed					
5. Rancona V PD*	None	-	3.7	2.2	2423
6. Rancona V PD*	Propulse	13.7 fl oz	5.4	2.3	2344
7. Dynasty PD*	None	-	4.3	2.0	2149
8. Dynasty PD*	Propulse	13.7 fl oz	4.3	2.0	2385
LSD(P<0.05)			N. S.	0.4	549
*Seed trt rates were all applied at 4.0 oz/100 lbs.					
TSWV ³ =Percent of row feet infectd based on disease loci (up to 12" linear row) per plot.					
Roots/ft ⁴ =Number of tap roots per foot of row after the plots were inverted.					

OFFICIAL DAILY RAINFALL, 2020								
BLACKSHANK FARM, WOODS FIELD								
TIFTON, GA								
RAINFALL								
DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0.15	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0.00	0	0	0	0	0	0
4	2.70	0	0	0	0	0.68	0	0
5	1.86	0.01	0	0	0.11	0.01	0	0
6	0.01	0	0	0.12	0.57	0	0	0
7	0	0	0	0.77	0.08	0	0	0
8	0	0.21	0	0.02	0.02	0	0	0
9	0	0.01	0	1.03	0.01	0	0	0.45
10	0	0.04	0	0.01	0	0.09	0.62	0.01
11	0	0	0	0	0	0.31	0	0.11
12	0	0	0	2.67	0	0.01	0.60	0
13	0	0.58	0	0	0	0.46	0	0
14	0	0	0	0	0	0.13	0	0
15	0	0.02	0	0	0	0.17	0.68	0
16	0	0	0	0	0	0.01	2.55	0
17	0	0	0.01	0	0	0	0.33	0
18	0	0.06	0.06	0	0	0.11	0	0
19	0	0.79	0.02	0.11	0	0.01	0	0
20	0	0.42	1.43	0.04	0	0.53	0	0
21	0	0	0	0	0	0.13	0	0
22	0	0	0.72	0.01	0	0.02	0	0
23	0	2.28	0.01	0.01	0.21	0.02	0	0
24	0	0	0	0.20	0.01	1.67	0.14	0.55
25	0	0	0.01	0.07	0	0.01	0.03	0.01
26	0	0	0.21	0	0	0	0	0
27	0	0	0.02	0	0	0	0.22	0.13
28	0	0	0	0	0.67	0.03	0.03	0
29	0	0.07	0.10	0	0.02	0	0.01	1.21
30	0	1.18	0.01	0.01	0	0	0.01	0
31	0.40	0	0	0	0	0.17	0	0
TOTAL		5.7	2.6	5.1	1.9	4.6	5.2	2.5
Rainfall = inches.								
Irrigated as needed.								

BAYER WHITE MOLD TEST II, 2020

- A. PURPOSE: To evaluate the efficacy of different programs for southern stem rot (White Mold).
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with five replicates.
 2. One two-row bed (20ft 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: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.
 2. Treatment sprays: In furrow sprays were applied at planting on 27 May. Sprays 1-7 were applied on 29 June, 13 July, 28 July, 10 Aug., 26 Aug., 7 Sep., and 23 Sep., respectively. Plots were not coversprayed.
- D. ADDITIONAL INFORMATION:
1. Location: Blackshank Farm, Irr/Non Field, Tifton, GA 31794
31.503114° N, 83.544443° W
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 11 Apr. Ran strip till rig through to subsoil on 11 May.
 4. Soil Fertility: pH – 6.53 P – 28.1 K – 42.5 Ca – 278 Mg – 31.6
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) + Strongarm (0.45 dry oz/a) tank mix on 13 May. Rotilled to incorporate.
POST: Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (2 pt /100 gal.) on 20 July. Tank mix of Fusilade DX (20 fl oz/a) + nonionic surfactant (2 pt /100 gal.) on 4 Sep.

6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 8 June.
Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. Planting Info: Tifguard, 6 seed/ft (2" deep) on 27 May.
8. Harvest Dates: Dug – 14 Oct. Picked – 19 Oct.

E: SUMMARY:

This trial had modest levels of foliar and soilborne disease and all treatments did a good job of reducing disease incidence and increasing pod yield.

BAYER WHITE MOLD TEST II, 2020							
BLACKSHANK FARM, IRR-NONIRRIGATED FIELD							
				% Dead			
			Plant/ft ¹	Plants ²	LS ³	WM ⁴	Yield
Trt	App's	Rate	10-Jun	10-Jun	5-Oct	14-Oct	lb/A
1. Untreated	-	-	2.9	0.0	6.1	15.2	3310.6
2. Velum	In furrow*	6.5 fl oz	-	-	2.9	4.4	4588.3
Absolute	2	3.5 fl oz					
Propulse	3 (wash in)**	13.6 fl oz					
Provost Silver	4 & 6	13.0 fl oz					
Excalia	5	2.5 oz					
+ Bravo		1.5 pt					
Bravo	7	1.5 pt					
3. Velum	In furrow*	6.5 fl oz	2.8	0.0	2.7	6.4	4414.1
Absolute	2	3.5 fl oz					
Excalia	3 & 5	2.5 oz					
+ Bravo		1.5 pt					
Provost Silver	4 & 6	13.0 fl oz					
Bravo	7	1.5 pt					
4. Bravo	1 & 7	1.5 pt	-	-	2.9	4.4	4268.9
Absolute	2	3.5 fl oz					
Excalia	3 & 5	2.5 oz					
+ Bravo		1.5 pt					
Provost Silver	4 & 6	13.0 fl oz					
5. Proline	In furrow*	5.7 fl oz	2.6	0.0	3.0	3.6	4152.7
Absolute	2	3.5 fl oz					
Excalia	3 & 5	2.5 oz					
+ Bravo		1.5 pt					
Provost Silver	4 & 6	13.0 fl oz					
Bravo	7	1.5 pt					
6. Bravo	1-7	1.5 pt	-	-	4.2	9.6	3949.4
LSD(P<0.05)			N. S.	N. S.	0.6	5.7	378.5

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

** The washed in application will be made just prior to an irrigation event.

Plant/ft¹ = Stand count is the number of emerged plants per foot of row on June 10.

% Dead Plants² = The % of emerged plants that were dead or dying per plot.

Leaf Spot³ = Florida 1 - 10 scale where 1=no disease and 10=dead plant.

White Mold⁴ = Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

CONCEPT AGRI TEK, 2020

- 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 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: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO₂ unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens. Treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO₂ unit with six SX-6 tips and 50 mesh ball check screens.
 2. Cover sprays: Chlorothalanyl (1.5 pt/a) was applied for leaf spot control on 25 June, 9 July, 22 July, 7 Aug., 19 Aug., 2 Sep., and 15 Sep.
 3. Treatment sprays: In furrow spray was applied at planting on 27 May. Treatment sprays 1, 3, and 5 were applied on 29 June, 28 July, and 24 Aug., respectively.
- D. ADDITIONAL INFORMATION:
1. Location: Blackshank Farm, Irr/Non Field, Tifton, GA 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 11 Apr. Ran strip till rig through to subsoil 11 May.
 4. Soil Fertility: pH – 6.53 P – 28.1 K – 42.5 Ca – 278 Mg – 31.6
Soil type: Tifton loamy sand, 2 – 5% slope.

5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) + Strongarm (0.45 dry oz/a) tank mix on 13 May. Rototilled to incorporate.
POST: Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (2 pt /100 gal.) on 20 July. Tank mix of Fusilade DX (20 fl oz/a) + nonionic surfactant (2 pt /100 gal.) on 4 Sep.
6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 8 June.
Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. Planting Info: Tifguard, 6 seed/ft (1.5" deep) on 27 May.
8. Harvest Dates: Dug – 14 Oct. Picked – 19 Oct.

E: SUMMARY:

The in furrow application of BioAid did result in increased early season plant emergence, but there were no differences in plant populations or yield at harvest. There were numerical reductions in disease but no significant differences among treatments.

CONCEPT AGRI TEK TEST, 2020								
BLACKSHANK FARM, IRR-NON FIELD								
Treatments	App's	Rate	Plant/ft ¹		% Dead Plants ²			TSWV ³
			10-Jun	17-Jun	10-Jun	17-Jun	1-Jul	28-Aug
1. Untreated			2.8	2.9	0.0	0.3	0.7	7.0
2. BioAid	In furrow*	32.0 fl oz	2.6	3.3	0.0	0.4	0.4	6.7
	BioAid	1, 3, 5	32.0 fl oz					
3. BioAid	1, 3, 5	32.0 fl oz	2.6	3.1	0.0	0.3	0.3	6.3
LSD(P<0.05)			0.1	0.3	N. S.	0.8	1.3	N. S.

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

Plant/ft¹ = Stand count is the number of emerged plants per foot of row on June 10 and 17.

% Dead Plants²=The % of emerged plants that were dead or dying per plot.

TSWV³=Percent of row feet infectd based on disease loci (up to 12" linear row) per plot.

CONCEPT AGRI TEK TEST, 2020					
BLACKSHANK FARM, IRR-NON FIELD					
			WM ⁴	Roots/ft ⁵	Yield
Treatments	App's	Rate	14-Oct	15-Oct	lb/A
1. Untreated			20.0	2.2	3436.4
2. BioAid	In furrow*	32.0 fl oz	14.0	2.2	3484.8
BioAid	1, 3, 5	32.0 fl oz			
3. BioAid	1, 3, 5	32.0 fl oz	9.7	2.3	3654.2
LSD(P<0.05)			N. S.	N. S.	N. S.
*In furrow applications applied in 3.4 GPA, mixed in 2 L volume.					
White Mold ⁴ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.					
Roots/ft ⁵ =Number of tap roots per foot of row after the plots were inverted.					

KPHITE IN FURROW TEST, 2020

- A. **PURPOSE:** To evaluate the comparative efficacy of experimental treatments for control of seedling diseases.
- 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: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens. Treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.

2. Cover sprays: Chlorothalanil (1.5 pt/a) was applied for leaf spot control on 25 June, 9 July, 22 July, 7 Aug., 19 Aug., 2 Sep., and 15 Sep.
3. Treatments sprays: In furrow sprays were applied at planting on 27 May. Spray 2 was applied on 13 July and spray 4 was applied on 10 Aug.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Irr/Non Field, Tifton, GA 31794
2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 11 Apr. Ran strip till rig through to subsoil 11 May.
4. Soil Fertility: pH – 6.53 P – 28.1 K – 42.5 Ca – 278 Mg – 31.6
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) + Strongarm (0.45 dry oz/a) tank mix on 13 May. Rototilled to incorporate.
POST: Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (2 pt /100 gal.) on 20 July. Tank mix of Fusilade DX (20 fl oz/a) + nonionic surfactant (2 pt /100 gal.) on 4 Sep.
6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 8 June. Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. Planting Info: Tifguard, 6 seed/ft (2" deep) on 27 May.
8. Harvest Dates: Dug – 14 Sep. Picked – 19 Oct.

E: SUMMARY:

The seed treatment did a very good job in this trial, and the Kphite in furrow gave no additional benefit. However, on the nontreated seed, Kphite increased stands and also decreased the incidence of dead plants caused by *Aspergillus* crown rot. There was little difference between rates, and even the very high rate applied in furrow was not phytotoxic to the seedlings. That was thought to be a possibility considering the concentrated spray due to the low volume of in furrow applications. This treatment needs to be explored further, especially in situations where *Pythium* is a potential issue.

KPHITE IN FURROW TEST, 2020								
BLACKSHANK FARM, IRR-NON FIELD								
Treatments	App's	Rate	Plant/ft ¹		% Dead Plants ²			TSWV ³
			10-Jun	17-Jun	10-Jun	17-Jun	1-Jul	28-Aug
Untreated Tiftuard								
1. Untreated	-		0.9	0.9	0.0	18.9	30.4	8.0
2. Kphite	In furrow*	32.0 fl oz	1.9	1.6	0.0	12.8	16.6	9.0
Kphite	2 & 4	64.0 fl oz						
3. Kphite	In furrow*	64.0 fl oz	1.8	1.7	0.0	9.5	15.0	6.5
Kphite	2 & 4	64.0 fl oz						
LSD(P<0.05)			0.6	0.5	N. S.	7.5	11.8	N. S.
Treatments	App's	Rate	Plant/ft ¹		% Dead Plants ²			TSWV ³
			10-Jun	17-Jun	10-Jun	17-Jun	1-Jul	28-Aug
Treated Tiftuard								
1. Untreated	-		2.8	3.0	0.0	1.2	1.9	8.5
2. Kphite	In furrow*	32.0 fl oz	2.5	3.1	0.0	0.6	0.9	9.5
Kphite	2 & 4	64.0 fl oz						
3. Kphite	In furrow*	64.0 fl oz	2.7	3.1	0.0	0.0	0.0	6.0
Kphite	2 & 4	64.0 fl oz						
LSD(P<0.05)			N. S.	N. S.	N. S.	N. S.	1.8	N. S.
*In furrow applications applied in 3.4 GPA, mixed in 2 L volume.								
Plant/ft ¹ = Stand count is the number of emerged plants per foot of row on June 10 and 17.								
% Dead Plants ² =The % of emerged plants that were dead or dying per plot.								
TSWV ³ =Percent of row feet infectd based on disease loci (up to 12" linear row) per plot.								

KPHITE IN FURROW TEST, 2020									
BLACKSHANK FARM, IRR-NON FIELD									
			LS ⁴	Roots/ft ⁵	WM ⁶	Yield			
Treatments	App's	Rate	5-Oct	15-Oct	14-Oct	lb/A	SMKSS ⁷	\$/Ton	\$/Acre
Untreated Tiftuard									
1. Untreated			-	0.5	13.5	835	78.3	387.5	162.2
2. Kphite	In furrow*	32.0 fl oz	-	1.0	18.5	1851	80.4	397.4	368.6
	Kphite 2 & 4	64.0 fl oz							
3. Kphite	In furrow*	64.0 fl oz	-	1.2	16.5	1307	79.5	391.9	259.0
	Kphite 2 & 4	64.0 fl oz							
LSD(P<0.05)			-	0.6	N. S.	849	N. S.	N. S.	179.3
			LS ⁴	Roots/ft ⁵	WM ⁶	Yield			
Treatments	App's	Rate	5-Oct	15-Oct	14-Oct	lb/A	SMKSS ⁷	\$/Ton	\$/Acre
Treated Tiftuard									
1. Untreated			3.8	2.0	17.0	2541	79.3	390.2	496.1
2. Kphite	In furrow*	32.0 fl oz	3.7	1.9	14.0	2287	80.9	398.5	457.5
	Kphite 2 & 4	64.0 fl oz							
3. Kphite	In furrow*	64.0 fl oz	3.3	2.0	17.5	2505	80.7	396.7	495.4
	Kphite 2 & 4	64.0 fl oz							
LSD(P<0.05)			0.5	N. S.	N. S.	N. S.	N. S.	N. S.	N. S.
*In furrow applications applied in 3.4 GPA, mixed in 2 L volume.									
Leaf Spot ⁴ = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.									
Roots/ft ⁵ =Number of tap roots per foot of row after the plots were inverted.									
White Mold ⁶ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.									
SMKSS ⁷ = The percent of sound mature kernels and sound splits.									

SYNGENTA MANAGEMENT TEST, 2020

- A. **PURPOSE:** To evaluate the comparative efficacy of fungicides applied for the control of foliar and soil borne diseases.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with 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:** In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.
 2. **Treatment Sprays:** In furrow sprays applied at planting on 27 May. Sprays 1, 1.5, 2, 2.5, 3, 3.5, 4, 4.5, 5, 5.5, 6, 6.5, and 7 were applied on 30 June, 8 July, 13 July, 21 July, 29 July, 4 Aug., 10 Aug., 18 Aug., 27 Aug., 1 Sep., 7 Sep., 15 Sep., and 23 Sep., respectively. No cover sprays were applied to this test.
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Blackshank Farm, Irr/Non Field, Tifton, GA 31794
 2. **Crop History:** Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. **Land Preparation:** Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 11 Apr. Ran strip till rig through to subsoil on 11 May.
 4. **Soil Fertility:** pH – 6.53 P – 28.1 K – 42.5 Ca – 278 Mg – 31.6
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. **Herbicides:** PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) + Strongarm (0.45 dry oz/a) tank mix on 13 May. Rototilled to incorporate.
POST: Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (2 pt /100 gal.) on 20 July. Tank mix of Fusilade DX (20 fl oz/a) + nonionic surfactant (2 pt /100 gal.) on 4 Sep.

6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 8 June.
Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. Planting Info: Tifguard, 6 seed/ft (2" deep) on 27 May.
8. Harvest Dates: Dug – 14 Oct. Picked – 19 Oct.

E: SUMMARY:

Disease levels were lower than expected in this trial. There were some differences in disease control and yield from treatments, but overall this was not a real definitive trial.

SYNGENTA MANAGEMENT TEST, 2020					
BLACKSHANK FARM, IRR-NONIRRIGATED FIELD					
			LS ¹	WM ²	Yield
Trt	App's	Rate	5-Oct	14-Oct	lb/A
1. Untreated			4.9	12.0	3521.1
2. Absolute	1	3.5 fl oz	2.6	9.5	3557.4
Bravo W'stik	2, 6 & 7	1.5 pt			
Provost Silver	3 - 5	12.8 fl oz			
3. Absolute	1	3.5 fl oz	3.1	8.5	3557.4
Propulse	2	13.7 fl oz			
Provost Silver	3 & 5	12.8 fl oz			
Elatus 45WG	4 & 6	7.3 oz			
Bravo W'stik	7	1.5 pt			
4. Priaxor	1.5	6.0 fl oz	3.0	9.0	4174.5
Provysol	3 & 5	7.0 fl oz			
+ Convoy		29.0 ml			
Priaxor	4	8.0 fl oz			
Orius 3.6	6	7.2 fl oz			
Bravo W'stik	7	1.5 pt			
5. Priaxor	1.5	6.0 fl oz	2.8	8.0	3920.4
Bravo W'stik	3 & 5	1.0 pt			
+ Umbra		36.0 fl oz			
Priaxor	4	8.0 fl oz			
Bravo	6	1.5 pt			
+ Orius 3.6		7.2 fl oz			
Bravo W'stik	7	1.5 pt			
6. Lucento	1.5 & 3.5	5.5 fl oz	3.3	4.5	3993.0
Elatus	2.5	9.0 oz			
Convoy	4.5	21.0 oz			
+ Bravo		1.5 pt			
Bravo	5.5	1.5 pt			
+ Orius 3.6		7.2 fl oz			
Bravo W'stik	6.5	1.5 pt			
7. Alto	1	5.5 fl oz	3.1	5.0	3956.7
+ Bravo		1.0 pt			
Bravo	2 & 7	1.5 pt			
Elatus 45WG	3 & 5	9.5 oz			
+ Miravis		3.4 fl oz			

SYNGENTA MANAGEMENT TEST, 2020					
BLACKSHANK FARM, IRR-NONIRRIGATED FIELD					
			LS ¹	WM ²	Yield
Trt	App's	Rate	5-Oct	14-Oct	lb/A
8. Elatus 45WG	1	7.3 oz	2.8	5.0	4610.1
+ Bravo		1.0 pt			
Elatus 45WG	2.5 & 4.5	7.3 oz			
+ Miravis		3.4 fl oz			
Bravo	6 & 7	1.5 pt			
9. Alto	1	5.5 fl oz	2.7	8.5	3702.6
+ Bravo		1.5 pt			
Bravo	2	1.5 pt			
Elatus 45WG	3 & 5	9.5 oz			
+ A19649H		3.4 fl oz			
Bravo	7	1.5 pt			
10. Elatus	1	7.3 oz	3.7	9.0	4065.6
+ Bravo		1.0 pt			
Elatus 45WG	2.5 & 4.5	7.3 oz			
+ A19649H		3.4 fl oz			
Bravo	6 & 7	1.5 pt			
11. Alto	1	5.5 fl oz	3.2	5.5	3956.7
+ Bravo		1.0 pt			
Bravo	2	1.5 pt			
A23427	3 & 5	13.7 fl oz			
Bravo	7	1.5 pt			
12. Alto	1	5.5 fl oz	2.8	3.5	4065.6
+ Bravo		1.0 pt			
Bravo	2	1.5 pt			
A23427	3 & 5	13.7 fl oz			
+ Abound		11.0 fl oz			
Bravo	7	1.5 pt			
13. A23427	1, 2.5, 4.5	10.5 fl oz	3.5	5.0	4065.6
Bravo	6 & 7	1.5 pt			
14. A23427	1, 2.5, 4.5	10.5 fl oz	3.1	4.0	4174.5
+ Abound		9.0 fl oz			
Bravo	6 & 7	1.5 pt			
LSD(P<0.05)			0.7	5.7	559.1

Leaf Spot¹=Florida 1 - 10 scale where 1=no disease and 10=dead plant.

White Mold²=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

VALENT WHITE MOLD TEST II, 2020

- 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: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.
 2. Treatment Sprays: In furrow sprays were applied at planting on 27 May. Treatment sprays 1, 2, 2.5, 3, 4, 4.5, 5, 6, and 7 were applied 29 June, 15 July, 21 July, 29 July, 13 Aug., 18 Aug., 27 Aug., 7 Sep., and 23 Sep., respectively.
- D. ADDITIONAL INFORMATION:
1. Location: Blackshank Farm, Irr/Non Field, Tifton, GA 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 11 Apr. Ran strip till rig through to subsoil on 11 May.
 4. Soil Fertility: pH – 6.53 P – 28.1 K – 42.5 Ca – 278 Mg – 31.6
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) + Strongarm (0.45 dry oz/a) tank mix on 13 May. Rototilled to incorporate.
POST: Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (2 pt /100 gal.) on 20 July. Tank mix of Fusilade DX (20 fl oz/a) + nonionic surfactant (2 pt /100 gal.) on 4 Sep.

6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 8 June.
Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. Planting Info: Tifguard, 6 seed/ft (2" deep) on 27 May.
8. Harvest Dates: Dug – 14 Oct. Picked – 19 Oct.

E: SUMMARY:

There was a moderate level of foliar (leaf spots) and soilborne (white mold) diseases in this field and good separation of treatments in terms of disease control and yield increase.

VALENT WHITE MOLD TEST II, 2020							
BLACKSHANK FARM, IRR-NONIRRIGATED FIELD							
				% Dead			
			Plant/ft ¹	Plants ²	LS ³	WM ⁴	Yield
Trt	App's	Rate	10-Jun	10-Jun	5-Oct	14-Oct	lb/A
1. Bravo	1-7	1.5 pt	2.9	0.0	4.5	23.6	3484.8
2. Proline	In furrow*	5.7 fl oz	2.8	0.0	3.1	6.4	3920.4
Absolute	2	3.5 fl oz					
Elatus 45WG	3 & 5	7.3 oz					
Provost Silver	4 & 6	13.0 fl oz					
Bravo	7	1.5 pt					
3. Priaxor	2 & 4	6.0 fl oz	-	-	3.2	2.8	4297.9
Convoy	3 & 5	32 fl oz					
+ Bravo		1.5 pt					
Tebuconazole	6	7.2 fl oz					
+ Bravo		1.5 pt					
Bravo	7	1.5 pt					
4. Lucento	2 & 4	5.5 fl oz	-	-	2.9	6.4	4327.0
Elatus 45WG	3 & 5	7.3 oz					
Tebuconazole	6	7.2 fl oz					
+ Bravo		1.5 pt					
Bravo	7	1.5 pt					
5. Proline	In furrow*	5.7 fl oz	-	-	3.2	5.6	4297.9
Absolute	2	3.5 fl oz					
Excalia	3 & 5	2.5 oz					
+ Bravo		1.0 pt					
Provost Silver	4 & 6	13.0 fl oz					
Bravo	7	1.5 pt					
6. Priaxor	2 & 4	6.0 fl oz	-	-	3.4	7.6	4297.9
Excalia	3 & 5	2.5 oz					
+ Bravo		1.0 pt					
Tebuconazole	6	7.2 fl oz					
+ Bravo		1.5 pt					
Bravo	7	1.5 pt					

VALENT WHITE MOLD TEST II, 2020							
BLACKSHANK FARM, IRR-NONIRRIGATED FIELD							
				% Dead			
			Plant/ft ¹	Plants ²	LS ³	WM ⁴	Yield
Trt	App's	Rate	10-Jun	10-Jun	5-Oct	14-Oct	lb/A
7. Lucento	2 & 4	5.5 fl oz	-	-	3.2	7.6	4152.7
Excalia	3 & 5	2.5 oz					
+ Bravo		1.0 pt					
Tebuconazole	6	7.2 fl oz					
+ Bravo		1.5 pt					
Bravo	7	1.5 pt					
8. Bravo	1	1.0 pt	-	-	2.7	4.0	4414.1
+ Alto		5.5 fl oz					
Excalia	2.5 & 4.5	3.0 fl oz					
+ Miravis		3.4 fl oz					
Bravo	6 & 7	1.5 pt					
9. Bravo	1	1.0 pt	-	-	2.9	4.4	4356.0
+ Alto		5.5 fl oz					
Excalia	2.5 & 4.5	4.0 fl oz					
+ Miravis		3.4 fl oz					
Bravo	6 & 7	1.5 pt					
LSD(P<0.05)			N. S.	N. S.	0.4	5.1	536.2
Plant/ft ¹ = Stand count is the number of emerged plants per foot of row on June 10.							
% Dead Plants ² = The % of emerged plants that were dead or dying per plot.							
Leaf Spot ³ = Florida 1 - 10 scale where 1=no disease and 10=dead plant.							
White Mold ⁴ = Percent of row feet infected based on disease loci (up to 12" linear row) per plot.							

OFFICIAL DAILY RAINFALL, 2020								
BLACKSHANK FARM, IRR/NON FIELD								
TIFTON, GA								
RAINFALL								
DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0.15	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0.00	0	0	0	0	0	0
4	2.70	0	0	0	0	0.68	0	0
5	1.86	0.01	0	0	0.11	0.01	0	0
6	0.01	0	0	0.12	0.57	0	0	0
7	0	0	0	0.77	0.08	0	0	0
8	0	0.21	0	0.02	0.02	0	0	0
9	0	0.01	0	1.03	0.01	0	0	0.45
10	0	0.04	0	0.01	0	0.09	0.62	0.01
11	0	0	0	0	0	0.31	0	0.11
12	0	0	0	2.67	0	0.01	0.60	0
13	0	0.58	0	0	0	0.46	0	0
14	0	0	0	0	0	0.13	0	0
15	0	0.02	0	0	0	0.17	0.68	0
16	0	0	0	0	0	0.01	2.55	0
17	0	0	0.01	0	0	0	0.33	0
18	0	0.06	0.06	0	0	0.11	0	0
19	0	0.79	0.02	0.11	0	0.01	0	0
20	0	0.42	1.43	0.04	0	0.53	0	0
21	0	0	0	0	0	0.13	0	0
22	0	0	0.72	0.01	0	0.02	0	0
23	0	2.28	0.01	0.01	0.21	0.02	0	0
24	0	0	0	0.20	0.01	1.67	0.14	0.55
25	0	0	0.01	0.07	0	0.01	0.03	0.01
26	0	0	0.21	0	0	0	0	0
27	0	0	0.02	0	0	0	0.22	0.13
28	0	0	0	0	0.67	0.03	0.03	0
29	0	0.07	0.10	0	0.02	0	0.01	1.21
30	0	1.18	0.01	0.01	0	0	0.01	0
31	0.40	0	0	0	0	0.17	0	0
TOTAL		5.7	2.6	5.1	1.9	4.6	5.2	2.5
Rainfall = inches.								
Irrigated as needed.								

MULTI-STATE DISEASE EVALUATION TEST, 2020

- 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 continuous peanut production.
 5. Variety: Multiple Varieties
- C. APPLICATION OF TREATMENTS:
1. Equipment: Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
 2. Cover sprays: Chlorothalanyl (1.5 pt/a) was applied for leaf spot control on 9 July, 22 July, 7 Aug., 2 Sep., and 15 Sep.
 3. Inoculated test with white mold on 11 Aug.
- D. ADDITIONAL INFORMATION:
1. Location: Blackshank Farm, Banana Field, Tifton, GA 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a), deep turned and leveled field on 23 Mar. Fumigated with TRI-PIC 100 (300 lb/a) by injecting into soil and covering with plastic on 31 Mar. Removed tarp on 7 Apr. Ran strip till rig through to subsoil on 11 May.
 4. Soil Fertility: pH – 6.32 P – 16.4 K – 40 Ca – 244 Mg – 29.4
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 12 May. Rototilled to incorporate.
POST: Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 20 July.
 6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 17 June.
Acephate 97 (1.0 lb/a) for fire ants on 7 Aug.
Acephate 97 (0.75 lb/a) for worms on 3 Sep.

7. Planting Info: Multiple Varieties, 6 seed/ft (2" deep) on 2 June.
8. Harvest Dates: Dug – 13 Oct. Picked – 20 Oct.

E: SUMMARY:

The fumigation treatment was effective at preventing infection from background inoculum, and the inoculation with *Sclerotium rolfsii* was successful resulting in a uniform level of infection. There were differences evident among genotypes, but these were not as pronounced as in some years. GA-06G was one of the more susceptible, as expected, but GA-12Y has shown a higher percentage of resistant plants in previous trials; the reasons for this are not known. GA-17SP was the cultivar most resistant to white mold in this test. There were notable differences among entries in susceptibility to TSWV and leaf spot as well.

MULTISTATE/RIL FIELD TEST, 2020					
BLACKSHANK FARM, BANANA FIELD					
	TSWV¹	LS²	WM³	WM (% 0's)⁴	Yield
Genotypes	24-Aug	12-Oct	13-Oct	-	lb/A
1. GA01	3.8	3.4	26.5	12.5	4598
2. GA02	4.0	3.0	22.1	12.5	3328
3. GA03	6.0	2.4	19.2	4.2	2662
4. GA04	2.5	2.9	49.2	0.0	3872
5. GA05	2.8	4.4	47.1	4.2	4175
6. GA06	2.5	4.4	45.0	4.2	4114
7. GA07	1.8	3.6	32.3	8.3	4175
8. GA08	2.3	4.5	62.7	0.0	3449
9. GA09	5.0	2.4	40.2	4.2	3812
10. GA10	3.5	2.8	61.3	4.2	3267
11. GA11	1.8	3.1	36.5	4.2	3630
12. GA193105	1.5	4.4	39.6	4.2	3630
13. GA193103	1.3	4.3	33.1	4.2	4659
14. GA193101	2.5	3.7	50.0	4.2	3691
15. GA193804	3.3	3.7	36.5	4.2	3086
16. GA193803	2.8	4.0	30.0	12.5	4114
17. GA193106	2.5	3.9	27.5	0.0	3872
18. GA193104	2.5	4.4	34.4	8.3	3570
19. GA193102	2.8	4.3	46.5	0.0	3449
20. GA191390	1.8	4.3	27.5	25.0	4598
21. GA193801	2.0	3.4	34.8	20.8	4840
22. 19502-MR 2	4.3	3.4	42.7	0.0	3812
23. 19N02-MR 5	5.5	3.4	44.2	0.0	3872
24. 19N02-MR 11	6.5	3.1	32.7	4.2	3388
25. 19UPT-MR 5	6.0	3.9	21.9	12.5	4296
26. 19MSI 51	3.3	4.0	40.6	8.3	4296
27. 19501-MR 17	3.0	4.3	35.2	4.2	4477
28. ACL X 3F104	4.5	3.0	31.5	16.7	3328

MULTISTATE/RIL FIELD TEST, 2020					
BLACKSHANK FARM, BANANA FIELD					
	TSWV ¹	LS ²	WM ³	WM (% 0's) ⁴	Yield
Genotypes	24-Aug	12-Oct	13-Oct	-	lb/A
29. ACL1C-12	3.3	4.0	28.8	8.3	4175
30. ACL X 1F410	4.5	2.9	28.8	12.5	3872
31. ACL109069	3.3	3.4	38.1	4.2	3933
32. ACL X 307 (spanish)	7.8	2.4	24.4	0.0	3146
33. IPG 464	8.3	5.4	46.7	0.0	3146
34. IPG 1288	10.0	5.0	77.5	0.0	1815
35. 16-1-2154	8.3	4.8	47.3	0.0	2723
36. T1	4.3	2.8	29.6	8.3	3328
37. T2	11.5	2.3	20.2	0.0	2420
38. T3	3.5	3.9	32.7	8.3	3751
39. T4	4.8	2.7	26.9	0.0	3207
40. TifNV High O/L	4.3	3.1	31.3	12.5	3933
41. GA-06G	7.3	4.3	45.0	4.2	3630
42. Florun 331	4.0	4.3	37.5	4.2	3933
43. Tufrunner 297	6.5	3.6	24.8	12.5	3751
44. GA-17SP	3.3	2.9	19.4	25.0	3933
45. GA-13M	2.3	5.5	45.8	4.2	3146
46. GA-18RU	9.0	4.5	45.4	0.0	3207
47. GA-11J	4.3	4.2	21.7	4.2	3812
48. Tifguard	6.0	3.2	47.1	0.0	3449
49. GA-14N	5.0	4.0	26.7	0.0	3630
50. GA-16HO	5.5	3.8	35.8	12.5	3509
51. GA-12Y	1.5	3.6	39.2	0.0	4175
52. AU-NPL17	6.0	2.3	32.7	4.2	3025
LSD(P<0.05)	3.1	0.7	12.8	12.7	757

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

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

White Mold³=Mean length of disease loci after digging (cm).

White Mold⁴=The percent of inoculated sites with no visible white mold symptoms.

OFFICIAL DAILY RAINFALL, 2020								
BLACKSHANK FARM, BANANA FIELD								
TIFTON, GA								
RAINFALL								
DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0.15	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0.00	0	0	0	0	0	0
4	2.70	0	0	0	0	0.68	0	0
5	1.86	0.01	0	0	0.11	0.01	0	0
6	0.01	0	0	0.12	0.57	0	0	0
7	0	0	0	0.77	0.08	0	0	0
8	0	0.21	0	0.02	0.02	0	0	0
9	0	0.01	0	1.03	0.01	0	0	0.45
10	0	0.04	0	0.01	0	0.09	0.62	0.01
11	0	0	0	0	0	0.31	0	0.11
12	0	0	0	2.67	0	0.01	0.60	0
13	0	0.58	0	0	0	0.46	0	0
14	0	0	0	0	0	0.13	0	0
15	0	0.02	0	0	0	0.17	0.68	0
16	0	0	0	0	0	0.01	2.55	0
17	0	0	0.01	0	0	0	0.33	0
18	0	0.06	0.06	0	0	0.11	0	0
19	0	0.79	0.02	0.11	0	0.01	0	0
20	0	0.42	1.43	0.04	0	0.53	0	0
21	0	0	0	0	0	0.13	0	0
22	0	0	0.72	0.01	0	0.02	0	0
23	0	2.28	0.01	0.01	0.21	0.02	0	0
24	0	0	0	0.20	0.01	1.67	0.14	0.55
25	0	0	0.01	0.07	0	0.01	0.03	0.01
26	0	0	0.21	0	0	0	0	0
27	0	0	0.02	0	0	0	0.22	0.13
28	0	0	0	0	0.67	0.03	0.03	0
29	0	0.07	0.10	0	0.02	0	0.01	1.21
30	0	1.18	0.01	0.01	0	0	0.01	0
31	0.40	0	0	0	0	0.17	0	0
TOTAL		5.7	2.6	5.1	1.9	4.6	5.2	2.5
Rainfall = inches.								
Irrigated as needed.								

BAYER IN FURROW RATE TEST, 2020

- A. **PURPOSE:** To evaluate the efficacy of full and reduced rates of in furrow fungicide treatments to control peanut seedling diseases when applied to seed with low germination. The seed were treated with Dynasty PD at 4 oz/100 lb of seed.
- 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: TUFRunner 297.
- C. **APPLICATION OF TREATMENTS:**
1. Equipment: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using 6-TX-12 tips and 50 mesh ball check screens.
 2. Cover sprays: Chlorothalonil (1.5 pt/a) was applied for leaf spot control on 11 June, 25 June, 9 July, 22 July, 19 Aug., and 2 Sep., and Miravis (3.4 fl oz/a) was applied on 3 Aug. Elatus (9.5 dry oz/a) applied for white mold control on 9 July, and 3 Aug., and Convoy (32 fl oz/a) was applied on 19 Aug.
- D. **ADDITIONAL INFORMATION:**
1. Location: Lang Farm, South Field, Tifton, GA, 31794
31.510520° N, 83.547440° W
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 18 March. Deep turned field, marked beds 6 ft, and turned under fertilizer on 28 March.
 4. Soil Fertility: pH – 6.4 P – 36 K – 66 Ca – 942 Mg – 93
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 28 Apr. Rototilled to incorporate.
POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.

6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June.
Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. Planting Info: TUFRunner 297, 6 seed/ft (2" deep) on 15 May.
8. Harvest Dates: Dug –21 Sep. Picked – 1 Oct.

E: SUMMARY:

The treatments evaluated are all labeled for in furrow use, and full and reduced rates of each were compared. All treatments reduced the low level of *Aspergillus* crown rot present, and also resulted in significantly higher tap root counts at harvest. The Propulse and Velum were the most effective, and the lower rates had similar activity to the highest labeled rate.

BAYER IN FURROW RATE TEST, 2020						
LANG FARM, SOUTH FIELD						
IF Treatments	IF Rate	Plant/ft ¹		% Dead Plants ²		
		28-May	4-Jun	28-May	4-Jun	19-Jun
Florida #1 Seed						
1. Nontreated	-	2.0	2.1	0.0	2.1	6.6
2. Velum	6.5 fl oz	1.9	2.4	0.0	0.2	0.5
3. Velum	4.3 fl oz	2.1	2.4	0.0	0.4	0.9
4. Proline	5.7 fl oz	1.4	2.2	0.0	0.0	0.0
5. Proline	3.8 fl oz	1.5	2.2	0.0	0.0	0.0
6. Propulse	13.7 fl oz	1.5	2.4	0.0	0.0	0.0
7. Propulse	9.0 fl oz	1.7	2.3	0.0	0.0	0.2
LSD(P<0.05)	-	0.4	0.3	N. S.	0.9	1.3
*All seed treated with Dynasty PD (4 oz/100 lbs).						
NOTE: Florida seed #1 = seed lot H19-482-24.						
Cold germination = 29, regular germination = 21.						
Plant/ft ¹ = Stand count is the number of emerged plants per foot of row on May 28 and June 4.						
% Dead Plants ² = The % of emerged plants that were dead or dying per plot.						

BAYER IN FURROW RATE TEST, 2020				
LANG FARM, SOUTH FIELD				
		TSWV ³	Roots/ft ⁴	Yield
IF Treatments	IF Rate	27-Aug	23-Sep	lb/A
Florida #1 Seed				
1. Nontreated	-	19.6	1.8	4124
2. Velum	6.5 fl oz	15.2	2.2	4385
3. Velum	4.3 fl oz	17.6	2.2	4327
4. Proline	5.7 fl oz	15.2	2.0	4356
5. Proline	3.8 fl oz	16.0	2.0	4008
6. Propulse	13.7 fl oz	14.0	2.3	3862
7. Propulse	9.0 fl oz	15.2	2.4	4646
LSD(P<0.05)	-	9.8	0.2	N. S.
*All seed treated with Dynasty PD (4 oz/100 lbs).				
TSWV ³ = Percent of row feet infected based on disease loci (up to 12" linear row) per plot.				
Roots/ft ⁴ = Number of tap roots per foot of row after the plots were inverted.				

CORTEVA-VALENT IN FURROW TEST, 2020

- A. **PURPOSE:** To evaluate the efficacy of labeled and experimental in furrow fungicide treatments to control peanut seedling diseases when applied to untreated seed with lower germination.
- 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: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
2. Cover sprays: Chlorothalonil (1.5 pt/a) was applied for leaf spot control on 11 June, 25 June, 9 July, 22 July, 19 Aug., and 2 Sep., and Miravis (3.4 fl oz/a) was applied on 3 Aug. Elatus (9.5 dry oz/a) applied for white mold control on 9 July, and 3 Aug., and Convoy (32 fl oz/a) was applied on 19 Aug.
3. 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 – 2019, Peanut – 2018, Peanut – 2017
3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 18 March. Deep turned field, marked beds 6 ft, and turned under fertilizer on 28 March.
4. Soil Fertility: pH – 6.4 P – 36 K – 66 Ca – 942 Mg – 93
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 28 Apr. Rototilled to incorporate.
POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June.
Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. Planting Info: Tifguard, 6 seed/ft (2” deep) on 6 May.
8. Harvest Dates: Dug –21 Sep. Picked – 24 Sep.

E: SUMMARY:

This was an excellent test with significant pre- and post-emergence seedling disease. Some were more effective than others, but all treatments significantly increased the number of plants present at harvest. Aspergillus crown rot was severe and Abound had no effect on this disease. These stands resulted in some large differences in crop yield.

CORTEVA/VALENT IN FURROW TEST, 2020									
LANG FARM, SOUTH FIELD									
IF Treatments	Rate	Plant/ft ¹		% Dead Plants ²			TSWV ³	Roots/ft ⁴	Yield
		19-May	27-May	19-May	27-May	9-Jun	27-Aug	23-Sep	lb/A
1. Fontelis	16.0 fl oz	2.0	2.4	0.0	2.4	5.1	33.6	1.7	4728
2. Fontelis	24.0 fl oz	1.6	2.1	0.0	0.9	4.7	32.4	1.5	4472
3. Aproach	6.0 fl oz	1.7	1.9	0.0	11.7	20.9	39.6	1.0	3787
4. Aproach	12.0 fl oz	1.6	2.0	0.3	6.1	12.5	35.2	1.4	4112
5. Abound	11.6 fl oz	1.6	1.6	0.0	18.6	35.5	36.0	1.0	3421
6. Excalia	4.0 fl oz	1.6	1.8	0.0	5.1	12.4	34.8	1.4	4182
7. Nontreated	-	1.2	1.5	0.3	15.2	30.2	36.0	0.7	2439
LSD(P<0.05)		0.4	0.4	N. S.	6.3	10.5	N. S.	0.3	727
Plant/ft ¹ = Stand count is the number of emerged plants per foot of row on May 19 and 27.									
% Dead Plants ² =The % of emerged plants that were dead or dying per plot.									
TSWV ³ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.									
Roots/ft ⁴ =Number of tap roots per foot of row after the plots were inverted.									

IN FURROW X SEED TRT TEST, 2020

A. PURPOSE: To evaluate the efficacy of commercial peanut seed treatments and in furrow sprays on seedling diseases and crop yields.

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: Untreated Tifguard

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
2. Cover sprays: Chlorothalonil (1.5 pt/a) was applied for leaf spot control on 11 June, 25 June, 9 July, 22 July, 19 Aug., and 2 Sep., and Miravis (3.4 fl oz/a) was applied on 3 Aug. Elatus (9.5 dry oz/a) applied for white mold control on 9 July, and 3 Aug., and Convoy (32 fl oz/a) was applied on 19 Aug.
3. In furrow sprays were applied at planting on 5 May

D. ADDITIONAL INFORMATION:

1. Location: Lang Farm, South Field, Tifton, GA, 31794
2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 18 March. Deep turned field, marked beds 6 ft, and turned under fertilizer on 28 March.
4. Soil Fertility: pH – 6.4 P – 36 K – 66 Ca – 942 Mg – 93
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 28 Apr. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June. Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. Planting Info: Untreated Tifguard, 6 seed/ft (2” deep) on 5 May.
8. Harvest Dates: Dug –21 Sep. Picked – 24 Sep.

E: SUMMARY:

This was an excellent test with significant pre- and post-emergence seedling disease. Some were more effective than others, but nearly all treatments significantly increased the plant stands. Aspergillus crown rot was severe and as in other trials, Abound had no effect on this disease. These stands resulted in some large differences in crop yield.

IN FURROW SEED TRT TEST, 2020							
LANG FARM, SOUTH FIELD							
Seed Trt	IF	IF Rate	Plant/ft ¹		% Dead Plants ²		
			19-May	26-May	19-May	26-May	8-Jun
1. Nontrt	None		1.0	0.6	0.5	17.9	46.1
2. Nontrt	Abound	6.0 fl oz	1.6	0.9	1.2	24.1	47.7
3. Nontrt	Velum Total	18.0 fl oz	1.4	1.8	0.3	4.0	7.3
4. Nontrt	Proline	5.7 fl oz	1.0	0.7	0.0	8.2	12.4
5. Rancona V PD*	None		2.7	3.0	0.0	0.2	0.7
6. Rancona V PD*	Abound	6.0 fl oz	2.5	2.9	0.0	0.2	0.9
7. Rancona V PD*	Velum Total	18.0 fl oz	3.2	3.2	0.0	0.0	0.0
8. Rancona V PD*	Proline	5.7 fl oz	3.1	3.3	0.0	0.0	0.1
9. Dynasty PD*	None		2.8	2.4	0.4	1.3	3.8
10. Dynasty PD*	Abound	6.0 fl oz	2.7	2.7	0.0	1.7	3.0
11. Dynasty PD*	Velum Total	18.0 fl oz	3.0	3.1	0.0	0.3	0.3
12. Dynasty PD*	Proline	5.7 fl oz	3.0	3.0	0.0	0.0	0.0
LSD(P<0.05)			0.4	0.5	1.0	3.8	7.0
*Rate of Rancona V PD and Dynasty PD = 4 oz/100 lbs.							
Plant/ft ¹ = Stand count is the number of emerged plants per foot of row on May 19 and 26.							
% Dead Plants ² =The % of emerged plants that were dead or dying per plot.							

IN FURROW SEED TRT TEST, 2020

LANG FARM, SOUTH FIELD

Seed Trt	IF	IF Rate	TSWV³ 3-Sep	Roots/ft⁴ 21-Sep	Yield lb/A
1. Nontrt	None		-	0.7	2214
2. Nontrt	Abound	6.0 fl oz	36.0	0.6	2875
3. Nontrt	Velum Total	18.0 fl oz	20.0	2.1	4646
4. Nontrt	Proline	5.7 fl oz	-	0.8	3093
5. Rancona V PD*	None		17.5	3.0	4930
6. Rancona V PD*	Abound	6.0 fl oz	16.5	3.0	5648
7. Rancona V PD*	Velum Total	18.0 fl oz	18.5	3.1	4922
8. Rancona V PD*	Proline	5.7 fl oz	16.5	3.3	4857
9. Dynasty PD*	None		18.5	2.6	4850
10. Dynasty PD*	Abound	6.0 fl oz	17.5	2.7	5017
11. Dynasty PD*	Velum Total	18.0 fl oz	18.5	2.9	4530
12. Dynasty PD*	Proline	5.7 fl oz	14.0	3.1	5409
LSD(P<0.05)			11.5	0.4	918

*Rate of Rancona V PD and Dynasty PD = 4 oz/100 lbs.

TSWV³=Percent of row feet infectd based on disease loci (up to 12" linear row) per plot.

Roots/ft⁴=Number of tap roots per foot of row after the plots were inverted.

SEED LOT X SEED TRT X IN FURROW TEST, 2020

- A. PURPOSE: To evaluate the efficacy of various in furrow fungicide sprays for seedling disease control when applied to seed treated with either Rancona PD or Dynasty PD.
- 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: TUFRunner 297.
- C. APPLICATION OF TREATMENTS:
1. Equipment: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
 2. Cover sprays: Chlorothalonil (1.5 pt/a) was applied for leaf spot control on 11 June, 25 June, 9 July, 22 July, 19 Aug., and 2 Sep., and Miravis (3.4 fl oz/a) was applied on 3 Aug. Elatus (9.5 dry oz/a) applied for white mold control on 9 July, and 3 Aug., and Convoy (32 fl oz/a) was applied on 19 Aug.
 3. Treatment sprays: In furrow sprays were applied at planting on 15 May.
- D. ADDITIONAL INFORMATION:
1. Location: Lang Farm, South Field, Tifton, GA, 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 18 March. Deep turned field, marked beds 6 ft, and turned under fertilizer on 28 March.
 4. Soil Fertility: pH – 6.4 P – 36 K – 66 Ca – 942 Mg – 93
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 28 Apr. Rototilled to incorporate.
POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.

6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June.
Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. Planting Info: TUFRunner 297, 6 seed/ft (2" deep) on 15 May.
8. Harvest Dates: Dug –21 Sep. Picked – 1 Oct.

E: SUMMARY:

As noted in the footnotes of the tables, there was a significant difference in germination of these seed lots when treated with Rancona versus Dynasty. The seed was infested with a high incidence of *Aspergillus flavus*, at least some of which was found to be resistant to azoxystrobin. However, the expected difference in emergence between the two seed treatments did not develop, nor were there significant differences from in furrow sprays. There also was very little *Aspergillus* crown rot present in any plots. The colder, wetter soils in the spring of 2020 apparently were not as conducive for *A. niger* or *A. flavus* to affect the plants, and the other seedling diseases were apparently controlled at similar levels by the two seed treatments.

SEED LOT X IN FURROW X SEED TRT TEST, 2020

LANG FARM, SOUTH FIELD

Seed Trt	IF Treatment	IF Rate	Plant/ft ¹		% Dead Plants ²		
			28-May	4-Jun	28-May	4-Jun	19-Jun
Florida #2 Seed							
1. Rancona V PD*	None	-	2.3	3.0	0.0	0.6	2.2
2. Rancona V PD*	Abound	11.6 fl oz	2.6	2.8	0.0	0.7	1.8
3. Rancona V PD*	Velum	6.5 fl oz	2.5	2.8	0.0	0.0	0.2
4. Rancona V PD*	Proline	5.7 fl oz	2.2	2.9	0.0	0.5	1.8
5. Dynasty PD*	None	-	2.5	2.7	0.0	0.6	2.2
6. Dynasty PD*	Abound	11.6 fl oz	2.3	2.7	0.0	0.7	1.9
7. Dynasty PD*	Velum	6.5 fl oz	2.9	2.9	0.0	0.0	0.8
8. Dynasty PD*	Proline	5.7 fl oz	2.1	3.1	0.0	0.2	0.9
LSD(P<0.05)			0.4	N. S.	N. S.	0.7	1.5
Florida #3 Seed							
9. Rancona V PD*	None	-	2.2	2.4	0.0	0.9	1.4
10. Rancona V PD*	Abound	11.6 fl oz	2.0	2.7	0.0	0.2	1.2
11. Rancona V PD*	Velum	6.5 fl oz	2.3	2.4	0.0	0.0	0.0
12. Rancona V PD*	Proline	5.7 fl oz	1.6	2.5	0.0	0.2	0.2
13. Dynasty PD*	None	-	2.3	2.6	0.0	0.6	1.6
14. Dynasty PD*	Abound	11.6 fl oz	2.0	2.3	0.0	0.0	1.4
15. Dynasty PD*	Velum	6.5 fl oz	2.0	2.6	0.0	0.0	0.2
16. Dynasty PD*	Proline	5.7 fl oz	1.6	2.5	0.0	0.2	1.0
LSD(P<0.05)			0.5	N. S.	N. S.	0.6	1.5

*Seed trt rates were all applied at 4.0 oz/100 lbs.

NOTE: Florida seed #2 = seed lot H19-482-25, #3 = seed lot H19-482-33

Cold germs: Florida #2 Rancona = 69 and Dynasty = 54; Florida #3 Rancona = 46 and Dynasty = 32.

Regular germs: Florida #2 Rancona = 76 and Dynasty = 33 ; Florida #3 Rancona = 58 and Dynasty = 42.

Plant/ft¹ = Stand count is the number of emerged plants per foot of row on May 28 and June 4.

% Dead Plants² = The % of emerged plants that were dead or dying per plot.

SEED LOT X IN FURROW X SEED TRT TEST, 2020					
LANG FARM, SOUTH FIELD					
Seed Trt	IF Treatment	IF Rate	TSWV ³ 27-Aug	Roots/ft ⁴ 24-Sep	Yield lb/A
Florida #2 Seed					
1. Rancona V PD*	None	-	19.0	2.4	4840
2. Rancona V PD*	Abound	11.6 fl oz	16.5	2.8	4937
3. Rancona V PD*	Velum	6.5 fl oz	16.5	2.7	4755
4. Rancona V PD*	Proline	5.7 fl oz	14.5	3.0	5118
5. Dynasty PD*	None	-	16.5	2.6	4574
6. Dynasty PD*	Abound	11.6 fl oz	15.0	2.5	4574
7. Dynasty PD*	Velum	6.5 fl oz	13.5	2.6	5554
8. Dynasty PD*	Proline	5.7 fl oz	17.0	2.7	4465
LSD(P<0.05)			13.5	0.5	1029
Florida #3 Seed					
9. Rancona V PD*	None	-	17.0	2.2	4973
10. Rancona V PD*	Abound	11.6 fl oz	12.0	2.4	5046
11. Rancona V PD*	Velum	6.5 fl oz	13.0	2.2	4610
12. Rancona V PD*	Proline	5.7 fl oz	12.5	2.2	4719
13. Dynasty PD*	None	-	17.0	2.1	4719
14. Dynasty PD*	Abound	11.6 fl oz	19.0	1.9	4501
15. Dynasty PD*	Velum	6.5 fl oz	9.0	2.3	5118
16. Dynasty PD*	Proline	5.7 fl oz	15.0	2.3	5009
LSD(P<0.05)			N. S.	0.5	1464
*Seed trt rates were all applied at 4.0 oz/100 lbs.					
TSWV ³ =Percent of row feet infectd based on disease loci (up to 12" linear row) per plot.					
Roots/ft ⁴ =Number of tap roots per foot of row after the plots were inverted.					

EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT SEEDLING DISEASES (SYNGENTA SEED TREATMENT TEST I, 2020)

- A. PURPOSE: To evaluate the efficacy of experimental peanut seed treatments.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with five replicates.
 2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
 3. There are eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
 5. Variety: Unknow
- C. APPLICATION OF TREATMENTS:
1. Equipment: Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
 2. Cover sprays: Chlorothalonil (1.5 pt/a) was applied for leaf spot control on 11 June, 25 June, 9 July, 22 July, 19 Aug., and 2 Sep., and Miravis (3.4 fl oz/a) was applied on 3 Aug. Elatus (9.5 dry oz/a) applied for white mold control on 9 July, and 3 Aug., and Convoy (32 fl oz/a) was applied on 19 Aug.
- D. ADDITIONAL INFORMATION:
1. Location: Lang Farm, South Field, Tifton, GA, 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 18 March. Deep turned field, marked beds 6 ft, and turned under fertilizer on 28 March.
 4. Soil Fertility: pH – 6.4 P – 36 K – 66 Ca – 942 Mg – 93
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 28 Apr. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
 6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June. Acephate 97 (0.75 lb/a) for worms on 2 Sep.
 7. Planting Info: Unknown variety, 6 seed/ft (2” deep) on 5 May.
 8. Harvest Dates: Dug –21 Sep. Picked – 1 Oct.

E: SUMMARY:

Treatment number one was untreated, and had very poor initial stands as well as severe Aspergillus crown rot after emergence. All experimental treatments did a good job on crown rot (% dead plants), and also had similar effects on initial emergence and final crop yield.

SYNGENTA SEED TRT TEST I, 2020								
LANG FARM, SOUTH FIELD								
Seed Trt	Plant/ft ¹		% Dead Plants ²			TSWV ³	Roots/ft ⁴	Yield
	18-May	26-May	18-May	26-May	8-Jun	27-Aug	1-Oct	lb/A
1	0.3	0.3	1.4	10.8	22.7	.	0.2	930
2	1.8	2.2	0.0	1.5	5.1	33.6	1.5	2963
3	1.8	2.3	0.0	0.4	0.4	29.2	1.9	3428
4	1.7	2.0	0.0	0.3	0.3	33.6	1.8	3631
5	2.0	2.3	0.0	0.0	0.0	25.2	1.9	3283
6	1.9	2.1	0.0	1.9	3.2	30.4	1.8	3399
7	1.5	1.9	0.0	4.8	7.8	32.8	1.6	3283
8	2.1	2.4	0.0	0.9	1.8	30.0	2.0	3312
9	1.8	2.2	0.4	0.8	0.8	28.4	1.8	3689
LSD(P<0.05)	0.3	0.4	N. S.	4.6	10.5	11.5	0.4	1000

Plant/ft¹ = Stand count is the number of emerged plants per foot of row on May 18 and 26.

% Dead Plants² = The % of emerged plants that were dead or dying per plot.

TSWV³ = Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

Roots/ft⁴ = Number of tap roots per foot of row after the plots were inverted.

EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT SEEDLING DISEASES (SYNGENTA SEED TREATMENT TEST II, 2020)

- A. PURPOSE: To evaluate the efficacy of experimental peanut seed treatments.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with five replicates.
 2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
 3. There are eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
 5. Variety: Unknown
- C. APPLICATION OF TREATMENTS:
1. Equipment: Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
 2. Cover sprays: Chlorothalonil (1.5 pt/a) was applied for leaf spot control on 11 June, 25 June, 9 July, 22 July, 19 Aug., and 2 Sep., and Miravis (3.4 fl oz/a) was applied on 3 Aug. Elatus (9.5 dry oz/a) applied for white mold control on 9 July, and 3 Aug., and Convoy (32 fl oz/a) was applied on 19 Aug.
- D. ADDITIONAL INFORMATION:
1. Location: Lang Farm, South Field, Tifton, GA, 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 18 March. Deep turned field, marked beds 6 ft, and turned under fertilizer on 28 March.
 4. Soil Fertility: pH – 6.4 P – 36 K – 66 Ca – 942 Mg – 93
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 28 Apr. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
 6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June. Acephate 97 (0.75 lb/a) for worms on 2 Sep.
 7. Planting Info: Unknown variety, 6 seed/ft (2” deep) on 5 May.

8. Harvest Dates: Dug –21 Sep. Picked – 24 Sep.

E: SUMMARY:

SYNGENTA SEED TRT TEST II, 2020								
LANG FARM, SOUTH FIELD								
Seed Trt	Plant/ft ¹		% Dead Plants ²			TSWV ³	Roots/ft ⁴	Yield
	18-May	26-May	18-May	26-May	8-Jun	3-Sep	21-Sep	lb/A
1	0.1	0.1	0.0	20.3	26.2	-	0.1	720
2	1.4	1.2	0.0	9.1	17.0	35.6	0.9	2086
3	1.8	1.6	0.0	0.5	0.7	38.0	1.2	2568
4	2.0	1.8	0.0	0.0	0.0	41.6	1.5	2516
5	1.6	1.8	0.0	0.0	0.2	34.0	1.3	2917
6	1.7	1.5	0.0	7.7	16.4	40.4	0.9	2063
7	1.4	1.3	0.0	13.8	28.6	43.6	0.8	2138
8	1.8	2.0	0.0	2.1	4.2	28.4	1.4	2731
9	1.8	1.9	0.0	0.8	1.0	39.2	1.4	2754
LSD(P<0.05)	0.5	0.3	N. S.	7.4	10.1	8.7	0.3	712

Plant/ft¹ = Stand count is the number of emerged plants per foot of row on May 18 and 26.
 % Dead Plants²=The % of emerged plants that were dead or dying per plot.
 TSWV³=Percent of row feet infectd based on disease loci (up to 12" linear row) per plot.
 Roots/ft⁴=Number of tap roots per foot of row after the plots were inverted.

EVALUATION OF SEED TREATMENTS FOR CONTROL OF PEANUT SEEDLING DISEASES (SYNGENTA SEED TREATMENT TEST III, 2020)

- 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
- C. APPLICATION OF TREATMENTS:
1. Equipment: Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
 2. Cover sprays: Chlorothalonil (1.5 pt/a) was applied for leaf spot control on 11 June, 25 June, 9 July, 22 July, 19 Aug., and 2 Sep., and Miravis (3.4 fl oz/a) was applied on 3 Aug. Elatus (9.5 dry oz/a) applied for white mold control on 9 July, and 3 Aug., and Convoy (32 fl oz/a) was applied on 19 Aug.
- D. ADDITIONAL INFORMATION:
1. Location: Lang Farm, South Field, Tifton, GA, 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 18 March. Deep turned field, marked beds 6 ft, and turned under fertilizer on 28 March.
 4. Soil Fertility: pH – 6.4 P – 36 K – 66 Ca – 942 Mg – 93
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 28 Apr. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
 6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June. Acephate 97 (0.75 lb/a) for worms on 2 Sep.
 7. Planting Info: Tifguard, 6 seed/ft (2” deep) on 6 May.

8. Harvest Dates: Dug –21 Sep. Picked – 24 Sep.

E: SUMMARY:

This was an excellent test with Dynasty still being very effective on plant emergence and crown rot (% dead plants). The in furrow sprays had varying levels of effect, with the azoxystrobin being the least efficacious, especially on crown rot. Large yield differences resulted and were clearly associated with stand densities.

SYNGENTA SEED TRT TEST III, 2020							
LANG FARM, SOUTH FIELD							
Seed Trt/IF	Rate/ 100 lb	Rate IF	Plant/ft ¹		% Dead Plants ²		
			19-May	27-May	19-May	27-May	9-Jun
1. Untreated	-	-	1.2	1.1	0.0	19.5	40.9
2. Dynasty PD [®]	4 oz	-	2.3	3.0	0.0	0.9	2.9
3. Untreated	-	-	1.4	1.8	0.4	0.2	1.0
A22011	-	4.56 fl oz					
4. Untreated	-	-	1.3	2.2	0.0	0.0	0.5
A22011	-	6.08 fl oz					
5. Dynasty PD [®]	4 oz	-	2.1	3.2	0.2	1.0	2.6
A22011	-	6.08 fl oz					
6. Dynasty PD [®]	4 oz	-	2.3	3.2	0.3	0.2	0.9
A22011	-	7.60 fl oz					
7. Untreated	-	-	1.4	2.0	0.0	1.6	3.3
A220093	-	6.87 fl oz					
8. Untreated	-	-	1.7	1.5	0.0	18.8	45.3
Abound (YF 10698)	-	11.6 fl oz					
LSD(P<0.05)			0.7	0.5	N. S.	12.3	18.6

Plant/ft¹ = Stand count is the number of emerged plants per foot of row on May 19 and 27.
 % Dead Plants² = The % of emerged plants that were dead or dying per plot.

SYNGENTA SEED TRT TEST III, 2020					
LANG FARM, SOUTH FIELD					
	Rate/ 100 lb	Rate IF	TSWV ³ 3-Sep	Roots/ft ⁴ 23-Sep	Yield lb/A
Seed Trt/IF					
1. Untreated	-	-	36.0	0.6	2215
2. Dynasty PD ²	4 oz	-	16.5	2.3	4031
3. Untreated	-	-	28.0	1.7	3595
A22011	-	4.56 fl oz			
4. Untreated	-	-	17.5	1.8	4205
A22011	-	6.08 fl oz			
5. Dynasty PD ²	4 oz	-	15.0	2.7	4227
A22011	-	6.08 fl oz			
6. Dynasty PD ²	4 oz	-	15.5	2.6	4583
A22011	-	7.60 fl oz			
7. Untreated	-	-	31.0	1.3	4082
A220093	-	6.87 fl oz			
8. Untreated	-	-	32.0	0.6	2927
Abound (YF 10698)	-	11.6 fl oz			
LSD(P<0.05)			7.5	0.5	739
TSWV ³ =Percent of row feet infectd based on disease loci (up to 12" linear row) per plot.					
Roots/ft ⁴ =Number of tap roots per foot of row after the plots were inverted.					

OFFICIAL DAILY RAINFALL, 2020								
LANG/RIGDON FARM, SOUTH FIELD								
TIFTON, GA								
RAINFALL								
DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0.15	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0.00	0	0	0	0	0	0
4	2.70	0	0	0	0	0.68	0	0
5	1.86	0.01	0	0	0.11	0.01	0	0
6	0.01	0	0	0.12	0.57	0	0	0
7	0	0	0	0.77	0.08	0	0	0
8	0	0.21	0	0.02	0.02	0	0	0
9	0	0.01	0	1.03	0.01	0	0	0.45
10	0	0.04	0	0.01	0	0.09	0.62	0.01
11	0	0	0	0	0	0.31	0	0.11
12	0	0	0	2.67	0	0.01	0.60	0
13	0	0.58	0	0	0	0.46	0	0
14	0	0	0	0	0	0.13	0	0
15	0	0.02	0	0	0	0.17	0.68	0
16	0	0	0	0	0	0.01	2.55	0
17	0	0	0.01	0	0	0	0.33	0
18	0	0.06	0.06	0	0	0.11	0	0
19	0	0.79	0.02	0.11	0	0.01	0	0
20	0	0.42	1.43	0.04	0	0.53	0	0
21	0	0	0	0	0	0.13	0	0
22	0	0	0.72	0.01	0	0.02	0	0
23	0	2.28	0.01	0.01	0.21	0.02	0	0
24	0	0	0	0.20	0.01	1.67	0.14	0.55
25	0	0	0.01	0.07	0	0.01	0.03	0.01
26	0	0	0.21	0	0	0	0	0
27	0	0	0.02	0	0	0	0.22	0.13
28	0	0	0	0	0.67	0.03	0.03	0
29	0	0.07	0.10	0	0.02	0	0.01	1.21
30	0	1.18	0.01	0.01	0	0	0.01	0
31	0.40	0	0	0	0	0.17	0	0
TOTAL		5.7	2.6	5.1	1.9	4.6	5.2	2.5
Rainfall = inches.								
Irrigated as needed.								

ASPERGILLUS LATE SEASON SPRAY TEST I, 2020

A. **PURPOSE:** To determine if a late season fungicide treatment could be watered in to the peanut canopy and achieve reductions in *Aspergillus* colonization and possibly even aflatoxin.

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. Treatment sprays: 90 DAP treatments were applied on 12 Aug. and 110 DAP treatments were applied on 1 Sep. Treatments 1 and 3 were applied with sprinkler cans in 4 gallons of water per plot (2 gallons per row), ie. 1162 gallons per acre. No other fungicides were applied to this test.

D. **ADDITIONAL INFORMATION:**

1. **Location:** Rigdon Farm, New Field, Tifton, GA, 31794
2. **Crop History:** Peanut – 2019, Peanut – 2018, Peanut – 2017
3. **Land Preparation:** Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 23 Mar.
4. **Soil Fertility:** pH – 6.4 P – 19 K – 46 Ca – 698 Mg – 62
Soil type: Tifton loamy sand, 2 – 5% slope.
5. **Herbicides:** PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 7 May. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
6. **Insecticides:** Acephate 97 (0.75 lb/a) for thrips on 4 June. Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. **Planting Info:** Tifguard, 6 seed/ft (2” deep) on 11 May.
8. **Harvest Dates:** Dug – 2 Oct. Picked – 8 Oct.

E: SUMMARY:

This test was initiated late season and received no fungicides other than the treatments. Significant leaf spot developed, although there was a high level of control found with only 2 applications of Miravis. This was evident in the white mold ratings as well, and the increased yield. Pods are currently being evaluated for *Aspergillus* colonization.

ASPERGILLUS LATE SEASON SPRAY TEST I, 2020					
LANG FARM, NEW FIELD					
			Lf Spot ¹	WM ²	Yield
IF Treatments	App's	Rate/A	21-Sep	2-Oct	lb/A
1. Miravis	90 & 110 DAP	3.4 fl oz	4.3	20.0	3449
2. Aflaguard	90 DAP	20 lb	6.4	56.0	2650
3. Beauvaria	90 & 110 DAP	1.0 fl oz	6.5	57.0	2142
4. Nontreated	-	-	6.6	59.5	2468
LSD(P<0.05)			0.5	10.0	561
Leaf Spot ¹ = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.					
White Mold ² =Percent of row feet infected based on disease loci					
(up to 12" linear row) per plot.					

BASF-ADAMA FUNGICIDE TEST, 2020

- A. PURPOSE: To evaluate efficacy of various fungicide programs on foliar and soilborne diseases of peanut.
- 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: Treatment sprays were applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.
2. Treatment sprays 1, 2, 3, 4, 5, and 6 were applied on 24 June, 8 July, 24 July, 5 Aug., 19 Aug., 4 Sep., 2 Oct., and 9 Oct., respectively. No cover sprays were applied to this test.

D. ADDITIONAL INFORMATION:

1. Location: Rigdon Farm, New Field, Tifton, GA, 31794
2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 23 Mar.
4. Soil Fertility: pH – 6.4 P – 19 K – 46 Ca – 698 Mg – 62
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 7 May. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June. Acephate 97 (0.75 lb/a) for worms on 2 Sep.
7. Planting Info: Tifguard, 6 seed/ft (2” deep) on 11 May.
8. Harvest Dates: Dug – 2 Oct. Picked – 8 Oct.

E. SUMMARY:

This was a very good trial with significant foliar and soilborne disease pressure. Clear differences in fungicide programs were evident and resulted in significant yield differences as well. Note that spray programs with white mold applications not starting until application 3 had noticeably higher disease levels than those with a white mold product in an earlier spray.

BASF/ADAMA TEST, 2020					
LANG FARM, NEW FIELD					
			WM ¹	Lf Spot ²	Yield
IF Treatments	App's	Rate/A	2-Oct	23-Sep	lb/A
1. Nontreated			49.5	6.6	3449
BASF Part					
2. Priaxor	2	6.0 fl oz	9.0	4.8	4283
Bravo	3 & 5	1.5 pt			
+ Convoy		32.0 fl oz			
Priaxor	4	8.0 fl oz			
Bravo	6 & 7	1.5 pt			
3. Priaxor	2	6.0 fl oz	10.0	4.1	4371
BAS 750 07F	3 & 5	5.0 fl oz			
+ Convoy		32.0 fl oz			
Priaxor	4	8.0 fl oz			
Bravo	6 & 7	1.5 pt			
4. Priaxor	2	6.0 fl oz	9.0	4.1	4429
BAS 750 07F	3 & 5	5.0 fl oz			
+ Orius 3.6F		7.2 fl oz			
Priaxor	4	8.0 fl oz			
Bravo	6 & 7	1.5 pt			
5. Alto	1	5.5 fl oz	7.0	3.4	4429
+ Bravo		1.5 pt			
Bravo	2, 6 & 7	1.5 pt			
Elatus	3 & 5	9.5 oz			
+ Miravis		3.4 fl oz			
6. Alto	1	5.5 fl oz	5.0	3.5	4792
+ Bravo		1.5 pt			
Bravo	2, 6 & 7	1.5 pt			
Elatus	3	9.5 oz			
+ Miravis		3.4 fl oz			
Elatus	5	9.5 oz			
+ BAS 750 07F		5.0 fl oz			
7. Bravo	2, 4, 6, 7	1.5 pt	16.0	5.0	3993
Bravo	3 & 5	1.5 pt			
+ Convoy		32.0 fl oz			

BASF/ADAMA TEST, 2020					
LANG FARM, NEW FIELD					
			WM¹	Lf Spot²	Yield
IF Treatments	App's	Rate/A	2-Oct	23-Sep	lb/A
8. Priaxor	2	6.0 fl oz	12.5	4.3	4392
BAS 750	3, 5 & 6	3.0 fl oz			
+ Orius		7.2 fl oz			
Priaxor	4	8.0 fl oz			
Bravo	7	1.5 pt			
9. Priaxor	2	6.0 fl oz	8.0	3.8	4864
BAS 750	3 & 5	3.0 fl oz			
+ Umbra		25.0 fl oz			
Priaxor	4	8.0 fl oz			
BAS 750	6	3.0 fl oz			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			
10. Priaxor	2	6.0 fl oz	4.5	3.8	4320
Bravo	3 & 5	16.0 fl oz			
+ Umbra		36.0 fl oz			
BAS 750	4 & 6	3.0 fl oz			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			
11. Priaxor	2	6.0 fl oz	7.5	3.4	4102
Bravo	3 & 5	24.0 fl oz			
+ Umbra		18.0 fl oz			
BAS 750	4 & 6	3.0 fl oz			
+ Umbra		18.0 fl oz			
Bravo	7	1.5 pt			
12. Priaxor	2	6.0 fl oz	4.0	4.3	4538
BAS 750	3 & 5	3.0 fl oz			
+ Excalia		4.0 fl oz			
Priaxor	4	8.0 fl oz			
Bravo	6 & 7	1.5 pt			

BASF/ADAMA TEST, 2020					
LANG FARM, NEW FIELD					
			WM ¹	Lf Spot ²	Yield
IF Treatments	App's	Rate/A	2-Oct	23-Sep	lb/A
ADAMA Part					
13. Bravo W'stik	1, 2, 4 & 7	1.5 pt	14.0	5.3	4320
Omega	3 & 5	1.5 pt			
Omega	6	16.0 fl oz			
14. Bravo W'stik	1, 2, 4 & 7	1.5 pt	28.0	5.3	3521
MCW465	3, 5 & 6	16.0 fl oz			
15. Bravo W'stik	1, 2, 4 & 7	1.5 pt	25.0	5.3	3630
MCW465	3 & 5	1.5 pt			
MCW465	6	16.0 fl oz			
16. Bravo W'stik	1, 2, 4 & 7	1.5 pt	15.5	4.8	4102
Elatius	3, 5 & 6	7.3 oz			
17. Bravo W'stik	1, 2, 4 & 7	1.5 pt	33.0	6.0	3412
Convoy	3 & 5	1.5 pt			
Convoy	6	16.0 fl oz			
18. Bravo W'stik	1, 2, 4 & 7	1.5 pt	18.0	4.5	4029
Fontelis	3, 5 & 6	1.5 pt			
+ Bravo		1.5 pt			
LSD(P<0.05)			9.7	0.6	675
White Mold ¹ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.					
Leaf Spot ² = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.					

CORTEVA TEST, 2020

- A. **PURPOSE:** To evaluate efficacy of various fungicide programs on foliar and soilborne diseases of peanut.
- 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: Treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.
 2. Treatment sprays 1, 1.5, 2, 3, 4, 5, 6, and 7 were applied on 15 June, 22 June, 30 June, 13 July, 29 July, 14 Aug., 27 Aug., 10 Sep., 2 Oct., and 9 Oct., respectively. No cover sprays were applied to this test.
- D. **ADDITIONAL INFORMATION:**
1. Location: Rigdon Farm, New Field, Tifton, GA, 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 23 March. Deep turned field, marked beds 6 ft, and turned under fertilizer on 23 March.
 4. Soil Fertility: pH – 6.4 P – 19 K – 46 Ca – 698 Mg – 62
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 7 May. Rototilled to incorporate.
POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
 6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June.
Acephate 97 (0.75 lb/a) for worms on 2 Sep.
 7. Planting Info: Tifguard, 6 seed/ft (2" deep) on 11 May.
 8. Harvest Dates: Dug – 2 Oct. Picked – 9 Oct.

E: SUMMARY: This was a good trial with significant foliar and soilborne disease pressure. Clear differences in fungicide programs were evident and resulted in significant yield differences as well.

CORTEVA TEST, 2020					
LANG FARM, NEW FIELD					
			Lf Spot ¹	WM ²	Yield
IF Treatments	App's	Rate	23-Sep	2-Oct	lb/A
1. Aproach Prima	1.5	6.8 fl oz	3.7	10.0	4530
+ Induce		0.25%			
Fontelis	3 - 5	16.0 fl oz			
+ Induce		0.25%			
Bravo W'stik	6 & 7	1.5 pt			
2. Priaxor	1.5	6.0 fl oz	3.5	7.7	4506
+ Induce		0.25%			
Fontelis	3 - 5	16.0 fl oz			
+ Induce		0.25%			
Bravo W'stik	6 & 7	1.5 pt			
3. Aproach Prima	1	6.8 fl oz	3.6	10.0	4598
+ Induce		0.25%			
Bravo W'stik	2 & 6	1.5 pt			
+ Onset 3.6L		7.2 fl oz			
Fontelis	3 - 5	16.0 fl oz			
+ Induce		0.25%			
Bravo W'stik	7	1.5 pt			
4. Aproach Prima	1	6.8 fl oz	3.6	11.7	4308
+ Induce		0.25%			
Bravo W'stik	2 & 6	1.5 pt			
+ Onset 3.6L		7.2 fl oz			
Fontelis	3 & 5	16.0 fl oz			
+ Induce		0.25%			
Aproach Prima	4	6.8 fl oz			
+ Onset 3.6L		7.2 fl oz			
Bravo W'stik	7	1.5 pt			
5. Bravo W'stik	1 - 7	1.5 pt	4.8	34.3	3872
6. Nontreated	-	-	7.1	66.0	2657
7. Bravo W'stik	1, 2 & 7	1.5 pt	5.3	21.3	4138
Kphite	3 - 6	4.0 qt			
8. Bravo W'stik	1, 2 & 7	1.5 pt	5.2	34.3	3654
Kphite	3 - 6	2.0 qt			
LSD(P<0.05)			0.5	9.6	514

Leaf Spot¹ = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.

White Mold²=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

VALENT WHITE MOLD TEST I, 2020

- A. **PURPOSE:** To evaluate the comparative efficacy of fungicides applied in furrow for the control foliar and soil borne diseases.
- B. **EXPERIMENTAL DESIGN:**
1. Randomized complete blocks with six replicates.
 2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
 3. There are eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
 5. Variety: Tifguard
- C. **APPLICATION OF TREATMENTS:**
1. Equipment: Treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.
 2. Treatment sprays 1, 2, 3, 4, 5, 6, and 7 were applied on 15 June, 30 June, 13 July, 30 July, 14 Aug., 27 Aug., 10 Sep., 2 Oct., and 9 Oct., respectively. No cover sprays were applied to this test.
- D. **ADDITIONAL INFORMATION:**
1. Location: Rigdon Farm, New Field, Tifton, GA, 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Fertilizer (5-10-15) was broadcast at 600 lb/a on March 23. Deep turned field, marked beds 6 ft, and turned under fertilizer on 24 March.
 4. Soil Fertility: pH – 6.4 P – 19 K – 46 Ca – 698 Mg – 62
Soil type: Tifton loamy sand, 2 – 5% slope.
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 7 May. Rototilled to incorporate.
POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
 6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June.
Acephate 97 (0.75 lb/a) for worms on 2 Sep.
 7. Planting Info: Tifguard, 6 seed/ft (2” deep) on 11 May.
 8. Harvest Dates: Dug – 2 Oct. Picked – 9 Oct.

E: SUMMARY: This was a good trial with significant foliar and soilborne disease pressure. Clear differences in fungicide programs were evident and resulted in significant yield differences as well.

VALENT WHITE MOLD TEST I, 2020					
LANG FARM, NEW FIELD					
			LS ¹	WM ²	Yield
Trt	App's	Rate	22-Sep	2-Oct	lb/A
1. Bravo	1 - 7	1.5 pt	5.1	43.0	3896
2. Bravo	1, 2, 4, 6, 7	1.5 pt	4.0	7.3	4719
Elatus	3 & 5	9.5 oz			
3. Bravo	1, 2, 4, 6, 7	1.5 pt	4.9	15.0	4598
Convoy	3 & 5	32.0 fl oz			
+ Bravo		1.0 pt			
4. Bravo	1, 2, 4, 6, 7	1.5 pt	4.8	18.3	4637
Excalia*	3 & 5	2.0 fl oz			
+ Bravo		1.0 pt			
5. Bravo	1, 2, 4, 6, 7	1.5 pt	4.7	11.7	4719
Excalia*	3 & 5	3.0 fl oz			
+ Bravo		1.0 pt			
6. Bravo	1, 2, 4, 6, 7	1.5 pt	4.8	8.7	4792
Excalia*	3 & 5	4.0 fl oz			
+ Bravo		1.0 pt			
7. Excalia	1	2.5 fl oz	4.7	15.3	4671
+ Bravo		1.5 pt			
Bravo	2, 4, 6, 7	1.5 pt			
Excalia*	3 & 5	2.5 fl oz			
+ Bravo		1.0 pt			
LSD(P<0.05)			0.4	10.1	520
*Excalia = VC1946					
Leaf Spot ¹ = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.					
White Mold ² =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.					

**OFFICIAL DAILY RAINFALL, 2020
LANG/RIGDON FARM, NEW FIELD
TIFTON, GA**

RAINFALL								
DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0.15	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0.00	0	0	0	0	0	0
4	2.70	0	0	0	0	0.68	0	0
5	1.86	0.01	0	0	0.11	0.01	0	0
6	0.01	0	0	0.12	0.57	0	0	0
7	0	0	0	0.77	0.08	0	0	0
8	0	0.21	0	0.02	0.02	0	0	0
9	0	0.01	0	1.03	0.01	0	0	0.45
10	0	0.04	0	0.01	0	0.09	0.62	0.01
11	0	0	0	0	0	0.31	0	0.11
12	0	0	0	2.67	0	0.01	0.60	0
13	0	0.58	0	0	0	0.46	0	0
14	0	0	0	0	0	0.13	0	0
15	0	0.02	0	0	0	0.17	0.68	0
16	0	0	0	0	0	0.01	2.55	0
17	0	0	0.01	0	0	0	0.33	0
18	0	0.06	0.06	0	0	0.11	0	0
19	0	0.79	0.02	0.11	0	0.01	0	0
20	0	0.42	1.43	0.04	0	0.53	0	0
21	0	0	0	0	0	0.13	0	0
22	0	0	0.72	0.01	0	0.02	0	0
23	0	2.28	0.01	0.01	0.21	0.02	0	0
24	0	0	0	0.20	0.01	1.67	0.14	0.55
25	0	0	0.01	0.07	0	0.01	0.03	0.01
26	0	0	0.21	0	0	0	0	0
27	0	0	0.02	0	0	0	0.22	0.13
28	0	0	0	0	0.67	0.03	0.03	0
29	0	0.07	0.10	0	0.02	0	0.01	1.21
30	0	1.18	0.01	0.01	0	0	0.01	0
31	0.40	0	0	0	0	0.17	0	0
TOTAL		5.7	2.6	5.1	1.9	4.6	5.2	2.5
Rainfall = inches.								
Irrigated as needed.								

ASPERGILLUS LATE SEASON SPRAY TEST II, 2020

- A. **PURPOSE:** To determine if a late season fungicide treatment could be watered in to the peanut canopy and achieve reductions in *Aspergillus* colonization and possibly even aflatoxin.
- 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. Treatment sprays: 90 DAP treatments were applied on 12 Aug., and 110 DAP treatments were applied on 1 Sep. Treatments 1 and 3 were applied with sprinkler cans in 4 gallons of water per plot (= 1162 gallons per acre).
- D. **ADDITIONAL INFORMATION:**
1. **Location:** Rigdon Farm, Cotton Field, Tifton, GA, 31794
 2. **Crop History:** Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. **Land Preparation:** Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 23 Mar.
 4. **Soil Fertility:** pH – 6.1 P – 103 K – 62.3 Ca – 694.7 Mg – 58.7
Soil type: Norfolk loamy sand
 5. **Herbicides:** PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 7 May. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
 6. **Insecticides:** Acephate 97 (0.75 lb/a) for thrips on 4 June. Acephate 97 (0.75 lb/a) for thrips on 2 Sep.
 7. **Planting Info:** Tifguard, 6 seed/ft (2" deep) on 7 May.
 8. **Harvest Dates:** Dug – 28 Sep. Picked – 2 Oct.

E: SUMMARY: This test was initiated late season and received no fungicides other than the treatments. Significant leaf spot developed, although there was a high level of control found with only 2 applications of Miravis. This was evident in the increased yield also. Pods are currently being evaluated for *Aspergillus* colonization.

ASPERGILLUS LATE SEASON SPRAY TEST II, 2020					
LANG FARM, COTTON FIELD					
			Lf Spot ¹	WM ²	Yield
IF Treatments	App's	Rate/A	21-Sep	23-Sep	lb/A
1. Miravis	90 & 110 DAP	3.4 fl oz	3.5	37.0	2214
2. Aflaguard	90 DAP	20 lb	4.9	43.5	1924
3. Beauvaria	90 & 110 DAP	1.0 fl oz	4.4	49.5	1488
4. Nontreated	-	-	5.1	46.0	1271
LSD(P<0.05)			0.8	11.3	807
Leaf Spot ¹ = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.					
White Mold ² =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.					

EVALUATION OF FUNGICIDES FOR FOLIAR AND SOILBORNE DISEASE CONTROL ON TIFGUARD (FMC TEST, 2020)

- A. PURPOSE: To evaluate the comparative efficacy of fungicides applied for the control foliar and soil borne diseases.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with six replicates.
 2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
 3. There are eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
 5. Variety: Tifguard

C. APPLICATION OF TREATMENTS:

1. Equipment: Treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO₂ unit with six SX-6 tips and 50 mesh ball check screens.
2. Treatment sprays 1-7 were applied on 11 June, 22 June, 7 July, 20 July, 4 Aug., 20 Aug., and 3 Sep., respectively. No cover sprays were applied to this test.

D. ADDITIONAL INFORMATION:

1. Location: Rigdon Farm, Cotton Field, Tifton, GA, 31794
2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 23 Mar.
4. Soil Fertility: pH – 6.1 P – 103 K – 62.3 Ca – 694.7 Mg – 58.7
Soil type: Tifton loamy sand, 2 – 5% slope.
5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 7 May. Rototilled to incorporate.
POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June.
Acephate 97 (0.75 lb/a) for thrips on 2 Sep.
7. Planting Info: Tifguard, 6 seed/ft (2" deep) on 7 May.
8. Harvest Dates: Dug – 28 Sep. Picked – 2 Oct.

E: SUMMARY: This was a very good trial with significant foliar and soilborne disease pressure. Clear differences in fungicide programs were evident and resulted in significant yield differences as well.

FMC TEST, 2020					
LANG FARM, COTTON FIELD					
			LS ¹	WM ²	Yield
Treatments	App's	Rate	18-Sep	23-Sep	lb/A
1. Untreated	-		5.2	50.3	2880
2. Priaxor	2 & 4	6.0 fl oz	3.3	14.3	5372
Convoy	3 & 5	32.0 fl oz			
+Bravo		1.5 pt			
Bravo W'stik	6	1.5 pt			
+ Tebuconazole 3.6 Select		7.2 fl oz			
Bravo	7	1.5 pt			
3. Lucento	2 & 4	5.5 fl oz	3.8	13.3	5179
Convoy	3 & 5	32.0 fl oz			
+Bravo		1.5 pt			
Bravo W'stik	6	1.5 pt			
+ Tebuconazole 3.6 Select		7.2 fl oz			
Bravo	7	1.5 pt			
4. Alto	1	5.5 fl oz	3.1	17.0	4937
+Bravo		16.0 fl oz			
Bravo W'stik	2 & 7	1.5 pt			
Elatus	3 & 5	9.5 oz			
+ Miravis		3.4 fl oz			
5. Bravo	1	1.5 pt	3.2	12.7	5058
Lucento	2 & 4	5.5 fl oz			
Elatus	3 & 5	9.5 oz			
Tebuconazole 3.6 Select	6	7.2 fl oz			
+Bravo		1.5 pt			
Bravo	7	1.5 pt			
6. Bravo	1, 2 & 7	1.5 pt	4.1	31.7	4235
Tebuconazole 3.6 Select	3-6	7.2 fl oz			
+Bravo		1.5 pt			
7. Bravo	1 & 7	1.5 pt	3.4	18.0	5009
Lucento	2 & 4	5.5 fl oz			
Tebuconazole 3.6 Select	3, 5 & 6	7.2 fl oz			
+Bravo		1.5 pt			

FMC TEST, 2020					
LANG FARM, COTTON FIELD					
			LS ¹	WM ²	Yield
Treatments	App's	Rate	18-Sep	23-Sep	lb/A
8. Bravo	1, 2 & 7	1.5 pt	3.3	24.7	4767
Lucento	3 & 5	5.5 fl oz			
Tebuconazole 3.6 Select	4 & 6	7.2 fl oz			
+Bravo		1.5 pt			
9. Lucento	2 & 4	5.5 fl oz	3.7	13.3	4961
+ Interlock		4.0 fl oz			
Convoy	3 & 5	32.0 fl oz			
+Bravo		1.5 pt			
+ Interlock		4.0 fl oz			
Bravo W'stik	6	1.5 pt			
+ Tebuconazole 3.6 Select		7.2 fl oz			
+ Interlock		4.0 fl oz			
Bravo	7	1.5 pt			
+ Interlock		4.0 fl oz			
10. Bravo	1	1.5 pt	3.8	15.3	4985
+ Interlock		4.0 fl oz			
Lucento	2 & 4	5.5 fl oz			
+ Interlock		4.0 fl oz			
Elatus	3 & 5	9.5 oz			
+ Interlock		4.0 fl oz			
Tebuconazole 3.6 Select	6	7.2 fl oz			
+Bravo		1.5 pt			
+ Interlock		4.0 fl oz			
Bravo	7	1.5 pt			
+ Interlock		4.0 fl oz			
LSD(P<0.05)			0.3	9.3	692

Leaf Spot¹ = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.

White Mold²=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

NICHINO TEST, 2020

- A. PURPOSE: To evaluate the efficacy of different programs for foliar and soilborne diseases.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with five replicates.
 2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
 3. There are eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
 5. Variety: Tifguard
- C. APPLICATION OF TREATMENTS:
1. Equipment: Treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.
 2. Treatment sprays 1-7 were applied on 11 June, 23 June, 10 July, 20 July, 4 Aug., 20 Aug., and 3 Sep., respectively. No cover sprays were applied.
- D. ADDITIONAL INFORMATION:
1. Location: Rigdon Farm, Cotton Field, Tifton, GA, 31794
 2. Crop History: Peanut – 2019, Peanut – 2018, Peanut – 2017
 3. Land Preparation: Broadcast 5-10-15 fertilizer (600 lb/a) on 23 Mar. Deep turned field, marked beds 6 ft, and turned under fertilizer on 23 Mar.
 4. Soil Fertility: pH – 6.1 P – 103 K – 62.3 Ca – 694.7 Mg – 58.7
Soil type: Norfolk loamy sand
 5. Herbicides: PPI: Sonalan (2 pt/a) + Dual Magnum (1.5 pt/a) tank mix on 7 May. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) on 30 June. Tank mix of Cadre (4 fl oz/a) + nonionic surfactant (3 pt /100 gal.) on 14 July.
 6. Insecticides: Acephate 97 (0.75 lb/a) for thrips on 4 June. Acephate 97 (0.75 lb/a) for thrips on 2 Sep.
 7. Planting Info: Tifguard, 6 seed/ft (2" deep) on 7 May.
 8. Harvest Dates: Dug – 28 Sep. Picked – 2 Oct.

E: SUMMARY: This was a very good trial with significant foliar and soilborne disease pressure. Treatments with earlier applications of sprays with activity on white mold tended to look better than those waiting until application #3.

NICHINO TEST, 2020
RIGDON FARM, COTTON FIELD

Seed Trt	App's	Rate	Vigor ¹	% Lf Burn ²	LS ³	% Lf Burn ²	WM ⁴	Yield
			13-Aug	13-Aug	21-Sep	21-Sep	23-Sep	lb/A
1. Bravo W'stik	1,2,4,6,7	1.5 pt	8.8	-	4.2	-	29.6	4095
Bravo W'stik	3 & 5	1.5 pt						
+ Convoy		32.0 fl oz						
2. Priaxor	2	6.0 fl oz	-	-	3.4	-	15.2	4356
Alto	3 & 5	5.5 fl oz						
+ Convoy		32.0 fl oz						
+ Bravo		16.0 fl oz						
Bravo W'stik	4 & 6	1.5 pt						
+ Muscle 3.6F		7.2 fl oz						
Bravo W'stik	7	1.5 pt						
3. Bravo W'stik	1, 2 & 7	1.5 pt	-	-	3.4	-	33.2	3909
Miravis	3 & 5	3.4 fl oz						
+ Convoy		32.0 fl oz						
4. Priaxor	2	6.0 fl oz	-	-	3.4	-	12.8	3891
Umbra	3 & 5	36.0 fl oz						
+ Bravo		16.0 fl oz						
Bravo W'stik	4 & 6	1.5 pt						
+ Muscle 3.6F		7.2 fl oz						
Bravo W'stik	7	1.5 pt						
5. Priaxor	2	6.0 fl oz	-	-	3.2	-	19.2	4240
Umbra	3 & 5	36.0 fl oz						
+ Microthiol S		5.0 lb						
Bravo W'stik	4 & 6	1.5 pt						
+ Muscle 3.6F		7.2 fl oz						
Bravo W'stik	7	1.5 pt						
6. Priaxor	2	6.0 fl oz	-	-	3.1	-	13.6	4095
Umbra	3 & 5	36.0 fl oz						
+ Microthiol S		5.0 lb						
Lucento	4	5.5 fl oz						
Bravo W'stik	6	1.5 pt						
+ Muscle 3.6F		7.2 fl oz						
Bravo W'stik	7	1.5 pt						
7. Bravo W'stik	1, 2, 7	1.5 pt	-	-	3.2	-	14.4	4414
Miravis	3 & 5	3.4 fl oz						
+ Elatus		9.5 oz						

NICHINO TEST, 2020								
RIGDON FARM, COTTON FIELD								
Seed Trt	App's	Rate	Vigor ¹	% Lf Burn ²	LS ³	% Lf Burn ²	WM ⁴	Yield
			13-Aug	13-Aug	21-Sep	21-Sep	23-Sep	lb/A
8. Bravo W'stik	1, 2, 7	1.5 pt	7.8	-	3.5	-	22.0	4095
Bravo W'stik	3 & 5	1.5 pt						
+ Convoy		32.0 fl oz						
+ NAI-666		13.7 fl oz						
Bravo W'stik	4 & 6	1.5 pt						
+ NAI-666		13.7 fl oz						
9. Bravo W'stik	1-7	1.5 pt	-	-	4.1	-	40.4	2875
10. Pyraziflumid	2	4.67 fl oz	-	-	3.8	-	22.4	3920
Alto	3 & 5	5.5 fl oz						
+ Convoy		32.0 fl oz						
+ Bravo		16.0 fl oz						
Bravo W'stik	4 & 6	1.5 pt						
+ Muscle 3.6F		7.2 fl oz						
Bravo W'stik	7	1.5 pt						
11. Bravo W'stik	1,2,4,6,7	1.5 pt	-	-	3.7	-	25.2	4182
Pyraziflumid	3 & 5	2.34 fl oz						
+ Convoy		32.0 fl oz						
12. Bravo W'stik	1,2,4,6,7	1.5 pt	-	-	4.0	-	27.2	3688
Pyraziflumid	3 & 5	3.1 fl oz						
+ Convoy		32.0 fl oz						
13. Bravo W'stik	1,2,4,6,7	1.5 pt	-	-	4.6	-	28.4	3630
Lektivar	3 & 5	16.0 fl oz						
14. Bravo W'stik	1, 2, 7	1.5 pt	-	-	4.6	-	28.4	3311
Lektivar	3 - 6	8.0 fl oz						
15. Bravo W'stik	1, 2, 7	1.5 pt	-	57.0	4.4	16.4	44.4	2381
Kphite	3 - 6	4.0 qt						
16. Bravo W'stik	1, 2, 7	1.5 pt	-	19.0	3.9	7.8	41.6	2178
Kphite	3 - 6	2.0 qt						
LSD(P<0.05)			N. S.	11.3	0.5	3.8	11.4	862

Vigor¹=Based on a scale from 0-10, with 10 being the best.

% Lf Burn²=Percent leaf burn.

Leaf Spot³ = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.

White Mold⁴=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

OFFICIAL DAILY RAINFALL, 2020								
LANG/RIGDON FARM, COTTON FIELD								
TIFTON, GA								
RAINFALL								
DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0.15	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0.00	0	0	0	0	0	0
4	2.70	0	0	0	0	0.68	0	0
5	1.86	0.01	0	0	0.11	0.01	0	0
6	0.01	0	0	0.12	0.57	0	0	0
7	0	0	0	0.77	0.08	0	0	0
8	0	0.21	0	0.02	0.02	0	0	0
9	0	0.01	0	1.03	0.01	0	0	0.45
10	0	0.04	0	0.01	0	0.09	0.62	0.01
11	0	0	0	0	0	0.31	0	0.11
12	0	0	0	2.67	0	0.01	0.60	0
13	0	0.58	0	0	0	0.46	0	0
14	0	0	0	0	0	0.13	0	0
15	0	0.02	0	0	0	0.17	0.68	0
16	0	0	0	0	0	0.01	2.55	0
17	0	0	0.01	0	0	0	0.33	0
18	0	0.06	0.06	0	0	0.11	0	0
19	0	0.79	0.02	0.11	0	0.01	0	0
20	0	0.42	1.43	0.04	0	0.53	0	0
21	0	0	0	0	0	0.13	0	0
22	0	0	0.72	0.01	0	0.02	0	0
23	0	2.28	0.01	0.01	0.21	0.02	0	0
24	0	0	0	0.20	0.01	1.67	0.14	0.55
25	0	0	0.01	0.07	0	0.01	0.03	0.01
26	0	0	0.21	0	0	0	0	0
27	0	0	0.02	0	0	0	0.22	0.13
28	0	0	0	0	0.67	0.03	0.03	0
29	0	0.07	0.10	0	0.02	0	0.01	1.21
30	0	1.18	0.01	0.01	0	0	0.01	0
31	0.40	0	0	0	0	0.17	0	0
TOTAL		5.7	2.6	5.1	1.9	4.6	5.2	2.5
Rainfall = inches.								
Irrigated as needed.								

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITA
PECAN NORTH ORCHARD (PECAN FUNGICIDE TEST, 2020)

- 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 2 Apr., 17 Apr., 29 Apr., 14 May, 28 May, 11 June, 25 June, 9 July, 23 July, and 6 Aug., respectively.
- D. ADDITIONAL INFORMATION:
1. Location: Ponder Farm, CPES Tifton, GA, 31794
 2. Soil Fertility: pH – 5.4 P – 55 K – 54 Ca – 358 Mg – 40
Soil type: Tifton loamy sand, 2 – 5 % slope.
 3. Land Preparation: Put out lime (1 ton/a) on 13 Mar.
 4. Insecticides: Sprayed Entrepid Edge (6 oz/a) on 18 Aug.
 5. Herbicides: Alion (5 oz/a) and Roundup (2 qt/a) on 6 Apr.
Roundup (2 qt/a) and Interlinn (56 oz/a) on 31 July.
- E. SUMMARY: This was a very good trial with significant leaf and nut scab pressure. Clear differences in fungicide programs were evident and data was also collected on leaf die-back caused by *Neofusicoccum caryigenum*.

PECAN FUNGICIDE TEST, 2020									
PONDER FARM, NORTH ORCHARD									
WICHITA									
Treatments	Rate/A	App's	Leaf Inc ¹	Leaf Sev ²	Nut Inc ³	Nut Sev ⁴	Nut Inc ³	Nut Sev ⁴	Neofus. ⁵
			23-Jun	23-Jun	21-Jul	21-Jul	20-Aug	20-Aug	15-Sep
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	21.7	4.2	97.7	19.0	100.0	40.5	3.3
+ Elast 400F	25.0 fl oz								
BAS 750 07F	3.0 fl oz	2 & 4							
+ Abound	11.2 fl oz								
+ Remain	8.0 fl oz								
BAS 750 07F	5.0 fl oz	6, 8 & 10							
+ Abound	11.2 fl oz								
+ Remain	8.0 fl oz								
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	18.5	3.3	100.0	28.3	100.0	58.0	5.0
+ Elast 400F	25.0 fl oz								
BAS 750 07F	3.0 fl oz	2 & 4							
+ Remain	8.0 fl oz								
BAS 750 07F	5.0 fl oz	6, 8 & 10							
+ Remain	8.0 fl oz								
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	37.7	7.8	100.0	71.7	100.0	88.1	7.8
+ Elast 400F	25.0 fl oz								
Nontreated									
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	19.8	2.8	93.5	13.8	100.0	24.2	3.3
+ Elast 400F	25.0 fl oz								
Amistar Top	14.0 fl oz	2, 4, 6, 8, 10							
+ Remain	8.0 fl oz								
5. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	12.7	1.9	81.3	9.8	100.0	17.4	6.3
+ Elast 400F	25.0 fl oz								
Miravis Prime	6.84 fl oz	2, 4, 6, 8, 10							
+ Remain	8.0 fl oz								
6. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	18.3	3.1	67.8	9.3	100.0	23.9	5.5
+ Elast 400F	25.0 fl oz								
Miravis Prime	9.1 fl oz	2, 4, 6, 8, 10							
+ Remain	8.0 fl oz								
7. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	16.7	3.0	97.8	17.6	100.0	40.4	2.8
+ Elast 400F	25.0 fl oz								
Miravis Top	13.6 fl oz	2, 4, 6, 8, 10							
+ Remain	8.0 fl oz								

PECAN FUNGICIDE TEST, 2020
PONDER FARM, NORTH ORCHARD
WICHITA

Treatments	Rate/A	App's	Leaf Inc ¹	Leaf Sev ²	Nut Inc ³	Nut Sev ⁴	Nut Inc ³	Nut Sev ⁴	Neofus. ⁵
			22-Jun	22-Jun	21-Jul	21-Jul	20-Aug	20-Aug	15-Sep
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	29.7	4.9	100.0	52.7	100.0	60.9	15.0
+ Elast 400F	25.0 fl oz								
Fludioxinil 50WG	3.57 oz	2, 4, 6, 8, 10							
+ Remain	8.0 fl oz								
9. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	24.2	4.7	98.4	13.9	97.4	31.6	8.0
+ Elast 400F	25.0 fl oz								
A19649(H)	5.13 fl oz	2, 4, 6, 8, 10							
+ Remain	8.0 fl oz								
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	22.1	3.2	100.0	28.3	100.0	42.5	5.0
+ Elast 400F	25.0 fl oz								
Difenoconazole*	6.84 fl oz	2, 4, 6, 8, 10							
+ Remain	8.0 fl oz								
11. Super Tin 4L	6.0 fl oz	5-10	19.5	3.7	100.0	37.8	100.0	36.9	8.5
+ Elast 400F	25.0 fl oz								
Kphite	4.0 qt	1 & 3							
12. Super Tin 4L	6.0 fl oz	5-10	20.3	3.7	100.0	42.2	100.0	66.5	13.8
+ Elast 400F	25.0 fl oz								
Kphite	2.0 qt	1, 2, 3, 4							
13. Super Tin 4L	6.0 fl oz	1-10	28.1	4.6	99.2	22.9	98.4	27.8	7.8
+ Elast 400F	25.0 fl oz								
14. Nontreated	-	-	63.1	12.4	100.0	99.2	100.0	100.0	25.0
LSD(P<0.05)			7.4	1.5	7.6	10.3	1.8	10.6	6.9

Difenoconazole* = Difenoconazole 250EC

Leaf Inc¹=Leaf scab incidence, based on 8 terminals per tree (% of leaflets on end of leaf with scab).

Leaf Sev²=Leaf scab severity, based on end leaf of 8 terminals per tree.

Nut Inc³=Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).

Nut Sev⁴=Nut scab severity, based on 8 nuts clusters per tree (% of shuck covered with scab).

Neofusicoccum⁵ = # leaves with symptoms per 1/2 tree.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE
PECAN NORTH ORCHARD (PECAN FUNGICIDE TEST, 2020)

- 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 2 Apr., 17 Apr., 29 Apr., 14 May, 28 May, 11 June, 25 June, 9 July, 23 July, and 6 Aug., respectively.
- D. ADDITIONAL INFORMATION:
1. Location: Ponder Farm, CPES Tifton, GA, 31794
 2. Soil Fertility: pH – 5.4 P – 55 K – 54 Ca – 358 Mg – 40
Soil type: Tifton loamy sand, 2 – 5 % slope.
 3. Land Preparation: Put out lime (1 ton/a) on 13 Mar.
 4. Insecticides: Sprayed Entrepid Edge (6 oz/a) on 18 Aug.
 5. Herbicides: Alion (5 oz/a) and Roundup (2 qt/a) on 6 Apr.
Roundup (2 qt/a) and Interlinn (56 oz/a) on 31 July.
- E. SUMMARY: This was a very good trial with significant leaf and nut scab pressure. Clear differences in fungicide programs were evident and data was also collected on leaf die-back caused by *Neofusicoccum caryigenum*.

PECAN FUNGICIDE TEST, 2020									
PONDER FARM, NORTH ORCHARD									
DESIRABLE									
			Leaf Inc ¹	Leaf Sev ²	Nut Inc ³	Nut Sev ⁴	Nut Inc ³	Nut Sev ⁴	Neofus. ⁵
Treatments	Rate/A	App's	22-Jun	22-Jun	22-Jul	22-Jul	24-Aug	24-Aug	15-Sep
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7,	23.9	1.6	94.3	7.9	100.0	15.9	1.5
+ Elast 400F	25.0 fl oz								
BAS 750 07F	3.0 fl oz	2 & 4							
+ Abound	11.2 fl oz								
+ Remain	8.0 fl oz								
BAS 750 07F	5.0 fl oz	6, 8 & 10							
+ Abound	11.2 fl oz								
+ Remain	8.0 fl oz								
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7,	26.0	2.5	95.6	11.5	100.0	21.5	2.0
+ Elast 400F	25.0 fl oz								
BAS 750 07F	3.0 fl oz	2 & 4							
+ Remain	8.0 fl oz								
BAS 750 07F	5.0 fl oz	6, 8 & 10							
+ Remain	8.0 fl oz								
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7,	37.0	3.9	100.0	26.2	100.0	37.5	5.0
+ Elast 400F	25.0 fl oz								
Nontreated									
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7,	23.7	2.0	94.3	7.5	100.0	19.8	1.0
+ Elast 400F	25.0 fl oz								
Amistar Top	14.0 fl oz	2, 4, 6, 8,							
+ Remain	8.0 fl oz								
5. Super Tin 4L	6.0 fl oz	1, 3, 5, 7,	7.6	0.6	79.4	5.4	98.4	12.3	2.3
+ Elast 400F	25.0 fl oz								
Miravis Prime	6.84 fl oz	2, 4, 6, 8,							
+ Remain	8.0 fl oz								
6. Super Tin 4L	6.0 fl oz	1, 3, 5, 7,	7.8	0.8	79.7	2.3	100.0	11.7	3.8
+ Elast 400F	25.0 fl oz								
Miravis Prime	9.1 fl oz	2, 4, 6, 8,							
+ Remain	8.0 fl oz								
7. Super Tin 4L	6.0 fl oz	1, 3, 5, 7,	4.7	0.6	96.9	6.6	100.0	19.5	2.0
+ Elast 400F	25.0 fl oz								
Miravis Top	13.6 fl oz	2, 4, 6, 8,							
+ Remain	8.0 fl oz								

PECAN FUNGICIDE TEST, 2020									
PONDER FARM, NORTH ORCHARD									
DESIRABLE									
Treatments	Rate/A	App's	Leaf Inc ¹ 22-Jun	Leaf Sev ² 22-Jun	Nut Inc ³ 21-Jul	Nut Sev ⁴ 21-Jul	Nut Inc ³ 24-Aug	Nut Sev ⁴ 24-Aug	Neofus. ⁵ 15-Sep
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7,	31.9	3.4	99.0	22.2	100.0	29.2	4.5
+ Elast 400F	25.0 fl oz								
Fludioxinil 50WG	3.57 oz	2, 4, 6, 8,							
+ Remain	8.0 fl oz								
9. Super Tin 4L	6.0 fl oz	1, 3, 5, 7,	16.3	1.3	82.3	4.8	92.2	9.6	2.8
+ Elast 400F	25.0 fl oz								
A19649(H)	5.13 fl oz	2, 4, 6, 8,							
+ Remain	8.0 fl oz								
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7,	25.7	2.1	98.4	9.9	100.0	28.8	4.0
+ Elast 400F	25.0 fl oz								
Difenoconazole*	6.84 fl oz	2, 4, 6, 8,							
+ Remain	8.0 fl oz								
11. Super Tin 4L	6.0 fl oz	5-10	30.5	2.1	98.4	26.2	100.0	18.1	8.0
+ Elast 400F	25.0 fl oz								
Kphite	4.0 qt	1 & 3							
12. Super Tin 4L	6.0 fl oz	5-10	17.3	1.6	97.4	16.2	100.0	24.0	4.5
+ Elast 400F	25.0 fl oz								
Kphite	2.0 qt	1, 2, 3, 4							
13. Super Tin 4L	6.0 fl oz	1-10	14.9	1.2	90.6	6.2	100.0	18.0	4.0
+ Elast 400F	25.0 fl oz								
14. Nontreated	-	-	61.0	7.0	99.0	74.8	100.0	85.6	15.3
LSD(P<0.05)			8.3	0.9	9.3	6.0	3.2	7.8	3.5
Difenoconazole* = Difenoconazole 250EC									
Leaf Inc ¹ =Leaf scab incidence, based on 8 terminals per tree (% of leaflets on end of leaf with scab).									
Leaf Sev ² =Leaf scab severity, based on end leaf of 8 terminals per tree.									
Nut Inc ³ =Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).									
Nut Sev ⁴ =Nut scab severity, based on 8 nuts clusters per tree (% of shuck covered with scab).									
Neofusicoccum ⁵ = # leaves with symptoms per 1/2 tree.									

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON
DESIRABLE PECAN SOUTH ORCHARD (PECAN FUNGICIDE TEST II, 2020)

- A. PURPOSE: To evaluate the efficacy of registered and experimental fungicides against pecan scab on a standard commercial cultivar.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with five replicates.
 2. Each replication consisted of single-tree treatments.
 3. The orchard was established in 1988 planted on a 40 ft x 40 ft spacing running north and south. This test used Desirable trees only. Every other row was removed and replanted. These younger trees serve as unsprayed borders, and all treatments were applied to the original trees.
- C. APPLICATION OF TREATMENTS:
1. Equipment: All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.
 2. Calendar-based spray treatments (1-10) were applied on 7 Apr., 23 Apr., 4 May, 19 May, 29 May, 12 June, 26 June, 10 July, 24 July, and 7 Aug., respectively.
- D. ADDITIONAL INFORMATION:
1. Location: Ponder Farm, CPES Tifton, GA, 31794
 2. Soil Fertility: pH – 5.7 P – 84 K – 115 Ca – 409 Mg – 79
Soil type: Tifton loamy sand, 2 – 5 % slope.
 3. Land Preparation: Put out lime (1 ton/a) on 13 Mar.
 4. Insecticides: Sprayed Entrepid Edge (6 oz/a) on 18 Aug.
 5. Herbicides: Alion (5 oz/a) and Roundup (2 qt/a) on 6 Apr.
Roundup (2 qt/a) and Interlinn (56 oz/a) on 31 July.
- E. SUMMARY:

PECAN FUNGICIDE TEST II, 2020								
PONDER FARM, SOUTH ORCHARD								
DESIRABLE								
			Nut Inc ¹	Nut Sev ²	Leaf Inc ³	Leaf Sev ⁴	Nut Inc ¹	Nut Sev ²
Treatments	Rate/A	App's	30-Jun	30-Jun	9-Jul	9-Jul	25-Aug	25-Aug
1. Super Tin 4L	6.0 fl oz	1 – 10	19.6	1.0	23.3	2.6	97.5	34.5
+Elast 400F	25.0 fl oz							
2. Nontreated		2, 4, 6, 8, 10	62.1	2.6	34.4	3.6	100.0	36.6
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
3. Luna Sensation	5.0 fl oz	2, 4, 6, 8, 10	16.0	0.4	23.9	2.8	100.0	43.7
+ Induce	0.06 % v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
4. Absolute Maxx	7.5 fl oz	2, 4, 6, 8, 10	30.0	0.9	22.7	2.6	97.5	39.3
+ Induce	0.06 % v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
5. Badge SC	4.0 pt	2, 4, 6, 8, 10	67.1	4.2	35.2	4.3	99.2	43.2
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
6. Domark	8.4 fl oz	2, 4, 6, 8, 10	38.8	2.7	35.8	4.4	95.9	36.0
+ Induce	0.06 % v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
7. Domark	6.3 fl oz	2, 4, 6, 8, 10	52.3	2.9	32.9	3.6	100.0	38.0
+ Badge SC	2.7 pt							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
8. Topguard EQ	8.0 fl oz	2, 4, 6, 8, 10	45.0	1.3	21.2	3.0	100.0	32.2
+ Induce	0.06 % v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							

PECAN FUNGICIDE TEST II, 2020
PONDER FARM, SOUTH ORCHARD
DESIRABLE

Treatments	Rate/A	App's	Nut Inc ¹	Nut Sev ²	Leaf Inc ³	Leaf Sev ⁴	Nut Inc ¹	Nut Sev ²
			30-Jun	30-Jun	9-Jul	9-Jul	25-Aug	25-Aug
9. VJR84-R002	5.0 fl oz	2, 4, 6, 8, 10	61.7	2.0	33.5	4.7	100.0	42.5
+ Induce	0.06 % v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
10. VJR84-R002	7.0 fl oz	2, 4, 6, 8, 10	43.8	1.6	22.9	2.9	100.0	30.0
+ Induce	0.06 % v/v							
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
11. Topguard EQ	6.0 fl oz	2, 4, 6, 8, 10	18.3	0.8	27.5	3.2	99.2	35.2
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
12. Sovran	3.2 oz	2, 4, 6, 8, 10	32.3	1.0	21.9	2.8	99.2	36.8
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
13. Miravis Top	13.7 fl oz	2, 4, 6, 8, 10	17.5	0.4	20.2	2.4	91.3	19.5
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9						
+Elast 400F	25.0 fl oz							
14. Kpwhite	4.0 qt	2 & 4	61.7	3.4	24.1	3.0	99.2	30.6
Super Tin 4L	6.0 fl oz	1, 6 – 10						
+Elast 400F	25.0 fl oz							
15. Kpwhite	2.0 qt	2 – 5	61.7	3.9	30.5	3.6	95.0	33.3
Super Tin 4L	6.0 fl oz	1, 6 – 10						
+Elast 400F	25.0 fl oz							
16. Nontreated	-	-	90.8	15.0	36.8	4.4	100.0	70.1
LSD(P<0.05)			17.5	1.9	8.1	1.1	5.1	10.2

Nut Inc¹=Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).

Nut Sev²=Nut scab severity, based on 8 nuts clusters per tree (% of shuck covered with scab).

Leaf Inc³=Leaf scab incidence, based on 8 terminals per tree (% of leaflets on end of leaf with scab).

Leaf Sev⁴=Leaf scab severity, based on end leaf of 8 terminals per tree.

OFFICIAL DAILY RAINFALL, 2020

PONDER FARM

TY TY, GA

RAINFALL									
DATE	Mar	Apr	May	June	July	Aug	Sep	Oct	
1	0	0	0	0	0.05	0	0.01	0	
2	0	0	0	0	0	0	0	0	
3	0	0	0	0	0	0.23	0	0	
4	2.86	0	0	0	0	0.10	0	0	
5	1.38	0	0	0	0.83	0	0	0	
6	0	0	0	0.07	0.76	0	0	0	
7	0	0.01	0	0.59	0.11	0	0	0	
8	0	0.30	0	0.01	0.32	0.06	0	0	
9	0	0	0	0.15	0.12	0.06	0	0.53	
10	0	0.04	0	0	0.23	0.24	1.16	0.07	
11	0	0	0	0.01	0	0	0.01	0.04	
12	0	0	0	2.67	0	0	0.19	0	
13	0	0.88	0	0	0	0.19	0.01	0	
14	0	0	0	0	0	0.23	0	0	
15	0	0	0	0	0	0.24	0.32	0	
16	0	0	0	0	0	0	2.59	0	
17	0	0	0.11	0	0	0	0.20	0	
18	0	0.04	0.04	0	0	1.26	0	0	
19	0	0.80	0.01	0	0	0.05	0	0	
20	0	0.64	1.21	0	0	0.03	0	0	
21	0	0	0.02	0	0	0.13	0	0	
22	0	0	1.01	0.60	0	0.02	0	0	
23	0	2.28	0.02	0.01	0.10	0.50	0	0	
24	0	0	0	0.41	0.01	1.15	0.24	0.80	
25	0	0	0.01	0.05	0	0	0	0	
26	0	0	0.26	0.01	0.01	0	0	0	
27	0	0	0	0	0	0	0.19	0.10	
28	0	0	0.41	0	0.12	0	0.02	0	
29	0	0.19	0.19	0	0.03	0	0.03	1.45	
30	0	0.70	0	0.09	0.01	0	0.01	0	
31	0.64		0		0.11	0.25		0	
TOTAL	4.9	5.9	3.3	4.7	2.8	4.7	5.0	3.0	
Rainfall = inches.									
Irrigated as needed.									