2021 TEST RESULTS

Peanut & Pecan Fungicide Evaluations

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Memo to: Industry Cooperators

From: Tim Brenneman

Subject: Field Trial Results

I want to acknowledge the hard work of our crew lead by Corey Thompson, Aaron Moore, and Jessica Bell. Summer workers included Ethan Hester, Lucinda McEachin, Ron Woodall, and Cade Bryant. 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 “2021 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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ADAMA NEMATODE TEST, 2021

A. PURPOSE: To evaluate management programs for peanut root knot nematodes.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: 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. 14, 45, 75, and 105 DAP 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. 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. Treatment sprays: In furrow sprays applied at planting on May 13. 14, 45, 75, and 105 DAP sprays applied on May 28, June 28, July 27, and Aug. 26, respectively.

3. Cover sprays: Chlorothalonil (1.5 pts/a) was applied on July 1, July 15, Aug. 12, Sep. 9, and Sep. 23. Elatus (8 oz/a) was applied on July 29 and Aug. 26.

D. ADDITIONAL INFORMATION:

1. Location: Blackshank Farm, Pond Field, Tifton, GA 31794

2. Crop History: Peanut – 2020, Peanut – 2019, Peanut – 2018

3. Land Preparation: Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.

4. Soil Fertility: pH –5.95 P –31.5 K –9.3 Ca –189 Mg –13.6

   Soil type: Tifton loamy sand, 2 – 5% slope.

5. Herbicides: PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 21. Rototilled to incorporate.
   POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.

6. Insecticides: Acephate 97 (12 oz/a) on June 3.

7. Planting Info: GA-06G, 6 seed/ft (2" deep) on May 13.

8. Harvest Dates: Dug – Oct. 6 Picked – Oct. 14

E: SUMMARY:

This was a moderate pressure root knot nematode test with some treatments reducing both final nematode numbers and galling. There were few other treatment effects, and no significant differences in pod yield.

ADAMA NEMATODE TEST, 2021

Treatments	App's	Rate/A	Plant/ft[1] 26-May	% Dead Plants[2] 26-May	Root-Knot[3] 30-Aug	Ring[4] 30-Aug
1. Untreated	-	-	3.3	0.0	181.4	34.6
2. PHC949	In furrow	56.7 g	3.1	0.0	82.2	28.0
3. PHC949	14, 45, 75 & 105 DAP	56.7 g	3.2	0.0	83.0	14.0
4. PHC949	In furrow	56.7 g	3.3	0.0	49.0	5.2
PHC949	45, 75 & 105 DAP	56.7 g				
5. Majestene	In furrow	4.0 qt	3.5	0.0	36.2	11.2
Majestene	35 DAP	4.0 qt				
6. Velum	In furrow	6.5 fl oz	3.2	0.0	51.8	6.8
LSD(P<0.05)			0.3	N. S.	115.4	N. S.

*In furrow apps applied in 3.4 GPA singles, mixed in 1 L volume.

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

% Dead Plants[2]=The % of emerged plants that were 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.

ADAMA NEMATODE TEST, 2021

Treatments	App's	Rate/A	TSWV[5] 1-Sep	WM[6] 6-Oct	Root Galling[7] 6-Oct	Pod Galling[7] 6-Oct	Yield lbs/A
1. Untreated	-	-	17.2	10.0	28.0	26.0	3771
2. PHC949	In furrow	56.7 g	15.6	10.0	18.6	19.6	3794
3. PHC949	14, 45, 75 & 105 DAP	56.7 g	15.6	10.0	23.4	20.0	3306
4. PHC949	In furrow	56.7 g	18.8	13.2	21.0	20.4	3806
PHC949	45, 75 & 105 DAP	56.7 g					
5. Majestene	In furrow	4.0 qt	20.0	16.8	23.4	26.0	3201
Majestene	35 DAP	4.0 qt					
6. Velum	In furrow	6.5 fl oz	18.4	14.0	12.2	20.0	3370
LSD(P<0.05)			N. S.	N. S.	10.3	N. S.	N. S.

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

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

Galling[7]= Visual rating of the percent of pods and roots (1-100) with visible damage from root-knot nematode.

AFLATOXIN FUNGICIDE TEST, 2021

A. PURPOSE: To evaluate the comparative efficacy of Miravis and Propulse when applied using various methods to achieve penetration of the plant canopy for the control of *Aspergillus* infections.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Treatments 1 and 4 applied with sprinkler cans in 4 gallons of water per plot (2 gallons per row). Treatments 2 and 5 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. Cover sprays and treatments 3 and 6 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. Treatment sprays: Treatments 1, 3, 4, and 6 were applied on July 22, Aug. 16, and Sep. 10. Treatments 2 and 5 were applied at night on July 23, Aug. 17, and Sep. 11 and washed in the following morning.

3. Cover sprays: Chlorothalonil (1.5 pts/a) was applied on July 1, July 15, July 29, Aug. 12, Aug. 26, Sep. 9, and Sep. 23.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Pond Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –5.95 P –31.5 K –9.3 Ca –189 Mg –13.6
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 21. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.

6. Insecticides: Acephate 97 (12 oz/a) on June 3.

7. Planting Info: GA-06G, 6 seed/ft (2" deep) on May 11.

8. Harvest Dates: Dug – Oct. 6 Picked – Oct. 14

9. SPECIAL NOTE – Irrigation will be applied as needed until 90 DAP. No irrigation (other than the ¼ inch at 120 DAP) will be applied after 90 DAP.

E: SUMMARY:

This test was designed to evaluate two different SDHI fungicides with activity on Aspergillus for their ability to reduce colonization of pods and potentially aflatoxin. The deep sand soil and the lack of irrigation was intended to favor drought stress and subsequent Aspergillus infection, but frequent rains resulted in very little drought stress. Pods are being bioassayed, and there were some interesting differences in control of other diseases as a result of the unique application methods used in this trial.

AFLATOXIN FUNGICIDE TEST, 2021

Treatments	App's	Rate/A	LS[1] 6-Oct	Pod Galling[2] 6-Oct	WM[3] 6-Oct	Yield lbs/A
1. Miravis	72, 97 & 122 DAP*	3.4 fl oz	3.7	19.6	8.0	3920
2. Miravis	72, 97 & 122 DAP**	3.4 fl oz	3.6	16.0	15.6	3328
3. Miravis	72, 97 & 122 DAP***	3.4 fl oz	3.5	20.0	10.4	3572
4. Propulse	72, 97 & 122 DAP*	11.4 fl oz	4.3	16.0	2.8	3949
5. Propulse	72, 97 & 122 DAP**	11.4 fl oz	2.9	18.4	7.6	4321
6. Propulse	72, 97 & 122 DAP***	11.4 fl oz	3.0	16.6	5.6	4699
7. Untreated	-	-	4.7	27.0	10.4	3839
LSD(P<0.05)			0.8	N.S.	8.5	1156

* Trt's 1 and 4 will be applied with sprinkler cans in 4 gallons of water per plot.

** Trt's 2 and 5 will be sprayed at night and washed in the next morning with an irrigation event.

*** Trt's 3 & 6 will be sprayed broadcast during the day.

Number of *M. arenaria* juveniles (root-knot nematodes) per 100 cc of soil = 43.

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

Galling[2]= Visual rating of the percent of pods and roots (1-100) with visible damage from root-knot nematode.

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

AFLATOXIN FUNGICIDE TEST, 2021

Treatments	App's	Rate/A	SMKSS[4]	$/Ton	$/Acre
1. Miravis	72, 97 & 122 DAP*	3.4 fl oz	75.7	373.7	729.7
2. Miravis	72, 97 & 122 DAP**	3.4 fl oz	76.2	376.1	626.2
3. Miravis	72, 97 & 122 DAP***	3.4 fl oz	75.2	371.6	664.2
4. Propulse	72, 97 & 122 DAP*	11.4 fl oz	77.0	380.0	752.1
5. Propulse	72, 97 & 122 DAP**	11.4 fl oz	76.1	375.3	811.0
6. Propulse	72, 97 & 122 DAP***	11.4 fl oz	76.5	377.8	890.7
7. Untreated	-	-	73.5	363.3	625.1
LSD(P<0.05)			1.9	9.3	231.7

SMKSS[4] = The percent of sound mature kernels and sound splits.

IN FURROW RATE TEST II, 2021

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.

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: Untreated GA-16HO (66% germination)

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. Treatment sprays: In furrow sprays applied at planting on May 11.

3. Cover sprays: Chlorothalonil (1.5 pts/a) was applied on July 1, July 15, Aug. 12, Sep. 9, and Sep. 23. Elatus (8 oz/a) was applied on July 29 and Aug. 26.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Pond Field, Tifton, GA 31794 31°30'07.8"N 83°32'48.8"W
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –5.95 P –31.5 K –9.3 Ca –189 Mg –13.6
	Soil type:	Tifton loamy sand, 2 – 5% slope. % sand=90.9, % silt=5.0, % clay=4.1, % OM=0.48, CEC=1.81
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 21. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.

6. Insecticides: Acephate 97 (12 oz/a) on June 3.

7. Planting Info: GA-16HO, 6 seed/ft (2" deep) on May 11.

8. Harvest Dates: Dug – Sep. 29 Picked –Oct. 4

E: SUMMARY:

There were differences in seedling disease and plant stands due to the in furrow treatments. Differences were due primarily to pre-emergence seed rot, presumably due to *Rhizopus* and other pathogens. The seed had low levels of Aspergillus infection, and there was only 5% plant death after emergence with the untreated seed. This is almost entirely due to Aspergillus crown rot, and is much higher in years with more highly infected seed. One objective was to see if sulfur added to Abound would counteract the QoI resistance that has greatly compromised control of crown rot with that fungicide. Unfortuanately that did not appear to be the case.

IN FURROW RATE TEST II, 2021

			Plant/ft[1]		% Dead Plants[2]		
In Furrow	**Rate/A**	**Seed Trt**	**24-May**	**1-Jun**	**24-May**	**1-Jun**	**14-Jun**
1. Nontreated		None	1.7	2.3	0.0	2.7	5.0
2. Velum	6.5 fl oz	None	2.3	2.8	0.0	0.0	0.0
3. Velum	4.3 fl oz	None	2.2	2.7	0.0	0.1	0.3
4. Abound	6.0 fl oz	None	2.3	2.8	0.0	1.9	2.8
5. Abound	6.0 fl oz	None	2.0	2.4	0.0	3.4	5.6
+ Microthiol S	1.0 lb	None					
6. Nontreated	-	Rancona	2.7	3.0	0.0	0.0	0.3
		(4 oz/100 lb)					
LSD(P<0.05)	-	-	0.3	0.3	N. S.	1.6	2.7

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

Number of *M. arenaria* juveniles (root-knot nematodes) per 100 cc of soil = 75.

Number of ring nematodes per 100 cc of soil = 16.

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

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

IN FURROW RATE TEST II, 2021

In Furrow	Rate/A	Seed Trt	WM[3] 29-Sep	Roots/ft[4] 4-Oct	TSWV[5] 1-Sep	Yield lbs/A
1. Nontreated		None	5.6	1.4	17.2	3387
2. Velum	6.5 fl oz	None	10.4	2.5	12.0	3806
3. Velum	4.3 fl oz	None	10.0	2.2	15.6	3713
4. Abound	6.0 fl oz	None	7.6	2.1	15.2	3742
5. Abound	6.0 fl oz	None	9.2	1.8	16.0	3149
+ Microthiol S	1.0 lb	None				
6. Nontreated	-	Rancona (4 oz/100 lb)	12.8	3.1	16.4	3614
LSD(P<0.05)	-	-	N. S.	0.4	N. S.	645

White Mold[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.

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

BAYER NEMATODE TEST, 2021

A. PURPOSE: To evaluate management programs for peanut root knot nematodes.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: 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. 60 DAP 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. 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. Treatment sprays: In furrow sprays applied at planting on May 12. 60 DAP spray applied on July 12.

3. Cover sprays: Chlorothalonil (1.5 pts/a) was applied on July 1, July 15, Aug. 12, Sep. 9, and Sep. 23. Elatus (8 oz/a) was applied on July 29 and Aug. 26.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Pond Field, Tifton, GA 31794 31°30'07.8"N 83°32'48.8"W
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –5.95 P –31.5 K –9.3 Ca –189 Mg –13.6
	Soil type:	Tifton loamy sand, 2 – 5% slope. % sand=90.9, % silt=5.0, % clay=4.1, % OM=0.48, CEC=1.81
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 21. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.

6. Insecticides: Acephate 97 (12 oz/a) on June 3.

7. Planting Info: GA-06G, 6 seed/ft (2" deep) on May 12.

8. Harvest Dates: Dug – Sep. 29 Picked –Oct. 4

E: SUMMARY:

This was a moderate pressure root knot nematode test with some treatments reducing both final nematode numbers and galling. There were few other treatment effects, and no significant differences in pod yield.

BAYER NEMATODE TEST, 2021

Treatments	App's	Rate/A	Plant/ft[1] 25-May	% Dead Plants[2] 25-May	Root-Knot[3] 30-Aug	Ring[4] 30-Aug
1. Untreated	-	-	3.1	0.0	117.4	13.6
2. Velum	In furrow*	6.5 fl oz	3.2	0.0	42.2	13.6
+ Admire Pro		9.0 fl oz				
3. Velum	In furrow*	6.5 fl oz	3.1	0.0	35.4	1.8
+ Admire Pro		9.0 fl oz				
Propulse	60 DAP	13.6 fl oz**				
4. Admire Pro	In furrow*	9.0 fl oz	3.1	0.0	83.2	18.8
Propulse	60 DAP	13.6 fl oz**				
5. Velum	In furrow*	6.5 fl oz	3.0	0.0	182.0	26.4
+ Admire Pro		9.0 fl oz				
+ Minuet		6.4 fl oz				
6. Minuet	In furrow*	6.4 fl oz	3.3	0.0	112.4	7.8
+ Admire Pro		9.0 fl oz				
7. Vydate C-LV	In furrow*	34.0 fl oz	3.1	0.0	137.2	12.8
LSD(P<0.05)			N. S.	N. S.	124.0	N. S.

*In furrow apps applied in 3.4 GPA singles, mixed in 1 L volume.

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

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

% Dead Plants[2]=The % of emerged plants that were 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 NEMATODE TEST, 2021

Treatments	App's	Rate/A	TSWV[5] 1-Sep	WM[6] 29-Sep	Root Galling[7] 29-Sep	Pod Galling[7] 29-Sep	Yield lbs/A
1. Untreated	-	-	18.0	15.2	22.0	51.0	2440
2. Velum	In furrow*	6.5 fl oz	20.0	10.8	11.0	23.0	2458
+ Admire Pro		9.0 fl oz					
3. Velum	In furrow*	6.5 fl oz	16.4	12.8	11.4	25.0	2609
+ Admire Pro		9.0 fl oz					
Propulse	60 DAP	13.6 fl oz**					
4. Admire Pro	In furrow*	9.0 fl oz	17.2	16.8	19.4	37.0	2580
Propulse	60 DAP	13.6 fl oz**					
5. Velum	In furrow*	6.5 fl oz	16.8	17.6	20.0	47.0	2312
+ Admire Pro		9.0 fl oz					
+ Minuet		6.4 fl oz					
6. Minuet	In furrow*	6.4 fl oz	16.8	14.0	24.6	41.0	2202
+ Admire Pro		9.0 fl oz					
7. Vydate C-LV	In furrow*	34.0 fl oz	17.2	15.2	19.4	53.0	2283
LSD(P<0.05)			N. S.	N. S.	10.9	23.3	N. S.

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

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

Galling[7]= Visual rating of the percent of pods and roots (1-100) with visible damage from root-knot nematode.

OFFICIAL DAILY RAINFALL, 2021

BLACKSHANK FARM, POND FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0.58	0.01	0	0	0.2	0.17	0.36	0
2	2.09	0	0	0	0.72	0.1	0.01	0
3	0.49	0	0	0.49	0.01	0.27	0	0
4	0.01	0	0.76	0.35	0	0.01	0	0
5	0	0	0.01	0	0.06	0	0	0.04
6	0	0	0	0.27	0.59	0.07	0	0.1
7	0	0	0	1.69	0.39	0.33	0	0
8	0	0	0	0.61	0.05	0	0.29	1.82
9	0	0.26	0	0	0.01	0.03	0.56	0
10	0	0.05	0	0	0	0	0	0.01
11	0	0.03	0.03	0.12	0.01	0.1	0	0.01
12	0	0	0.23	0.33	0.71	0.84	0	0.01
13	0	0	0.01	0.06	0.01	0	0	0
14	0	0	0	0	0.61	0.13	0	0
15	0	0	0	0.1	0.84	0	0.4	0
16	0.09	0	0	0.01	0.13	0.82	0.42	0
17	0.01	0.07	0	0	0.01	0.46	0	0
18	0.99	0.02	0	0.01	0.2	0	0.09	0
19	0	0	0	0.63	0.12	0	0.63	0.01
20	0	0	0	0.21	0.84	0	0.51	0
21	0	0	0	0	0.1	0	0.06	0
22	0	0	0	1.62	0.22	1.38	0.22	0
23	0	0	0	0.01	1.48	0.01	0	0
24	0	6.36	0	0	0.01	0	0	0
25	0	0	0	0	0	0.32	0	0.15
26	0	0	0	0	0	0.01	0	0.01
27	0	0	0	0.01	0.55	0	0	0
28	0.03	0	0	0	0.01	0.46	0	1.54
29	0	0	0.01	1.24	0	0.05	0	0.01
30	0	0	0	0.28	0	0.02	0	0
31	0.38	.	0	.	0.27	0.29	.	0
TOTAL (inches)	**4.67**	**6.8**	**1.05**	**8.04**	**8.15**	**5.87**	**3.55**	**3.71**

*Irrigated as needed.

CNIRGY NEMATODE TEST, 2021

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

B. EXPERIMENTAL DESIGN:

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

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. Treatment Sprays: In furrow sprays were applied at planting on May 11.

3. Cover Sprays: Plots were cover sprayed with Chlorothalonil (1.5 pts/a) on June 11, June 25, July 23, Aug. 20, and Sep. 3 and Elatus (8 oz/a) on July 9 and Aug. 6.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Woods Field Tifton, GA 31794 31.500814° N, 83.546653° W
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 16, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH – 6.12, P –55.7, K – 16.6, Ca – 253, Mg – 20.0 (soil samples were taken prior to fertilization)
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 21. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.

6. Insecticides: Acephate 97 (12 oz/a) on June 3.

7. Planting Info: GA-06G, 6 seed/ft (2" deep) in single rows on May 11.

8. Harvest Dates: Dug – Sep. 21 Picked – Sep. 28

E: SUMMARY:

This was a lower pressure root knot nematode test with some treatments reducing galling. There were few other treatment effects, and no significant differences in pod yield. The nematode-resistant cultivar exhibited virtually no galling and had only 1 juvenile per 100 cc of soil at harvest. Yields of the two cultivars were similar due to the low nematode pressure.

CNIRGY NEMATODE TEST, 2021

Treatments	Rate/A	Plant/ft[1] 24-May	% Dead Plants[2] 24-May	Root-Knot[3] 30-Aug	Ring[4] 30-Aug	Pod Galling[5] 21-Sep	WM[6] 21-Sep	Yield lbs/A
GA-06G								
1. Novozymes 1	6.0 oz	3.1	0.0	36.0	4.1	47.4	1.7	3381
2. Novozymes 2	12.0 oz	3.1	0.0	139.3	8.0	41.7	4.0	3153
3. Novozymes 3	6.0 oz	3.2	0.0	29.7	10.7	35.7	1.4	3667
+ Velum	6.84 fl oz							
4. Novozymes 4	12.0 oz	3.3	0.0	34.7	16.0	33.6	1.7	3833
+ Velum	6.84 fl oz							
5. Velum	6.84 fl oz	3.2	0.0	60.4	8.1	30.4	2.0	3771
6. Nontreated	-	3.2	0.0	79.0	8.0	35.0	2.3	3535
TifNV-HiOL								
7. Nontreated	-	3.1	0.0	1.0	40.3	1.0	0.9	3605
LSD(P<0.05)		0.2	N. S.	96.2	21.2	15.1	2.0	531

*All trts applied in furrow in 3.4 GPA singles and mixed in 2 L volume.

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

% Dead Plants[2]=The % of emerged plants that were 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.

Galling[5]= Visual rating of the % of pods and roots (1-100) with visible damage from root-knot nematode.

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

CORTEVA IN FURROW TEST II, 2021

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

B. EXPERIMENTAL DESIGN:

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

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. Treatment Sprays: In furrow sprays were applied at planting on May 6.

3. Cover Sprays: Plots were cover sprayed with Chlorothalonil (1.5 pts/a) on June 11, June 25, July 23, Aug. 20, and Sep. 3 and Elatus (8 oz/a) on July 9 and Aug. 6.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Woods Field Tifton, GA 31794 31.500814° N, 83.546653° W
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 16, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH – 6.12, P –55.7, K – 16.6, Ca – 253, Mg – 20.0 (soil samples were taken prior to fertilization)
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 21. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.

6. Insecticides: Acephate 97 (12 oz/a) on June 3.

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

8. Harvest Dates: Dug – Sep. 21 Picked – Sep. 28

E: SUMMARY:
With good quality seed and the seed treatment there was little if any difference found with the in furrow applications.

CORTEVA IN FURROW TEST II, 2021

		Plant/ft[1]		% Dead Plants[2]		
Treatments	**Rate / A**	**20-May**	**26-May**	**20-May**	**26-May**	**11-Jun**
1. Fontelis*	12.0 fl oz	2.6	3.4	0.0	0.0	0.2
2. Fontelis*	16.0 fl oz	2.8	3.5	0.0	0.1	0.2
3. Fontelis*	20.0 fl oz	2.7	3.4	0.0	0.3	0.3
4. Fontelis*	24.0 fl oz	2.8	3.6	0.0	0.0	0.1
5. Abound*	11.6 fl oz	2.7	3.4	0.0	0.2	0.2
6. Velum*	4.35 fl oz	2.7	3.5	0.0	0.0	0.0
7. Nontreated	-	2.9	3.6	0.0	0.1	0.2
LSD(P<0.05)		0.2	0.2	N. S.	0.2	N. S.

*All trts applied in furrow in 3.4 GPA singles and mixed in 2 L volume.

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

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

CORTEVA IN FURROW TEST II, 2021

Treatments	Rate/A	WM[3] 21-Sep	TSWV[4] 20-Sep	Roots/ft[5] 28-Sep	Yield lbs/A
1. Fontelis*	12.0 fl oz	1.7	15.7	2.9	3021
2. Fontelis*	16.0 fl oz	1.4	16.9	3.1	2598
3. Fontelis*	20.0 fl oz	2.3	15.1	2.7	2610
4. Fontelis*	24.0 fl oz	2.0	16.6	2.9	2490
5. Abound*	11.6 fl oz	2.3	16.6	2.9	2581
6. Velum*	4.35 fl oz	2.0	15.4	3.1	2337
7. Nontreated	-	2.6	15.1	2.9	2644
LSD(P<0.05)		N. S.	N. S.	N. S.	N. S.

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

TSWV[4]=Percent of row feet infectd 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.

VALENT NEMATODE TEST, 2021

A. PURPOSE: To evaluate the comparative efficacy of labeled and experimental nematicides applied for the control of nematodes.

B. EXPERIMENTAL DESIGN:

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

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. Treatment Sprays: In furrow sprays were applied at planting on May 6.

3. Cover Sprays: Plots were cover sprayed with Chlorothalonil (1.5 pts/a) on June 11, June 25, July 23, Aug. 20, and Sep. 3 and Elatus (8 oz/a) on July 9 and Aug. 6.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Woods Field Tifton, GA 31794 31.500814° N, 83.546653° W
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 16, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH – 6.12, P –55.7, K – 16.6, Ca – 253, Mg – 20.0 (soil samples were taken prior to fertilization)
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 21. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.

6. Insecticides: Acephate 97 (12 oz/a) on June 3.

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

8. Harvest Dates: Dug – Sep. 21 Picked – Sep. 28

E: SUMMARY:

This was a moderate to high pressure root knot nematode test with some treatments reducing galling. There were few other treatment effects, and yields were low in all treatments. The nematode-resistant cultivar exhibited virtually no galling and had only 3 juveniles per 100 cc of soil at harvest. Yield of TifNV-HiOL was also at least double any of the treatments on GA-06G.

VALENT NEMATODE TEST, 2021

Treatments	Rate/A	Plant/ft[1] 20-May	% Dead Plants[2] 20-May	Root-Knot[3] 30-Aug	Ring[4] 30-Aug	Pod Galling[5] 21-Sep	Root Galling[5] 21-Sep
GA-06G							
1. Thimet*	5.0 lb	3.3	0.0	71.3	15.0	45.7	47.9
2. Thimet*	5.0 lb	3.3	0.0	34.6	5.6	41.4	40.7
VBC-90063B*	8.0 fl oz						
3. Admire Pro*	8.5 fl oz	3.7	0.0	71.0	9.3	41.0	52.9
VBC-90063B*	8.0 fl oz						
4. Velum Total*	18.0 fl oz	3.5	0.0	69.9	8.3	25.0	28.6
5. Admire Pro*	8.5 fl oz	3.4	0.0	89.9	10.7	57.9	60.7
+ VBC-90062B*	8.0 fl oz						
6. Admire Pro*	8.5 fl oz	3.6	0.0	112.3	9.6	46.4	55.0
+ VBC-90062B*	10.0 fl oz						
TifNV-HiOL							
7. Thimet*	5.0 lb	3.0	0.0	3.3	4.7	0.0	0.5
LSD(P<0.05)		0.3	N. S.	64.5	N. S.	13.7	13.7

*All trts applied in furrow in 3.4 GPA singles and mixed in 2 L volume, or applied as a granular with a Gandy applicator on the planter.

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

% Dead Plants[2]=The % of emerged plants that were 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.

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

VALENT NEMATODE TEST, 2021

Treatments	Rate/A	WM[6] 21-Sep	Yield lbs/A
GA-06G			
1. Thimet*	5.0 lb	6.3	900
2. Thimet*	5.0 lb	10.3	1245
VBC-90063B*	8.0 fl oz		
3. Admire Pro*	8.5 fl oz	8.0	1162
VBC-90063B*	8.0 fl oz		
4. Velum Total*	18.0 fl oz	4.0	1319
5. Admire Pro*	8.5 fl oz	8.0	884
+ VBC-90062B*	8.0 fl oz		
6. Admire Pro*	8.5 fl oz	7.7	1128
+ VBC-90062B*	10.0 fl oz		
TifNV-HiOL			
7. Thimet*	5.0 lb	2.3	2769
LSD(P<0.05)		4.7	577

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

OFFICIAL DAILY RAINFALL, 2021

BLACKSHANK FARM, WOODS FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0.58	0.01	0	0	0.2	0.17	0.36	0
2	2.09	0	0	0	0.72	0.1	0.01	0
3	0.49	0	0	0.49	0.01	0.27	0	0
4	0.01	0	0.76	0.35	0	0.01	0	0
5	0	0	0.01	0	0.06	0	0	0.04
6	0	0	0	0.27	0.59	0.07	0	0.1
7	0	0	0	1.69	0.39	0.33	0	0
8	0	0	0	0.61	0.05	0	0.29	1.82
9	0	0.26	0	0	0.01	0.03	0.56	0
10	0	0.05	0	0	0	0	0	0.01
11	0	0.03	0.03	0.12	0.01	0.1	0	0.01
12	0	0	0.23	0.33	0.71	0.84	0	0.01
13	0	0	0.01	0.06	0.01	0	0	0
14	0	0	0	0	0.61	0.13	0	0
15	0	0	0	0.1	0.84	0	0.4	0
16	0.09	0	0	0.01	0.13	0.82	0.42	0
17	0.01	0.07	0	0	0.01	0.46	0	0
18	0.99	0.02	0	0.01	0.2	0	0.09	0
19	0	0	0	0.63	0.12	0	0.63	0.01
20	0	0	0	0.21	0.84	0	0.51	0
21	0	0	0	0	0.1	0	0.06	0
22	0	0	0	1.62	0.22	1.38	0.22	0
23	0	0	0	0.01	1.48	0.01	0	0
24	0	6.36	0	0	0.01	0	0	0
25	0	0	0	0	0	0.32	0	0.15
26	0	0	0	0	0	0.01	0	0.01
27	0	0	0	0.01	0.55	0	0	0
28	0.03	0	0	0	0.01	0.46	0	1.54
29	0	0	0.01	1.24	0	0.05	0	0.01
30	0	0	0	0.28	0	0.02	0	0
31	0.38	.	0	.	0.27	0.29	.	0
TOTAL (inches)	**4.67**	**6.8**	**1.05**	**8.04**	**8.15**	**5.87**	**3.55**	**3.71**

*Irrigated as needed.

AGRITHORITY BIOAID TEST, 2021

A. PURPOSE: To evaluate the comparative efficacy of labeled fungicides as well as labeled and experimental biologicals in order to control 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. 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. Treatment sprays: Sprays 1-5 were applied on June 16, June 28, July 11, July 26, and July 9. In furrow sprays applied at planting on May 11.

3. Cover Sprays: Plots were cover sprayed with Chlorothalonil (1.5 pts/a) on June 18, July 2, July 16, July 30, Aug. 6, Aug. 20, and Sep. 3.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794 31.503114° N, 83.544443° W
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 16, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH – 6.20, P –32.9, K – 33.6, Ca – 311, Mg – 27.7
	Soil type:	Tifton loamy sand, 2 – 5% slope.

5. Herbicides: PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 20. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.

6. Insecticides: Acephate 97 (12 oz/a) on June 2.

7. Planting Info: Tifguard, 6 seed/ft (2" deep) in single rows on May 11.

8. Harvest Dates: Dug – Oct. 7 Picked – Oct. 15

E: SUMMARY:

With good quality seed treated with Rancona there was little if any difference found with the in furrow applications. There was a moderate level of white mold, but no treatments had significantly less disease than the control.

AGRITHORITY/BIO-AID TEST, 2021

			Plant/ft[1]		% Dead Plants[2]			WM[3]	Yield
Treatment	App's	Rate/A	24-May	1-Jun	24-May	1-Jun	15-Jun	6-Oct	lbs/A
1. Untreated	-	-	3.2	3.5	0.0	0.0	0.3	14.5	4387
2. Bio-Aid	IF*	32.0 fl oz	3.2	3.4	0.0	0.0	0.3	19.3	4802
3. Bio-Aid	IF*	32.0 fl oz	3.7	3.4	0.0	0.0	0.3	12.0	4975
Bio-Aid	3 & 5	32.0 fl oz							
4. Bio-Aid	1, 3, 5	32.0 fl oz	-	-	-	-	-	11.0	4859
5. AGTEXP101	1-5	32.0 fl oz	-	-	-	-	-	21.5	4692
6. AGTEXP101	1-5	45.7 fl oz	-	-	-	-	-	23.5	4579
7. Elatus	1, 3, 5	7.3 oz	-	-	-	-	-	8.5	5338
8. Prophite	IF*	32.0 fl oz	3.7	3.5	0.0	1.0	0.3	17.0	5124
LSD(P<0.05)	-		0.5	N. S.	N. S.	N. S.	N. S.	15.7	N. S.

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

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

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

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

BAYER WHITE MOLD TEST, 2021

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: 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: Sprays 1-7 were applied on June 15, June 29, July 12, July 27, Aug. 10, Aug. 24, and Sep. 7. In furrow sprays applied at planting on May 10. No cover sprays were applied.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794 31.503114° N, 83.544443° W
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 16, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH – 6.20, P –32.9, K – 33.6, Ca – 311, Mg – 27.7
	Soil type:	Tifton loamy sand, 2 – 5% slope. % sand=83.9, % silt=7.0, % clay=9.1, % OM=0.90, CEC=2.79
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 20. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.

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

8. Harvest Dates: Dug – Oct. 7 Picked – Oct. 15

E: SUMMARY:

This as an excellent high pressure test for both leaf spot and white mold. The “Bravo only” treatment is the best “nontreated” check for white mold, and it had 27% white mold. There were notable differences in efficacy for both leaf spot and white mold, as well as yield.

BAYER WHITE MOLD TEST, 2021

Treatment	App's	Rate/A	Plant/ft[1] 24-May	% Dead Plants[2] 24-May	LS[3] 22-Sep	WM[4] 6-Oct	Yield lbs/A
1. Untreated	-	-	3.3	0.0	7.9	67.0	2062
2. Velum	In furrow*	6.5 fl oz	3.6	0.0	2.9	5.0	5677
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	7.5	5652
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	.	.	3.7	8.5	5293
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. Velum	In furrow*	6.5 fl oz	.	.	3.2	18.5	5307
Bravo	1 - 7	1.5 pt					
6. Bravo	1, 2 & 7	1.5 pt	.	.	4.0	9.0	5249
Excalia	3 & 5	2.5 oz					
+ Bravo		1.5 pt					
Provost Silver	4 & 6	13.0 fl oz					
7. Bravo	1 - 7	1.5 pt	.	.	6.2	27.0	4106
LSD(P<0.05)			N. S.	N. S.	0.8	9.5	692

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

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

% 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.

CORTEVA/VALENT FUNGICIDE TEST, 2021

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: 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: Sprays 1-7 were applied on June 16, June 29, July 11, July 26, Aug. 9, Aug. 23, and Sep. 6. No cover sprays applied.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794 31.503114° N, 83.544443° W
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 16, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH – 5.92, P –27.9, K – 29.7, Ca – 345, Mg – 30.7 (soil samples were taken prior to fertilization)
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 20. Rototilled to incorporate.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.

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

8. Harvest Dates: Dug – Oct. 7 Picked – Oct. 15

E: SUMMARY:

This as an excellent high pressure test for leaf spot which also had modest white mold pressure (the nontreated plot with severe defoliation is an artificially high assessment due to plant death). The “Bravo only” treatment is the best “nontreated” check for white mold. There were notable differences in efficacy which resulted in significant yield differences.

CORTEVA/VALENT FUNGICIDE TEST, 2021

Treatment	App's	Rate/A	LS[1] 22-Sep	WM[2] 7-Oct	Yield lbs/A
1. Aproach Prima	1	6.8 fl oz	4.0	4.0	5650
Bravo W'stik	2 & 6	1.5 pt			
+ Orius 3.6L	-	7.2 fl oz			
Fontelis	3 - 5	16.0 fl oz			
Bravo W'stik	7	1.5 pt			
2. Aproach Prima	1	6.8 fl oz	5.1	7.0	4750
Bravo W'stik	2 & 6	1.5 pt			
+ Orius 3.6L	-	7.2 fl oz			
Fontelis	3, 5 & 7	16.0 fl oz			
Elatus	4	9.0 oz			
3. Aproach Prima	2	6.8 fl oz	4.3	8.0	5878
Fontelis	3, 5 & 7	16.0 fl oz			
Elatus	4	9.0 oz			
Bravo W'stik	6	1.5 pt			
+ Orius 3.6L	-	7.2 fl oz			
4. Aproach Prima	2	6.8 fl oz	3.0	5.0	5545
Fontelis	3 & 5	16.0 fl oz			
Elatus	4	9.0 oz			
Bravo W'stik	6	1.5 pt			
+ Orius 3.6L	-	7.2 fl oz			
Provost Silver	7	13.0 fl oz			
5. Bravo	1,2,4,6,7	1.5 pt	5.4	8.0	5087
Excalia*	3 & 5	2.0 fl oz			
+ Bravo	-	1.0 pt			
6. Bravo	1,2,4,6,7	1.5 pt	3.3	6.0	5451
Excalia*	3 & 5	2.0 fl oz			
+ Microthiol S	-	3.0 lb			
7. Bravo W'stik	1 - 7	1.5 pt	5.9	10.5	5000
8. Nontreated	-	-	7.8	43.0	3254
LSD(P<0.05)	-	-	0.9	7.3	513

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.

EARLY SEASON WHITE MOLD TEST, 2021

A. PURPOSE: To determine if early season fungicide treatment could improve the efficacy of different fungicide programs for southern stem rot (White Mold).

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: 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. 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. Treatment sprays: Sprays were applied on June 23, July 12, and July 28.

3. Cover sprays: Chlorothalonil (1.5 pts/a) was applied on June 18, July 2, and July 16, July 30, Aug. 6, Aug. 20, and Sep. 3.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794 31.503114° N, 83.544443° W
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 16, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH – 6.20, P –32.9, K – 33.6, Ca – 311, Mg – 27.7
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 20. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.

6. Insecticides: Acephate 97 (12 oz/a) on June 2.

7. Planting Info: Tifguard, 6 seed/ft (2" deep) in single rows on May 10.

8. Harvest Dates: Dug – Oct. 7 Picked – Oct. 15

E: SUMMARY:

This as an excellent high pressure test for both leaf spot and white mold. In this trial the "Nontreated" plots received Bravo at 1.5 pt/A, and had 26% white mold. There were notable differences in efficacy for leaf spot from te early season sprays, but the standard 2-spray Elatus program did a good job on white mold, and little additional control was noted from the early season sprays.

EARLY SEASON WHITE MOLD TEST, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	WM[2] 7-Oct	Yield lbs/A
1. Nontreated	-	-	5.5	26.0	3862
2. Elatus 45WG	3 & 5	7.3 oz	3.9	7.0	5035
3. Proline *	1.5	5.7 fl oz	2.2	7.0	5147
Elatus 45WG	3 & 5	7.3 oz			
4. Lucento	1.5	5.5 fl oz	2.1	7.5	4966
Elatus 45WG	3 & 5	7.3 oz			
5. Tebuconazole	1.5	7.2 fl oz	3.2	5.0	5452
Elatus 45WG	3 & 5	7.3 oz			
6. Priaxor	1.5	6.0 fl oz	3.0	5.5	5343
Elatus 45WG	3 & 5	7.3 oz			
7. Elatus 45WG	1.5	7.3 oz	3.2	6.0	4977
Elatus 45WG	3 & 5	7.3 oz			
LSD(P<0.05)	-	-	0.5	11.8	1007

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

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.

NICHINO WHITE MOLD TEST, 2021

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: 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: Sprays 1-7 were applied on June 15, June 28, July 11, July 27, Aug. 10, Aug. 24, and Sep. 7. No cover sprays applied.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794 31.503114° N, 83.544443° W
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 16, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH – 5.92, P –27.9, K – 29.7, Ca – 345, Mg – 30.7 (soil samples were taken prior to fertilization)
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1 pt/a) on Apr. 20. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 17.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) in single rows on May 10.

8. Harvest Dates: Dug – Oct. 7 Picked – Oct. 15

E: SUMMARY:

This as an excellent high pressure test for both leaf spot and white mold. There were notable differences in efficacy for both leaf spot and white mold, as well as yield.

NICHINO WHITE MOLD TEST, 2021

Treatment	App's	Rate/A	LS[1] 22-Sep	WM[2] 6-Oct	Yield lbs/A
1. Untreated	-	-	7.4	38.5	3347
2. Bravo	1, 2, & 7	1.5 pt	5.1	12.5	5002
Bravo	3 - 6	1.5 pt			
+ Convoy	-	16 fl oz			
3. Bravo	1, 2 & 7	1.5 pt	6.4	32.0	3783
NAI-666	3 - 6	13.7 oz			
+ Convoy	-	16 fl oz			
4. Bravo	1, 2 & 7	1.5 pt	2.0	10.0	5365
Proline	3 - 6	5.7 fl oz			
5. Bravo	1, 2 & 7	1.5 pt	2.1	5.5	5924
Proline	3 - 6	3.0 fl oz			
6. Bravo	1, 2 & 7	1.5 pt	2.1	7.5	5554
Proline	3 - 6	5.7 fl oz			
+ Convoy	-	16 fl oz			
7. Bravo	1, 2 & 7	1.5 pt	2.9	16.0	5086
Proline	3 - 6	3.0 fl oz			
+ Convoy		16 fl oz			
8. Bravo	1, 2, 4, 6 & 7	1.5 pt	6.1	24.0	4312
Convoy	3 & 5	32.0 fl oz			

NICHINO WHITE MOLD TEST, 2021

Treatment	App's	Rate/A	LS[1] 22-Sep	WM[2] 6-Oct	Yield lbs/A
9. Bravo	1, 2 & 7	1.5 pt	3.8	17.0	5009
Proline	3 & 5	5.7 fl oz			
10. Bravo	1, 2 & 7	1.5 pt	4.0	15.5	4450
Convoy	3 & 5	32.0 fl oz			
+ Proline	-	5.7 fl oz			
11. Bravo	1, 2, 4, 6 & 7	1.5 pt	2.1	8.0	5285
Convoy	3 & 5	32.0 fl oz			
+ Proline	-	5.7 fl oz			
12. Bravo	1, 2, 4, 6 & 7	1.5 pt	3.0	14.0	5561
Convoy	3 & 5	32.0 fl oz			
+ Proline	-	3.0 fl oz			
13. Priaxor	2	6.0 fl oz	2.9	6.0	5362
Bravo	3 & 5	16.0 fl oz			
+ Convoy	-	32.0 fl oz			
+ Alto	-	5.5 fl oz			
Bravo	4 & 6	16.0 fl oz			
+ Muscle	-	7.2 fl oz			
Bravo	7	1.5 pt			
14. Pyraziflumid	2	4.67 fl oz	3.6	13.5	5314
Bravo	3 & 5	16.0 fl oz			
+ Convoy	-	32.0 fl oz			
+ Alto	-	5.5 fl oz			
Bravo	4 & 6	16.0 fl oz			
+ Muscle	-	7.2 fl oz			
Bravo	7	1.5 pt			
LSD(P<0.05)	-	-	0.7	10.4	902

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, 2021

BLACKSHANK FARM, IRR/NON FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0.58	0.01	0	0	0.2	0.17	0.36	0
2	2.09	0	0	0	0.72	0.1	0.01	0
3	0.49	0	0	0.49	0.01	0.27	0	0
4	0.01	0	0.76	0.35	0	0.01	0	0
5	0	0	0.01	0	0.06	0	0	0.04
6	0	0	0	0.27	0.59	0.07	0	0.1
7	0	0	0	1.69	0.39	0.33	0	0
8	0	0	0	0.61	0.05	0	0.29	1.82
9	0	0.26	0	0	0.01	0.03	0.56	0
10	0	0.05	0	0	0	0	0	0.01
11	0	0.03	0.03	0.12	0.01	0.1	0	0.01
12	0	0	0.23	0.33	0.71	0.84	0	0.01
13	0	0	0.01	0.06	0.01	0	0	0
14	0	0	0	0	0.61	0.13	0	0
15	0	0	0	0.1	0.84	0	0.4	0
16	0.09	0	0	0.01	0.13	0.82	0.42	0
17	0.01	0.07	0	0	0.01	0.46	0	0
18	0.99	0.02	0	0.01	0.2	0	0.09	0
19	0	0	0	0.63	0.12	0	0.63	0.01
20	0	0	0	0.21	0.84	0	0.51	0
21	0	0	0	0	0.1	0	0.06	0
22	0	0	0	1.62	0.22	1.38	0.22	0
23	0	0	0	0.01	1.48	0.01	0	0
24	0	6.36	0	0	0.01	0	0	0
25	0	0	0	0	0	0.32	0	0.15
26	0	0	0	0	0	0.01	0	0.01
27	0	0	0	0.01	0.55	0	0	0
28	0.03	0	0	0	0.01	0.46	0	1.54
29	0	0	0.01	1.24	0	0.05	0	0.01
30	0	0	0	0.28	0	0.02	0	0
31	0.38	.	0	.	0.27	0.29	.	0
TOTAL (inches)	**4.67**	**6.8**	**1.05**	**8.04**	**8.15**	**5.87**	**3.55**	**3.71**

*Irrigated as needed.

MULTI-STATE DISEASE EVALUATION TEST, 2021

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: Chlorothalanil (1.5 pt/a) was applied on July 22, Aug. 7, Aug. 19, Sep. 3.

3. Inoculated test with white mold on July 21.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Banana Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	No fertilizer applied. Fumigated with 300 lb/a of Tri-Pic 100 by injecting into soil and covering with plastic on March 22. Removed tarp on Apr. 5.
4.	Soil Fertility:	pH – 6.36 P – 17.5 K – 32.5 Ca – 278 Mg – 26.3
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Insecticides:	Acephate 97 (12 oz/a) on July 19.
6.	Planting Info:	Multiple Varieties, 6 seed/ft (2” deep) on May 20.
7.	Harvest Dates:	Dug – Oct. 18 Picked – Oct. 26

E: SUMMARY:

High levels of both white mold amd TSWV developed and there was a good separation of genotypes. There was some leaf spot (mainly early leaf spot), but a more aggressive spray program resulted in less disease than in previous years.

MULTISTATE/RIL FIELD TEST, 2021

	White Mold (18-Oct)			TSWV[3]	LS[4]	Yield
Genotypes	% Zeroes[1]	No Zeroes[2]	All[2]	30-Jul	15-Oct	lb/A
1. GA01	4.2	46.3	45.2	22.5	2.8	4441
2. GA02	0.0	46.0	46.0	6.7	2.6	4090
3. GA03	58.3	34.2	14.8	6.7	2.8	7054
4. GA04	25.0	30.6	22.7	7.1	3.1	6522
5. GA05	4.2	54.7	46.5	3.3	2.3	5288
6. GA06	8.3	54.1	48.1	12.5	2.1	5143
7. GA07	0.0	62.1	62.1	3.3	2.0	5385
8. GA08	0.0	39.6	39.6	10.0	2.8	5784
9. GA09	4.2	48.3	43.0	10.8	2.4	4925
10. GA10	20.8	43.8	37.7	7.5	2.1	6522
11. GA11	4.2	86.5	84.4	5.0	2.1	4296
12. GA12	8.3	41.9	39.4	0.8	2.9	5227
13. GA13	11.1	57.9	49.7	7.2	2.6	6050
14. GA14	0.0	44.2	44.2	0.8	2.7	5796
15. GA15	75.0	19.4	4.4	5.0	3.4	7550
16. GA 182537	4.2	52.2	49.6	3.3	3.9	6050
17. GA 182520	0.0	35.0	35.0	1.7	2.8	5506
18. GA 182521	4.2	37.9	32.8	5.8	2.6	5469
19. GA 182519	8.3	31.7	28.1	5.8	2.3	5735
20. GA 182729	0.0	58.3	58.3	5.0	2.8	4973
21. GA 182726	0.0	62.3	62.3	3.3	3.1	4066
22. GA 182730	0.0	62.3	62.3	3.3	3.1	3824
23. GA 182701	3.3	48.1	47.3	6.3	2.6	5866
24. 20501-MR_3	4.2	49.7	43.8	16.7	2.4	5639
25. 20501-MR_5	12.5	29.5	25.4	13.3	2.4	7163

MULTISTATE/RIL FIELD TEST, 2021

	White Mold (18-Oct)			TSWV[3]	LS[4]	Yield
Genotypes	% Zeroes[1]	No Zeroes[2]	All[2]	30-Jul	15-Oct	lb/A
26. 20VAR-MR_21	12.5	44.4	39.8	5.0	2.9	6970
27. 20404-MR_23	8.3	44.1	40.8	4.2	2.7	6667
28. 20404-MR_14	16.7	27.3	22.7	3.7	2.7	7151
29. 20404-MR_21	8.3	51.3	49.0	1.7	2.8	6280
30. 20404-MR_19	8.3	51.9	48.3	2.1	3.2	6365
31. ACIx 3F104	41.7	20.8	14.6	5.0	3.5	6970
32. ACIx 1F410	16.7	26.7	22.3	7.9	3.3	6534
33. M16-0022	8.3	39.0	35.8	8.3	2.6	6570
34. SC16-0061	25.0	31.8	21.9	1.1	2.8	7405
35. ACI 1D-9684	20.8	25.3	20.0	8.3	3.1	6812
36. 18-1-0911	16.7	52.2	43.1	12.5	3.0	4465
37. 18-1-0216	33.3	34.4	21.5	10.4	2.9	6425
38. 18-1-0215	20.8	36.9	28.8	11.2	2.7	6655
39. 17-1-0517	8.3	57.0	51.5	11.7	2.3	5772
40. GA 163120	12.5	50.1	44.2	1.7	2.9	6316
41. TifNV High O/L	33.3	18.9	13.1	10.0	2.8	6595
42. GA-06G	4.2	56.6	54.2	6.7	3.3	6026
43. Florun 331	37.5	25.3	15.2	10.8	3.1	6800
44. Tufrunner 297	8.3	43.3	40.8	4.6	3.0	6002
45. GA-19HP	4.2	46.4	43.1	1.7	2.6	5679
46. GA-13M	16.7	44.0	37.9	6.2	4.1	6703
47. GA-18RU	12.5	41.0	34.0	5.8	3.6	6607
48. GA-20VHO	8.3	54.7	49.2	3.3	2.8	5409
49. GA-09B	4.2	56.1	51.3	10.0	3.3	6171
50. GA-16HO	12.5	39.6	34.0	8.7	3.6	6582
51. GA-12Y	20.8	20.0	16.0	1.7	2.8	8664
52. AU-NPL17	12.5	27.1	25.6	2.9	2.4	6413
LSD(P<0.05)	16.7	20.8	19.9	7.2	0.5	1147

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

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

TSWV[3]=Percent of row feet infectd 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.

GA-12Y TEST, 2021

A. PURPOSE: To evaluate the comparative susceptibility of various GA-12Y seed lots for susceptibility to white mold versus two known standards.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six 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: GA-12Y, GA-09B (susceptible), GA-14N (resistant)

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: Chlorothalanil (1.5 pt/a) was applied on July 22, Aug. 7, Aug. 19, Sep. 3. Elatus (8 oz/a) was applied on Sep. 16 and Sep. 30.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Banana Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	No fertilizer applied. Fumigated with 300 lb/a of Tri-Pic 100 by injecting into soil and covering with plastic on March 22. Removed tarp on Apr. 5.
4.	Soil Fertility:	pH – 6.36 P – 17.5 K – 32.5 Ca – 278 Mg – 26.3
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Insecticides:	Acephate 97 (12 oz/a) on July 19.
6.	Planting Info:	GA-12Y, 6 seed/ft (2” deep) on May 18.
7.	Harvest Dates:	Dug – Oct. 18 Picked – Oct. 26

E: SUMMARY:

The results confirmed that multiple GA-12Y seed lots going as far back as 2012 had a similar level of resistance to white mold and yield potential. All were more resistant than GA-09B, the susceptible check, and hada similar level of disease as GA-14N, the resistant check. However, yields were generally higher with GA-12Y than with GA-14N.

GA-12Y TEST, 2021

				White Mold			Yield
Cultivar	Year	Source	Lot #	% Zeroes[1]	No Zeroes[2]	All[2]	lbs/A
1. GA-09B	2021	ACIA	.	8.3	48.2	46.1	5776
2. GA-12Y	2021	Branch	.	33.3	20.0	17.9	7231
3. GA-12Y	2021	ACIA	Y-2010, Ours	58.3	17.1	12.5	7728
4. GA-12Y	2021	ACIA	Y-2014, T Pnut	72.2	20.8	12.1	7220
5. GA-12Y	2021	ACIA	Y-2012, T Pnut	77.8	22.8	9.0	7478
6. GA-12Y	2019	ACIA	.	80.6	22.3	8.6	7647
7. GA-12Y	2012	GFS	.	69.4	16.5	7.9	7083
8. GA-14N	2020	GFS	.	63.9	22.5	12.2	6553
LSD(P<0.05)				22.0	13.3	10.8	867

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

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

OFFICIAL DAILY RAINFALL, 2021

BLACKSHANK FARM, BANANA FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0.58	0.01	0	0	0.2	0.17	0.36	0
2	2.09	0	0	0	0.72	0.1	0.01	0
3	0.49	0	0	0.49	0.01	0.27	0	0
4	0.01	0	0.76	0.35	0	0.01	0	0
5	0	0	0.01	0	0.06	0	0	0.04
6	0	0	0	0.27	0.59	0.07	0	0.1
7	0	0	0	1.69	0.39	0.33	0	0
8	0	0	0	0.61	0.05	0	0.29	1.82
9	0	0.26	0	0	0.01	0.03	0.56	0
10	0	0.05	0	0	0	0	0	0.01
11	0	0.03	0.03	0.12	0.01	0.1	0	0.01
12	0	0	0.23	0.33	0.71	0.84	0	0.01
13	0	0	0.01	0.06	0.01	0	0	0
14	0	0	0	0	0.61	0.13	0	0
15	0	0	0	0.1	0.84	0	0.4	0
16	0.09	0	0	0.01	0.13	0.82	0.42	0
17	0.01	0.07	0	0	0.01	0.46	0	0
18	0.99	0.02	0	0.01	0.2	0	0.09	0
19	0	0	0	0.63	0.12	0	0.63	0.01
20	0	0	0	0.21	0.84	0	0.51	0
21	0	0	0	0	0.1	0	0.06	0
22	0	0	0	1.62	0.22	1.38	0.22	0
23	0	0	0	0.01	1.48	0.01	0	0
24	0	6.36	0	0	0.01	0	0	0
25	0	0	0	0	0	0.32	0	0.15
26	0	0	0	0	0	0.01	0	0.01
27	0	0	0	0.01	0.55	0	0	0
28	0.03	0	0	0	0.01	0.46	0	1.54
29	0	0	0.01	1.24	0	0.05	0	0.01
30	0	0	0	0.28	0	0.02	0	0
31	0.38	.	0	.	0.27	0.29	.	0
TOTAL (inches)	**4.67**	**6.8**	**1.05**	**8.04**	**8.15**	**5.87**	**3.55**	**3.71**

*Irrigated as needed.

BAYER IN FURROW RATE TEST, 2021

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.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: GA-16HO (66% germination).

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 on June 11, June 25, July 23, Aug. 20, and Sep. 3 and Elatus (8 oz/a) on July 9 and Aug. 6.

3. Treatment sprays: In furrow sprays were applied at planting on May 4.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. Field was deep turned, beds marked 6 ft, and fertilizer turned under Apr. 20. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH – 6.3 P – 16.6 K – 33.7 Ca – 417 Mg – 38.2 (soil samples were taken prior to fertilization)
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 22. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.

6. Insecticides: Acephate 97 (12 oz/a) on June 2.

7. Planting Info: GA-16HO (66% germ), 6 seed/ft (3" deep) on May 4.

8. Harvest Dates: Dug –Sep. 3 Picked – Sep. 10

E: SUMMARY:

There were some differences in seedling disease and plant stands due to the in furrow treatments. Differences were due primarily to pre-emergence seed rot, presumably due to *Rhizopus* and other pathogens. The seed had low levels of Aspergillus infection, and there was only 2.5% plant death after emergence with the untreated seed. This is almost entirely due to Aspergillus crown rot, and is much higher in years with more highly infected seed. The relatively small differences in plant stand had little effect on pod yields.

BAYER IN FURROW RATE TEST, 2021

		Plant/ft[1]		% Dead Plants[2]		
Treatment	**Rate/A**	**19-May**	**24-May**	**19-May**	**24-May**	**9-Jun**
1. Nontreated	-	2.0	2.1	0.0	0.3	2.5
2. Velum	6.5 fl oz	2.1	2.3	0.0	0.2	0.5
3. Velum	4.3 fl oz	2.0	2.1	0.0	0.2	0.7
4. Proline	5.7 fl oz	1.8	2.2	0.0	0.1	0.5
5. Proline	3.8 fl oz	1.7	2.3	0.0	0.1	0.6
6. Propulse	13.7 fl oz	2.0	2.3	0.0	0.0	0.0
7. Propulse	9.0 fl oz	2.2	2.4	0.0	0.0	0.3
8. Kphite	64.0 fl oz	2.2	2.5	0.0	0.6	2.9
9. Kphite	32.0 fl oz	2.2	2.1	0.0	1.4	5.1
10. Kphite	32.0 fl oz	2.2	2.4	0.0	0.4	0.6
+ Velum	-					
LSD(P<0.05)	-	0.5	0.3	N. S.	0.6	1.6

This test will be planted with the compromised GA-16HP (66% germ).

All trts applied in furrow in 3.4 GPA singles and mixed in 2 L volume.

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

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

BAYER IN FURROW RATE TEST, 2021

Treatment	Rate/A	TSWV[3] 4-Aug	Roots/ft[4] 8-Sep	Yield lbs/A	SMKSS[5]	$/Ton	$/Acre
1. Nontreated	-	23.7	1.6	2911	69.3	348.3	505.3
2. Velum	6.5 fl oz	42.0	1.8	2784	68.4	343.4	476.8
3. Velum	4.3 fl oz	32.7	1.7	2808	67.3	338.2	473.0
4. Proline	5.7 fl oz	28.7	1.5	2590	65.8	334.0	434.3
5. Proline	3.8 fl oz	33.0	1.6	2581	66.8	335.6	432.3
6. Propulse	13.7 fl oz	29.7	1.7	3389	67.3	338.1	571.6
7. Propulse	9.0 fl oz	21.0	2.1	3462	66.7	335.9	581.9
8. Kphite	64.0 fl oz	30.0	1.6	3268	67.8	340.6	555.5
9. Kphite	32.0 fl oz	25.3	1.5	2953	67.1	338.2	498.2
10. Kphite	32.0 fl oz	33.3	1.8	3196	67.1	337.8	538.4
+ Velum	-						
LSD(P<0.05)	-	8.9	0.3	635	2.9	13.4	108.3

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.

SMKSS[5] = The percent of sound mature kernels and sound splits.

CORTEVA IN FURROW TEST I, 2021

A. PURPOSE: To evaluate the comparative efficacy of fungicides applied for the control of peanut seedling 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: Untreated GA-16HO.

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 on June 11, June 25, July 23, Aug. 20, and Sep. 3 and Elatus (8 oz/a) on July 9 and Aug. 6.

3. Treatment sprays: In furrow sprays were applied at planting on May 4.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. Field was deep turned, beds marked 6 ft, and fertilizer turned under Apr. 9. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH – 6.3 P – 16.6 K – 33.7 Ca – 417 Mg – 38.2 (soil samples were taken prior to fertilization)
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 22. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.

7. Planting Info: Untreated GA-16HO. (66% germ), 6 seed/ft (3" deep) on 4 May.

8. Harvest Dates: Dug –Sep. 3 Picked – Sep. 10

E: SUMMARY:

There were some differences in seedling disease and plant stands due to the in furrow treatments. Differences were due primarily to pre-emergence seed rot, presumably due to *Rhizopus* and other pathogens. The seed had low levels of Aspergillus infection, and there was only 2.0% plant death after emergence with the untreated seed. This is almost entirely due to Aspergillus crown rot, and is much higher in years with more highly infected seed. The relatively small differences in plant stand had little effect on pod yields

CORTEVA IN FURROW TEST I, 2021

		Plant/ft[1]		% Dead Plants[2]		
Treatments	**Rate / A**	**17-May**	**24-May**	**17-May**	**24-May**	**9-Jun**
1. Fontelis*	12.0 fl oz	1.6	2.2	0.0	0.9	2.0
2. Fontelis*	16.0 fl oz	1.8	2.6	0.0	0.6	1.2
3. Fontelis*	20.0 fl oz	2.1	2.4	0.0	1.3	1.8
4. Fontelis*	24.0 fl oz	1.7	2.5	0.0	0.6	1.2
5. Abound*	11.6 fl oz	1.9	2.4	0.0	1.3	3.2
6. Velum*	4.35 fl oz	2.1	2.6	0.0	0.5	1.0
7. Nontreated	-	1.7	2.4	0.0	0.7	3.2
LSD(P<0.05)		0.5	0.3	N. S.	N. S.	1.7

This test will be planted with the compromised GA-16HO (66% germ) with no seed treatment.

*All trts applied in furrow in 3.4 GPA singles and mixed in 2 L volume.

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

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

CORTEVA IN FURROW TEST I, 2021

Treatments	Rate / A	TSWV[3] 4-Aug	Roots/ft[4] 7-Sep	Yield lbs/A
1. Fontelis*	12.0 fl oz	19.7	1.6	3811
2. Fontelis*	16.0 fl oz	20.0	1.5	3213
3. Fontelis*	20.0 fl oz	12.4	1.7	3660
4. Fontelis*	24.0 fl oz	18.4	1.7	3718
5. Abound*	11.6 fl oz	13.2	1.6	3893
6. Velum*	4.35 fl oz	18.4	2.2	3544
7. Nontreated	-	15.1	1.3	3376
LSD(P<0.05)		6.9	0.3	N. S.

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.

SYNGENTA IN FURROW TEST, 2021

A. PURPOSE: To evaluate the efficacy of labeled and experimental in furrow fungicide treatments to control peanut seedling diseases.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: GA-16HO (66% germination)

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 and treatment 8 spray were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens. Band at emergence spray was applied in a 12" band directly over the row with a single 8003 nozzle in a total spray volume of 20 GPA.

2. Treatment sprays: In furrow sprays were applied at planting on May 4. Band at emergence spray (treatment 7) was applied on May 21. Broadcast spray (treatment 8) was applied on June 18 and was watered in with irrigation soon after.

3. Cover sprays: Chlorothalonil (1.5 pts/a) was applied on June 11, June 25, July 23, Aug. 20, and Sep. 3. Elatus (8 oz/a) was applied on July 9 and Aug. 6.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 20, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –6.29 P –16.6 K –33.7 Ca –417 Mg –38.2 (Soil samples taken prior to fertilization)
	Soil type:	Tifton loamy sand, 2 – 5% slope.

5. Herbicides: PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 22. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.

6. Insecticides: Acephate 97 (12 oz/a) on June 2.

7. Planting Info: GA-16HO, 6 seed/ft (3" deep) on May 4.

8. Harvest Dates: Dug – Sep. 3 Picked – Sep. 10

E: SUMMARY:

There were some distinct differences in seedling disease and plant stands due to the in furrow treatments. Differences were due primarily to pre-emergence seed rot, presumably due to *Rhizopus* and other pathogens. The seed had low levels of Aspergillus infection, and there was only 3.0% plant death after emergence with the untreated seed. This is almost entirely due to Aspergillus crown rot, and is much higher in years with more highly infected seed. The significant differences in plant stand translated into significant differences in yield as well.

SYNGENTA IN FURROW TEST, 2021

Treatment	Timing	Rate / A	Plant/ft[1]		% Dead Plants[2]		
			17-May	25-May	17-May	25-May	9-Jun
1. Untreated	-	-	1.5	1.9	0.0	1.3	3.9
2. Elatus 45WG	In Furrow*	7.14 oz	1.7	2.5	0.0	0.4	1.9
3. Elatus 45WG	In Furrow*	9.52 oz	2.2	2.7	0.0	0.4	0.9
4. SYN549522 300SC	In Furrow*	11.4 fl oz	2.1	2.8	0.0	0.0	0.1
5. SYN549522 300SC	In Furrow*	11.4 fl oz	2.0	2.9	0.0	0.0	0.0
+Elatus 45WG	In Furrow*	7.14 oz					
6. SYN549522 300SC	In Furrow*	11.4 fl oz	1.9	2.8	0.0	0.0	0.0
+Elatus 45WG	In Furrow*	9.52 oz					
7. SYN549522 300SC	Band at Emerg**	11.4 fl oz	1.6	2.3	0.0	1.0	2.9
+Elatus 45WG	Band at Emerg**	9.52 oz					
8. SYN549522 300SC	In Furrow*	11.4 fl oz	1.9	3.0	0.0	0.0	0.0
+Elatus 45WG		9.52 oz					
SYN549522 300SC	45 DAP, B'cast***	11.4 fl oz	-	-	-	-	-
+Elatus 45WG		9.52 oz					
9. Propulse	In Furrow*	13.6 fl oz	1.3	2.4	0.0	0.3	1.2
LSD(P<0.05)	-		0.4	0.4	N. S.	0.5	1.5

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

**Applied at emergence in a 12" band directly over the row with a single 8003 nozzle in a total spray volume of 20 GPA, mixing 2 L.

***Broadcast application and watered in with irrigation soon after.

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

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

SYNGENTA IN FURROW TEST, 2021

Treatment	Timing	Rate/A	TSWV[3] 4-Aug	Roots/ft[4] 7-Sep	Yield lb/A
1. Untreated	-	-	21.6	1.2	3498
2. Elatus 45WG	In Furrow*	7.14 oz	26.4	1.9	3689
3. Elatus 45WG	In Furrow*	9.52 oz	26.0	2.0	3660
4. SYN549522 300SC	In Furrow*	11.4 fl oz	25.6	2.2	4125
5. SYN549522 300SC	In Furrow*	11.4 fl oz	19.6	2.3	4299
+Elatus 45WG	In Furrow*	7.14 oz			
6. SYN549522 300SC	In Furrow*	11.4 fl oz	20.8	2.5	4735
+Elatus 45WG	In Furrow*	9.52 oz			
7. SYN549522 300SC	Band at Emerg**	11.4 fl oz	31.7	1.6	3341
+Elatus 45WG	Band at Emerg**	9.52 oz			
8. SYN549522 300SC	In Furrow*	11.4 fl oz	26.4	2.6	4299
+Elatus 45WG		9.52 oz			
SYN549522 300SC	45 DAP, B'cast***	11.4 fl oz	-	-	-
+Elatus 45WG		9.52 oz			
9. Propulse	In Furrow*	13.6 fl oz	23.8	1.8	3765
LSD(P<0.05)	-		N. S.	0.3	657

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.

SYNGENTA SEED TREATMENT TEST, 2021

A. PURPOSE: To evaluate the efficacy of experimental peanut seed treatments that are proprietary mixes of up to five different active ingredients.

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: unknown

C. APPLICATION OF TREATMENTS:

1. Equipment: Cover sprays were 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 pts/a) was applied on June 11, June 25, July 23, Aug. 20, and Sep. 3. Elatus (8 oz/a) was applied on July 9 and Aug. 6.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 20, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –6.29 P –16.6 K –33.7 Ca –417 Mg –38.2 (Soil samples taken prior to fertilization)
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 22. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.
7.	Planting Info:	Unknown variety, 6 seed/ft (3” deep) on Apr. 30.
8.	Harvest Dates:	Dug – Sep. 3 Picked – Sep. 9

E: SUMMARY:

There were some distinct differences in seedling disease and plant stands due to the in furrow treatments. Differences were due primarily to pre-emergence seed rot, presumably due to *Rhizopus* and other pathogens. The seed had low levels of Aspergillus infection, although there was 12.4% plant death after emergence with the untreated seed. This is almost entirely due to Aspergillus crown rot, and is much higher in years with more highly infected seed. The differences in plant stand had an effect on yield, especially comparing the nontreated seed to some of the better treatments.

SYNGENTA SEED TREATMENT TEST, 2021

	Plant/ft[1]		% Dead Plants[2]			Cold Germ*	Reg Germ*
Seed Trt	11-May	21-May	11-May	21-May	3-Jun	16-Jun	16-Jun
1	0.5	0.7	0.0	4.9	12.4	-	-
2	3.2	3.4	0.0	0.2	0.5	76.0	79
3	3.0	3.3	0.0	0.0	0.0	83.0	79
4	3.1	3.3	0.0	0.1	0.3	79.0	79
5	2.9	3.3	0.0	0.0	0.0	59.0	84
6	3.2	3.3	0.0	0.0	0.0	82.0	80
7	3.0	3.5	0.0	0.0	0.0	75.0	83
8	3.2	3.3	0.0	0.0	0.1	75.0	77
LSD(P<0.05	0.5	0.2	0.0	2.0	3.4	-	-

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

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

*Seed taken for germ testing on 6-16-21.

SYNGENTA SEED TREATMENT TEST, 2021

Seed Trt	TSWV[3] 4-Aug	Roots/ft[4] 8-Sep	Yield lb/A
1	39.4	1.0	3235
2	34.3	2.9	3578
3	19.3	3.2	4178
4	24.3	3.1	3936
5	16.7	3.3	4755
6	26.0	2.9	3985
7	22.0	3.1	4261
8	25.3	2.8	3859
LSD(P<0.05)	12.1	0.4	688

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.

UPL SEED TREATMENT TEST, 2021

A. PURPOSE: To evaluate the efficacy of experimental peanut seed treatments. Some of those included were single active ingredients evaluated to determine their potential contribution in a commercial seed treatment mix.

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: 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 on June 11, June 25, July 23, Aug. 20, and Sep. 3 and Elatus (8 oz/a) on July 9 and Aug. 6.

D. ADDITIONAL INFORMATION:

1. Location:	Lang Farm, South Field, Tifton, GA, 31794
2. Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3. Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. Field was deep turned, beds marked 6 ft, and fertilizer turned under Apr. 20. On June 29, 1500 lbs/a of land plaster was applied.
4. Soil Fertility:	pH – 6.3 P – 16.6 K – 33.7 Ca – 417 Mg – 38.2 (soil samples were taken prior to fertilization)
Soil type:	Tifton loamy sand, 2 – 5% slope.
5. Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 22. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.
6. Insecticides:	Acephate 97 (12 oz/a) on June 2.
7. Planting Info:	Unknown, 6 seed/ft (3” deep) on Apr. 30.
8. Harvest Dates:	Dug –Sep. 3 Picked – Sep. 9

E: SUMMARY:

There were some distinct differences in seedling disease and plant stands due to the in furrow treatments. Differences were due primarily to pre-emergence seed rot, presumably due to *Rhizopus* and other pathogens. The seed had low levels of Aspergillus infection, although there was 9.6% plant death after emergence with the untreated seed. This is almost entirely due to Aspergillus crown rot, and is much higher in years with more highly infected seed. The big differences in plant stand had a large effect on yield, especially comparing the nontreated seed to some of the better treatments. The poor control with some single ingredient treatments is reflected by poor germination as well as poor stands and yields.

UPL SEED TREATMENT TEST, 2021

	Plant/ft[1]		% Dead Plants[2]		
Seed Trt	**11-May**	**21-May**	**11-May**	**21-May**	**3-Jun**
1	0.7	1.9	0.0	2.5	9.6
2	2.3	3.4	0.0	0.1	0.2
3	2.3	3.6	0.0	0.5	0.7
4	1.0	1.9	0.0	0.2	0.8
5	0.9	1.8	0.0	0.0	0.2
6	0.7	1.7	0.0	0.0	0.8
7	2.5	3.6	0.0	0.1	0.1
8	2.0	3.6	0.0	0.1	0.2
9	2.3	3.6	0.0	0.0	0.1
10	2.3	3.6	0.0	0.0	0.0
LSD(P<0.05)	0.5	0.3	N. S.	0.8	1.4

Plant/ft[1] = Stand count is the number of emerged plants per foot of row.

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

UPL SEED TREATMENT TEST, 2021

Seed Trt	Cold Germ* 16-Jun	Reg Germ* 16-Jun	TSWV[3] 4-Aug	Roots/ft[4] 8-Sep	Yield lbs/A
1	-	-	33.7	1.1	3297
2	58	71	26.0	3.3	4154
3	81	76	20.3	3.3	4062
4	6	21	35.7	1.4	2832
5	7	18	34.7	1.3	3162
6	12	40	36.0	1.3	2992
7	83	81	25.3	3.6	4445
8	82	84	28.3	3.5	4924
9	54	80	23.7	3.5	4600
10	56	86	19.7	3.4	4324
LSD(P<0.05)	-	-	12.1	0.3	688

*Seed taken for germ testing on 6-16-21.

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 + IRRIGATION, 2021

LANG FARM, SOUTH FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0	0.20	0.50	0
2	2.90	0	0	0.00	1.50	0.30	0	0
3	0	0	0	0.80	0	0.90	0	0
4	0	0	0	0.50	0	0	0	0.10
5	0	0	1.00	0	0	0	0	0
6	0	0	0	0.30	0.50	0	0	0.15
7	0	0	0	2.50	0.30	0.40	0	0
8	0	0	0	0.40	0.10	0	0.80	2.10
9	0	0	0	0	0	0	0	0
10	0	0.50	0	0	0	0	0	0
11	0	0	0	0.70	0	3.10	0	0
12	0	0	0.40	0.50	0	0	0	0
13	0	0	0	0	0.60	0	0	0
14	0	0	0	0	0.50	0.20	0	0
15	0	0	0	0	0	0	0.40	0
16	0	0	0	0	0	1.00	0.60	0
17	0	0	0	0	0	0	0.40	0
18	0.70	0	0	0	0.40	0	0.20	0
19	0	0	0	0.50	0	0	0.80	0
20	0	0	0.50	0.40	0.40	0	0	0
21	0	0	0	0	0	0	0	0
22	0	0	0	2.20	0.65	0.50	0	0
23	0	0	0	0	2.00	0	0	0
24	0	6.00	0.50	0	0	0	0	0
25	0	0	0	0	0	0.40	0	0.10
26	0	0	0	0	0	0	0	0
27	0	0	0.50	0.10	1.60	0	0	0
28	0	0	0	0	0	0.30	0	1.60
29	0	0	0	1.30	0	0.10	0	0
30	0	0	0	0.25	0	0	0	0
31	0.50	0	0.50	0	0.25	0.50	0	0
TOTAL (inches)	**4.10**	**6.50**	**3.40**	**10.45**	**8.80**	**7.90**	**3.70**	**4.05**

FMC PROGRAMS TEST, 2021

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 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: Sprays 1-7 were applied on June 10, June 24, July 8, July 22, Aug. 5, Aug. 19, and Sep. 2. No cover sprays were applied.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, New Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 9, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –6.62 P –8.4 K –26.3 Ca –413 Mg –38.1
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 22. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) on May 3.
8.	Harvest Dates:	Dug – Sep. 27 Picked – Oct. 1

E: SUMMARY:

This as an excellent high pressure test for white mold and moderate leaf spot intensity. There were notable differences in efficacy for both leaf spot and white mold, as well as yield.

FMC PROGRAMS TEST, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
1. Untreated	-	-	6.6	18.0	58.3	2179
2. Bravo	1 & 7	1.5 pt	3.9	32.3	11.0	3704
Lucento	2 & 4	5.5 fl oz				
Convoy	3 & 5	32.0 fl oz				
+ Bravo	-	1.5 pt				
Provost Silver	6	13.0 fl oz				
3. Bravo	1 & 7	1.5 pt	3.6	22.0	9.3	4387
Lucento	2 & 4	5.5 fl oz				
Provysol	3 & 5	5.0 fl oz				
+ Orius	-	7.2 fl oz				
Provost Silver	6	13.0 fl oz				
4. Bravo	1 & 7	1.5 pt	3.5	28.3	8.3	4237
Lucento	2 & 4	5.5 fl oz				
Provost Silver	3, 5, & 6	13.0 fl oz				
5. Bravo	1 & 7	1.5 pt	3.8	30.7	7.7	3830
Lucento	2 & 4	5.5 fl oz				
Excalia	3 & 5	4.0 fl oz				
+ Bravo	-	1.5 pt				
Provost Silver	6	13.0 fl oz				
6. Bravo	1 & 7	1.5 pt	3.8	36.0	8.7	3641
Lucento	2 & 4	5.5 fl oz				
Elatus	3 & 5	9.5 oz				
Provost Silver	6	13.0 fl oz				
7. Bravo	1	1.0 pt	3.4	35.0	8.3	3777
+ Alto	-	5.5 fl oz				
Bravo	2 & 7	1.5 pt				
Lucento	2 & 4	5.5 fl oz				
Elatus	3 & 5	9.5 oz				
+ Miravis	-	3.4 oz				

FMC PROGRAMS TEST, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
8. Bravo	1 & 7	1.5 pt	3.6	29.0	8.7	4212
Elatus	2	7.3 oz				
Elatus	3 & 5	9.5 oz				
+ Miravis	-	3.4 oz				
Bravo	6	1.0 pt				
9. Bravo	1 & 7	1.5 pt	3.8	31.3	11.7	3559
Lucento	2 & 5	5.5 fl oz				
Convoy	3	32.0 fl oz				
+ Bravo	-	1.5 pt				
Elatus	4	9.5 oz				
Provost Silver	6	13.0 fl oz				
10. Provysol	2	5.0 fl oz	4.2	28.0	11.0	3447
+ Orius	-	7.2 fl oz				
Convoy	3	32.0 fl oz				
+ Bravo	-	1.5 pt				
Lucento	4 & 6	5.5 fl oz				
Elatus	5	9.5 oz				
+ Interlock	-	4.0 fl oz				
Provost Silver	7	13.0 fl oz				
Bravo	8	1.5 pt				
11. Bravo	1, 2 & 7	1.5 pt	3.8	34.3	12.0	3588
Lucento	4	5.5 fl oz				
Convoy	3 & 5	32.0 fl oz				
+ Bravo	-	1.5 pt				
Provost Silver	6	13.0 fl oz				
12. Bravo	1, 2, 4 & 7	1.5 pt	4.4	28.7	24.0	3302
Convoy	3 & 5	32.0 fl oz				
+ Bravo	-	1.5 pt				
Provost Silver	6	13.0 fl oz				
LSD(P<0.05)	-	-	0.4	9.1	7.8	808

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

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

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

SYNGENTA MANAGEMENT TEST III, 2021

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: 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: Sprays 1-7 were applied on June 10, June 17, June 24, July 8, July 22, Aug. 5, Aug. 19, and Sep. 2. No cover sprays were applied.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, New Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 9, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –6.62 P –8.4 K –26.3 Ca –413 Mg –38.1
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 22. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) on May 3.
8.	Harvest Dates:	Dug – Sep. 27 Picked – Oct. 1

E: SUMMARY:

This as an excellent high pressure test for both leaf spot and white mold. There were notable differences in efficacy for both leaf spot and white mold, as well as yield.

SYNGENTA MANAGEMENT TEST III, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
1. Untreated	-	-	6.3	26.5	28.5	2977
2. Bravo W'stik	1 & 7	1.5 pt	2.8	39.0	7.5	5227
Absolute Max	2	3.5 fl oz				
Elatus 45WG	3 & 5	7.3 oz				
Provost Silver	4 & 6	13.0 fl oz				
3. Bravo W'stik	1 & 7	1.5 pt	3.0	36.0	8.5	5227
Absolute Max	2	3.5 fl oz				
Propulse	3	13.7 fl oz				
Elatus 45WG	5	7.3 oz				
Provost Silver	4 & 6	13.0 fl oz				
4. Priaxor	2	6.0 fl oz	3.3	36.0	5.0	5300
Provysol	3 & 5	5.0 fl oz				
+ Convoy	-	20 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				
5. Bravo W'stik	1, 2, 4 & 7	1.5 pt	3.8	38.0	6.5	4864
Excalia	3 & 5	4.0 fl oz				
+ Bravo	-	1.5 pt				
Bravo W'stik	6	1.5 pt				
+ Orius 3.6	-	7.2 fl oz				
6. Lucento	1 & 4	5.5 fl oz	3.6	46.0	6.0	4501
Bravo	2	1.5 pt				
Elatus 45WG	3	9.5 oz				
Bravo W'stik	5 - 7	1.5 pt				
+ Orius 3.6	-	7.2 fl oz				

SYNGENTA MANAGEMENT TEST III, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
7. Bravo W'stik	1 & 4	1.0 pt	2.8	40.0	6.0	4966
+ Orius 3.6	-	7.2 fl oz				
Alto	2 & 6	5.5 fl oz				
+ Bravo	-	1.0 pt				
Elatus 45WG	3 & 5	9.5 oz				
+ Miravis	-	3.4 fl oz				
Bravo	7	1.5 pt				
8. Alto	1	5.5 fl oz	3.3	39.5	11.0	4966
+ Elatus	-	7.3 oz				
Bravo	2	1.0 pt				
+ Orius 3.6	-	7.2 fl oz				
Elatus 45WG	3 & 5	7.3 oz				
+ Miravis	-	3.4 fl oz				
Bravo	7	1.5 pt				
+ Alto	-	5.5 fl oz				
9. A23427 (D)	1, 3 & 5	10.5 fl oz	3.3	49.5	4.5	4066
Bravo	2	1.0 pt				
+ Orius 3.6	-	7.2 fl oz				
Bravo	7	1.5 pt				
+ Alto	-	5.5 fl oz				
10. A23807 (B)27WG	1, 3 & 5	12.1 oz	3.1	40.3	3.0	4973
Bravo	2	1.0 pt				
+ Orius 3.6	-	7.2 fl oz				
Bravo	7	1.5 pt				
+ Alto	-	5.5 fl oz				
11. Bravo W'stik	1	1.0 pt	3.3	37.4	6.0	4625
+ Orius 3.6	-	7.2 fl oz				
Alto	2 & 7	5.5 fl oz				
+ Bravo	-	1.0 pt				
Elatus 45WG	3 & 5	9.5 oz				
+ Miravis	-	3.4 fl oz				
12. Bravo W'stik	1	1.0 pt	3.5	41.5	5.0	4153
+ Orius 3.6	-	7.2 fl oz				
Alto	2 & 7	5.5 fl oz				
+ Bravo	-	1.0 pt				
A23427 (D)	3 & 5	13.7 fl oz				

SYNGENTA MANAGEMENT TEST III, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
13. Bravo W'stik	1	1.0 pt	3.4	50.5	7.5	4153
+ Orius 3.6	-	7.2 fl oz				
Alto	2 & 7	5.5 fl oz				
+ Bravo	-	1.0 pt				
A23807 (B)27WG	3 & 5	15.8 oz				
14. Bravo W'stik	1	1.0 pt	2.9	42.0	5.5	4842
+ Orius 3.6	-	7.2 fl oz				
Alto	2 & 7	5.5 fl oz				
+ Bravo	-	1.0 pt				
Elatus 45WG	3 & 5	9.5 oz				
+ A20259 (G)	-	13.7 fl oz				
15. Priaxor	1.5	6.0 fl oz	3.5	44.0	9.0	4262
Elatus 45WG	3 & 5	9.5 oz				
+ Miravis	-	3.4 fl oz				
Orius	7	7.2 fl oz				
+ Bravo	-	1.0 pt				
16. Priaxor	1.5	6.0 fl oz	3.4	54.5	9.5	4029
+ Microthiol S	-	3.0 lb				
Elatus 45WG	3 & 5	9.5 oz				
+ Miravis	-	3.4 fl oz				
+ Microthiol S	-	3.0 lb				
Orius	7	7.2 fl oz				
+ Bravo	-	1.0 pt				
17. Bravo W'stik	1 & 7	1.5 pt	3.3	46.5	7.0	4407
Absolute Max	2	3.5 fl oz				
Elatus 45WG	3 & 5	7.3 oz				
+ Microthiol S	-	3.0 lb				
Provost Silver	4 & 6	13.0 fl oz				
LSD(P<0.05)	-	-	0.5	17.0	6.3	1126

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

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

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

OFFICIAL DAILY RAINFALL + IRRIGATION, 2021

LANG FARM, NEW FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0	0.20	0.50	0
2	2.90	0	0	0.60	1.50	0.30	0	0
3	0	0	0	0.80	0	0.90	0	0
4	0	0	0	0.50	0	0	0	0.10
5	0	0	1.00	0	0	0	0	0
6	0	0	0	0.30	0.50	0	0	0.15
7	0	0	0	2.50	0.30	0.40	0	0
8	0	0	0	0.40	0.10	0	0.80	2.10
9	0	0	0	0	0	0	0	0
10	0	0.50	0	0	0	0	0	0
11	0	0	0	0.70	0	3.10	0	0
12	0	0	0.40	0.50	0	0	0	0
13	0	0	0	0	0.60	0	0	0
14	0	0	0	0	0.50	0.20	0	0
15	0	0	0	0	0	0	0.40	0
16	0	0	0	0	0	1.00	0.60	0
17	0	0	0	0	0	0	0.40	0
18	0.70	0	0	0	0.40	0	0.20	0
19	0	0	0	0.50	0	0	0.80	0
20	0	0	0	0.40	0.40	0	0	0
21	0	0	0	0	0	0	0	0
22	0	0	0	2.20	0.65	0.50	0	0
23	0	0	0	0	2.00	0	0	0
24	0	6.00	0	0	0	0	0	0
25	0	0	0	0	0	0.40	0	0.10
26	0	0	0	0	0	0	0	0
27	0	0	0	0.10	1.60	0	0	0
28	0	0	0	0	0	0.30	0	1.60
29	0	0	0	1.30	0	0.10	0	0
30	0	0	0	0.25	0	0	0	0
31	0.50	0	0	0	0.25	0.50	0	0
TOTAL (inches)	**4.10**	**6.50**	**1.40**	**11.05**	**8.80**	**7.90**	**3.70**	**4.05**

ADAMA FUNGICIDE TEST, 2021

A. PURPOSE: To evaluate the efficacy of commercial and experimental applied fungicides 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: 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. 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. Treatment sprays: Sprays were applied on June 23, July 7, and Aug. 5.

3. Cover sprays: Chlorothalonil (1.5 pt/a) was applied on June 11, June 25, July 9, July 23, Aug. 6, Aug. 20, and Sep. 3.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, Cotton Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 9, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –5.88 P –34.8 K –21.4 Ca –251 Mg –17.8
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 21. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.

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

8. Harvest Dates: Dug – Oct. 5 Picked – Oct. 14

E: SUMMARY:

This was a high pressure test for white mold. Some differences in leaf spot were noted even though Bravo cover sprays were applied.

ADAMA FUNGICIDE TEST, 2021

Treatments	App's	Rate/A	TSWV[1] 24-Sep	LS[2] 30-Sep	WM[3] 4-Oct	Yield lbs/A
1. Nontreated	-	-	26.0	4.7	34.0	5082
2. MCW465	2, 3 & 5	16.0 fl oz	25.0	3.0	23.0	5699
3. MCW465	2 & 3	24.0 fl oz	26.5	3.2	17.5	6244
MCW465	5	16.0 fl oz				
4. Elatus	2, 3 & 5	7.3 oz	34.5	2.8	12.5	6062
5. Convoy	2, 3 & 5	16.0 fl oz	27.0	4.2	26.5	5808
6. Convoy	2, 3 & 5	32.0 fl oz	25.5	4.4	24.0	5990
7. Excalia	2, 3 & 5	2.0 fl oz	26.6	4.2	12.5	6244
8. Convoy	2, 3 & 5	16.0 fl oz	21.5	3.3	15.0	6570
+ MCW465	-	16.0 fl oz				
9. Convoy	2 & 3	32.0 fl oz	22.5	3.1	12.0	6607
+ MCW465	-	24.0 fl oz				
Convoy	5	32.0 fl oz				
+ MCW465	-	16.0 fl oz				
10. Valent EXP1	2, 3 & 5	2.0 fl oz	18.5	3.8	16.5	6752
11. Excalia	2, 3 & 5	2.0 fl oz	21.5	3.0	23.0	6425
+ Microthiol S	-	4.0 lb				
LSD(P<0.05)			14.2	0.7	8.6	798

TSWV[1] = Percent of row feet infectd 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.

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

BASF FUNGICIDE TEST, 2021

A. PURPOSE: To evaluate the efficacy of commercial and experimental applied fungicides 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: 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. 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. Treatment sprays: Sprays 1-7 were applied on June 10, June 24, July 8, July 23, Aug. 5, Aug. 19, and Sep. 3.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, Cotton Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 9, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –5.88 P –34.8 K –21.4 Ca –251 Mg –17.8
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 21. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) on May 3.
8.	Harvest Dates:	Dug – Sep. 27 Picked – Sep. 30

E: SUMMARY:

This test was in a deep sand soil with very poor plant growth, which was also affected by an unexpectedly high incidence of root knot nematode and TSWV. While there was significant disease pressure, and some meaningful disease ratings, there was also a lot of physiological leaf spotting from unknown causes. Combined with the poor plant growth, this made rating difficult and added considerable varibility to the data.

BASF FUNGICIDE TEST, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
1. Nontreated	-	-	6.6	18.0	69.5	1902
2. Priaxor	2	6.0 fl oz	4.0	28.5	21.0	2287
BAS 750	3 & 5	3.0 fl oz				
+ Convoy	-	32.0 fl oz				
Bravo	4 & 6	1.5 pt				
+ Orius		7.2 fl oz				
Bravo	7	1.5 pt				
3. Priaxor	2	6.0 fl oz	4.4	31.5	27.0	2664
Bravo	3 & 5	1.5 pt				
+ Convoy		32.0 fl oz				
BAS 750 07F	4 & 6	3.0 fl oz				
+ Orius		7.2 fl oz				
Bravo	7	1.5 pt				
4. Priaxor	2	6.0 fl oz	3.8	27.0	21.5	2868
BAS 750 07F	3 & 5	3.0 fl oz				
+ Orius 3.6F		7.2 fl oz				
Bravo	4 & 6	1.5 pt				
+ Orius		7.2 fl oz				
Bravo	7	1.5 pt				
5. Alto	1	5.5 fl oz	4.3	26.5	20.0	3274
+ Bravo		1.5 pt				
Bravo	2, 5 & 7	1.5 pt				
Elatus	3	9.5 oz				
+ Miravis		3.4 fl oz				

BASF FUNGICIDE TEST, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
6. Alto	1	5.5 fl oz	3.8	29.5	13.5	2810
+ Bravo		1.5 pt				
Bravo	2 & 7	1.5 pt				
Elatus	3	9.5 oz				
+ Miravis		3.4 fl oz				
BAS 750 07F	4 & 6	3.0 fl oz				
+ Orius		7.2 fl oz				
Elatus	5	9.5 oz				
+ Bravo		1.5 pt				
7. BAS 750 07F	2, 4 & 6	3.0 fl oz	3.5	23.5	18.0	3645
+ Orius		7.2 fl oz				
Elatus	3 & 5	9.5 oz				
+ Bravo		1.5 pt				
Bravo	7	1.5 pt				
8. Priaxor	2	6.0 fl oz	3.6	27.0	11.0	3267
BAS 750 07F	3 & 5	3.0 fl oz				
+ Excalia		3.0 oz				
Bravo	4 & 6	1.5 pt				
+ Orius		7.2 fl oz				
Bravo	7	1.5 pt				
9. Priaxor	2	6.0 fl oz	3.6	18.5	26.5	3797
BAS 750 07F	3 & 5	3.0 fl oz				
+ Excalia		2.0 oz				
Bravo	4 & 6	1.5 pt				
+ Orius		7.2 fl oz				
Bravo	7	1.5 pt				
10. Priaxor	2	6.0 fl oz	3.8	37.5	22.5	2875
Excalia	3 & 5	3.0 oz				
+ Bravo		1.5 pt				
BAS 750 07F	4 & 6	3.0 fl oz				
+ Orius		7.2 fl oz				
Bravo	7	1.5 pt				

BASF FUNGICIDE TEST, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
11. Priaxor	2	6.0 fl oz	3.9	31.5	31.0	3369
Bravo	3 & 5	24.0 fl oz				
+ Endura		10.0 fl oz				
Bravo	4 & 6	1.5 pt				
+ Orius		7.2 fl oz				
Bravo	7	1.5 pt				
12. Priaxor	2	6.0 fl oz	4.0	32.5	16.5	3223
BAS 750	3 & 5	3.0 fl oz				
+ Endura		10.0 fl oz				
Bravo	4 & 6	1.5 pt				
+ Orius		7.2 fl oz				
Bravo	7	1.5 pt				
LSD(P<0.05)	-	-	0.6	11.9	12.7	1108

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

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

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

SYNGENTA FUNGICIDE TEST I, 2021

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: 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: Sprays were applied on June 11, June 25, July 9, July 23, Aug. 6, Aug. 20, and Sep. 3. No cover sprays applied.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, Cotton Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 9, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –5.88 P –34.8 K –21.4 Ca –251 Mg –17.8
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 21. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) on May 3.
8.	Harvest Dates:	Dug – Sep. 27 Picked – Sep. 30

E: SUMMARY:

This was a high pressure test for white mold that also had modest leaf spot intensity. Leaf spot ratings were confounded by significant physiological spotting with unknown etiology that sometimes occurs on Tifguard. There were notable differences in efficacy for white mold, as well as yield. However, yield data were unusually variable due to the confounding influence of root knot nematode and TSWV.

SYNGENTA FUNGICIDE TEST I, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
1. Untreated	-	-	5.1	24.0	58.0	3812
2. Bravo W'stik	1 & 7	1.5 pt	3.8	32.0	14.5	5062
Absolute Maxx 4.36	2	3.5 fl oz				
Elatus 45WG	3 & 5	7.3 oz				
Provost Silver	4 & 6	13.0 fl oz				
3. Bravo W'stik	1 & 7	1.5 pt	3.5	18.0	20.5	5750
Absolute Maxx 4.36	2	3.5 fl oz				
Propulse	3	13.6 fl oz				
Provost Silver	4 & 6	13.0 fl oz				
Elatus 45WG	5	7.3 oz				
4. Priaxor	2	6.0 fl oz	3.6	22.5	19.5	5624
Provysol	3 & 5	5.0 fl oz				
+ Convoy	-	20.0 fl oz				
Priaxor	4	8.0 fl oz				
Bravo	5 & 6	1.5 pt				
+ Orius 3.6	-	7.2 fl oz				
5. Bravo	1 & 4	1.0 pt	3.5	18.5	11.0	5779
+ Muscle	-	7.2 fl oz				
Alto	2 & 6	5.5 fl oz				
+ Bravo	-	1.0 pt				
Elatus 45WG	3 & 5	9.5 oz				
+ Miravis	-	3.4 fl oz				
Bravo W'stik	7	1.5 pt				

SYNGENTA FUNGICIDE TEST I, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
6. Alto	1	5.5 fl oz	3.8	28.5	19.5	4988
+ Bravo	-	1.0 pt				
Bravo	2	1.5 pt				
Elatus 45WG	3 & 5	9.5 oz				
+ Miravis	-	3.4 fl oz				
Alto	7	5.5 fl oz				
+ Bravo	-	1.5 pt				
7. Alto	1	5.5 fl oz	3.9	24.5	17.0	4842
+ Bravo	-	1.0 pt				
Bravo	2	1.5 pt				
A23542 (D)	3 & 5	13.7 fl oz				
+ Miravis	-	3.4 fl oz				
Alto	7	5.5 fl oz				
+ Bravo	-	1.5 pt				
8. Alto	1	5.5 fl oz	3.9	25.5	24.0	4443
+ Bravo	-	1.0 pt				
Bravo	2	1.5 pt				
A23542 (F)	3 & 5	13.7 fl oz				
+ Miravis	-	3.4 fl oz				
Alto	7	5.5 fl oz				
+ Bravo	-	1.5 pt				
9. Alto	1	5.5 fl oz	4.1	23.5	14.0	5082
+ Bravo	-	1.0 pt				
Bravo	2	1.5 pt				
A23427 (D)	3 & 5	13.7 fl oz				
Alto	7	5.5 fl oz				
+ Bravo	-	1.5 pt				
10. Alto	1	5.5 fl oz	4.0	25.0	9.5	6137
+ Elatus	-	7.3 oz				
Bravo	2	1.0 pt				
+ Muscle	-	7.2 fl oz				
Elatus 45WG	3 & 5	7.3 oz				
+ Miravis	-	3.4 fl oz				
Alto	7	5.5 fl oz				
+ Bravo	-	1.5 pt				

SYNGENTA FUNGICIDE TEST I, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
11. Alto	1	5.5 fl oz	3.9	21.0	7.5	6316
+ A23542 (D)	-	10.5 fl oz				
Bravo	2	1.0 pt				
+ Miravis	-	7.2 fl oz				
A23542 (D)	3 & 5	10.5 fl oz				
+ Miravis	-	3.4 fl oz				
Alto	7	5.5 fl oz				
+ Bravo	-	1.5 pt				
12. Alto	1	5.5 fl oz	3.8	31.0	12.5	5721
+ A23542 (F)	-	10.5 fl oz				
Bravo	2	1.0 pt				
+ Miravis	-	7.2 fl oz				
A23542 (F)	3 & 5	10.5 fl oz				
+ Miravis	-	3.4 fl oz				
Alto	7	5.5 fl oz				
+ Bravo	-	1.5 pt				
13. A23427 (D)	1	10.5 fl oz	3.8	26.0	15.0	5731
Bravo	2	1.0 pt				
+ Muscle	-	7.2 fl oz				
A23427 (D)	3 & 5	10.5 fl oz				
Alto	7	5.5 fl oz				
+ Bravo	-	1.5 pt				
14. Bravo W'stik	1	1.0 pt	3.9	22.5	13.5	6147
+ Muscle	-	7.2 fl oz				
Alto	2	5.5 fl oz				
+ Bravo	-	1.5 pt				
Elatus 45WG	3 & 5	9.5 oz				
+ A20259 (G)	-	13.7 fl oz				
Alto	7	5.5 fl oz				
+ Bravo	-	1.5 pt				
LSD(P<0.05)	-	-	0.5	13.9	11.1	1572

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

TSWV[2]=Percent of row feet infectd based on disease loci (up to 12" linear row) per plot

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

SYNGENTA FUNGICIDE TEST II, 2021

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were 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: Sprays were applied on June 11, June 23, July 9, July 24, and Aug. 6. No cover sprays were applied.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, Cotton Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2020, Peanut – 2019, Peanut – 2018
3.	Land Preparation:	Fertilizer (3-9-18) was broadcast at 500 lb/a on Apr. 8. On Apr. 9, field was deep turned, beds marked 6 ft, and fertilizer turned under. On June 29, 1500 lbs/a of land plaster was applied.
4.	Soil Fertility:	pH –5.88 P –34.8 K –21.4 Ca –251 Mg –17.8
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1 pt/a) tank mix on Apr. 21. Rototilled to incorporate. POST: Strongarm (0.45 dry oz/a) and Cadre (4 fl oz/a) on June 16.
6.	Insecticides:	Acephate 97 (12 oz/a) on June 2.
7.	Planting Info:	Tifguard, 6 seed/ft (2” deep) on May 3.
8.	Harvest Dates:	Dug – Sep. 27 Picked – Sep. 30

E: SUMMARY:

This was a high pressure test for white mold that also had modest leaf spot intensity. Leaf spot ratings were confounded by significant physiological spotting with unknown etiology that sometimes occurs on Tifguard. There were notable differences in efficacy for white mold, as well as yield. However, yield data were unusually variable due to the confounding influence of root knot nematode and TSWV.

SYNGENTA FUNGICIDE TEST II, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
1. Untreated	-	-	5.2	22.8	54.4	3784
2. A19649 (H) 200SC	1, 2, 4 & 5	3.42 fl oz	3.9	29.2	37.2	3994
Bravo W'stik	3	1.5 pt				
3. Alto	1 & 5	5.5 fl oz	4.1	32.0	44.8	3457
+ Bravo	-	1.5 pt				
A19649 (H) 200SC	2 & 4	3.42 fl oz				
Bravo W'stik	3	1.5 pt				
4. Alto	1 & 5	5.5 fl oz	4.3	25.2	42.8	3958
+ Bravo	-	1.5 pt				
A19649 (H) 200SC	2 & 4	5.13 fl oz				
Bravo W'stik	3	1.5 pt				
5. Alto	1 & 5	5.5 fl oz	4.1	29.6	48.8	4009
+ Bravo	-	1.5 pt				
A20259 (G) 200SC	2 & 4	13.7 fl oz				
Bravo W'stik	3	1.5 pt				
6. Alto	1 & 5	5.5 fl oz	3.7	29.6	49.6	3472
+ Bravo	-	1.5 pt				
A19649 (H) 200SC	2 & 4	6.84 fl oz				
Bravo W'stik	3	1.5 pt				
7. Alto	1 & 5	5.5 fl oz	3.9	17.6	9.6	5554
+ Bravo	-	1.5 pt				
A19649 (H) 200SC	2 & 4	3.42 fl oz				
+ Elatus	-	9.5 oz				
Bravo W'stik	3	1.5 pt				

SYNGENTA FUNGICIDE TEST II, 2021

Treatment	App's	Rate/A	LS[1] 20-Sep	TSWV[2] 20-Sep	WM[3] 27-Sep	Yield lbs/A
8. Alto	1, 2, 4 & 5	5.5 fl oz	3.6	24	41.2	4183
+ Bravo	-	1.5 pt				
Bravo W'stik	3	1.5 pt				
9. A16976 (A)	1, 2, 4 & 5	34 fl oz	4.3	29.2	54.0	3334
Bravo W'stik	3	1.5 pt				
10. A13703 (O)	1, 2, 4 & 5	14 fl oz	4.1	24.4	18.4	4684
Bravo W'stik	3	1.5 pt				
11. A23177 (A)	1, 2, 4 & 5	5.0 fl oz	4.0	30.4	50.0	4111
Bravo W'stik	3	1.5 pt				
12. Provost Silver	1, 2, 4 & 5	13 fl oz	4.2	26.4	19.2	4251
Bravo W'stik	3	1.5 pt				
13. A20581 (A)	1, 2, 4 & 5	6.0 fl oz	4.2	25.6	33.6	3835
Bravo W'stik	3	1.5 pt				
LSD(P<0.05)	-	-	0.4	11.7	16.8	1351

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

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

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

OFFICIAL DAILY RAINFALL + IRRIGATION, 2021

LANG FARM, COTTON FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0	0.20	0.50	0
2	2.90	0	0	0.60	1.50	0.30	0	0
3	0	0	0	0.80	0	0.90	0	0
4	0	0	0	0.50	0	0	0	0.10
5	0	0	1.00	0	0	0	0	0
6	0	0	0	0.30	0.50	0	0	0.15
7	0	0	0	2.50	0.30	0.40	0	0
8	0	0	0	0.40	0.10	0	0.80	2.10
9	0	0	0	0	0	0	0	0
10	0	0.50	0	0	0	0	0	0
11	0	0	0	0.70	0	3.10	0	0
12	0	0	0.40	0.50	0	0	0	0
13	0	0	0	0	0.60	0	0	0
14	0	0	0	0	0.50	0.20	0	0
15	0	0	0	0	0	0	0.40	0
16	0	0	0	0	0	1.00	0.60	0
17	0	0	0	0	0	0	0.40	0
18	0.70	0	0	0	0.40	0	0.20	0
19	0	0	0	0.50	0	0	0.80	0
20	0	0	0	0.40	0.40	0	0	0
21	0	0	0	0	0	0	0	0
22	0	0	0	2.20	0.65	0.50	0	0
23	0	0	0	0	2.00	0	0	0
24	0	6.00	0	0	0	0	0	0
25	0	0	0	0	0	0.40	0	0.10
26	0	0	0	0	0	0	0	0
27	0	0	0	0.10	1.60	0	0	0
28	0	0	0	0	0	0.30	0	1.60
29	0	0	0	1.30	0	0.10	0	0
30	0	0	0	0.25	0	0	0	0
31	0.50	0	0	0	0.25	0.50	0	0
TOTAL (inches)	**4.10**	**6.50**	**1.40**	**11.05**	**8.80**	**7.90**	**3.70**	**4.05**

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITA, PECAN NORTH ORCHARD (PECAN FUNGICIDE TEST, 2021)

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 were applied on Apr. 14, Apr. 27, May 7, May 24, June 7, June 21, July 6, July 19, Aug. 2, and Aug. 16.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, CPES Tifton, GA, 31794

2. Soil Fertility: pH – 6.8 P – 75 K – 90 Ca – 1359 Mg – 101

   Soil type: Tifton loamy sand, 2 – 5 % slope.

3. Insecticides: Dimilin (10 oz/a) + Nickel Plus (1.2 pt/a) on May 20.

4. Herbicides: Alion (5 oz/a) + Roundup (1 qt/a) on April 9.
   Valor (7 oz/a) + Roundup (2 qt/a) on July 1.

E: SUMMARY:

This was an exceptionally high pressure scab test due to the frequent rains this summer. Unexpected rain events soon after some applications reduced efficacy and differentially favored those treatments that had been applied first. This resulted in much higher levels of scab in all treatments late in the season, but significant differences in efficacy for both leaf and nut scab were found. The levels of Neofusicoccum leaf dieback and late season defoliation from all causes was also documented and varied by treatment.

PECAN FUNGICIDE TEST, 2021

WICHITA

Treatments	Rate/A	App's	Leaf Inc[1] 6-Jul	Leaf Sev[2] 6-Jul	Nut Inc[3] 6-Jul	Nut Sev[4] 6-Jul	Phyto[5] 6-Jul
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	55.3	12.0	82.0	13.2	0.3
+ Elast 400F	25.0 fl oz						
Luna Flex	9.0 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	66.8	12.8	86.3	12.3	0.1
+ Elast 400F	25.0 fl oz						
Luna Sensation	5.0 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	54.6	12.0	83.0	14.3	0.0
+ Elast 400F	25.0 fl oz						
Absolute Maxx	7.5 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	59.7	8.9	64.0	5.7	0.0
+ 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	47.0	6.3	25.4	1.4	0.0
+ 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	45.3	7.8	35.2	1.7	0.0
+ 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	44.7	6.7	53.1	4.0	0.0
+ 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, 2021

WICHITA

Treatments	Rate/A	App's	Leaf Inc[1] 6-Jul	Leaf Sev[2] 6-Jul	Nut Inc[3] 6-Jul	Nut Sev[4] 6-Jul	Phyto[5] 6-Jul
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	74.9	16.3	97.5	28.0	0.1
+ 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	53.3	10.1	43.6	4.6	0.4
+ Elast 400F	25.0 fl oz						
A19649	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	45.2	6.9	44.0	3.7	0.03
+ Elast 400F	25.0 fl oz						
A23089	13.6 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
11. Super Tin 4L	6.0 fl oz	5 - 10	36.1	4.6	93.8	20.0	0.0
+ Elast 400F	25.0 fl oz						
Kphite	4.0 qt	1 & 3					
12. Super Tin 4L	6.0 fl oz	5 - 10	30.6	5.1	90.2	14.3	0.3
+ Elast 400F	25.0 fl oz						
Kphite	2.0 qt	1, 2, 3 & 4					
13. Super Tin 4L	6.0 fl oz	1 - 10	63.6	12.3	78.4	10.1	0.3
+ Elast 400F	25.0 fl oz						
14. Nontreated			84.3	25.3	100.0	77.2	0.3
LSD(P<0.05)			10.7	3.0	17.0	5.5	N. S.

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).

Phyto[5]= Percent phytotoxicity damage for entire end leaf.

PECAN FUNGICIDE TEST, 2021

WICHITA

Treatments	Rate/A	App's	Nut Inc[3] 24-Aug	Nut Sev[4] 24-Aug	Phyto[5] 24-Aug	Neo[6] 30-Jun	Defol[7] 29-Oct
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	100.0	92.1	0.0	4.8	40.0
+ Elast 400F	25.0 fl oz						
Luna Flex	9.0 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	100.0	94.2	0.0	2.3	25.0
+ Elast 400F	25.0 fl oz						
Luna Sensation	5.0 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	100.0	93.9	0.0	3.5	37.5
+ Elast 400F	25.0 fl oz						
Absolute Maxx	7.5 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	100.0	76.3	0.0	1.0	28.8
+ 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	100.0	50.2	0.0	1.3	42.5
+ 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	100.0	37.8	0.0	2.8	41.3
+ 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	100.0	51.7	0.0	2.8	25.0
+ 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, 2021

WICHITA

Treatments	Rate/A	App's	Nut Inc[3] 24-Aug	Nut Sev[4] 24-Aug	Phyto[5] 24-Aug	Neo[6] 30-Jun	Defol[7] 29-Oct
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	100.0	97.2	0.0	3.5	32.5
+ 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	100.0	62.8	0.0	2.3	42.5
+ Elast 400F	25.0 fl oz						
A19649	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	100.0	49.9	0.0	2.3	28.8
+ Elast 400F	25.0 fl oz						
A23089	13.6 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
11. Super Tin 4L	6.0 fl oz	5 - 10	100.0	93.7	0.0	3.3	41.3
+ Elast 400F	25.0 fl oz						
Kphite	4.0 qt	1 & 3					
12. Super Tin 4L	6.0 fl oz	5 - 10	100.0	91.6	0.0	1.0	37.5
+ Elast 400F	25.0 fl oz						
Kphite	2.0 qt	1, 2, 3 & 4					
13. Super Tin 4L	6.0 fl oz	1 - 10	100.0	88.7	0.0	3.5	30.0
+ Elast 400F	25.0 fl oz						
14. Nontreated			100.0	100.0		9.5	87.5
LSD(P<0.05)			N. S.	9.0	N. S.	2.4	18.8

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).

Phyto[5]= Percent phytotoxicity damage for entire end leaf.

Neo[6]= Percent of terminals with neofusicoccum symptoms.

Defol[7] = Percent defoliation.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE, PECAN NORTH ORCHARD (PECAN FUNGICIDE TEST, 2021)

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 were applied on Apr. 14, Apr. 27, May 7, May 24, June 7, June 21, July 6, July 19, Aug. 2, and Aug. 16.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, CPES Tifton, GA, 31794

2. Soil Fertility: pH – 6.8 P – 75 K – 90 Ca – 1359 Mg – 101

   Soil type: Tifton loamy sand, 2 – 5 % slope.

3. Insecticides: Dimilin (10 oz/a) + Nickel Plus (1.2 pt/a) on May 20.

4. Herbicides: Alion (5 oz/a) + Roundup (1 qt/a) on April 9.
   Valor (7 oz/a) + Roundup (2 qt/a) on July 1.

E: SUMMARY:

This was an exceptionally high pressure scab test due to the frequent rains this summer. Unexpected rain events soon after some applications reduced efficacy and differentially favored those treatments that had been applied first. This resulted in much higher levels of scab in all treatments late in the season, but significant differences in efficacy for both leaf and nut scab were found. The levels of phytotoxicity and late season defoliation from all causes was also documented and varied by treatment.

PECAN FUNGICIDE TEST, 2021

DESIRABLE

Treatments	Rate/A	App's	Leaf Inc[1] 8-Jul	Leaf Sev[2] 8-Jul	Nut Inc[3] 8-Jul	Nut Sev[4] 8-Jul	Phyto[5] 8-Jul
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	47.0	5.4	55.2	3.1	0.0
+ Elast 400F	25.0 fl oz						
Luna Flex	9.0 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	45.1	4.8	32.1	1.3	0.0
+ Elast 400F	25.0 fl oz						
Luna Sensation	5.0 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	40.8	4.2	44.1	2.6	0.0
+ Elast 400F	25.0 fl oz						
Absolute Maxx	7.5 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	36.7	3.9	19.3	0.7	0.0
+ 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	19.8	1.7	5.5	0.2	0.0
+ 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	18.9	2.0	9.9	0.3	0.0
+ 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	26.1	2.4	13.3	0.4	0.0
+ 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, 2021

DESIRABLE

Treatments	Rate/A	App's	Leaf Inc[1] 8-Jul	Leaf Sev[2] 8-Jul	Nut Inc[3] 8-Jul	Nut Sev[4] 8-Jul	Phyto[5] 8-Jul
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	56.9	6.4	55.7	3.6	0.03
+ 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	30.8	3.1	15.1	0.7	0.0
+ Elast 400F	25.0 fl oz						
A19649	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	20.9	2.0	22.4	0.5	0.0
+ Elast 400F	25.0 fl oz						
A23089	13.6 fl oz	2, 4, 6, 8, 10					
+ Remain	8.0 fl oz						
11. Super Tin 4L	6.0 fl oz	5 - 10	26.6	2.6	78.6	5.0	0.03
+ Elast 400F	25.0 fl oz						
Kphite	4.0 qt	1 & 3					
12. Super Tin 4L	6.0 fl oz	5 - 10	30.1	3.5	52.3	1.7	0.0
+ Elast 400F	25.0 fl oz						
Kphite	2.0 qt	1, 2, 3 & 4					
13. Super Tin 4L	6.0 fl oz	1 - 10	39.7	4.1	21.1	1.0	0.0
+ Elast 400F	25.0 fl oz						
14. Nontreated			78.2	14.0	100.0	21.7	0.0
LSD(P<0.05)			9.0	1.5	16.6	1.5	0.03

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).

Phyto[5]= Percent phytotoxicity damage for entire end leaf.

PECAN FUNGICIDE TEST, 2021

DESIRABLE

Treatments	Rate/A	App's	Nut Inc[3] 24-Aug	Nut Sev[4] 24-Aug	Phyto[5] 24-Aug	Defol[6] 29-Oct
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	100.0	70.8	0.0	15.0
+ Elast 400F	25.0 fl oz					
Luna Flex	9.0 fl oz	2, 4, 6, 8, 10				
+ Remain	8.0 fl oz					
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	100.0	79.5	0.0	10.0
+ Elast 400F	25.0 fl oz					
Luna Sensation	5.0 fl oz	2, 4, 6, 8, 10				
+ Remain	8.0 fl oz					
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	100.0	80.2	0.0	13.8
+ Elast 400F	25.0 fl oz					
Absolute Maxx	7.5 fl oz	2, 4, 6, 8, 10				
+ Remain	8.0 fl oz					
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	100.0	68.3	0.0	8.8
+ 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	100.0	36.3	0.0	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	99.2	26.7	0.0	8.8
+ 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	100.0	43.3	0.0	11.3
+ 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, 2021

DESIRABLE

Treatments	Rate/A	App's	Nut Inc[3] 24-Aug	Nut Sev[4] 24-Aug	Phyto[5] 24-Aug	Defol[6] 29-Oct
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	100.0	81.6	0.03	12.5
+ 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	100.0	44.7	0.0	12.5
+ Elast 400F	25.0 fl oz					
A19649	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	100.0	55.1	0.0	13.8
+ Elast 400F	25.0 fl oz					
A23089	13.6 fl oz	2, 4, 6, 8, 10				
+ Remain	8.0 fl oz					
11. Super Tin 4L	6.0 fl oz	5 - 10	100.0	76.4	0.03	18.8
+ Elast 400F	25.0 fl oz					
Kphite	4.0 qt	1 & 3				
12. Super Tin 4L	6.0 fl oz	5 - 10	100.0	63.6	0.0	11.3
+ Elast 400F	25.0 fl oz					
Kphite	2.0 qt	1, 2, 3 & 4				
13. Super Tin 4L	6.0 fl oz	1 - 10	100.0	61.9	0.0	8.8
+ Elast 400F	25.0 fl oz					
14. Nontreated			100.0	99.8	0.0	60.0
LSD(P<0.05)			0.6	8.8	N. S.	10.7

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).

Phyto[5]= Percent phytotoxicity damage for entire end leaf.

Defol[6] = Percent defoliation.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITA AND DESIRABLE, PECAN NORTH ORCHARD (SYNGENTA INDIVIDUAL TERMINAL PECAN TRIAL, 2021)

A. PURPOSE: To evaluate the efficacy of registered and experimental fungicides against pecan scab on susceptible cultivars when applying multiple applications of single products to individual terminals.

B. EXPERIMENTAL DESIGN:

1. Randomized complete block design with eight replicates on each cultivar, each rep being a single tree that receives no other fungicide applications.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a hand-held 2 L sprayer. Treatments were sprayed until full coverage and runoff was achieved. Based on a dilution of 100 GPA spray volume.

2. Calendar-based spray treatments were applied on Apr. 12, Apr. 26, May 10, May 25, June 7, June 21, July 6, July 20, and Aug. 3.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, CPES Tifton, GA, 31794

2. Soil Fertility: pH – 6.8 P – 75 K – 90 Ca – 1359 Mg – 101

   Soil type: Tifton loamy sand, 2 – 5 % slope.

3. Insecticides: Dimilin (10 oz/a) + Nickel Plus (1.2 pt/a) on May 20.

4. Herbicides: Alion (5 oz/a) + Roundup (1 qt/a) on April 9.
   Valor (7 oz/a) + Roundup (2 qt/a) on July 1.

E: SUMMARY:

This was an exceptionally high pressure scab test due to the frequent rains this summer. Unexpected rain events soon after some applications reduced efficacy and differentially favored those treatments that had been applied first. This resulted in higher levels of scab in all treatments late in the season, but some treatments held up remarkably well. Significant differences in efficacy for both leaf and nut scab were found, with extended interval programs notably having higher levels of disease.

SYNGENTA INDIVIDUAL TERMINAL PECAN TRIAL, 2021

WICHITA

Treatments	Rate/A	Apps	Leaf Inc[1] 8-Jul	Leaf Sev[2] 8-Jul	Nut Inc[3] 8-Jul	Nut Sev[4] 8-Jul	Nut Inc[3] 24-Aug	Nut Sev[4] 24-Aug
1. A19649H	5.13 fl oz	1 – 8	22.8	2.5	5.6	0.2	100.0	18.3
2. A19649H	5.13 fl oz	1, 3, 5, 7	41.4	3.9	34.7	3.2	100.0	33.4
3. A20560E	6.84 fl oz	1 – 8	18.8	1.6	3.3	0.2	85.7	1.9
4. A20560E	6.84 fl oz	1, 3, 5, 7	43.2	5.5	30.0	1.6	100.0	21.5
5. A20259G	13.6 fl oz	1 – 8	37.5	4.2	6.3	0.3	91.7	2.8
6. A20259G	13.6 fl oz	1, 3, 5, 7	64.2	7.8	16.7	0.5	100.0	26.2
7. Amistar Top	14.0 fl oz	1 – 8	22.2	1.5	0.0	0.0	91.7	12.5
8. Amistar Top	14.0 fl oz	1, 3, 5, 7	50.5	5.8	38.9	2.0	100.0	35.8
9. A23089	13.6 fl oz	1, 3, 5, 7	49.0	6.1	17.1	0.3	100.0	14.0
10. Nontreated	-	-	94.6	18.8	100.0	75.1	100.0	100.0
LSD(P<0.05)			22.5	3.8	30.5	7.9	19.7	15.4

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

SYNGENTA INDIVIDUAL TERMINAL PECAN TRIAL, 2021

DESIRABLE

Treatments	Rate/A	Apps	Leaf Inc[1] 8-Jul	Leaf Sev[2] 8-Jul	Nut Inc[3] 8-Jul	Nut Sev[4] 8-Jul	Nut Inc[3] 24-Aug	Nut Sev[4] 24-Aug
1. A19649H	5.13 fl oz	1 – 8	9.0	1.0	16.7	0.2	76.7	2.6
2. A19649H	5.13 fl oz	1, 3, 5, 7	34.2	1.8	25.0	0.3	62.5	1.5
3. A20560E	6.84 fl oz	1 – 8	7.9	0.5	0.0	0.0	75.0	2.0
4. A20560E	6.84 fl oz	1, 3, 5, 7	17.2	1.3	0.0	0.0	78.6	9.3
5. A20259G	13.6 fl oz	1 – 8	18.0	1.6	0.0	0.0	83.3	5.2
6. A20259G	13.6 fl oz	1, 3, 5, 7	35.1	2.3	8.3	0.2	100.0	23.8
7. Amistar Top	14.0 fl oz	1 – 8	26.5	1.8	0.0	0.0	100.0	20.7
8. Amistar Top	14.0 fl oz	1, 3, 5, 7	21.4	1.9	46.7	1.0	100.0	47.0
9. A23089	13.6 fl oz	1, 3, 5, 7	32.5	2.5	19.1	0.6	100.0	12.4
10. Nontreated	-	-	65.3	10.4	100.0	17.9	100.0	99.4
LSD(P<0.05)			15.8	2.1	29.8	2.9	31.7	14.4

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITAS AND DESIRABLES, PECAN NORTH ORCHARD (MISCELLANEOUS FUNGICIDE TEST I, 2021)

A. PURPOSE: To evaluate the efficacy of registered and experimental fungicides against pecan scab on standard commercial cultivars.

B. EXPERIMENTAL DESIGN:

1. Randomized complete block design with eight replicates on each cultivar, each rep being a single tree that receives no other fungicide applications.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a hand-held 2 L sprayer. Treatments were sprayed until full coverage and runoff was achieved. Based on a dilution of 100 GPA spray volume.

2. Calendar-based spray treatments were applied on Apr. 13, Apr. 26, May 13, June 8, June 29, July 12, July 31, Aug. 14, and Aug. 27.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, CPES Tifton, GA, 31794

2. Soil Fertility: pH – 6.8 P – 75 K – 90 Ca – 1359 Mg – 101

   Soil type: Tifton loamy sand, 2 – 5 % slope.

3. Insecticides: Dimilin (10 oz/a) + Nickel Plus (1.2 pt/a) on May 20.

4. Herbicides: Alion (5 oz/a) + Roundup (1 qt/a) on April 9.
   Valor (7 oz/a) + Roundup (2 qt/a) on July 1.

E: SUMMARY:

This was an exceptionally high pressure scab test due to the frequent rains this summer. Unexpected rain events soon after some applications reduced efficacy and differentially favored those treatments that had been applied first. This resulted in higher levels of scab in all treatments late in the season. Significant differences in efficacy for both leaf and nut scab were found.

MISCELLANEOUS FUNGICIDE TEST I, 2021

WICHITA

Treatments	Rate/A	Leaf Inc[1] 6-Jul	Leaf Sev[2] 6-Jul	Nut Inc[3] 6-Jul	Nut Sev[4] 6-Jul	Phyto[5] 6-Jul
1. Badge	3.0 pt	55.8	5.8	100.0	26.0	0.0
+ Kphyte	1.0 qt					
2. Badge	3.0 pt	75.1	16.6	100.0	76.0	0.0
3. Badge	3.0 pt	69.2	13.0	100.0	44.0	0.0
+ Domark	6.3 fl oz					
4. Domark	6.3 fl oz	66.9	11.1	100.0	39.4	0.0
+ Kphyte	1.0 qt					
5. Domark	6.3 fl oz	68.2	12.3	100.0	37.0	0.0
6. LBG63 FTA	2.5 pt	65.2	8.1	100.0	16.8	0.0
7. LBG63 FTA	2.5 pt	59.6	6.9	100.0	14.3	0.0
+ Penetrator plus	8.0 fl oz					
8. Viathon	2.5 pt	68.5	8.4	100.0	31.0	1.1
+ Penetrator plus	8.0 fl oz					
9. Super Tin	6.0 fl oz	80.5	10.1	64.3	6.3	0.0
+ EXP1	24.0 fl oz					
10. Nontreated	-	81.1	17.1	100.0	84.4	0.0
LSD(P<0.05)	-	19.4	5.6	20.1	24.8	0.5

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

Phyto[5]= Percent phytotoxicity damage for entire terminal.

MISCELLANEOUS FUNGICIDE TEST I, 2021

WICHITA

Treatments	Nut Inc[3] 24-Aug	Nut Sev[4] 24-Aug	Phyto[5] 24-Aug
1. Badge + Kphyte	100.0	99.2	0.0
2. Badge	100.0	100.0	0.0
3. Badge + Domark	100.0	100.0	0.0
4. Domark + Kphyte	100.0	99.6	0.0
5. Domark	100.0	100.0	0.0
6. LBG63 FTA	100.0	96.6	0.0
7. LBG63 FTA + Penetrator plus	100.0	97.7	0.0
8. Viathon + Penetrator plus	100.0	99.0	0.0
9. Super Tin + EXP1	100.0	57.3	0.0
10. Nontreated	100.0	100.0	0.0
LSD(P<0.05)	N. S.	16.5	N. S.

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

Phyto[5]= Percent phytotoxicity damage for entire terminal.

MISCELLANEOUS FUNGICIDE TEST I, 2021

DESIRABLE

Treatments	Rate/A	Leaf Inc[1] 8-Jul	Leaf Sev[2] 8-Jul	Nut Inc[3] 8-Jul	Nut Sev[4] 8-Jul	Phyto[5] 8-Jul
1. Badge	3.0 pt	36.0	2.9	81.3	4.1	0.0
+ Kphyte	1.0 qt					
2. Badge	3.0 pt	60.5	4.6	100.0	7.3	0.0
3. Badge	3.0 pt	76.4	6.2	100.0	11.5	0.0
+ Domark	6.3 fl oz					
4. Domark	6.3 fl oz	34.9	2.6	50.0	2.8	0.0
+ Kphyte	1.0 qt					
5. Domark	6.3 fl oz	68.8	5.9	85.7	7.9	0.0
6. LBG63 FTA	2.5 pt	24.8	1.8	14.3	0.6	0.5
7. LBG63 FTA	2.5 pt	24.1	1.9	42.9	1.4	0.0
+ Penetrator plus	8.0 fl oz					
8. Viathon	2.5 pt	21.7	1.5	40.0	1.4	0.5
+ Penetrator plus	8.0 fl oz					
9. Super Tin	6.0 fl oz	33.3	2.8	4.8	0.6	0.0
+ EXP1	24.0 fl oz					
10. Nontreated	-	70.0	8.0	100.0	13.5	0.0
LSD(P<0.05)	-	17.2	1.5	35.7	3.8	N. S.

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

Phyto[5]= Percent phytotoxicity damage for entire terminal.

MISCELLANEOUS FUNGICIDE TEST I, 2021

DESIRABLE

Treatments	Nut Inc[3] 24-Aug	Nut Sev[4] 24-Aug	Phyto[5] 24-Aug
1. Badge	100.0	95.0	0.0
+ Kphyte			
2. Badge	100.0	100.0	0.0
3. Badge	100.0	90.0	0.0
+ Domark			
4. Domark	100.0	99.3	0.0
+ Kphyte			
5. Domark	100.0	90.0	0.0
6. LBG63 FTA	100.0	79.2	0.0
7. LBG63 FTA	100.0	65.0	0.0
+ Penetrator plus			
8. Viathon	100.0	94.0	0.0
+ Penetrator plus			
9. Super Tin	100.0	55.0	0.0
+ EXP1			
10. Nontreated	100.0	100.0	0.0
LSD(P<0.05)	N. S.	20.3	N. S.

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

Phyto[5]= Percent phytotoxicity damage for entire terminal.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITAS, PECAN NORTH ORCHARD (MISCELLANEOUS FUNGICIDE TEST II, 2021)

A. PURPOSE: To evaluate the efficacy of registered and experimental fungicides against pecan scab on highly susceptible cultivar.

B. EXPERIMENTAL DESIGN:

1. Randomized complete block design with eight replicates on each cultivar, each rep being a single tree that receives no other fungicide applications.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a hand-held 2 L sprayer. Treatments were sprayed until full coverage and runoff was achieved. Based on a dilution of 100 GPA spray volume.

2. Calendar-based spray treatments were applied on Apr. 14, May 1, May 14, June 8, June 29, July 12, July 31, Aug. 14, and Aug. 27.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, CPES Tifton, GA, 31794

2. Soil Fertility: pH – 6.8 P – 75 K – 90 Ca – 1359 Mg – 101

   Soil type: Tifton loamy sand, 2 – 5 % slope.

3. Insecticides: Dimilin (10 oz/a) + Nickel Plus (1.2 pt/a) on May 20.

4. Herbicides: Alion (5 oz/a) + Roundup (1 qt/a) on April 9.
   Valor (7 oz/a) + Roundup (2 qt/a) on July 1.

E: SUMMARY:

This was an exceptionally high pressure scab test due to the frequent rains this summer. Unexpected rain events soon after some applications reduced efficacy and differentially favored those treatments that had been applied first. This resulted in higher levels of scab in all treatments late in the season. Significant differences in efficacy for both leaf and nut scab were found.

MISCELLANEOUS FUNGICIDE TEST II, 2021

WICHITA

Treatments	Rate/A	Leaf Inc[1] 6-Jul	Leaf Sev[2] 6-Jul	Nut Inc[3] 6-Jul	Nut Sev[4] 6-Jul	Phyto[5] 6-Jul
1. AGTEXP101	32.0 fl oz	79.5	18.4	100.0	82.6	0.0
2. AGTEXP101	45.7 fl oz	89.4	20.6	100.0	56.0	0.0
3. Narvos 50WDG	3.2 oz	77.8	14.9	100.0	45.1	0.0
4. Narvos 50WDG	3.2 oz	69.0	11.5	85.7	38.6	0.0
+ Kphyte	1.0 qt					
5. NAI-9055	3.8 oz	75.0	18.9	100.0	51.1	0.0
6. NAI-9055	7.6 oz	81.6	16.9	100.0	68.5	0.0
7. Regev	8.5 fl oz	59.5	9.9	100.0	15.0	0.0
8. STK 20A	8.5 fl oz	79.9	14.8	100.0	7.9	0.0
9. Miravis Top	13.7 fl oz	51.3	7.9	41.7	1.0	0.0
10. Nontreated	-	82.6	20.8	100.0	73.9	0.0
LSD(P<0.05)	-	19.8	7.8	20.7	22.8	N. S.

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

Phyto[5]= Percent phytotoxicity damage for entire terminal.

MISCELLANEOUS FUNGICIDE TEST II, 2021

WICHITA

Treatments	Nut Inc[3] 24-Aug	Nut Sev[4] 24-Aug	Phyto[5] 24-Aug
1. AGTEXP101	100.0	100.0	0.0
2. AGTEXP101	100.0	100.0	0.0
3. Narvos 50WDG	100.0	100.0	0.0
4. Narvos 50WDG + Kphyte	100.0	97.6	0.0
5. NAI-9055	100.0	100.0	0.0
6. NAI-9055	100.0	100.0	0.0
7. Regev	100.0	95.8	0.0
8. STK 20A	100.0	94.5	0.0
9. Miravis Top	100.0	52.5	0.0
10. Nontreated	100.0	100.0	0.0
LSD(P<0.05)	N. S.	12.1	N. S.

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

Phyto[5]= Percent phytotoxicity damage for entire terminal.

EVALUATION OF TWO PHOSPHITE FUNGICIDES FOR SCAB CONTROL ON WICHITAS AND DESIRABLES, PECAN NORTH ORCHARD (KPHITE/PHOSTROL RATE TEST, 2021)

A. PURPOSE: To evaluate the efficacy of various rates of Kphite and Phostrol fungicides against pecan scab on standard commercial cultivars.

B. EXPERIMENTAL DESIGN:

1. Randomized complete block design with eight replicates on each cultivar, each rep being a single tree that receives no other fungicide applications.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a hand-held 2 L sprayer. Treatments were sprayed until full coverage and runoff was achieved. Based on a dilution of 100 GPA spray volume.

2. Calendar-based spray treatments were applied on Apr. 14, May 1, May 14, June 7, June 29, July 12, July 31, Aug. 14, and Aug. 27.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, CPES Tifton, GA, 31794

2. Soil Fertility: pH – 6.8 P – 75 K – 90 Ca – 1359 Mg – 101

   Soil type: Tifton loamy sand, 2 – 5 % slope.

3. Insecticides: Dimilin (10 oz/a) + Nickel Plus (1.2 pt/a) on May 20.

4. Herbicides: Alion (5 oz/a) + Roundup (1 qt/a) on April 9.
   Valor (7 oz/a) + Roundup (2 qt/a) on July 1.

E: SUMMARY:

This was an exceptionally high pressure scab test due to the frequent rains this summer. Unexpected rain events soon after some applications reduced efficacy in some cases. This resulted in higher levels of scab in all treatments late in the season. Significant differences in efficacy for both leaf and nut scab were found among rates of phosphite, but remarkably little difference between the two products in either disease control or phytotoxicity.
NOTE – This is the third year of this test. Results are given for both the current year, and for the 3-year average on both cultivars.

KPHITE/PHOSTROL RATE TEST, 2021

WICHITA

Treatments	Rate/A	Leaf Inc[1] 24-Jun	Leaf Sev[2] 24-Jun	Phyto[3] 24-Jun	Nut Inc[4] 6-Jul	Nut Sev[5] 6-Jul	Nut Inc[4] 24-Aug	Nut Sev[5] 24-Aug	Phyto[3] 24-Aug
1. Kphite 7LP	2 pt	65.3	9.0	0.0	100.0	46.5	100.0	98.4	0.4
2. Kphite 7LP	4 pt	59.6	6.7	0.0	100.0	27.3	100.0	98.3	0.8
3. Kphite 7LP	6 pt	36.3	4.6	2.9	91.7	24.2	100.0	97.9	3.8
4. Kphite 7LP	8 pt	26.0	2.1	9.6	100.0	19.4	100.0	98.2	5.5
5. Phostrol	2 pt	63.6	8.4	0.0	100.0	55.6	100.0	98.3	0.0
6. Phostrol	4 pt	50.4	5.3	0.0	100.0	32.4	100.0	98.1	0.5
7. Phostrol	6 pt	27.7	3.4	0.4	100.0	12.7	100.0	96.7	1.1
8. Phostrol	8 pt	18.7	1.8	8.8	100.0	16.7	100.0	96.3	4.4
9. Miravis Top	13.7 fl oz	40.5	3.5	2.0	80.0	9.0	100.0	86.6	0.0
10. Nontreated	-	74.5	13.4	0.0	100.0	86.3	100.0	100.0	0.0
LSD(P<0.05)		20.4	3.7	3.1	15.9	20.8	N. S.	4.2	2.8

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Phyto[3]= Percent phytotoxicity damage for entire terminal.

Nut Inc[4]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[5]=Nut scab severity per terminal (% of shuck area covered with scab).

FORMULATION AVERAGE OF ALL RATES

WICHITA

Treatments	Rate/A	Leaf Inc[1] 24-Jun	Leaf Sev[2] 24-Jun	Phyto[3] 24-Jun	Nut Inc[4] 6-Jul	Nut Sev[5] 6-Jul	Nut Inc[4] 24-Aug	Nut Sev[5] 24-Aug	Phyto[3] 24-Aug
Kphite 7LP	All	47.1	5.7	3.0	98.0	31.1	100.0	98.2	2.6
Phostrol	All	47.1	5.1	2.0	100.0	33.8	100.0	97.5	1.5
LSD(P<0.05)		N. S.	N. S.	N. S.	N. S.	N. S.	N. S.	N. S.	N. S.

KPHITE/PHOSTROL RATE TEST, 2021

DESIRABLE

Treatments	Rate/A	Leaf Inc[1] 24-Jun	Leaf Sev[2] 24-Jun	Phyto[3] 24-Jun	Nut Inc[4] 6-Jul	Nut Sev[5] 6-Jul	Nut Inc[4] 24-Aug	Nut Sev[5] 24-Aug	Phyto[3] 24-Aug
1. Kphite 7LP	2 pt	38.8	3.8	1.3	88.9	4.7	100.0	88.0	0.0
2. Kphite 7LP	4 pt	47.0	4.6	2.0	72.2	5.5	100.0	91.0	1.9
3. Kphite 7LP	6 pt	31.2	2.7	4.5	44.4	2.3	100.0	83.3	0.5
4. Kphite 7LP	8 pt	20.7	1.5	3.4	58.6	4.1	100.0	85.0	1.1
5. Phostrol	2 pt	37.6	3.7	3.3	77.8	9.2	100.0	90.8	0.0
6. Phostrol	4 pt	40.6	4.5	2.2	100.0	6.0	100.0	93.0	0.5
7. Phostrol	6 pt	39.7	3.0	0.3	87.5	7.3	100.0	94.8	0.0
8. Phostrol	8 pt	32.0	2.9	5.7	59.5	2.9	100.0	90.0	13.8
9. Miravis Top	13.7 fl oz	22.5	2.3	1.4	47.6	3.4	100.0	65.0	0.4
10. Nontreated	-	60.8	7.0	0.0	100.0	15.0	100.0	95.3	0.0
LSD(P<0.05)		21.9	2.3	3.4	37.4	5.2	N. S.	15.0	9.0

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Phyto[3]= Percent phytotoxicity damage for entire terminal.

Nut Inc[4]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[5]=Nut scab severity per terminal (% of shuck area covered with scab).

FORMULATION AVERAGE OF ALL RATES

DESIRABLE

Treatments	Rate/A	Leaf Inc[1] 24-Jun	Leaf Sev[2] 24-Jun	Phyto[3] 24-Jun	Nut Inc[4] 6-Jul	Nut Sev[5] 6-Jul	Nut Inc[4] 24-Aug	Nut Sev[5] 24-Aug	Phyto[3] 24-Aug
Kphite 7LP	All	34.3	3.1	2.8	65.7	4.2	100.0	86.6	0.9
Phostrol	All	37.4	3.4	2.8	80.9	6.3	100.0	92.3	3.6
LSD(P<0.05)		N. S.	N. S.	N. S.	N. S.	N. S.	N. S.	5.1	N. S.

KPHITE/PHOSTROL RATE TEST

2019-2021 COMBINED DATA

WICHITA

Treatments	Rate/A	Leaf Inc[1] 17-Jun	Leaf Sev[2] 17-Jun	Nut Inc[3] 17-Jun	Nut Inc[3] 18-Jul	Nut Sev[4] 18-Jul
1. Kphite 7LP	2 pt	38.7	4.7	12.1	100.0	58.2
2. Kphite 7LP	4 pt	35.4	4.3	20.9	100.0	47.4
3. Kphite 7LP	6 pt	26.0	3.3	17.1	96.7	45.3
4. Kphite 7LP	8 pt	23.1	2.1	26.0	100.0	37.7
5. Phostrol	2 pt	43.1	6.3	25.0	100.0	63.1
6. Phostrol	4 pt	30.8	3.1	37.5	100.0	47.0
7. Phostrol	6 pt	24.2	2.7	0.0	100.0	45.8
8. Phostrol	8 pt	17.0	1.8	8.3	100.0	32.7
9. Miravis Top	13.7 fl oz	26.8	2.7	0.0	78.6	17.4
10. Nontreated	-	51.0	8.7	57.3	100.0	89.0
LSD(P<0.05)	-	13.1	2.1	31.5	8.3	19.6

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

FORMULATION AVERAGE OF ALL RATES

WICHITA

Treatments	Rate/A	Leaf Inc[1] 17-Jun	Leaf Sev[2] 17-Jun	Nut Inc[3] 17-Jun	Nut Inc[3] 18-Jul	Nut Sev[4] 18-Jul
Kphite 7LP	All	31.0	3.6	18.2	99.3	48.3
Phostrol	All	29.2	3.5	20.3	100.0	47.2
LSD(P<0.05)		N. S.	N. S.	N. S.	N. S.	N. S.

KPHITE/PHOSTROL RATE TEST

2019-2021 COMBINED DATA

WICHITA

Treatments	Rate/A	Nut Inc[3] 30-Aug	Nut Sev[4] 30-Aug	Phyto[5] 17-Jun	Phyto[5] 18-Jul	Phyto[5] 30-Aug
1. Kphite 7LP	2 pt	100.0	97.2	0.5	2.8	0.8
2. Kphite 7LP	4 pt	100.0	93.7	1.1	3.6	2.3
3. Kphite 7LP	6 pt	100.0	96.2	2.0	8.3	6.8
4. Kphite 7LP	8 pt	100.0	88.2	7.1	15.1	8.9
5. Phostrol	2 pt	100.0	97.3	0.1	0.9	0.6
6. Phostrol	4 pt	100.0	95.3	1.2	5.3	2.1
7. Phostrol	6 pt	100.0	89.5	2.2	11.7	4.7
8. Phostrol	8 pt	100.0	88.6	7.3	17.1	10.2
9. Miravis Top	13.7 fl oz	96.7	48.3	0.8	0.0	0.0
10. Nontreated	-	100.0	99.9	0.3	0.0	0.0
LSD(P<0.05)		2.5	10.6	1.9	3.0	3.0

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

Phyto[5]= Percent phytotoxicity damage for entire terminal.

FORMULATION AVERAGE OF ALL RATES

WICHITA

Treatments	Rate/A	Nut Inc[3] 30-Aug	Nut Sev[4] 30-Aug	Phyto[5] 17-Jun	Phyto[5] 18-Jul	Phyto[5] 30-Aug
Kphite 7LP	All	100.0	94.0	2.6	7.6	4.7
Phostrol	All	100.0	92.9	2.6	8.5	4.4
LSD(P<0.05)		N. S.	N. S.	N. S.	N. S.	N. S.

KPHITE/PHOSTROL RATE TEST

2019-2021 COMBINED DATA

DESIRABLE

Treatments	Rate/A	Leaf Inc[1] 17-Jun	Leaf Sev[2] 17-Jun	Nut Inc[3] 17-Jun	Nut Inc[3] 18-Jul	Nut Sev[4] 18-Jul
1. Kphite 7LP	2 pt	25.2	2.8	30.0	86.5	28.1
2. Kphite 7LP	4 pt	22.9	2.5	2.8	75.5	12.1
3. Kphite 7LP	6 pt	23.8	2.4	9.1	69.3	11.2
4. Kphite 7LP	8 pt	15.9	1.5	0.0	74.2	10.9
5. Phostrol	2 pt	22.5	2.2	4.2	81.7	20.0
6. Phostrol	4 pt	20.5	2.4	9.1	87.0	15.5
7. Phostrol	6 pt	21.6	2.4	0.0	84.2	14.8
8. Phostrol	8 pt	15.7	1.7	0.0	69.3	8.2
9. Miravis Top	13.7 fl oz	21.0	2.0	0.0	59.7	7.2
10. Nontreated	-	51.1	6.6	25.6	94.2	29.7
LSD(P<0.05)	-	12.0	1.4	18.8	23.2	13.5

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

FORMULATION AVERAGE OF ALL RATES

DESIRABLE

Treatments	Rate/A	Leaf Inc[1] 17-Jun	Leaf Sev[2] 17-Jun	Nut Inc[3] 17-Jun	Nut Inc[3] 18-Jul	Nut Sev[4] 18-Jul
Kphite 7LP	All	21.7	2.3	10.1	76.0	15.1
Phostrol	All	20.0	2.2	3.5	80.5	14.7
LSD(P<0.05)		N. S.	N. S.	N. S.	N. S.	N. S.

KPHITE/PHOSTROL RATE TEST

2019-2021 COMBINED DATA

DESIRABLE

Treatments	Rate/A	Nut Inc[3] 30-Aug	Nut Sev[4] 30-Aug	Phyto[5] 17-Jun	Phyto[5] 18-Jul	Phyto[5] 30-Aug
1. Kphite 7LP	2 pt	100.0	70.8	0.8	2.1	0.5
2. Kphite 7LP	4 pt	100.0	55.3	2.0	7.1	4.8
3. Kphite 7LP	6 pt	100.0	51.2	2.6	11.2	5.7
4. Kphite 7LP	8 pt	100.0	45.8	6.3	15.1	6.8
5. Phostrol	2 pt	100.0	61.5	1.6	1.8	0.8
6. Phostrol	4 pt	100.0	57.2	2.2	6.1	3.2
7. Phostrol	6 pt	100.0	54.4	2.5	11.1	5.1
8. Phostrol	8 pt	100.0	49.7	7.2	16.0	16.9
9. Miravis Top	13.7 fl oz	94.7	32.8	0.8	0.0	0.2
10. Nontreated	-	100.0	82.6	0.0	0.0	0.0
LSD(P<0.05)		3.3	19.7	1.9	2.6	5.5

Nut Inc[3]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[4]=Nut scab severity per terminal (% of shuck area covered with scab).

Phyto[5]= Percent phytotoxicity damage for entire terminal.

FORMULATION AVERAGE OF ALL RATES

DESIRABLE

Treatments	Rate/A	Nut Inc[3] 30-Aug	Nut Sev[4] 30-Aug	Phyto[5] 17-Jun	Phyto[5] 18-Jul	Phyto[5] 30-Aug
Kphite 7LP	All	100.0	55.1	3.0	8.9	4.5
Phostrol	All	100.0	55.7	3.4	8.4	6.5
LSD(P<0.05)		N. S.	N. S.	N. S.	N. S.	N. S.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITAS AND DESIRABLES, PECAN NORTH ORCHARD (PHOSPHITE FORMULATION TEST, 2021)

A. PURPOSE: To evaluate the efficacy of various phosphite formulations when compared at the same rate of active ingredient (lb phosphorous acid / gallon) against pecan scab on susceptible commercial cultivars.

B. EXPERIMENTAL DESIGN:

1. Randomized complete block design with seven replicates on each cultivar, each rep being a single tree that receives no other fungicide applications.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a hand-held 2 L sprayer. Treatments were sprayed until full coverage and runoff was achieved. Based on a dilution of 100 GPA spray volume.

2. Calendar-based spray treatments were applied on April 23, May 7, June 9, June 25, July 9, and July 31.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, CPES Tifton, GA, 31794

2. Soil Fertility: pH – 6.8 P – 75 K – 90 Ca – 1359 Mg – 101

   Soil type: Tifton loamy sand, 2 – 5 % slope.

3. Insecticides: Dimilin (10 oz/a) + Nickel Plus (1.2 pt/a) on May 20.

4. Herbicides: Alion (5 oz/a) + Roundup (1 qt/a) on April 9.
   Valor (7 oz/a) + Roundup (2 qt/a) on July 1.

E: SUMMARY:

This test had very high scab pressure because of the frequent rains. We also applied treatments at an extended spray interval which resulted in more disease across all treatments. There were treatment differences, but most of the phosphite formulations gave similar control. Terminal sprays to runoff are more prone to phytotoxicity, and some was noted in this test. The Alloy treatment in particular had elevated phytotoxicity on both cultivars.

PHOSPHITE FORMULATION TEST, 2021

WICHITA

Treatments	Rate/A	Leaf Inc[1] 13-May	Leaf Sev[2] 13-May	Phyto[3] 13-May	Leaf Inc[1] 6-Jul	Leaf Sev[2] 6-Jul	Nut Inc[4] 6-Jul	Nut Sev[5] 6-Jul
1. Kphite 7LP	3.0 pt	8.8	0.7	0.0	70.7	8.6	100.0	26.0
2. Alloy	2.5 pt	27.9	3.1	3.0	71.4	8.0	100.0	17.8
3. Reliant	3.9 pt	29.2	3.6	0.0	64.4	9.6	100.0	36.7
4. Prophyt	3.1 pt	11.1	1.9	0.3	73.7	9.7	100.0	19.0
5. Phostrol	3.1 pt	28.8	2.6	0.0	68.5	9.4	100.0	28.6
6. Phostrol	3.1 pt	23.3	2.9	0.4	66.6	10.1	100.0	33.3
+ Nickel Plus	1.5 pt							
+ Zinc Nitro	1.0 pt							
7. Absolute Max	7.5 oz	21.4	2.4	0.0	75.8	11.3	50.0	3.7
8. Nontreated	-	62.6	6.9	0.0	91.9	24.7	100.0	85.0
LSD(P<0.05)	-	23.9	3.4	1.5	21.0	9.1	31.6	23.9

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Phyto[3]= Percent phytotoxicity damage for entire terminal.

Nut Inc[4]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[5]=Nut scab severity per terminal (% of shuck area covered with scab).

PHOSPHITE FORMULATION TEST, 2021

WICHITA

Treatments	Phyto[3] 6-Jul	Nut Inc[4] 24-Aug	Nut Sev[5] 24-Aug	Phyto[3] 24-Aug
1. Kphite 7LP	0.1	100.0	97.0	0.3
2. Alloy	5.3	100.0	97.8	10.0
3. Reliant	1.6	100.0	99.3	1.4
4. Prophyt	1.3	100.0	96.6	2.9
5. Phostrol	1.1	100.0	98.0	4.3
6. Phostrol + Nickel Plus + Zinc Nitro	0.7	100.0	98.6	4.3
7. Absolute Max	0.0	100.0	65.8	0.0
8. Nontreated	0.0	100.0	100.0	0.0
LSD(P<0.05)	1.8	N. S.	18.7	2.9

Phyto[3]= Percent phytotoxicity damage for entire terminal.

Nut Inc[4]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[5]=Nut scab severity per terminal (% of shuck area covered with scab).

PHOSPHITE FORMULATION TEST, 2021

DESIRABLE

Treatments	Rate/A	Leaf Inc[1] 13-May	Leaf Sev[2] 13-May	Phyto[3] 13-May	Leaf Inc[1] 7-Jul	Leaf Sev[2] 7-Jul	Nut Inc[4] 7-Jul	Nut Sev[5] 7-Jul
1. Kphite 7LP	3.0 pt	20.2	2.1	0.0	8.6	1.4	14.3	0.1
2. Alloy	2.5 pt	12.9	2.1	2.1	13.0	1.6	10.7	0.4
3. Reliant	3.9 pt	2.4	0.3	0.0	4.5	0.8	12.5	0.5
4. Prophyt	3.1 pt	14.5	2.1	1.0	22.2	2.6	58.3	4.3
5. Phostrol	3.1 pt	13.7	1.7	0.0	12.9	1.7	41.7	1.2
6. Phostrol	3.1 pt	29.0	3.0	0.0	16.4	2.2	83.3	4.7
+ Nickel Plus	1.5 pt							
+ Zinc Nitro	1.0 pt							
7. Absolute Max	7.5 oz	13.8	1.7	0.0	22.2	2.1	50.0	3.1
8. Nontreated	-	17.5	3.3	0.0	50.8	6.1	100.0	11.4
LSD(P<0.05)	-	11.5	1.5	0.9	13.2	2.1	38.8	3.4

Leaf Inc[1]=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev[2]=Leaf scab severity per terminal.

Phyto[3]= Percent phytotoxicity damage for entire terminal.

Nut Inc[4]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[5]=Nut scab severity per terminal (% of shuck area covered with scab).

PHOSPHITE FORMULATION TEST, 2021

DESIRABLE

Treatments	Phyto[3] 7-Jul	Nut Inc[4] 24-Aug	Nut Sev[5] 24-Aug	Phyto[3] 24-Aug
1. Kphite 7LP	2.6	100.0	77.1	3.7
2. Alloy	15.0	100.0	77.1	13.0
3. Reliant	2.2	100.0	68.3	3.5
4. Prophyt	1.0	100.0	80.7	3.4
5. Phostrol	3.7	100.0	78.3	5.4
6. Phostrol + Nickel Plus + Zinc Nitro	3.0	100.0	68.3	7.3
7. Absolute Max	0.0	100.0	71.4	0.0
8. Nontreated	0.0	100.0	99.3	0.0
LSD(P<0.05)	2.8	N. S.	14.9	3.2

Phyto[3]= Percent phytotoxicity damage for entire terminal.

Nut Inc[4]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[5]=Nut scab severity per terminal (% of shuck area covered with scab).

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE, PECAN SOUTH ORCHARD (PECAN FUNGICIDE TEST II, 2021)

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. The original trees served as unsprayed borders, and all treatments were applied to the younger trees.

C. APPLICATION OF TREATMENTS:

1. Equipment: Treatments 4-6 and the first and third application of treatment 7 were applied by drip. Two buckets were placed opposite sides of each tree, each containing 2 gallons of water. Small holes were drilled into buckets to allow for slow seepage. Soil was irrigated prior to and during applications. All remaining 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 were applied on Apr. 13, Apr. 26, May 7, May 25, June 8, June 22, July 5, July 20, Aug. 3, and Aug. 17. Drip applications were applied on Apr. 14, Apr. 28, May 13, and May 26.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, CPES Tifton, GA, 31794

2. Soil Fertility: pH – 6.1 P – 98 K – 94 Ca – 961 Mg – 109

   Soil type: Tifton loamy sand, 2 – 5 % slope.

3. Insecticides: Dimilin (10 oz/a) + Nickel Plus (1.2 pt/a) on May 20.

4. Herbicides: Alion (5 oz/a) + Roundup (1 qt/a) on April 9.
   Valor (7 oz/a) + Roundup (2 qt/a) on July 1.

E: SUMMARY:

This was an exceptionally high pressure scab test due to the frequent rains this summer. Unexpected rain events soon after some applications reduced efficacy and differentially favored those treatments that had been applied first. This resulted in much higher levels of scab in all treatments late in the season, but significant differences in efficacy for both leaf and nut scab were found. The levels of late season defoliation from all causes was also documented and varied by treatment. Note that the "*" treatments (4-6 and part of 7) were applied via a simulated injection through the drip system. While disease control with these treatments was poor, the Rhyme applications resulted in dramatically less late season defoliation.

PECAN FUNGICIDE TEST II, 2021

DESIRABLE

Treatments	Rate/A	App's	Nut Inc[1] 9-Jul	Nut Sev[2] 9-Jul	Leaf Inc[3] 9-Jul	Leaf Sev[4] 9-Jul	Phyto[5] 9-Jul
1. Super Tin 4L	6.0 fl oz	1 – 10	67.1	3.0	53.8	5.7	0.0
+Elast 400F	25.0 fl oz						
2. Kphite	4.0 qt	1 & 3	93.1	13.4	60.8	6.5	0.0
Super Tin 4L	6.0 fl oz	5 - 10					
+Elast 400F	25.0 fl oz						
3. Kphite	2.0 qt	1 - 4	91.3	7.7	41.7	3.7	0.0
Super Tin 4L	6.0 fl oz	5 - 10					
+Elast 400F	25.0 fl oz						
4. Rhyme*	7.0 fl oz	1 - 4	98.8	28.3	67.9	10.0	0.0
5. Prophyt*	48.0 fl oz	1 - 4	100.0	29.5	76.5	12.1	0.0
6. Rhyme*	7.0 fl oz	1 - 4	100.0	26.7	67.0	11.0	0.0
+Prophyt	48.0 fl oz						
7. Rhyme*	14.0 fl oz	1 & 3	93.8	10.9	57.6	6.4	0.03
Prophyt	48.0 fl oz	2					
Absolute	6.0 fl oz	4					
+Prophyt	48.0 fl oz						
Super Tin 4L	6.0 fl oz	5 - 10					
+Elast 400F	25.0 fl oz						
8. Absolute	6.0 fl oz	1	60.4	3.3	41.4	4.1	0.0
+Induce	0.06 % v/v						
Prophyt	48.0 fl oz	2					
Super Tin 4L	6.0 fl oz	3					
+Tilt	8.0 fl oz						
Super Tin 4L	6.0 fl oz	4 - 10					
+Elast 400F	25.0 fl oz						
9. Kphite	2.0 qt	1 & 3	95.3	8.9	56.1	5.8	0.0
Cevya	3.0 fl oz	2 & 4					
Super Tin 4L	6.0 fl oz	5 - 10					
+Elast 400F	25.0 fl oz						

PECAN FUNGICIDE TEST II, 2021

DESIRABLE

Treatments	Rate/A	App's	Nut Inc[1] 9-Jul	Nut Sev[2] 9-Jul	Leaf Inc[3] 9-Jul	Leaf Sev[4] 9-Jul	Phyto[5] 9-Jul
10. Cevya	3.0 fl oz	2, 4, 6, 8, 10	34.2	1.4	44.7	4.3	0.0
+Elast	25.0 ml						
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9					
+Elast 400F	25.0 fl oz						
11. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	98.8	10.9	64.8	8.5	0.0
+Elast 400F	25.0 fl oz						
Domark	6.3 fl oz	2, 4, 6, 8, 10					
+Badge SC	3.0 pt						
12. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	94.2	13.5	59.1	8.4	0.0
+Elast 400F	25.0 fl oz						
Domark	8.4 fl oz	2, 4, 6, 8, 10					
+Induce	0.06 % v/v						
13. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	41.5	1.3	41.0	3.6	0.20
+Elast 400F	25.0 fl oz						
Miravis Top	13.7 fl oz	2, 4, 6, 8, 10					
14. Nontreated	-	-	100.0	24.4	69.0	9.7	0.0
LSD(P<0.05)			12.5	3.8	10.2	1.8	0.2

*For trts 4-7, 2 buckets were placed per tree, with 2 gallons of water placed near an emitter on opposite sides of tree. Irrigation was run prior to and during app.

Nut Inc[1]=Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).

Nut Sev[2]=Nut scab severity, based on 8 nuts clusters per tree (% of shuck covered with scab).

Leaf Inc[3]=Leaf scab incidence, based on 8 terminals per tree (% of leaflets on end leaf with scab).

Leaf Sev[4]=Leaf scab severity, based on end leaf of 8 terminals per tree.

Phyto[5]= Percent phytotoxicity damage for entire end leaf.

PECAN FUNGICIDE TEST II, 2021

DESIRABLE

Treatments	Nut Inc[1] 26-Aug	Nut Sev[2] 26-Aug	Phyto[5] 26-Aug	Defol[6] 29-Oct
1. Super Tin 4L	100.0	76.3	0.0	41.0
+Elast 400F				
2. Kphite	100.0	93.8	0.0	61.0
Super Tin 4L				
+Elast 400F				
3. Kphite	100.0	87.4	0.0	43.0
Super Tin 4L				
+Elast 400F				
4. Rhyme*	100.0	99.9	0.0	19.0
5. Prophyt*	100.0	100.0	0.0	88.0
6. Rhyme*	100.0	99.8	0.0	19.0
+Prophyt				
7. Rhyme*	100.0	83.0	0.0	16.0
Prophyt				
Absolute				
+Prophyt				
Super Tin 4L				
+Elast 400F				
8. Absolute	100.0	75.6	0.0	44.0
+Induce				
Prophyt				
Super Tin 4L				
+Tilt				
Super Tin 4L				
+Elast 400F				
9. Kphite	100.0	82.4	0.0	32.0
Cevya				
Super Tin 4L				
+Elast 400F				

PECAN FUNGICIDE TEST II, 2021

DESIRABLE

Treatments	Nut Inc[1] 26-Aug	Nut Sev[2] 26-Aug	Phyto[5] 26-Aug	Defol[6] 29-Oct
10. Cevya	100.0	46.3	0.0	19.0
+Elast				
Super Tin 4L				
+Elast 400F				
11. Super Tin 4L	100.0	97.1	0.0	34.0
+Elast 400F				
Domark				
+Badge SC				
12. Super Tin 4L	100.0	96.2	0.0	28.0
+Elast 400F				
Domark				
+Induce				
13. Super Tin 4L	95.0	26.6	0.0	18.0
+Elast 400F				
Miravis Top				
14. Nontreated	100.0	100.0	0.0	92.6
LSD(P<0.05)	2.6	6.7	N. S.	19.2

Nut Inc[1]=Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).

Nut Sev[2]=Nut scab severity, based on 8 nuts clusters per tree (% of shuck covered with scab).

Phyto[5]= Percent phytotoxicity damage for entire end leaf.

Defol[6] = Percent defoliation.

OFFICIAL DAILY RAINFALL, 2021

PONDER FARM, NORTH & SOUTH ORCHARD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0.7	0	0	0	0.29	0.02	0.28	0
2	2.19	0	0	0	0.4	0.2	0	0
3	0.43	0	0.09	0	0.02	0.52	0	0
4	0	0	1.1	0.56	0	0.01	0	0
5	0	0	0.01	0	0	0	0	0.02
6	0	0	0	0.31	1.15	0	0	0.19
7	0	0	0	1.26	0.6	0.38	0.04	0.02
8	0	0	0	0.09	0.07	0	0.33	0.54
9	0	0.27	0	0	0.01	0	0.28	0
10	0	0.05	0	0	0.02	0	0	0
11	0	0.08	0.06	0.25	0.11	1.78	0	0
12	0	0.01	0.59	0.01	0.06	0.78	0	0
13	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0
15	0	0	0	0.3	1.45	0	0.02	0
16	0	0	0	0	0.01	0.72	0.68	0
17	0	0.1	0	0	0	0.22	0	0
18	0.75	0.01	0	0	0.43	0	1	0
19	0	0	0	0.83	0.74	0	0.95	0
20	0	0	0	0.3	0.78	0	0.13	0
21	0	0	0	0	0.15	0	0	0
22	0	0	0	1.77	0.65	0.12	0.07	0
23	0	0	0	0.01	0.12	0.01	0	0
24	0.01	5.85	0	0	0.01	0	0	0.01
25	0	0	0	0	0	0.01	0	0.04
26	0	0	0	0.02	0	0.01	0	0
27	0	0	0	0	0.15	0.01	0	0
28	0.08	0	0	0	0.01	0.23	0	1.81
29	0	0	0.02	0.77	0	0.87	0	0
30	0	0	0	0.06	0	0.32	0	0
31	0.71		0		0.31	0.34		0
TOTAL (inches)	**4.87**	**6.37**	**1.87**	**6.54**	**7.54**	**6.55**	**3.78**	**2.63**

*Irrigated as needed.