2022 TEST RESULTS

Peanut & Pecan Fungicide Evaluations

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Date: Dec. 12, 2022

Memo to: Industry Cooperators

From: Tim Brenneman

Subject: Field Trial Results

It is amazing how each year is different! Late winter was extremely wet here, but then early summer was very hot and dry. Thankfully frequent rains in July and August came and really helped make the peanut crop, and certainly drove a scab epidemic on pecans. I want to acknowledge the hard work of our crew lead by Corey Thompson, Lance Alberson, and Jessica Bell. Summer workers included Ron Woodall, Sarah Kelough, and Stephen Sumner. 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, Dr. Nino Brown, and Dr. Barry Tillman is much appreciated. Graduate student Walker Johnson was 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 "2022 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.

TABLE OF CONTENTS

SOILBORNE DISEASES, 2022

POND FIELD
BLACKSHANK FARM

AFLATOXIN FUNGICIDE TEST.....6

BAYER NAMATODE TEST.....8

DAILY RAINFALL 12

WOODS FIELD
BLACKSHANK FARM

CNIRGY NEMATODE TEST 13

KANNAR NEMATODE TEST 17

UPL SEED TREATMENT TEST II.....21

DAILY RAINFALL 24

IRRIGATED/NON-IRRIGATED FIELD
BLACKSHANK FARM

ADAMA PEANUT RX TEST.....25

AGRITHORITY TEST.....29

FMC XYWAY TEST 31

ISK TEST.....33

RHIZOCTONIA RUNGICIDE TEST.....36

VALENT WHITE MOLD TEST 38

DAILY RAINFALL 41

BANANA FIELD
BLACKSHANK FARM

MULTI-STATE EVALUATION TEST....42

GA-12Y TEST....48

DAILY RAINFALL....50

SOUTH FIELD
LANG/RIGDON FARM

CORTEVA IN FURROW TEST....51

SYNGENTA SEED TREATMENT TEST I....55

SYNGENTA SEED TREATMENT TEST II....58

UPL SEED TREATMENT TEST I....61

VALENT SEED TREATMENT TEST....64

DAILY RAINFALL + IRRIGATION....68

NEW FIELD
LANG/RIGDON FARM

FMC-BAYER TEST....69

BASF FUNGICIDE TEST....74

DAILY RAINFALL + IRRIGATION....79

COTTON FIELD
LANG/RIGDON FARM

ADAMA FUNGICIDE TEST 80

BASF FUNGICIDE TEST 83

SYNGENTA FUNGICIDE TEST.....87

NICHINO FUNGICIDE TEST.....91

DAILY RAINFALL + IRRIGATION.....94

NORTH ORCHARD
PONDER FARM

PECAN FUNGICIDE TEST I, WICHITA.....95

PECAN FUNGICIDE TEST I, DESIRABLE.....97

MISCELLANEOUS FUNGICIDE TEST I.....99

KPHITE TIMING TEST 102

SOUTH ORCHARD
PONDER FARM

PECAN FUNGICIDE TEST II, DESIRABLE.....107

DAILY RAINFALL, PONDER FARM, NORTH & SOUTH ORCHARD 109

AFLATOXIN FUNGICIDE TEST, 2022

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 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. Treatment sprays: 72, 97, and 122 DAP applications were applied on July 19, Aug. 9, and Sep. 2, respectively. Treatments 2 and 5 were applied early morning (~ 6:00 am) and washed in later that day.

3. Cover sprays: Chlorothalonil (1.5 pts/a) was applied on June 8, June 22, July 6, July 20, Aug. 10, Aug. 30, and Sep. 13.

4. NOTE: Irrigation was applied as needed until 90 DAP. No irrigation (other than the ¼ inch at 120 DAP) was applied after 90 DAP.

D. ADDITIONAL INFORMATION:

1. Location:	Blackshank Farm, Pond Field, Tifton, GA 31794
2. Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3. Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4. Soil Fertility:	pH –5.71 P –27.9 K –8.94 Ca –193 Mg –5.91
Soil type:	Tifton loamy sand, 2 – 5% slope.

5. Herbicides: PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 22. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.

6. Insecticides: Thimet (5 lbs/a) on May 4.

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

8. Harvest Dates: Dug – Oct. 3 Picked – Oct. 6

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 little drought stress until late in the season prior to harvest. 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, 2022

BLACKSHANK FARM, POND FIELD

Treatments	App's	Rate/A	Root Galling[1] 3-Oct	WM[2] 3-Oct	Root Knot[3] 31-Aug	Ring[4] 31-Aug	Yield lbs/A
1. Miravis	72, 97 & 122 DAP*	3.4 fl oz	12.2	24.8	81.4	13.4	3822
2. Miravis	72, 97 & 122 DAP**	3.4 fl oz	13.8	25.6	86.4	12.2	3368
3. Miravis	72, 97 & 122 DAP***	3.4 fl oz	15.4	35.6	108.4	7.8	3284
4. Propulse	72, 97 & 122 DAP*	11.4 fl oz	13.6	10.4	156.4	16.8	3624
5. Propulse	72, 97 & 122 DAP**	11.4 fl oz	16.0	9.6	119.6	11.4	4001
6. Propulse	72, 97 & 122 DAP***	11.4 fl oz	14.0	17.6	84.4	7.8	4239
7. Untreated	-	-	17.8	22.8	136.0	15.6	3937
LSD(P<0.05)			N. S.	18.9	N. S.	N. S.	930

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

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

*** Trt's 3 & 6 were sprayed broadcast during the day at 19.7 GPA.

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

White Mold[2]=Percent of row feet infected based on disease loci (up to 12" linear row) 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, 2022

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 treatment spray 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 4. 60 DAP treatment spray applied on July 4, and irrigation was run soon after application.

3. Cover Sprays: Plots were cover sprayed with Chlorothalonil (1.5 pts/a) on June 8, June 22, July 6, July 25, Aug. 11, Aug. 25, and Sep. 9, and Elatus (9 oz/a) was sprayed on July 6, July 25, and Aug. 11.

D. ADDITIONAL INFORMATION:

1. Location:	Blackshank Farm, Pond Field, Tifton, GA 31794 Coordinates: 31.502025, -83.546816
2. Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3. Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4. Soil Fertility:	pH –5.71 P –27.9 K –8.94 Ca –193 Mg –5.91
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 (1.3 pt/a) on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6. Insecticides:	None.
7. Planting Info:	GA-06G, 6 seed/ft (2” deep) on May 4.
8. Harvest Dates:	Dug – Sep. 28 Picked – Oct. 3

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 or incidence of TSWV.

BAYER NEMATODE TEST, 2022						
BLACKSHANK FARM, POND FIELD						
				% Dead		
			Plant/ft[1]	Plants[2]	Thrips[3]	TSWV[4]
Treatments	**App's**	**Rate/A**	**17-May**	**17-May**	**7-Jun**	**8-Aug**
1. Untreated	-	-	2.5	0.0	6.2	39.2
2. Velum	In furrow*	6.5 fl oz	2.4	0.0	1.4	32.0
+ Admire Pro		9.0 fl oz				
3. Velum	In furrow*	6.5 fl oz	.	.	1.4	41.6
+ Admire Pro		9.0 fl oz				
Propulse**	60 DAP	13.6 fl oz				
4. Velum	In furrow*	6.84 fl oz	1.8	0.0	0.6	27.6
+ Vydate C-LV		34.0 fl oz				
5. Vydate C-LV	In furrow*	34.0 fl oz	2.0	0.0	0.8	30.4
LSD(P<0.05)	-	-	0.3	N. S.	1.1	N. S.

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

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

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

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

Thrips[3]=based on a scale of 0-10 (0=no injury, 1=10% leaves injured, 2=20% leaves injured, 3=30% leaves injured, 4=50% leaves injured, 5=50% leaves injured and < 5% terminal buds injured, 6=50% leaves injured and 25% terminal buds injured, 7=50% leaves injured and 50% terminal buds injured, 8=50% leaves injured and 75% terminal buds injured, 9=50% leaves injured and 90% terminal buds injured, and 10=dead plants.

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

BAYER NEMATODE TEST, 2022

BLACKSHANK FARM, POND FIELD

Treatments	App's	Rate/A	Root Galling[5] 28-Aug	Root Knot[6] 29-Aug	Ring[7] 29-Aug	Yield lb/A
1. Untreated	-	-	35.6	114	11	2119
2. Velum	In furrow*	6.5 fl oz	22.0	150	3	2254
+ Admire Pro		9.0 fl oz				
3. Velum	In furrow*	6.5 fl oz	23.0	51	13	2542
+ Admire Pro		9.0 fl oz				
Propulse**	60 DAP	13.6 fl oz				
4. Velum	In furrow*	6.84 fl oz	15.6	79	10	2408
+ Vydate C-LV		34.0 fl oz				
5. Vydate C-LV	In furrow*	34.0 fl oz	16.0	43	13	2618
LSD(P<0.05)	-	-	13.0	97.3	N. S.	N. S.

Note: Cultivar is GA-06G, and no Thimet applied.

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

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

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

Root-knot[6]= Number of *M. arenaria* juvenile per 100 cc of soil.

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

OFFICIAL DAILY RAINFALL, 2022

BLACKSHANK FARM, POND FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0.75	1.75	0
5	0	0	0	0.7	0	0	0	0
6	0	0	0.3	0	0	0	0	0
7	0	0	0	0.1	0.25	1.4	0	0
8	0	0	0.25	0	0	1.55	1	0
9	0	0	0	0	0	0.6	0	0
10	0	0	0	0	0.1	0.05	0	0
11	0	0	0	0	0.45	0.7	0	0
12	0	0	0	0	0.05	0.05	0	0
13	0	0	0	0	0.75	0	0	0.9
14	0	0	0	1.8	1.6	0	0	0
15	0	0	0	0	0.25	0	0	0
16	0.75	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18	0.75	0	0	0	0	0.5	0	0
19	2.25	0	0	0	0	0.3	0	0
20	0	0	0	0	0.5	0	0	0
21	0	0	0	0	1.01	0	0	0
22	0	0	0	0	0	0	0	0
23	0	0	0.25	0	0	0	0	0
24	0	0	0.5	0	0.35	0	0	0
25	0	0	0	0	0	0.75	0	0
26	0	0	0.1	0	0	0	0	0
27	0	0	0	0	0	0	0	0
28	0	0	0	0	0.1	0.4	0	0
29	0	0	0	2	0.25	0	0	0
30	0	0	0	0	0	0	0	0
31	1.1	0	0	0	0	0	0	0
TOTAL (inches)	**4.85**	**0**	**1.4**	**4.6**	**5.66**	**7.05**	**2.75**	**0.9**

*Irrigated as needed.

CNIRGY NEMATODE TEST, 2022

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 and TifNV-HiOL

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.

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

3. Cover Sprays: Chlorothalonil (1.5 pts/a) was applied on June 7, June 22, July 5, July 25, Aug. 11, Aug. 25, and Sep. 13. Elatus (9 oz/a) was applied on July 5, July 25, and Aug. 11.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Woods Field Tifton, GA 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.3 P –46.4 K –13.0 Ca –286 Mg –8.85
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.

6. Insecticides: None.

7. Planting Info: GA-06G and TifNV-HiOL, 6 seed/ft (2" deep) in single rows on May 3.

8. Harvest Dates: Dug – Sep. 29 Picked – Oct. 3

E: SUMMARY:

This was a moderate pressure root knot nematode test with several treatments reducing galling, and some reductions in nematode numbers. There were few other treatment effects, and no significant differences in pod yield, except for the nematode-resistant cultivar TifNV-HiOL which increased yield by about 1000 lb/A over all other treatments. TifNV-HiOL exhibited virtually no galling and had only 5.7 juveniles per 100 cc of soil at harvest.

CNIRGY NEMATODE TEST, 2022

BLACKSHANK FARM, WOODS FIELD

Treatments	App's	Rate/A	Plant/ft[1] 17-May	% Dead Plants[2] 17-May	TSWV[3] 9-Aug	Root Galling[4] 29-Sep
GA-06G						
1. Novozymes 1	In furrow*	6.0 oz	2.6	0.0	53.1	50.7
2. Novozymes 2	In furrow*	12.0 oz	2.7	0.0	56.6	50.0
3. Novozymes 3	In furrow*	6.0 oz	2.6	0.0	50.9	20.7
+ Velum		6.84 fl oz				
4. Novozymes 4	In furrow*	12.0 oz	2.8	0.0	50.0	30.7
+ Velum		6.84 fl oz				
5. Velum	In furrow*	6.84 fl oz	2.8	0.0	59.4	25.7
6. Nontreated	-	-	2.8	0.0	64.9	52.9
TifNV-HiOL						
7. Nontreated	-	-	3.7	0.0	45.1	2.0
LSD(P<0.05)			0.3	N. S.	16.1	13.6

*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.

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

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

CNIRGY NEMATODE TEST, 2022

BLACKSHANK FARM, WOODS FIELD

Treatments	App's	Rate/A	Root Knot[5] 30-Aug	Ring[6] 30-Aug	Yield lb/A
GA-06G					
1. Novozymes 1	In furrow*	6.0 oz	177.9	16.7	2904
2. Novozymes 2	In furrow*	12.0 oz	141.7	7.7	2853
3. Novozymes 3	In furrow*	6.0 oz	77.7	13.6	3123
+ Velum		6.84 fl oz			
4. Novozymes 4	In furrow*	12.0 oz	137.7	10.4	2986
+ Velum		6.84 fl oz			
5. Velum	In furrow*	6.84 fl oz	210.3	14.4	3009
6. Nontreated	-	-	234.1	17.6	2785
TifNV-HiOL					
7. Nontreated	-	-	5.7	36.0	4102
LSD(P<0.05)			107.8	13.4	630

Root-knot[5]= Number of *M. arenaria* juvenile per 100 cc of soil.

Ring[6]= Population of ring nematodes per 100 cc of soil.

KANNAR NEMATODE TEST, 2022

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, TifNV-HiOL, and TifNV-HG.

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 treatment spray 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 were applied at planting on May 11. 60 DAP treatment was applied on July 11 and was irrigated soon after application.

3. Cover Sprays: Chlorothalonil (1.5 pts/a) was applied on June 15, June 29, July 13, July 28, Aug. 17, Aug. 30, and Sep. 13. Elatus (9 oz/a) was applied on July 13, July 28, and Aug. 17.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Woods Field Tifton, GA 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.3 P –46.4 K –13.0 Ca –286 Mg –8.85
	Soil type:	Tifton loamy sand, 2 – 5% slope.

5. Herbicides: PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.

6. Insecticides: None.

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

8. Harvest Dates: Dug – Sep. 29 Picked – Oct. 3

E: SUMMARY:

This was a moderate pressure root knot nematode test with several treatments reducing galling, but no reductions in nematode numbers except from the nematode-resistant cultivars TifNV-HiOL and TifNV-HG. There were few other treatment effects, and no significant differences in pod yield, except for the nematode-resistant cultivars which averaged about 2000 lb/A higher than other treatments. TifNV-HiOL and TifNV-HG both had higher plant counts than the Georgia-06G plots and exhibited virtually no galling. They also had only 4.2 and 1.9 *M. arenaria* juveniles per 100 cc of soil at harvest.

KANNAR NEMATODE TEST, 2022

BLACKSHANK FARM, WOODS FIELD

Treatments	App's	Rate/A	Plant/ft[1] 25-May	% Dead Plants[2] 25-May	TSWV[3] 9-Aug	Root Galling[4] 29-Sep
GA-06G						
1. Untreated	-	-	3.2	0.0	24.9	45.7
2. Velum	In Furrow	6.5 fl oz	2.7	0.0	27.7	14.9
Propulse*	60 DAP	13.6 fl oz				
3. Nematicide 1	In Furrow	32.0 fl oz	2.8	0.0	27.1	43.6
4. Nematicide 2	In Furrow	32.0 fl oz	2.8	0.0	29.1	32.9
5. Nematicide 3	In Furrow	32.0 fl oz	2.9	0.0	25.1	35.0
TifNV-HiOL						
6. Untreated	-	-	4.3	0.0	15.4	0.4
TifNV-HG						
7. Untreated	-	-	4.4	0.0	11.7	0.0
LSD(P<0.05)	-	-	0.3	N. S.	11.9	9.4

*Ran irrigation soon after planting.

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.

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

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

KANNAR NEMATODE TEST, 2022

BLACKSHANK FARM, WOODS FIELD

Treatments	App's	Rate/A	Root Knot[5] 30-Aug	Ring[6] 30-Aug	Yield lb/A
GA-06G					
1. Untreated	-	-	118.6	52.1	2474
2. Velum	In Furrow	6.5 fl oz	135.1	22.6	2748
Propulse*	60 DAP	13.6 fl oz			
3. Nematicide 1	In Furrow	32.0 fl oz	166.1	56.9	2387
4. Nematicide 2	In Furrow	32.0 fl oz	133.6	23.6	2222
5. Nematicide 3	In Furrow	32.0 fl oz	176.7	33.1	2222
TifNV-HiOL					
6. Untreated	-	-	4.2	50.4	4610
TifNV-HG					
7. Untreated	-	-	1.9	48.9	4330
LSD(P<0.05)	-	-	107.8	N. S.	619

*Ran irrigation soon after planting.

Root-knot[5]= Number of *M. arenaria* juvenile per 100 cc of soil.

Ring[6]= Population of ring nematodes per 100 cc of soil.

UPL SEED TREATMENT TEST II, 2022

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: GA-18RU (Compromised seed. See details below.)

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 pts/a) was applied on June 15, June 29, July 13, July 28, Aug. 17, Aug. 30, and Sep. 13. Elatus (9 oz/a) was applied on July 13, July 28, and Aug. 17.

D. ADDITIONAL INFORMATION:

1. Location:	Blackshank Farm, Woods Field Tifton, GA 31794
2. Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3. Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4. Soil Fertility:	pH –6.3 P –46.4 K –13.0 Ca –286 Mg –8.85
Soil type:	Tifton loamy sand, 2 – 5% slope.
5. Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6. Insecticides:	Thimet (5 lbs/a) on May 11.
7. Planting Info:	GA-18RU, 6 seed/ft (2” deep) in single rows on May 11.

8. Additional Seed Info: GA-18RU (lot #5002): Germination (w/ Rancona) = 76%, *A. niger* = 41%, *A. flavus* = 2%, *Lasiodiplodia* = 0%, *Rhizopus* = 100%.

9. Harvest Dates: Dug – Oct. 3 Picked – Oct. 6

E: SUMMARY:

There were some distinct differences in seedling disease and plant stands due to the various seed treatments. Differences were due primarily to pre-emergence seed rot, presumably due to *Rhizopus* and other pathogens, as well as Aspergillus crown rot which killed 35% of seedlings in the plots with no seed treatment. The seed had high levels of both *Aspergillus niger* and *Rhizopus* infection. The differences in plant stand had an effect on yield, especially comparing the nontreated seed to some of the better treatments.

UPL SEED TRT TEST II, 2022

BLACKSHANK FARM, WOODS FIELD

	Plant/ft[1]	% Dead Plants[2]			TSWV[3]	Roots/ft[4]	Yield
Seed Trt	**25-May**	**25-May**	**1-Jun**	**16-Jun**	**9-Aug**	**23-Sep**	**lbs/A**
1	1.8	0.0	11.3	35.2	42.4	1.1	2670
2	3.4	0.0	0.0	0.3	20.8	3.3	4207
3	3.4	0.0	0.0	0.0	35.2	3.1	3822
4	3.3	0.0	0.0	0.0	31.6	3.0	4046
5	3.1	0.0	0.0	0.0	23.6	3.1	3527
6	3.3	0.0	0.0	0.1	35.2	3.3	3732
7	3.2	0.0	0.0	0.0	33.6	3.1	3611
8	3.4	0.0	0.0	0.0	25.2	3.3	4193
9	3.6	0.0	0.0	0.0	30.4	3.6	4066
10	3.3	0.0	0.0	0.2	26.5	3.1	3913
LSD(P<0.05)	0.4	N. S.	2.3	6.2	12.0	0.3	1074

Note: Seed was GA-18RU (lot #5002) and was treated by UPL.

Germination (w/ Rancona): 76%

A. niger : 41%

A. flavus : 2%

Lasiodiplodia : 0%

Rhizopus : 100%

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.

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.

Nematode samples were taken for each tier. The average root-knot and ring nematode count was 152.1 and 91.3, respectively.

OFFICIAL DAILY RAINFALL, 2022

BLACKSHANK FARM, WOODS FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0.75	1.75	0
5	0	0	0	0.7	0	0	0	0
6	0	0	0.3	0	0	0	0	0
7	0	0	0	0.1	0.25	1.4	0	0
8	0	0	0.25	0	0	1.55	1	0
9	0	0	0	0	0	0.6	0	0
10	0	0	0	0	0.1	0.05	0	0
11	0	0	0	0	0.45	0.7	0	0
12	0	0	0	0	0.05	0.05	0	0
13	0	0	0	0	0.75	0	0	0.9
14	0	0	0	1.8	1.6	0	0	0
15	0	0	0	0	0.25	0	0	0
16	0.75	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18	0.75	0	0	0	0	0.5	0	0
19	2.25	0	0	0	0	0.3	0	0
20	0	0	0	0	0.5	0	0	0
21	0	0	0	0	1.01	0	0	0
22	0	0	0	0	0	0	0	0
23	0	0	0.25	0	0	0	0	0
24	0	0	0.5	0	0.35	0	0	0
25	0	0	0	0	0	0.75	0	0
26	0	0	0.1	0	0	0	0	0
27	0	0	0	0	0	0	0	0
28	0	0	0	0	0.1	0.4	0	0
29	0	0	0	2	0.25	0	0	0
30	0	0	0	0	0	0	0	0
31	1.1	0	0	0	0	0	0	0
TOTAL (inches)	**4.85**	**0**	**1.4**	**4.6**	**5.66**	**7.05**	**2.75**	**0.9**

*Irrigated as needed.

ADAMA PEANUT RX TEST, 2022

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 (20ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: TifNV-HiOL

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Additional treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.

2. Treatment sprays: In furrow sprays applied at planting on May 10. Applications 1-7 were applied on June 13, June 28, July 12, July 19, July 28, Aug. 10, Aug. 24, and Sep. 9.

D. ADDITIONAL INFORMATION:

1. Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794
2. Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3. Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4. Soil Fertility:	pH –6.09 P –25.8 K –42.8 Ca –316 Mg –18.0
Soil type:	Tifton loamy sand, 2 – 5% slope.
5. Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6. Insecticides:	Thimet (5 lbs/a) on May 10.
7. Planting Info:	TifNV-HiOL, 6 seed/ft (2” deep) on May 10.

8. Harvest Dates: Dug – Sep. 30 Picked – Oct. 4

E: SUMMARY:

This as a lower pressure test for both leaf spot and white mold. The "Bravo only" treatment is the best "nontreated" check for white mold, and it had 12.5 % white mold. Leaf spot pressure was also low with the nontreated checks rating only 5.6 on the Florida 1-10 scale. There were some differences in efficacy for leaf spot, but not for white mold incidence and pod yield.

ADAMA PEANUT RX TEST, 2022

BLACKSHANK FARM, IRR/NON FIELD

			Plant/ft[1]	% Dead Plants[2]	
Treatment	**App's**	**Rate/A**	**31-May**	**31-May**	**14-Jun**
1. Untreated	-	-	4.4	0.0	0.2
2. Abound	In Furrow	6.0 fl oz	4.2	0.0	0.0
Bravo W'stik	2 & 7	1.5 pt			
Bravo W'stik	3.5 & 5	1.5 pt			
+ Vantana 500	-	1.5 pt			
3. Abound	In Furrow	6.0 fl oz	-	-	-
Bravo W'stik	1 & 6	1.5 pt			
Bravo W'stik	2	1.5 pt			
+ Tebuzol 3.6F	-	7.2 fl oz			
Bravo W'stik	3 & 5	1.5 pt			
+ Vantana 500	-	1.5 pt			
Bravo W'stik	4	1.5 pt			
+ Vantana 500	-	1.0 pt			
Bravo W'stik	7	1.5 pt			
+ Incognito 85WDG	-	0.4 lb			
4. Abound	In Furrow	6.0 fl oz	-	-	-
Bravo W'stik	1	1.0 pt			
+ Alto 100SL	-	5.5 fl oz			
Bravo W'stik	2 & 7	1.5 pt			
Elatus	3 & 5	9.5 oz			
+ Miravis 1.67	-	3.4 fl oz			
5. ADM 03509F	In Furrow	10.9 fl oz	4.4	0.0	0.0
Bravo W'stik	1 & 7	1.5 pt			
ADM 03509F	2, 4 & 6	10.9 fl oz			
Bravo W'stik	3 & 5	1.5 pt			
+ Vantana 500	-	1.5 pt			
6. Bravo	1 - 7	1.5 pt	-	-	-
LSD(P<0.05)	-	-	N. S.	N. S.	N. S.

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.

ADAMA PEANUT RX TEST, 2022

BLACKSHANK FARM, IRR/NON FIELD

Treatment	App's	Rate/A	LS[3] 29-Sep	WM[4] 30-Sep	Yield lbs/A
1. Untreated	-	-	5.6	13.8	6309
2. Abound	In Furrow	6.0 fl oz	3.8	12.5	5523
Bravo W'stik	2 & 7	1.5 pt			
Bravo W'stik	3.5 & 5	1.5 pt			
+ Vantana 500	-	1.5 pt			
3. Abound	In Furrow	6.0 fl oz	3.2	11.3	5882
Bravo W'stik	1 & 6	1.5 pt			
Bravo W'stik	2	1.5 pt			
+ Tebuzol 3.6F	-	7.2 fl oz			
Bravo W'stik	3 & 5	1.5 pt			
+ Vantana 500	-	1.5 pt			
Bravo W'stik	4	1.5 pt			
+ Vantana 500	-	1.0 pt			
Bravo W'stik	7	1.5 pt			
+ Incognito 85WDG	-	0.4 lb			
4. Abound	In Furrow	6.0 fl oz	3.7	6.3	6172
Bravo W'stik	1	1.0 pt			
+ Alto 100SL	-	5.5 fl oz			
Bravo W'stik	2 & 7	1.5 pt			
Elatus	3 & 5	9.5 oz			
+ Miravis 1.67	-	3.4 fl oz			
5. ADM 03509F	In Furrow	10.9 fl oz	3.5	6.9	5963
Bravo W'stik	1 & 7	1.5 pt			
ADM 03509F	2, 4 & 6	10.9 fl oz			
Bravo W'stik	3 & 5	1.5 pt			
+ Vantana 500	-	1.5 pt			
6. Bravo	1 - 7	1.5 pt	3.3	12.5	5462
LSD(P<0.05)	-	-	0.5	N. S.	N. S.

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.

AGRITHORITY TEST, 2022

A. PURPOSE: To evaluate the comparative efficacy of labeled fungicides and biofungicides in order to control southern stem rot (white mold).

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (20ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: TifNV-HiOL

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: Treatments were applied on June 28, July 5, July 12, July 19, and July 26.

3. Cover Sprays: Plots were cover sprayed with Chlorothalonil (1.5 pts/a) on June 13, June 28, July 12, July 28, Aug. 10, Aug. 24, and Sep. 9.

D. ADDITIONAL INFORMATION:

1. Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794
2. Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3. Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4. Soil Fertility:	pH –6.09 P –25.8 K –42.8 Ca –316 Mg –18.0
Soil type:	Tifton loamy sand, 2 – 5% slope.
5. Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6. Insecticides:	Thimet (5 lbs/a) on May 10.

7. Planting Info: TifNV-HiOL, 6 seed/ft (2" deep) on May 10.

8. Harvest Dates: Dug – Sep. 30 Picked – Oct. 4

E: SUMMARY:

This test was sprayed with Bravo for leaf spot and ended up as a lower pressure test for white mold, although there were minor differences among treatments. The untreated check did have 27% white mold, but infections started late and had little impact on yield. There were no differences between treatments in pod yield.

AGRITHORITY TEST, 2022

BLACKSHANK FARM, IRRIGATED/NON FIELD

Treatments	App's	Rate/A	WM[1] 3-Oct	Yield lbs/A
1. ProBlad Verde	2, 2.5, 3, 3.5, 4	45.7 fl oz	16.7	6268
2. ProBlad Verde	2, 2.5, 3, 3.5, 4	45.7 fl oz	33.1	6303
+ 80/20 surfactant		2.0 pt/100 gal		
3. ProBlad Verde	2, 3, 4	45.7 fl oz	19.4	6293
Elatus	2.5 & 3.5	7.3 oz		
4. ProBlad Verde	2, 3, 4	45.7 fl oz	19.2	6215
+ 80/20 surfactant		2.0 pt/100 gal		
Elatus	2.5 & 3.5	7.3 oz		
5. ProBlad Verde	2, 3, 4	45.7 fl oz	20.0	6723
Serenade Opti	2.5 & 3.5	20.0 oz		
6. ProBlad Verde	2, 3, 4	45.7 fl oz	22.5	6053
+ 80/20 surfactant		2.0 pt/100 gal		
Serenade Opti	2.5 & 3.5	20.0 oz		
7. Elatus	2.5 & 3.5	7.3 oz	20.0	5908
8. Untreated			26.7	6749
LSD(P<0.05)			13.1	N. S.

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

FMC XYWAY TEST, 2022

A. PURPOSE: To evaluate the comparative efficacy of various Xyway LFR application methods at planting for the control of soil borne and foliar diseases.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (20ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: TifNV-HiOL

C. APPLICATION OF TREATMENTS:

1. Equipment: T band treatment sprays used in furrow nozzle raised to band 4-6 inches over open furrow and were 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. Surface band treatments were applied over the top of the row in a 4-6 inch band at 50 PSI going 3.5 MPH in 20 GPA using a CO2 unit with one 8003 flat fan tip per row and 50 mesh ball check screens. Treatment sprays 1-7 were applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.

2. Treatment sprays: T band sprays were applied at planting on May 10, and surface band sprays were applied after planting on May 10. Applications 1-7 were applied on June 13, June 28, July 12, July 28, Aug. 10, Aug. 24, and Sep. 9.

D. ADDITIONAL INFORMATION:

1. Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794
2. Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3. Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4. Soil Fertility:	pH –6.09 P –25.8 K –42.8 Ca –316 Mg –18.0
Soil type:	Tifton loamy sand, 2 – 5% slope.
5. Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.

6. Insecticides: Thimet (5 lbs/a) on May 10.

7. Planting Info: TifNV-HiOL, 6 seed/ft (2" deep) on May 10.

8. Harvest Dates: Dug – Sep. 30 Picked – Oct. 4

E: SUMMARY:

This was a lower pressure test for both leaf spot and white mold. The "Bravo only" treatment is the best "nontreated" check for white mold, and it had only 12.5 % white mold. Leaf spot pressure was also low with the nontreated checks rating only 5.6 on the Florida 1-10 scale. There were some differences in efficacy for leaf spot, but not for white mold incidence and pod yield.

FMC XYWAY TEST, 2022

BLACKSHANK FARM, IRR/NON FIELD

			Plant/ft[1]	% Dead Plants[2]		TSWV[3]
Treatment	**App's**	**Rate/A**	**31-May**	**31-May**	**14-Jun**	**5-Aug**
1. Untreated	-	-	3.4	0.0	0.0	35.6
2. Xyway LFR	T Band*	12.7 fl oz	3.7	0.0	0.0	30.0
Bravo	2 – 7	1.5 pt				
3. Xyway LFR	T Band*	12.7 fl oz	-	-	-	27.5
Bravo	4 – 7	1.5 pt				
4. Xyway LFR	Surface Band**	12.7 fl oz	3.7	0.0	0.2	45.0
Bravo	2 – 7	1.5 pt				
5. Xyway LFR	Surface Band**	12.7 fl oz	-	-	-	35.0
Bravo	4 – 7	1.5 pt				
6. Bravo	1 – 7	1.5 pt	-	-	-	34.4
LSD(P<0.05)	-	-	N. S.	N. S.	N. S.	14.6

* T Band used in furrow nozzle raised to band 4-6 inches over open furrow.

** Surface band was applied over the top of the row in a 4-6 inch band in 20 GPA.

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.

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

FMC XYWAY TEST, 2022					
BLACKSHANK FARM, IRR/NON FIELD					
			LS[4]	WM[5]	Yield
Treatment	App's	Rate/A	29-Sep	30-Sep	lbs/A
1. Untreated	-	-	5.6	13.8	6309
2. Xyway LFR	T Band*	12.7 fl oz	3.8	12.5	5523
Bravo	2 – 7	1.5 pt			
3. Xyway LFR	T Band*	12.7 fl oz	3.2	11.3	5352
Bravo	4 – 7	1.5 pt			
4. Xyway LFR	Surface Band**	12.7 fl oz	3.7	6.3	6172
Bravo	2 – 7	1.5 pt			
5. Xyway LFR	Surface Band**	12.7 fl oz	3.5	6.9	5963
Bravo	4 – 7	1.5 pt			
6. Bravo	1 – 7	1.5 pt	3.3	12.5	5462
LSD(P<0.05)	-	-	0.5	N. S.	N. S.

* T Band used in furrow nozzle raised to band 4-6 inches over open furrow.

** Surface band was applied over the top of the row in a 4-6 inch band in 20 GPA.

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

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

ISK TEST, 2022

A. PURPOSE: To evaluate the comparative efficacy of registered and experimental 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 (20ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: TifNV-HiOL

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: Treatments 1-7 were applied on June 13, June 28, July 12, July 28, Aug. 10, Aug. 24, and Sep. 9, respectively.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.09 P –25.8 K –42.8 Ca –316 Mg –18.0
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6.	Insecticides:	Thimet (5 lbs/a) on May 10.
7.	Planting Info:	TifNV-HiOL, 6 seed/ft (2" deep) on May 10.
8.	Harvest Dates:	Dug – Sep. 30 Picked – Oct. 4

E: SUMMARY:

This as a lower pressure test for leaf spot and moderate for white mold. The "Bravo only" treatment is the best "nontreated" check for white mold, and it had 28.8% disease incidence. Some treatments showed a good reduction of white mold, and there were some significant ield differences among treatments. Leaf spot pressure was low with the nontreated checks rating only 5.9 on the Florida 1-10 scale. There were some differences in efficacy for leaf spot and white mold incidence and pod yield.

ISK TEST, 2022

BLACKSHANK FARM, IRR/NON FIELD

Treatment	App's	Rate/A	LS[1] 29-Sep	WM[2] 30-Sep	Yield lbs/A
1. Untreated	-	-	5.9	25.6	6002
2. Bravo	1, 2 & 7	1.5 pt	4.8	24.2	5268
Tebustar	3 – 6	7.2 fl oz			
3. Bravo	1, 2 & 7	1.5 pt	4.4	20.8	5829
IKF-5411	3 – 6	12.5 fl oz			
4. Bravo	1, 2 & 7	1.5 pt	3.8	13.3	6055
IKF-1216	3 – 6	16.0 fl oz			
5. Bravo	1, 2 & 7	1.5 pt	3.7	15.0	6376
IKF-1216	3 – 6	8.0 fl oz			
+ IKF-5411		7.0 fl oz			
6. Bravo	1, 2 & 7	1.5 pt	3.5	15.0	6703
IKF-1216	3 – 6	10.0 fl oz			
+ IKF-5411		8.0 fl oz			
7. Bravo	1, 2 & 7	1.5 pt	4.1	16.3	6392
IKF-1216	3 – 6	10.0 fl oz			
+ Tebustar		7.2 fl oz			
8. Bravo	1, 2 & 7	1.5 pt	3.7	7.5	6543
IKF-1216	3 – 6	10.0 fl oz			
+ Abound		20.0 fl oz			
9. Bravo	1 - 7	1.5 pt	3.1	28.8	5991
LSD(P<0.05)			0.6	14.7	1314

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.

RHIZOCTONIA TEST, 2022

A. PURPOSE: To evaluate the comparative efficacy of registered and experimental fungicides applied for the control of soil borne diseases, particularly Rhizoctonia limb rot.

B. EXPERIMENTAL DESIGN

1. Randomized complete blocks with four replicates.
2. One two-row bed (20ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: GA-12Y

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. Treatments: Treatment sprays were applied on July 27, Aug. 9, and Aug. 23. Oat grains colonized by *Rhizoctonia solani* (isolate RS13, AG-4) were applied on July 28. 750 ml of oats were applied to each row, for a total of 1,500 ml per plot. Oats were evenly sprinkled over the length of the row, and the canopy was gently brushed afterwards to allow the oats to fall through to the ground.

3. Cover Sprays: Plots were cover sprayed with Chlorothalonil (1.5 pts/a) on June 13, June 28, July 12, July 28, Aug. 10, Aug. 24, and Sep. 9.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.09 P –25.8 K –42.8 Ca –316 Mg –18.0
	Soil type:	Tifton loamy sand, 2 – 5% slope.

5. Herbicides: PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.

6. Insecticides: Thimet (5 lbs/a) on May 10.

7. Planting Info: GA-12Y, 6 seed/ft (2" deep) on May 10.

8. Harvest Dates: Dug – Sep. 30 Picked – Oct. 4

E: SUMMARY:

This was a low-pressure test for Rhizoctonia limb rot, the primary target of the trial, and white mold which also developed in the field. The untreated checks had from 6-11% white mold and 16-19% limb rot. There were some significant differences for severity of Rhizoctonia limb rot, as well as pod yield, but not for white mold. Results were confounded by significant, but non-uniform damage from peanut root knot nematode. Overall this was not a real definitive test for comparison of limb rot fungicides.

RHIZOCTONIA TEST, 2022						
BLACKSHANK FARM, IRR/NONIRRIGATED FIELD						
				WM[1]	RHIZ[2]	Yield
Treatments	App's	Rate	Inoculated?	30-Sep	30-Sep	lbs/A
1. Untreated	-	-	Yes	10.6	19.0	5521
2. VJR90	4 – 6	9.0 fl oz	Yes	9.4	11.0	5673
3. Lucento	4 – 6	5.5 fl oz	Yes	12.5	16.8	5832
+ TST98		4.3 fl oz				
4. Excalia 2.84SC	4 – 6	2.5 fl oz	Yes	5.0	10.8	6912
5. Elatus 45WG	4 – 6	7.14 oz	Yes	6.3	12.5	6493
6. Priaxor	4 – 6	8.0 fl oz	Yes	10.0	12.5	5662
7. Untreated	-	-	No	6.3	16.3	5853
LSD (P<0.05)				N. S.	5.3	1086
Note: Inoculated on July 28 with 1,500 ml of *Rhizoctonia solani* AG-4 oat grain inoculum per plot.						
White Mold[1]=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.						
RHIZ[2]=Percent of lateral stems and leaves colonized by *R. solani.*						

VALENT WHITE MOLD TEST, 2022

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 (20ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: TifNV-HiOL

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: Treatments were applied on June 13, June 28, July 12, July 28, Aug. 10, Aug. 24, and Sep. 9.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Irr/Non Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a on Apr. 12. On Apr. 15, field was deep turned, beds marked 6 ft, and fertilizer turned under. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.09 P –25.8 K –42.8 Ca –316 Mg –18.0
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6.	Insecticides:	Thimet (5 lbs/a) on May 10.
7.	Planting Info:	TifNV-HiOL, 6 seed/ft (2" deep) on May 10.
8.	Harvest Dates:	Dug – Sep. 30 Picked – Oct. 4

E: SUMMARY:

This as a lower pressure test for leaf spot and moderate for white mold. The "Bravo only" treatment is the best "nontreated" check for white mold, and it had only 13.1% disease incidence. Some treatments showed a good reduction of white mold, and there were some large numerical yield differences among treatments, but they were not statistically different. Leaf spot pressure was low with the nontreated checks rating only 5.7 on the Florida 1-10 scale. There were some differences in efficacy for leaf spot and white mold incidence and pod yield.

VALENT WHITE MOLD TEST, 2022

BLACKSHANK FARM, IRR/NONIRRIGATED FIELD

Treatments	App's	Rate/A	LS[1] 29-Sep	WM[2] 30-Sep	Yield lbs/A
1. Bravo	1 – 7	1.5 pt	3.4	12.5	6032
2. Bravo	2, 4, 6 & 7	1.5 pt	3.5	3.1	5502
Excalia	1, 3 & 5	2.0 fl oz			
+ Bravo		1.5 pt			
3. Bravo	1, 2, 4, 6, 7	1.5 pt	3.8	2.5	6573
Excalia	1	2.0 fl oz			
+ Bravo		1.5 pt			
Excalia*	3 & 5	3.0 fl oz			
+ Bravo		1.0 pt			
4. Bravo	2, 4, 6 & 7	1.5 pt	3.9	0.6	6492
Excalia	1, 3 & 5	2.0 fl oz			
+ Microthiol S		4.0 lb			
5. Bravo	1, 2, 4, 6, 7	1.5 pt	3.9	6.3	6002
Excalia	1	2.0 fl oz			
+ Microthiol S		4.0 lb			
Excalia	3 & 5	3.0 fl oz			
+ Microthiol S		4.0 lb			
6. Bravo	1, 2, & 7	1.5 pt	3.4	6.9	5662
Orius	3 - 6	7.2 fl oz			
+ Microthiol S		5.0 lb			
7. Untreated			5.7	13.1	5252
LSD(P<0.05)	-	-	0.5	5.0	N. S.

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, 2022

BLACKSHANK FARM, IRR/NON FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0.75	1.75	0
5	0	0	0	0.7	0	0	0	0
6	0	0	0.3	0	0	0	0	0
7	0	0	0	0.1	0.25	1.4	0	0
8	0	0	0.25	0	0	1.55	1	0
9	0	0	0	0	0	0.6	0	0
10	0	0	0	0	0.1	0.05	0	0
11	0	0	0	0	0.45	0.7	0	0
12	0	0	0	0	0.05	0.05	0	0
13	0	0	0	0	0.75	0	0	0.9
14	0	0	0	1.8	1.6	0	0	0
15	0	0	0	0	0.25	0	0	0
16	0.75	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18	0.75	0	0	0	0	0.5	0	0
19	2.25	0	0	0	0	0.3	0	0
20	0	0	0	0	0.5	0	0	0
21	0	0	0	0	1.01	0	0	0
22	0	0	0	0	0	0	0	0
23	0	0	0.25	0	0	0	0	0
24	0	0	0.5	0	0.35	0	0	0
25	0	0	0	0	0	0.75	0	0
26	0	0	0.1	0	0	0	0	0
27	0	0	0	0	0	0	0	0
28	0	0	0	0	0.1	0.4	0	0
29	0	0	0	2	0.25	0	0	0
30	0	0	0	0	0	0	0	0
31	1.1	0	0	0	0	0	0	0
TOTAL (inches)	**4.85**	**0**	**1.4**	**4.6**	**5.66**	**7.05**	**2.75**	**0.9**

*Irrigated as needed.

MULTI-STATE DISEASE EVALUATION TEST, 2022

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 June 23, July 27, Aug. 11, Aug. 26, and Sep. 13.

3. Inoculated test with white mold on July 27.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Banana Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	No fertilizer applied. Fumigated with 300 lb/a of Tri-Pic 100 by injecting into soil and covering with plastic on April 4. Removed tarp 2 weeks later.
4.	Soil Fertility:	pH – 6.1 P – 16.3 K – 39.8 Ca – 278 Mg – 14.7
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Insecticides:	Orthene (0.75 lbs/a) after inoculations on July 27.
6.	Planting Info:	Multiple Varieties, 6 seed/ft (2” deep) on May 17.
7.	Harvest Dates:	Dug – Oct. 4 Picked – Oct. 11

E: SUMMARY:

Moderate levels of both white mold and TSWV developed and there was a good separation of genotypes. There was also moderate leaf spot (mainly early leaf spot), but a more aggressive spray program resulted in less disease than in some previous years. There was a lot of physiological spotting on the leaves that was actually rated on Sept 10 before leaf spot became severe. There were clearly differences among genotypes, but the etiology of these spots is uncertain. Differences were also observed for pod rot which developed later in the season. A potential pathogen was isolated and is still being identified, but a severity rating was made after the plots were inverted. Yields were quite high, and the greenhouse nematode screen showed significant differences in that trait also.

MULTISTATE/RIL FIELD TEST, 2022

BLACKSHANK FARM, BANANA FIELD

	White Mold (4-Oct)			TSWV[3]	LS[4]	FLS[5]	Pod Rot[6]
Genotypes	% Zeroes[1]	No Zeroes[2]	All[2]	29-Jul	5-Oct	10-Sep	10-Oct
1. 17-223	45.8	15.8	6.2	5.8	3.3	2.0	12.5
2. C1987-735	12.5	34.3	29.0	25.0	2.7	3.8	4.8
3. C1987-769	16.7	36.4	30.5	13.3	2.5	3.3	4.5
4. C1987-837	16.7	29.4	22.8	8.3	2.4	2.3	6.5
5. C1987-923	33.3	17.8	11.5	10.0	2.5	2.9	1.8
6. C1987-935	25.0	27.2	20.6	11.7	2.9	4.5	3.3
7. C2015-2	37.5	17.5	11.1	8.3	2.9	1.6	11.5
8. C2015-12	25.0	34.1	22.8	20.0	2.1	2.0	0.8
9. 17-172	8.3	32.5	30.3	20.0	4.6	1.9	5.3
10. 17-222	25.0	27.6	22.1	6.7	3.1	2.5	6.3
11. C1816B-13-9	20.8	23.7	19.0	6.7	3.3	2.9	4.0
12. CB 20	37.5	21.1	14.3	8.3	2.6	4.9	7.5
13. C1801_H_952	75.0	35.0	7.0	10.8	2.9	3.9	12.5
14. C1801_H_1036	70.8	25.0	6.3	9.2	3.0	4.3	0.0
15. 17-1638	33.3	23.1	16.3	2.5	2.6	5.3	0.5
16. C1819-9-287	8.3	50.7	46.7	5.8	2.5	3.6	0.0
17. 16-679	8.3	29.1	26.5	5.8	3.2	3.6	1.0
18. ARDG-1	45.8	22.0	13.5	5.0	2.9	3.8	17.3
19. ARDG-2	41.7	31.7	16.5	13.3	2.9	5.3	8.8
20. ARDG-3	25.0	32.4	24.0	15.8	3.0	3.0	1.5
21. ARDG-4	16.7	23.7	20.5	7.5	2.1	1.6	1.0
22. ARDG-5	37.5	16.4	10.6	11.7	2.6	2.5	3.8
23. 14X056-8-6-1-1	33.3	20.8	14.3	14.2	2.8	2.1	3.3
24. 14X068-H03-14-1-1	41.7	20.9	12.3	11.7	3.6	1.8	26.3
25. 14X070-H04-2-1-1	8.3	32.8	30.2	5.0	2.6	2.1	12.5
26. 14X075-H05-1-1-1	45.8	24.4	15.1	15.8	2.7	1.9	6.5
27. UF11X27-1-14-1-1	4.2	43.8	41.8	9.2	4.1	3.0	3.8
28. 15X092-H01-2-1-1	8.3	40.2	37.0	2.5	2.9	2.5	0.5
29. ACI-1453	16.7	22.0	18.8	18.3	2.9	4.1	0.8
30. ACI X 1F410	41.7	13.9	6.7	9.2	2.7	4.3	6.5
31. ACI10-9684	37.5	28.8	17.7	29.1	3.4	2.4	1.8
32. ACI-212	33.3	37.7	21.4	13.3	3.4	3.1	3.3
33. ACI-3321	41.7	24.4	13.8	20.0	2.9	4.6	2.8
34. ACI x 3F104	33.3	22.2	14.6	7.5	3.3	4.9	2.5

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MULTISTATE/RIL FIELD TEST, 2022

BLACKSHANK FARM, BANANA FIELD

	White Mold (4-Oct)			TSWV[3]	LS[4]	FLS[5]	Pod Rot[6]
Genotypes	**% Zeroes[1]**	**No Zeroes[2]**	**All[2]**	**29-Jul**	**5-Oct**	**10-Sep**	**10-Oct**
35. IPG2201	20.8	37.6	26.8	16.7	2.6	2.1	1.5
36. IPG2202	16.7	38.8	32.3	25.0	2.9	1.9	0.0
37. IPG2203	29.2	39.3	28.5	31.6	2.5	2.4	3.8
38. IPG2204	12.5	41.3	36.3	20.8	2.8	1.6	6.5
39. IPG2205	12.5	36.7	32.3	15.8	3.4	1.5	6.5
40. TifJumbo	54.2	12.4	5.6	20.0	2.9	1.8	10.0
41. TifNV-HG	33.3	17.4	11.8	9.2	3.1	2.8	2.5
42. TifNV-High O/L	33.3	15.5	9.7	6.7	3.3	4.4	0.5
43. GA-06G	20.8	39.0	31.7	9.2	4.3	1.9	2.3
44. AU-NPL17	16.7	24.0	20.0	8.3	3.3	3.6	14.0
45. TUFRunner 297	45.8	22.6	13.5	20.8	4.4	2.5	13.0
46. GA-20VHO	16.7	37.7	29.4	10.0	4.0	2.4	9.5
47. GA-19HP	16.7	37.5	30.4	4.2	3.1	4.0	2.0
48. GA-18RU	16.7	31.8	26.9	30.0	3.6	2.1	2.3
49. Florun T61	41.7	26.7	11.9	4.2	3.7	2.6	4.3
50. TUFRunner 511	45.8	29.4	17.5	18.3	6.5	2.0	3.5
51. GA-09B	0.0	47.9	48.9	23.3	5.0	2.6	2.5
52. GA-12Y	37.5	18.3	11.5	11.7	3.3	1.9	0.5
LSD(P<0.05)	22.2	13.4	11.2	13.3	0.8	0.8	10.0

[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.

Funkey Leaf Spot[5]=Florida 1 - 10 scale.

Pod Rot[6]= Percent of rotten pods.

MULTISTATE/RIL FIELD TEST, 2022

BLACKSHANK FARM, BANANA FIELD

Genotypes	Yield lb/A	Root Gall[7]	Eggs[7]
1. 17-223	5817	2.8	1.3
2. C1987-735	5242	2.8	2.0
3. C1987-769	5842	2.8	1.8
4. C1987-837	4682	0.0	0.0
5. C1987-923	5789	0.0	0.0
6. C1987-935	5803	1.8	1.0
7. C2015-2	5950	0.0	0.0
8. C2015-12	5176	3.3	3.0
9. 17-172	4856	3.3	2.3
10. 17-222	5562	1.7	1.0
11. C1816B-13-9	5496	2.6	1.8
12. CB 20	6576	0.3	0.0
13. C1801_H_952	5215	3.7	2.7
14. C1801_H_1036	5308	.	.
15. 17-1638	6976	0.9	0.5
16. C1819-9-287	5308	2.8	1.3
17. 16-679	6962	0.0	0.0
18. ARDG-1	6337	2.5	1.7
19. ARDG-2	6031	1.3	0.0
20. ARDG-3	5348	3.0	2.3
21. ARDG-4	4908	1.0	0.0
22. ARDG-5	5881	0.5	0.0
23. 14X056-8-6-1-1	6670	3.8	2.0
24. 14X068-H03-14-1-1	5202	4.5	4.0
25. 14X070-H04-2-1-1	6603	2.8	1.5
26. 14X075-H05-1-1-1	5895	3.5	2.3
27. UF11X27-1-14-1-1	5669	3.4	1.8
28. 15X092-H01-2-1-1	5948	3.8	3.7
29. ACI-1453	4921	3.7	2.7
30. ACI X 1F410	5817	0.0	0.0
31. ACI10-9684	4908	2.8	1.5
32. ACI-212	6362	2.3	1.5
33. ACI-3321	5896	4.0	2.7
34. ACI x 3F104	5748	0.0	0.0

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MULTISTATE/RIL FIELD TEST, 2022

BLACKSHANK FARM, BANANA FIELD

Genotypes	Yield lb/A	Root Gall[7]	Eggs[7]
35. IPG2201	5121	2.8	1.0
36. IPG2202	4896	2.4	1.8
37. IPG2203	4335	2.8	2.3
38. IPG2204	4976	3.6	2.5
39. IPG2205	5456	2.0	0.0
40. TifJumbo	6163	0.0	0.0
41. TifNV-HG	6749	2.1	1.8
42. TifNV-High O/L	7056	1.1	0.8
43. GA-06G	6389	3.0	2.5
44. AU-NPL17	6590	2.5	1.5
45. TUFRunner 297	6377	.	.
46. GA-20VHO	5987	1.3	0.0
47. GA-19HP	5842	0.3	0.0
48. GA-18RU	4748	1.2	1.0
49. Florun T61	6708	.	.
50. TUFRunner 511	6362	3.1	2.5
51. GA-09B	5107	2.1	1.8
52. GA-12Y	6656	2.4	1.5
LSD(P<0.05)	1173	2.0	1.8

Root-gall and egg-mass[7]=Index on 0 to 5 scale:

0=no galls or no egg-masses

1=1-2

2=3-10

4=31-100

5=more than 100 galls or egg masses per root system

GA-12Y TEST, 2022

A. PURPOSE: To evaluate the effect of various GA-12Y harvest intervals on yield.

B. EXPERIMENTAL DESIGN:

1. Each digging date had four replicates.
2. Two-row bed (30ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: GA-12Y

C. APPLICATION OF TREATMENTS:

1. Equipment: 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 June 23, July 8, July 27, Aug. 11, Aug. 26, and Sep. 13.

D. ADDITIONAL INFORMATION:

1.	Location:	Blackshank Farm, Banana Field, Tifton, GA 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	No fertilizer applied. Fumigated with 300 lb/a of Tri-Pic 100 by injecting into soil and covering with plastic on April 4. Removed tarp 2 weeks later.
4.	Soil Fertility:	pH – 6.1 P – 16.3 K – 39.8 Ca – 278 Mg – 14.7
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Insecticides:	Orthene (0.75 lbs/a) after inoculations on July 27.
6.	Planting Info:	GA-12Y, 6 seed/ft (2" deep) on May 17.
7.	Harvest Dates:	1st harvest: dug Oct. 7, picked Oct. 12 2nd harvest: dug Oct 17, picked Oct. 20 3rd harvest: dug Oct. 24, picked Nov. 4 4th harvest: dug Oct. 31, picked Nov. 7

GA-12Y HARVEST TEST, 2022

BLACKSHANK FARM, BANANA FIELD

Harvest	Date	Yield* lbs/A	SMKSS[1]	$/Ton	$/Acre
1. First Harvest	Dug 10-7-2022	7342	86.2	422.68	1561.50
	Picked 10-12-2022				
2. Second Harvest*	Dug 10-17-2022	6952	78.9	387.86	1354.10
	Picked 10-20-2022				
3. Third Harvest	Dug 10-24-2022	7656	78.4	386.49	1480.30
	Picked 11-4-2022				
4. Forth Harvest	Dug 10-31-2022	6642	83.7	410.16	1366.20
	Picked 11-7-2022				
LSD(P<0.05)		590	N. S.	N. S.	N. S.

***Note: The second harvest had 25% moisture content, which was adjusted to 10.5% using the formula in the following link: https://edis.ifas.ufl.edu/pdf/AG/AG442/AG442-12641661.pdf**

SMKSS[1] = The percent of sound mature kernels and sound splits.

OFFICIAL DAILY RAINFALL, 2022

BLACKSHANK FARM, BANANA FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0	0	0.75	1.75	0
5	0	0	0	0.7	0	0	0	0
6	0	0	0.3	0	0	0	0	0
7	0	0	0	0.1	0.25	1.4	0	0
8	0	0	0.25	0	0	1.55	1	0
9	0	0	0	0	0	0.6	0	0
10	0	0	0	0	0.1	0.05	0	0
11	0	0	0	0	0.45	0.7	0	0
12	0	0	0	0	0.05	0.05	0	0
13	0	0	0	0	0.75	0	0	0.9
14	0	0	0	1.8	1.6	0	0	0
15	0	0	0	0	0.25	0	0	0
16	0.75	0	0	0	0	0	0	0
17	0	0	0	0	0	0	0	0
18	0.75	0	0	0	0	0.5	0	0
19	2.25	0	0	0	0	0.3	0	0
20	0	0	0	0	0.5	0	0	0
21	0	0	0	0	1.01	0	0	0
22	0	0	0	0	0	0	0	0
23	0	0	0.25	0	0	0	0	0
24	0	0	0.5	0	0.35	0	0	0
25	0	0	0	0	0	0.75	0	0
26	0	0	0.1	0	0	0	0	0
27	0	0	0	0	0	0	0	0
28	0	0	0	0	0.1	0.4	0	0
29	0	0	0	2	0.25	0	0	0
30	0	0	0	0	0	0	0	0
31	1.1	0	0	0	0	0	0	0
TOTAL (inches)	**4.85**	**0**	**1.4**	**4.6**	**5.66**	**7.05**	**2.75**	**0.9**

*Irrigated as needed.

CORTEVA IN FURROW TEST, 2022

A. PURPOSE: To evaluate the comparative efficacy of various rates of Fontelis applied for the control of seedling diseases.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: untreated Flo-run 331 and untreated GA18-RU (Compromised seed. See details below.)

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 April 29.

3. Cover Sprays: Chlorothalonil (24 oz/a) was sprayed on June 3, June 17, June 30, July 14, July 29, Aug. 10, and Aug. 24, and Elatus (9 oz/a) was sprayed on June 30, July 14, and July 29.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.31 P –17.5 K –88.2 Ca –672 Mg –36.5
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) tank mix on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6.	Insecticides:	Thimet (5 lbs/a) on April 29.

7. Planting Info: Untreated Flo-run 331 and untreated GA18-RU, 6 seed/ft (3" deep) on Apr. 29.

8. Additional Seed Info: GA-18RU (lot #5002): Germination (w/ Rancona) = 76%, *A. niger* = 41%, *A. flavus* = 2%, *Lasiodiplodia* = 0%, *Rhizopus* = 100%.

   Flo-Run 331 (lot #7011): Germination (w/ Rancona) = 82%, *A. niger* = 53%, *A. flavus* = 77%, *Lasiodiplodia* = 4%, *Rhizopus* = 10%.

9. Harvest Dates: Dug – Sep. 22 Picked – Sep. 27

E. SUMMARY:

There were some big differences in seedling disease and plant stands due to the in furrow treatments. Differences in GA-18RU were due primarily to pre-emergence seed rot, presumably due to *Rhizopus*, and to Aspergillus crown rot in Flo-Run 331. The lower quality GA18-RU seed generally had lower stands and yield. All in furrow treatments except Abound greatly reduced Aspergillus crown rot, and there was a general rate response observed to Fontelis.

CORTEVA IN FURROW TEST, 2022

LANG FARM, SOUTH FIELD

			Plant/ft[1]		% Dead Plants[2]		
Treatments	**App's**	**Rate / A**	**13-May**	**20-May**	**13-May**	**20-May**	**3-Jun**
FloRun 331							
1. Fontelis	In Furrow*	12.0 fl oz	1.7	1.9	0.0	0.8	10.0
2. Fontelis	In Furrow*	16.0 fl oz	2.0	2.2	0.0	0.3	1.7
3. Fontelis	In Furrow*	20.0 fl oz	1.9	2.2	0.0	0.9	2.7
4. Fontelis	In Furrow*	24.0 fl oz	1.7	2.0	0.0	1.5	3.0
5. Abound	In Furrow*	11.6 fl oz	1.8	1.8	0.6	3.7	15.6
6. Velum	In Furrow*	4.35 fl oz	2.2	2.3	0.0	0.2	0.5
7. Nontreated	-	-	1.4	1.1	0.0	11.9	28.3
GA18-RU							
8. Fontelis	In Furrow*	12.0 fl oz	1.1	1.3	0.0	2.7	5.4
9. Fontelis	In Furrow*	16.0 fl oz	1.2	1.1	0.0	1.4	5.9
10. Fontelis	In Furrow*	20.0 fl oz	1.2	1.7	0.0	0.8	3.2
11. Fontelis	In Furrow*	24.0 fl oz	1.4	1.9	0.0	0.2	3.9
12. Abound	In Furrow*	11.6 fl oz	0.8	0.8	0.7	3.3	20.0
13. Velum	In Furrow*	4.35 fl oz	1.2	1.3	0.0	0.0	0.7
14. Nontreated	-	-	0.1	0.1	0.0	0.0	9.0
LSD(P<0.05)	-	-	0.5	0.6	0.6	3.2	10.2

Note: Trt 1 accidentially received a double rate of thimet during planting.

Flo-Run 331 seed (lot #7011): Germination (w/ Rancona)=82%, *A. niger*= 53% , *A. flavus*= 77%, *Lasiodiplodia*= 4%, *Rhizopus*= 10%. **GA-18RU seed (lot #5002)**: Germination (w/ Rancona)=76%, *A. niger* =41%, *A. flavus* =2%, *Lasiodiplodia* =0%, *Rhizopus* =100%.

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

**This test was planted with nontreated seed.

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, 2022

LANG FARM, SOUTH FIELD

Treatments	App's	Rate / A	TSWV[3] 4-Aug	Roots/ft[4] 23-Sep	Yield lbs/A
FloRun 331					
1. Fontelis	In Furrow*	12.0 fl oz	48.0	1.0	3401
2. Fontelis	In Furrow*	16.0 fl oz	60.5	1.2	3185
3. Fontelis	In Furrow*	20.0 fl oz	58.0	1.3	3777
4. Fontelis	In Furrow*	24.0 fl oz	59.0	1.1	3393
5. Abound	In Furrow*	11.6 fl oz	61.0	0.7	2297
6. Velum	In Furrow*	4.35 fl oz	65.5	1.4	3489
7. Nontreated	-	-	52.0	0.5	1968
GA18-RU					
8. Fontelis	In Furrow*	12.0 fl oz	.	0.6	2577
9. Fontelis	In Furrow*	16.0 fl oz	60.0	0.6	1753
10. Fontelis	In Furrow*	20.0 fl oz	44.5	0.8	3282
11. Fontelis	In Furrow*	24.0 fl oz	48.0	0.8	3096
12. Abound	In Furrow*	11.6 fl oz	62.0	0.3	1297
13. Velum	In Furrow*	4.35 fl oz	46.0	0.7	2466
14. Nontreated	-	-	.	0.1	431
LSD(P<0.05)	-	-	18.5	0.4	979

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 I, 2022

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: Flo-run 331 (Compromised seed. See details below.)

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 (24 oz/a) was sprayed on June 3, June 17, June 30, July 14, July 29, Aug. 10, and Aug. 24, and Elatus (9 oz/a) was sprayed on June 30, July 14, and July 29.

D. ADDITIONAL INFORMATION:

1. Location:	Lang Farm, South Field, Tifton, GA, 31794
2. Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3. Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4. Soil Fertility:	pH –6.31 P –17.5 K –88.2 Ca –672 Mg –36.5
Soil type:	Tifton loamy sand, 2 – 5% slope.
5. Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) tank mix on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6. Insecticides:	Thimet (5 lbs/a) on May 12.
7. Planting Info:	Flo-run 331, 6 seed/ft (3” deep) on May 12.
8. Additional Seed Info:	Flo-Run 331 (lot #7011): Germination (w/ Rancona) = 82%, *A. niger* = 53%, *A. flavus* = 77%, *Lasiodiplodia* = 4%, *Rhizopus* = 10%.

9. Harvest Dates: Dug – Sep. 22 Picked – Sep. 27

E. SUMMARY:

There were some distinct differences in seedling disease and plant stands due to the various seed treatments. Differences were due primarily to pre-emergence seed rot, as well as Aspergillus crown rot which killed 48.5% of emerged seedlings in the plots with no seed treatment. The seed had high levels of both *Aspergillus niger* and *A. flavus* infection. The differences in plant stand had an effect on yield, especially comparing the nontreated seed to some of the better treatments.

SYNGENTA SEED TRT TEST I, 2022

LANG FARM, SOUTH FIELD

	Plant/ft[1]	% Dead Plants[2]			TSWV[3]	Roots/ft[4]	Yield
Seed Trt	27-May	27-May	3-Jun	17-Jun	4-Aug	23-Sep	lbs/A
1	0.7	1.6	23.5	48.5	.	0.4	1658
2	3.6	0.0	0.0	0.2	35.5	3.0	4354
3	3.0	0.0	0.2	0.2	46.5	2.4	4074
4	3.3	0.0	0.0	0.4	37.0	3.0	4153
5	3.6	0.0	0.0	0.0	44.0	2.6	3970
6	3.7	0.0	0.2	0.2	44.0	2.7	3970
7	3.7	0.0	0.2	0.2	36.5	2.8	4193
8	3.3	0.0	0.0	0.0	40.5	2.5	3929
LSD(P<0.05	0.3	N. S.	6.6	12.5	N. S.	0.3	710

Note: Seed was Flo-Run 331 (lot #7011) and was treated by Syngenta.

Germination (w/ Rancona): 82%

A. niger : 53%

A. flavus : 77%

Lasiodiplodia : 4%

Rhizopus : 10%

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.

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 II, 2022

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety GA-18RU (Compromised seed. See details below.)

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 (24 oz/a) was sprayed on June 3, June 17, June 30, July 14, July 29, Aug. 10, and Aug. 24, and Elatus (9 oz/a) was sprayed on June 30, July 14, and July 29.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.31 P –17.5 K –88.2 Ca –672 Mg –36.5
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) tank mix on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6.	Insecticides:	Thimet (5 lbs/a) on May 12.
7.	Planting Info:	GA-18RU, 6 seed/ft (3” deep) on May 12.

8. Additional Seed Info: GA-18RU (lot #5002): Germination (w/ Rancona) = 76%, A. niger = 41%, A. flavus = 2%, Lasiodiplodia = 0%, Rhizopus = 100%.

9. Harvest Dates: Dug – Sep. 22 Picked – Sep. 27

E. SUMMARY:

There were some distinct differences in seedling disease and plant stands due to the various seed treatments. Differences were due primarily to pre-emergence seed rot from *Rhizopus*, as well as Aspergillus crown rot which killed 39.85% of emerged seedlings in the plots with no seed treatment. The seed had high levels of both *Aspergillus niger* and *Rhizopus* infection. The differences in plant stand had a huge effect on yield, especially comparing the nontreated seed to some of the better treatments.

SYNGENTA SEED TRT TEST II, 2022

LANG FARM, SOUTH FIELD

	Plant/ft[1]	% Dead Plants[2]			TSWV[3]	Roots/ft[4]	Yield
Seed Trt	27-May	27-May	3-Jun	17-Jun	4-Aug	23-Sep	lbs/A
1	0.3	0.0	32.3	39.8	.	0.2	833
2	2.0	0.0	2.3	8.9	39.0	1.2	3306
3	3.6	0.0	0.6	0.8	16.5	2.9	5802
4	2.7	0.0	0.7	2.0	35.5	1.9	4010
5	2.7	0.0	0.0	0.4	34.5	2.0	4786
6	3.1	0.0	0.2	0.2	30.0	2.8	4778
7	3.1	0.0	0.9	2.8	20.0	2.6	4970
8	3.0	0.0	0.6	1.1	12.5	2.7	5394
LSD(P<0.05	0.5	N. S.	12.5	10.2	13.1	0.4	924

Note: Seed was GA-18RU (lot #5002) and was treated by Syngenta.

Germination (w/ Rancona): 76%

A. niger : 41%

A. flavus : 2%

Lasiodiplodia : 0%

Rhizopus : 100%

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.

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 I, 2022

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. There are eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.
5. Variety: Flo-run 331 (Compromised seed. See details below.)

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 (24 oz/a) was sprayed on June 3, June 17, June 30, July 14, July 29, Aug. 10, and Aug. 24, and Elatus (9 oz/a) was sprayed on June 30, July 14, and July 29.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.31 P –17.5 K –88.2 Ca –672 Mg –36.5
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) tank mix on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6.	Insecticides:	Thimet (5 lbs/a) on May 12.
7.	Planting Info:	Flo-run 331, 6 seed/ft (3” deep) on May 12.
8.	Additional Seed Info:	Flo-Run 331 (lot #7011): Germination (w/ Rancona) = 82%, *A. niger* = 53%, *A. flavus* = 77%, *Lasiodiplodia* = 4%, *Rhizopus* = 10%.

9. Harvest Dates: Dug – Sep. 22 Picked – Sep. 27

E. SUMMARY:

There were some distinct differences in seedling disease and plant stands due to the various seed treatments. Differences were due primarily to pre-emergence seed rot, as well as Aspergillus crown rot which killed 35.0% of emerged seedlings in the plots with no seed treatment. The seed had high levels of both *Aspergillus niger* and *A. flavus* infection. The differences in plant stand had an effect on yield, especially comparing the nontreated seed to some of the better treatments.

UPL SEED TRT TEST I, 2022

LANG FARM, SOUTH FIELD

	Plant/ft[1]	% Dead Plants[2]			TSWV[3]	Roots/ft[4]	Yield
Seed Trt	27-May	27-May	3-Jun	16-Jun	4-Aug	23-Sep	lbs/A
1	1.4	0.0	19.9	35.0	51.5	0.8	2164
2	3.9	0.0	0.2	0.6	39.6	3.1	5090
3	3.5	0.0	0.3	0.3	30.8	2.9	4539
4	3.4	0.0	0.1	0.3	46.0	3.1	4072
5	3.7	0.0	0.0	0.0	37.6	3.0	4590
6	4.0	0.0	1.2	1.2	33.2	3.1	4386
7	3.6	0.1	0.5	0.5	38.0	2.7	4296
8	3.4	0.0	0.3	0.3	37.2	2.6	4533
9	3.9	0.0	0.0	0.0	39.6	3.3	4629
10	3.6	0.0	0.0	0.0	32.4	3.0	4660
LSD(P<0.05	0.4	0.1	3.8	5.7	11.9	0.4	693

Note: Seed was Flo-Run 331 (lot #7011) and was treated by UPL.

Germination (w/ Rancona): 82%

A. niger : 53%

A. flavus : 77%

Lasiodiplodia : 4%

Rhizopus : 10%

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.

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.

VALENT SEED TREATMENT TEST, 2022

A. PURPOSE: To evaluate the efficacy of Rancona peanut seed treatment when applied with in furrow fungicide applications.

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: Flo-run 331 (Compromised seed. See details below.)

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 April 29.

3. Cover Sprays: Chlorothalonil (24 oz/a) was sprayed on June 3, June 17, June 30, July 14, July 29, Aug. 10, and Aug. 24, and Elatus (9 oz/a) was sprayed on June 30, July 14, and July 29.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, South Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.31 P –17.5 K –88.2 Ca –672 Mg –36.5
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) tank mix on Apr. 25. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6.	Insecticides:	Thimet (5 lbs/a) on April 29.

7. Planting Info: Flo-run 331, 6 seed/ft (3" deep) on Apr. 29.

8. Additional Seed Info: Flo-Run 331 (lot #7011): Germination (w/ Rancona) = 82%, *A. niger* = 53%, *A. flavus* = 77%, *Lasiodiplodia* = 4%, *Rhizopus* = 10%.

9. Harvest Dates: Dug – Sep. 22 Picked – Sep. 27

E. SUMMARY:

There were some distinct differences in seedling disease and plant stands due to the seed treatment and the in furrow sprays. Rancona made a striking fifference in plant stand and yield, with some smaller additive benefits from in furrow sprays. With untreated seed, the infurrow sprays made more of a difference, with Velum in particular resulting in better stands and higher yields.

VALENT SEED TREATMENT TEST, 2022

LANG FARM, SOUTH FIELD

			Plant/ft[1]		% Dead Plants[2]		
Treatments	**App's**	**Rate/A**	**13-May**	**20-May**	**13-May**	**20-May**	**3-Jun**
Trt w/ Rancona							
1. Nontreated	-	-	3.1	2.9	0.0	0.0	1.1
2. VBC-90063B 15	In furrow*	8.0 fl oz	3.3	3.2	0.0	0.0	0.7
3. Velum Prime	In furrow*	6.0 fl oz	3.3	3.2	0.0	0.0	0.1
Nontreated Seed							
4. Nontreated	-	-	1.2	1.1	0.0	1.5	14.5
5. VBC-90063B 15	In furrow*	8.0 fl oz	1.6	1.4	0.0	0.2	7.5
6. Velum Prime	In furrow*	6.0 fl oz	2.1	2.3	0.0	0.2	2.1
LSD(P<0.05)	-		0.5	0.7	N. S.	1.1	4.2

Note: Seed was Flo-Run 331 (lot #7011) and was treated by UGA.

Germination (w/ Rancona): 82%

A. niger : 53%

A. flavus : 77%

Lasiodiplodia : 4%

Rhizopus : 10%

Treatments 1-3 were treated with Rancona V PD at 4 oz/100 lbs.

*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.

VALENT SEED TREATMENT TEST, 2022

LANG FARM, SOUTH FIELD

Treatments	App's	Rate/A	TSWV[3] 4-Aug	Roots/ft[4] 23-Sep	Yield lbs/A
Trt w/ Rancona					
1. Nontreated	-	-	53.2	2.4	4706
2. VBC-90063B 15	In furrow*	8.0 fl oz	39.6	2.6	4629
3. Velum Prime	In furrow*	6.0 fl oz	46.4	2.8	4911
Nontreated Seed					
4. Nontreated	-	-	44.0	0.5	2708
5. VBC-90063B 15	In furrow*	8.0 fl oz	44.0	0.7	3335
6. Velum Prime	In furrow*	6.0 fl oz	44.0	1.3	3854
LSD(P<0.05)	-		N. S.	0.4	917

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, 2022

LANG FARM, SOUTH FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0.50	0	0.50	0	0
2	0	0	0.50	0	0	0	0.30	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0.20	0	0.50	1.80	0
5	0	1.20	0	0.25	0.50	0.50	0	0
6	0	0.30	0.40	0.50		1.00	0	0
7	0	0	0	0	0.50	0.10	0	0
8	0	0	0	0	1.20	1.30	2.30	0
9	0.20	0	0	0	0	0.60	0	0
10	0.20	0	0	0.40	0	0	0.40	0
11	0.50	0	0	0	0.60	0.50	0	0
12	0	0	0	0	0.15	0	0	1.20
13	0	0	0	0.50	0	0	0	0.20
14	0	0	0	2.70	0.90	0	0	0
15	0.30	0	0	0	1.80	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0.70	0	0	0	0	0	0
18	1.60	0	0	0	0	0	0	0
19	0.30	0	0	0	1.00	0.60	0	0
20	0	0	0	0.50	0.30	0	0	0
21	0	0	0	0	0.50	0	0	0
22	0	0	0.20	0.20	0	0	0	0
23	0.20	0	0	0.50	0	0	0	0
24	0	0	0.60	0	0.30	0	0	0
25	0	0	0	0	0	0.70	0	0
26	0	0	0.15	0	0	0	0	0.20
27	0	0	0	0.50	0.40	0.30	0	0
28	0	0	0	0	0	0	0	0
29	0	0	0	1.20	0	0	0	0
30	0	0	0	0	0	0	0	0
31	1.20	0	0	0	0	0	0	0
TOTAL (inches)	**4.50**	**2.20**	**1.85**	**7.95**	**8.15**	**6.60**	**4.80**	**1.60**

FMC-BAYER TEST, 2022

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: TifNV-HiOL

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with two 80015 flat fan tip per row and 50 mesh ball check screens. Additional treatment sprays applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.

2. Treatment sprays: In furrow sprays applied at planting on April 28. Additional treatment sprays applied on June 3, June 17, June 30, July 14, July 28, Aug. 8, and Aug. 22. Propulse application was washed in afterwards.

D. ADDITIONAL INFORMATION:

1. Location:	Lang Farm, New Field, Tifton, GA 31794 Coordinates: 31.522612, -83.549321
2. Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3. Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4. Soil Fertility:	pH –6.42 P –17.8 K –40.5 Ca –598 Mg –29.6
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 (1.3 pt/a) on Apr. 22. Rototilled to incorporate.
6. Insecticides:	Thimet (5 lbs/a) on April 28.
7. Planting Info:	TifNV-HiOL, 6 seed/ft (2” deep) on April 28.

8. Harvest Dates: Dug – Sep. 21 Picked – Sep. 26

E: SUMMARY:

This as a very good moderate pressure test for white mold, but low pressure for leaf spot intensity. Although the white mold counts were high (40%) in nontreated plots, much of this came in late and was not well developed. This accounts for the lack of more dramatic yield differences among treatments. There were notable differences in efficacy for both leaf spot and white mold.

FMC-BAYER TEST, 2022

LANG FARM, NEW FIELD

Treatment	App's	Rate/A	LS[1] 21-Sep	WM[2] 21-Sep	Yield lbs/A
1. Untreated	-	-	4.9	40.5	4185
2. Bravo W'stik	1	1.5 pt	2.9	8.0	4898
Lucento	2 & 4	5.5 fl oz			
Convoy	3	32.0 fl oz			
+ Bravo		1.5 pt			
Elatus 45WG	5	9.5 oz			
Provost Silver	6	13.0 fl oz			
Bravo W'stik	7	1.5 pt			
+ Muscle		7.2 fl oz			
3. Bravo W'stik	1	1.5 pt	2.5	11.0	4426
Provysol	2	5.0 fl oz			
+ Muscle		7.2 fl oz			
Lucento	3 & 5	5.5 fl oz			
Convoy	4	32.0 fl oz			
+ Bravo		1.5 pt			
Elatus 45WG	6	9.5 oz			
Provost Silver	7	13.0 fl oz			
4. Bravo W'stik	1	1.5 pt	2.4	11.5	4770
Provysol	2	5.0 fl oz			
+ Muscle		7.2 fl oz			
Convoy	3	32.0 fl oz			
+ Bravo		1.5 pt			
Lucento	4 & 6	5.5 fl oz			
Elatus 45WG	5	9.5 oz			
Provost Silver	7	13.0 fl oz			
5. Bravo W'stik	1	1.5 pt	2.6	10.0	4930
Lucento	2 & 4	5.5 fl oz			
Convoy	3 & 5	32.0 fl oz			
+ Bravo		1.5 pt			
Bravo W'stik	6	1.5 pt			
+ Muscle		7.2 fl oz			
Bravo W'stik	7	1.5 pt			

FMC-BAYER TEST, 2022

LANG FARM, NEW FIELD

Treatment	App's	Rate/A	LS[1] 21-Sep	WM[2] 21-Sep	Yield lbs/A
6. Bravo W'stik	1	1.5 pt	2.8	8.0	4241
Lucento	2 & 4	5.5 fl oz			
Excalia	3 & 5	4.0 fl oz			
+ Bravo		1.5 pt			
Bravo W'stik	6	1.5 pt			
+ Muscle		7.2 fl oz			
Bravo W'stik	7	1.5 pt			
7. Bravo W'stik	1	1.5 pt	2.6	8.0	4890
Lucento	2 & 4	5.5 fl oz			
Elatus 45WG	3 & 5	9.5 oz			
Bravo W'stik	6	1.5 pt			
+ Muscle		7.2 fl oz			
Bravo W'stik	7	1.5 pt			
8. Alto	1	5.5 fl oz	2.4	8.5	4609
+ Bravo		1.0 pt			
Bravo	2	1.5 pt			
Elatus 45WG	3 & 5	7.3 oz			
+ Miravis		3.4 fl oz			
Bravo	7	1.5 pt			
9. Elatus	2	7.3 oz	3.0	6.5	5049
Elatus 45WG	3 & 5	7.3 oz			
+ Miravis		3.4 fl oz			
Bravo	6 & 7	1.5 pt			
10. Bravo	1	1.5 pt	3.0	8.0	5122
Priaxor	2	6.0 fl oz			
Convoy	3 & 5	32.0 fl oz			
+ Provysol		5.0 fl oz			
Priaxor	4	8.0 fl oz			
Bravo W'stik	6	1.5 pt			
+ Muscle		7.2 fl oz			
Bravo W'stik	7	1.5 pt			

FMC-BAYER TEST, 2022

LANG FARM, NEW FIELD

Treatment	App's	Rate/A	LS[1] 21-Sep	WM[2] 21-Sep	Yield lbs/A
11. Velum	In furrow	6.5 fl oz	2.9	12.5	4506
Absolute	2	3.5 fl oz			
Propulse	3*	13.6 fl oz			
Provost Silver	4 & 6	13.0 fl oz			
Excalia	5	2.5 fl oz			
+ Bravo		1.5 pt			
Bravo	7	1.5 pt			
12. Velum	In furrow	6.5 fl oz	2.6	6.5	4930
Absolute	2	3.5 fl oz			
Excalia	3 & 5	2.5 fl oz			
+ Bravo		1.5 pt			
Provost Silver	4 & 6	13.0 fl oz			
Bravo	7	1.5 pt			
13. Bravo	1	1.5 pt	2.5	12.0	4858
Absolute	2	3.5 fl oz			
Excalia	3 & 5	2.5 fl oz			
+ Bravo		1.5 pt			
Provost Silver	4 & 6	13.0 fl oz			
Bravo	7	1.5 pt			
14. Elatus	2	7.3 oz	2.4	7.0	4514
+ Microthiol S		5.0 lb			
Elatus 45WG	3 & 5	7.3 oz			
+ Miravis		3.4 fl oz			
+ Microthiol S		5.0 lb			
Bravo	6 & 7	1.5 pt			
15. Bravo	1, 2, 7	1.5 pt	3.6	25.5	4482
Muscle	3 - 6	7.2 fl oz			
16. Bravo	1, 2, 7	1.5 pt	2.4	25.0	4473
Muscle	3 - 6	7.2 fl oz			
+ Microthiol S		5.0 lb			
17. Bravo	1 - 7	1.5 pt	2.9	20.0	4241
LSD(P<0.05)	-	-	0.8	9.2	927

* Propulse washed in.

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

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

BASF FUNGICIDE TEST, 2022

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

B. EXPERIMENTAL DESIGN:

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

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 applied on June 3, June 17, June 30, July 14, July 28, Aug. 8, and Aug. 22.

D. ADDITIONAL INFORMATION:

1. Location:	Lang Farm, New Field, Tifton, GA 31794 Coordinates: 31.522612, -83.549321
2. Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3. Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4. Soil Fertility:	pH –6.42 P –17.8 K –40.5 Ca –598 Mg –29.6
Soil type:	Tifton loamy sand, 2 – 5% slope.
5. Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 22. Rototilled to incorporate.
6. Insecticides:	Thimet (5 lbs/a) on April 28.
7. Planting Info:	TifNV-HiOL, 6 seed/ft (2” deep) on April 28.
8. Harvest Dates:	Dug – Sep. 21 Picked – Sep. 26

E: SUMMARY:

This as a very good moderate pressure test for white mold, but low pressure for leaf spot intensity. Although the white mold counts were high (25%) in nontreated plots, much of this came in late and was not well developed. This accounts for the lack of more dramatic yield differences among treatments. There were notable differences in efficacy for both leaf spot and white mold.

BASF FUNGICIDE TEST, 2022

LANG FARM, NEW FIELD

Treatment	App's	Rate/A	LS[1] 21-Sep	WM[2] 21-Sep	Yield lbs/A
1. Nontreated	-	-	5.0	25.0	4426
2. Bravo	2	1.5 pt	2.5	12.5	4969
Bravo	3 & 5	1.5 pt			
+ 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	2.9	15.5	5017
Bravo	3 & 5	1.5 pt			
+ Convoy		32.0 fl oz			
Provysol	4 & 6	3.0 fl oz			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			
4. Priaxor	2	6.0 fl oz	2.4	9.0	5274
Bravo	3 & 5	1.5 pt			
+ Convoy		32.0 fl oz			
Provysol	4 & 6	3.0 fl oz			
+ Orius 3.6F		7.2 fl oz			
Bravo	7	1.5 pt			
5. Priaxor	2	6.0 fl oz	2.5	10.0	5049
Bravo	3 & 5	1.5 pt			
+ Convoy		32.0 fl oz			
Provost Silver	4 & 6	13.0 fl oz			
Bravo	7	1.5 pt			
6. Priaxor	2	6.0 fl oz	2.5	15.0	4721
Provysol	3 & 5	3.0 fl oz			
+ Orius		7.2 fl oz			
Bravo	4 & 6	1.5 pt			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			

BASF FUNGICIDE TEST, 2022

LANG FARM, NEW FIELD

Treatment	App's	Rate/A	LS[1] 21-Sep	WM[2] 21-Sep	Yield lbs/A
7. Priaxor	2	6.0 fl oz	2.8	8.5	5034
Provysol	3 & 5	5.0 fl oz			
+ Orius		7.2 fl oz			
Bravo	4 & 6	1.5 pt			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			
8. Priaxor	2	6.0 fl oz	2.6	11.5	5106
Provost Silver	3 & 5	13.0 fl oz			
Bravo	4 & 6	1.5 pt			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			
9. Priaxor	2	6.0 fl oz	2.8	10.5	4795
Excalia	3 & 5	3.0 oz			
+ Bravo		1.5 pt			
Provysol	4 & 6	3.0 fl oz			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			
10. Priaxor	2	6.0 fl oz	2.8	4.5	4962
Excalia	3 & 5	3.0 oz			
+ Bravo		1.5 pt			
Provost Silver	4 & 6	13.0 fl oz			
Bravo	7	1.5 pt			
11. Priaxor	2	6.0 fl oz	2.6	8.0	5162
Bravo	3 & 5	1.5 pt			
+ Convoy		32.0 fl oz			
BAS752 11F	4 & 6	6.5 fl oz			
Bravo	7	1.5 pt			
12. Priaxor	2	6.0 fl oz	2.5	10.5	5226
BAS752 11F	3 & 5	6.5 fl oz			
Bravo	4 & 6	1.5 pt			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			

BASF FUNGICIDE TEST, 2022

LANG FARM, NEW FIELD

Treatment	App's	Rate/A	LS[1] 21-Sep	WM[2] 21-Sep	Yield lbs/A
13. Alto	1	5.5 fl oz	2.9	9.0	5154
+ Bravo		1.5 pt			
Bravo	2	1.5 pt			
Elatus 45WG	3 & 5	7.3 oz			
+ Miravis		3.4 fl oz			
Bravo	7	1.5 pt			
14. Alto	1	5.5 fl oz	2.6	12.0	4930
+ Bravo		1.5 pt			
Bravo	2	1.5 pt			
Elatus 45WG	3 & 5	7.3 oz			
+ Miravis		3.4 fl oz			
+ Microthiol S		5.0 lb			
Bravo	7	1.5 pt			
15. Bravo	1 – 7	1.5 pt	3.1	24.5	4826
16. Bravo	1, 2, 4, 6 & 7	1.5 pt	2.5	13.5	5001
Abound	3 & 5	18.0 fl oz			
17. Bravo	1, 2, 4, 6 & 7	1.5 pt	2.3	12.0	4681
Abound	3 & 5	18.0 fl oz			
+ Microthiol S		5.0 lb			
LSD(P<0.05)			0.7	7.6	676

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 + IRRIGATION, 2022

LANG FARM, NEW FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0	0	0	0
2	0	0	0	0.60	0	0	0.30	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0.20	0	0.50	1.80	0
5	0	1.20	0	0	0	0	0	0
6	0	0.30	0.40	0.25	0	1.00	0	0
7	0	0	0	0	0	0.10	0	0
8	0	0	0	0	1.20	1.30	2.30	0
9	0.20	0	0	0	0	0.60	0	0
10	0.20	0	0	0	0	0	0.40	0
11	0.50	0	0	0	0.60	0.50	0	0
12	0	0	0	0	0.15	0	0	1.20
13	0	0	0	0	0	0	0	0.20
14	0	0	0	2.70	0.90	0	0	0
15	0.30	0	0	0	1.80	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0.70	0	0	0	0	0	0
18	1.60	0	0	0	0	0	0	0
19	0.30	0	0	0	1.00	0.60	0	0
20	0	0	0	0	0.30	0	0	0
21	0	0	0	0	0.50	0	0	0
22	0	0	0.20	0	0	0	0	0
23	0.20	0	0	0.20	0	0	0	0
24	0	0	0.60	0	0.30	0	0	0
25	0	0	0	0	0	0.70	0	0
26	0	0	0.15	0	0	0	0	0.20
27	0	0.50	0	0	0	0.30	0	0
28	0	0	0	0	0	0	0	0
29	0	0	0	1.20	0	0	0	0
30	0	0	0	0	0	0	0	0
31	1.20	0	0	0	0	0	0	0
TOTAL (inches)	**4.50**	**2.70**	**1.35**	**5.15**	**6.75**	**5.60**	**4.80**	**1.60**

ADAMA FUNGICIDE TEST, 2022

A. PURPOSE: To evaluate the comparative 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: TifNV-HiOL

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 3, June 17, June 30, July 14, July 28, Aug. 8, and Aug. 22.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, Cotton Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.0 P –45.7 K –38.4 Ca –405 Mg –15.0
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 22. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6.	Insecticides:	Thimet (5 lbs/a) on April 28.
7.	Planting Info:	TifNV-HiOL, 6 seed/ft (2” deep) on April 28.
8.	Harvest Dates:	Dug – Sep. 19 Picked – Sep. 22

E: SUMMARY:

This test had modest pressure for white mold, and low pressure for leaf spot intensity. The white mold counts were not well developed as it came in late, and there was not good definition among treatments. The reasons for this are unclear. This accounts for the lack of more dramatic yield differences among treatments, although several did stand out with highly significant differences.

ADAMA FUNGICIDE TEST, 2022

LANG FARM, COTTON FIELD

Treatment	App's	Rate/A	WM[1] 19-Sep	LS[2] 16-Sep	Yield lbs/A
1. Nontreated	-	-	31.5	4.2	4625
2. Bravo	1, 2, 7	1.5 pt	38.5	3.3	4778
MCW 465	3 - 6	5.47 fl oz			
3. Bravo	1, 2, 7	1.5 pt	35.0	3.5	5162
MCW 465	3 - 6	6.84 fl oz			
4. Bravo	1, 2, 7	1.5 pt	37.0	3.5	4842
MCW 465	3 - 6	8.21 fl oz			
5. Bravo	1, 2, 7	1.5 pt	27.0	2.9	5106
ADM03500.F.2.B	3 - 6	4.38 fl oz			
6. Bravo	1, 2, 7	1.5 pt	29.0	3.2	5074
ADM03500.F.2.B	3 - 6	5.47 fl oz			
7. Bravo	1, 2, 7	1.5 pt	20.0	3.2	5258
MCW 465	3 - 6	5.47 fl oz			
+ ADM03500.F.2.B		4.38 fl oz			
8. Bravo	1, 2, 7	1.5 pt	28.5	3.3	5577
MCW 465	3 - 6	5.47 fl oz			
+ ADM03500.F.2.B		5.47 fl oz			
9. Bravo	1, 2, 7	1.5 pt	21.5	3.1	4930
MCW 465	3 - 6	6.84 fl oz			
+ ADM03500.F.2.B		4.38 fl oz			
10. Bravo	1, 2, 7	1.5 pt	24.0	3.2	4874
MCW 465	3 - 6	6.84 fl oz			
+ ADM03500.F.2.B		5.47 fl oz			
11. Bravo	1, 2, 7	1.5 pt	19.5	3.2	5698
MCW 465	3 - 6	8.21 fl oz			
+ ADM03500.F.2.B		4.38 fl oz			
12. Bravo	1, 2, 7	1.5 pt	16.0	3.3	5762
MCW 465	3 - 6	8.21 fl oz			
+ ADM03500.F.2.B		5.47 fl oz			
13. Bravo	1, 2, 7	1.5 pt	31.5	3.7	5098
Convoy	3 - 6	16.0 fl oz			
LSD(P<0.05)	-	-	12.6	0.5	637

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

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

BASF FUNGICIDE TEST, 2022

A. PURPOSE: To evaluate the comparative efficacy of commercial and experimental applied fungicides for the control of 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: TifNV-HiOL

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 17, June 30, July 14, July 28, and Aug. 8.

3. Cover Sprays: Chlorothalonil (24 oz/a) was applied on June 3, June 17, June 30, July 14, July 29, Aug. 9, and Aug. 23.

D. ADDITIONAL INFORMATION:

1. Location:	Rigdon Farm, Cotton Field, Tifton, GA, 31794
2. Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3. Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4. Soil Fertility:	pH –6.0 P –45.7 K –38.4 Ca –405 Mg –15.0
Soil type:	Tifton loamy sand, 2 – 5% slope.
5. Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 22. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6. Insecticides:	Thimet (5 lbs/a) on April 28.

7. Planting Info: TifNV-HiOL, 6 seed/ft (2" deep) on April 28.

8. Harvest Dates: Dug – Sep. 19 Picked – Sep. 22

E: SUMMARY:

This test had modest pressure for white mold, even though this field has had higher levels of disease in years past. The white mold counts were not well developed as it came in late, although there were some clear differences among treatments. The reasons for this are unclear. This accounts for the lack of more dramatic yield differences among treatments, although several did stand out with highly significant differences.

BASF FUNGICIDE TEST, 2022

LANG FARM, COTTON FIELD

Treatment	App's	Rate/A	WM[1] 19-Sep	Yield lbs/A
1. Nontreated	-	-	14.5	5146
2. Priaxor	2	6.0 fl oz	7.5	5271
Elatus	3 & 5	9.5 oz		
Microthiol S	4 & 6	5.0 lb		
3. Priaxor	2	6.0 fl oz	7.5	5306
Provysol	3 & 5	3.43 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
Provysol	4 & 6	3.43 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
+ Microthiol S		5.0 lb		
4. Priaxor	2	6.0 fl oz	8.5	5482
Provysol	3 & 5	5.12 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
Provysol	4 & 6	5.12 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
+ Microthiol S		5.0 lb		
5. Priaxor	2	6.0 fl oz	8.0	6051
BAS75211F	3 & 5	4.5 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
BAS75211F	4 & 6	4.5 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
+ Microthiol S		5.0 lb		
6. Priaxor	2	6.0 fl oz	6.5	5947
BAS75211F	3 & 5	6.5 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
BAS75211F	4 & 6	6.5 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
+ Microthiol S		5.0 lb		

BASF FUNGICIDE TEST, 2022

LANG FARM, COTTON FIELD

Treatment	App's	Rate/A	WM[1] 19-Sep	Yield lbs/A
7. Priaxor	2	6.0 fl oz	6.0	5880
BAS76201F	3 & 5	14.85 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
BAS76201F	4 & 6	14.85 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
+ Microthiol S		5.0 lb		
8. Priaxor	2	6.0 fl oz	9.0	5738
BAS76201F	3 & 5	22.25 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
BAS76201F	4 & 6	22.25 fl oz		
+ Tebustar 3.6F		7.2 fl oz		
+ Microthiol S		5.0 lb		
9. Priaxor	2	6.0 fl oz	10.5	5825
Excalia	3 & 5	3.0 fl oz		
Microthiol S	4 & 6	5.0 lb		
LSD(P<0.05)	-	-	6.3	785

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

SYNGENTA FUNGICIDE TEST, 2022

A. PURPOSE: To evaluate the comparative 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: TifNV-HiOL

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 3, June 17, June 30, July 14, July 28, Aug. 8, and Aug. 22.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, Cotton Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.0 P –45.7 K –38.4 Ca –405 Mg –15.0
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 22. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6.	Insecticides:	Thimet (5 lbs/a) on April 28.
7.	Planting Info:	TifNV-HiOL, 6 seed/ft (2” deep) on April 28.
8.	Harvest Dates:	Dug – Sep. 19 Picked – Sep. 22

E: SUMMARY:

This test had high pressure for white mold, and low pressure for leaf spot intensity. The white mold loci were well developed, and there was good definition among treatments. These resulted in large and significant yield differences among treatments.

SYNGENTA FUNGICIDE TEST I, 2022

LANG FARM, COTTON FIELD

Treatment	App's	Rate/A	LS[1] 16-Sep	WM[2] 19-Sep	Yield lb/A
1. Untreated	-	-	4.3	38.0	4858
2. Bravo W'stik	1 & 7	1.5 pt	2.9	11.0	6267
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. Priaxor	1.5	6.0 fl oz	3.1	5.5	6106
Provysol	3 & 5	5.0 fl oz			
+ Excalia		3.0 fl oz			
Priaxor	4	8.0 fl oz			
Bravo	6	1.5 pt			
+ Orius 3.6		7.2 fl oz			
Bravo	7	1.5 pt			
4. Bravo	1, 2, 4 & 7	1.0 pt	3.2	12.0	5930
Excalia	3 & 5	4.0 fl oz			
+ Bravo		1.5 pt			
Bravo	6	1.5 pt			
+ Orius 3.6		7.2 fl oz			
5. Lucento	1.5 & 4	5.5 fl oz	3.1	8.5	6522
Bravo	3	1.5 pt			
+ Convoy		32.0 fl oz			
Elatus 45WG	5	9.5 oz			
Provost Silver	6	13.0 fl oz			
Orius	7	7.2 fl oz			
+ Bravo		1.0 pt			
6. Bravo W'stik	1 & 4	1.0 pt	3.4	2.5	6411
+ Orius		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			

SYNGENTA FUNGICIDE TEST I, 2022

LANG FARM, COTTON FIELD

Treatment	App's	Rate/A	LS[1] 16-Sep	WM[2] 19-Sep	Yield lb/A
7. Alto	1.5	5.5 fl oz	3.0	5.5	6387
+ Bravo		1.5 pt			
Elatus 45WG	3 & 5	9.5 oz			
+ Miravis		3.4 fl oz			
Bravo W'stik	4	1.0 pt			
+ Orius		7.2 fl oz			
Alto	6	5.5 fl oz			
+ Bravo		1.0 pt			
Bravo	7	1.5 pt			
8. Alto	1	5.5 fl oz	3.1	3.0	6546
+ Elatus		7.3 oz			
Bravo	2	1.0 pt			
+ Orius		7.2 fl oz			
Elatus 45WG	3 & 5	7.3 oz			
+ Miravis		3.4 fl oz			
Alto	6.5	5.5 fl oz			
+ Bravo		1.5 pt			
9. A24031A DF	1, 3 & 5	6.87 oz	3.2	10.0	6338
Bravo	2	1.0 pt			
+ Orius		7.2 fl oz			
Alto	6.5	5.5 fl oz			
+ Bravo		1.5 pt			
10. Bravo W'stik	1	1.0 pt	3.2	6.5	6314
+ Orius		7.2 fl oz			
Alto	2	5.5 fl oz			
+ Bravo		1.0 pt			
Elatus 45WG	3 & 5	9.5 oz			
+ Miravis		3.4 fl oz			
Alto	6.5	5.5 fl oz			
+ Bravo		1.5 pt			

SYNGENTA FUNGICIDE TEST I, 2022					
LANG FARM, COTTON FIELD					
			LS[1]	WM[2]	Yield
Treatment	App's	Rate/A	16-Sep	19-Sep	lb/A
11. Bravo W'stik	1	1.0 pt	2.8	7.0	6291
+ Orius		7.2 fl oz			
Alto	2	5.5 fl oz			
+ Bravo		1.0 pt			
A24031A DF	3 & 5	8.9 oz			
Alto	6.5	5.5 fl oz			
+ Bravo		1.5 pt			
12. Bravo W'stik	1	1.0 pt	3.1	9.0	6266
+ Orius		7.2 fl oz			
Alto	2	5.5 fl oz			
+ Bravo		1.0 pt			
Elatus 45WG	3 & 5	9.5 oz			
+ Miravis Top		13.7 fl oz			
Alto	7	5.5 fl oz			
+ Bravo		1.5 pt			
LSD(P<0.05)	-	-	0.5	7.4	668
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 FUNGICIDE TEST, 2022

A. PURPOSE: To evaluate the comparative efficacy of commercial applied fungicides 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: TifNV-HiOL

C. APPLICATION OF TREATMENTS:

1. Equipment: Treatment sprays were applied at 45 PSI at 2.5 MPH in 20 GPA using a CO2 unit with six SX-6 tips and 50 mesh ball check screens.

2. Treatment sprays: Sprays 1-7 were applied on June 3, June 17, June 30, July 14, July 28, Aug. 8, and Aug. 22.

D. ADDITIONAL INFORMATION:

1.	Location:	Rigdon Farm, Cotton Field, Tifton, GA, 31794
2.	Crop History:	Peanut – 2021, Peanut – 2020, Peanut – 2019
3.	Land Preparation:	Fertilizer (5-15-30) was broadcast at 600 lb/a, field was deep turned, beds marked 6 ft, and fertilizer turned under on Apr. 12. On July 6, 1,000 lbs/a of gypsum was applied.
4.	Soil Fertility:	pH –6.0 P –45.7 K –38.4 Ca –405 Mg –15.0
	Soil type:	Tifton loamy sand, 2 – 5% slope.
5.	Herbicides:	PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) on Apr. 22. Rototilled to incorporate. POST: Select (16 oz/a) on July 6.
6.	Insecticides:	Thimet (5 lbs/a) on April 28.
7.	Planting Info:	TifNV-HiOL, 6 seed/ft (2" deep) on April 28.
8.	Harvest Dates:	Dug – Sep. 19 Picked – Sep. 22

E: SUMMARY:

This test had high pressure for white mold, and low pressure for leaf spot intensity. The white mold counts were fairly well developed but came in late. There was reasonably good definition among treatments, but some did not perform as well as might be expected. The reasons for this are unclear. There were significant yield differences, but again not as dramatic as might be expected.

NICHINO FUNGICIDE TEST, 2022

LANG FARM, COTTON FIELD

Treatment	App's	Rate/A	LS[1] 16-Sep	WM[2] 19-Sep	Yield lbs/A
1. Nontreated	-	-	4.1	48.0	4995
2. Bravo	1, 2, & 7	1.5 pt	3.3	26.0	5982
Bravo	3 - 6	1.5 pt			
+ Convoy		16.0 fl oz			
3. Bravo	1, 2, & 7	1.5 pt	3.2	16.0	6098
Proline	3 - 6	5.7 fl oz			
4. Bravo	1, 2, & 7	1.5 pt	3.0	32.4	5343
Proline	3 - 6	3.0 fl oz			
5. Bravo	1, 2, & 7	1.5 pt	2.9	10.4	6157
Convoy	3 - 6	16.0 fl oz			
+ Proline		5.7 fl oz			
6. Bravo	1, 2, & 7	1.5 pt	3.1	15.2	5924
Convoy	3 - 6	16.0 fl oz			
+ Proline		3.0 fl oz			
7. Bravo	1, 2, 4, 6 & 7	1.5 pt	3.2	20.4	5634
Convoy	3 & 5	32.0 fl oz			
+ Proline		5.7 fl oz			
8. Bravo	1, 2, 4, 6 & 7	1.5 pt	3.2	24.8	5866
Convoy	3 & 5	32.0 fl oz			
+ Proline		3.0 fl oz			
9. Bravo	1, 2, 4, 6 & 7	1.5 pt	3.5	25.2	5576
Convoy	3 & 5	32.0 fl oz			
+ Pyraziflumid		3.1 fl oz			
10. Priaxor	2	6.0 fl oz	3.1	18.0	6157
Bravo	3 & 5	1.0 pt			
+ Alto		5.5 fl oz			
+ Convoy		32.0 fl oz			
Bravo	4 & 6	1.0 pt			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			
11. Pyraziflumid	2	4.67 fl oz	3.4	19.6	6098
Bravo	3 & 5	1.0 pt			
+ Alto		5.5 fl oz			
+ Convoy		32.0 fl oz			
Bravo	4 & 6	1.0 pt			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			
LSD(P<0.05)	-	-	0.4	11.2	498

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 + IRRIGATION, 2022

LANG FARM, COTTON FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0.30	0
3	0	0	0	0	0	0	0	0
4	0	0	0	0.20	0	0.50	1.80	0.30
5	0	1.20	0	0	0	0	0	0
6	0	0.30	0.40	0.25	0	1.00	0	0
7	0	0	0	0	0	0.10	0	0
8	0	0	0	0	1.20	1.30	2.30	0
9	0.20	0	0	0	0	0.60	0	0
10	0.20	0	0	0	0	0	0.40	0
11	0.50	0	0	0	0.60	0.50	0	0
12	0	0	0	0	0.15	0	0	1.20
13	0	0	0	0	0	0	0	0.20
14	0	0	0	2.70	0.90	0	0	0
15	0.30	0	0	0	1.80	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0.70	0.30	0	0	0	0	0
18	1.60	0	0.30	0	0	0	0	0
19	0.30	0	0.30	0	1.00	0.60	0	0
20	0	0	0	0	0.30	0	0	0
21	0	0	0	0	0.50	0	0	0
22	0	0	0.20	0	0	0	0	0
23	0.20	0	0	0.20	0	0	0	0
24	0	0	0.60	0	0.30	0	0	0
25	0	0	0	0	0	0.70	0	0
26	0	0	0.15	0	0	0	0	0.20
27	0	0.50	0	0	0	0.30	0	0
28	0	0	0	0	0	0	0	0
29	0	0	0	1.20	0	0	0	0
30	0	0	0	0	0	0	0	0
31	1.20	0	0	0	0	0	0	0
TOTAL (inches)	**4.50**	**2.70**	**2.25**	**4.55**	**6.75**	**5.60**	**4.80**	**1.90**

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITA (PECAN FUNGICIDE TEST I, 2022)

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. 4, Apr. 19, Apr. 26, May 2, May 18, June 1, June 9, June 16, June 30, July 18, July 22, July 29, and Aug. 11.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, North Orchard, 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: Intrepid Edge (8 oz/a) on May 27.

4. Herbicides: Alion (6 oz/a) + Roundup (2 qt/a) on April 11.

E: SUMMARY:

This was a very high-pressure test, especially for nut scab due to the frequent rains in the latter part of the summer. The early season was actually fairly dry, and the incidence of other foliar diseases like Neofusicoccum leaf dieback was quite low. Large and significant differences in efficacy of treatments for both leaf and nut scab were found.

PECAN FUNGICIDE TEST I, WICHITA, NORTH ORCHARD, 2022

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	Leaf Inc[1] 25-Aug	Leaf Sev[2] 25-Aug	Nut Inc[3] 25-Aug	Nut Sev[4] 25-Aug	% Def.[5] 11-Nov
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	15.7	1.5	47.0	1.8	15.0	1.3	100.0	30.1	26.3
+ Elast 400F	25.0 fl oz										
Cevya	3.0 fl oz	2, 4, 6, 8, 10									
+ Elast	25.0 fl oz										
2. Kphite	2.0 qt	1 & 3	17.8	1.9	67.0	2.8	21.1	1.8	100.0	85.9	36.3
Cevya	3.0 fl oz	2 & 4									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9									
+ Elast 400F	25.0 fl oz										
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	12.4	1.2	21.4	1.0	14.1	1.2	96.1	15.3	33.8
+ Elast 400F	25.0 fl oz										
Amistar Top	14.0 fl oz	2, 4, 6, 8, 10									
+ Remain	8.0 fl oz										
4. Super Tin 4L	6.0 fl oz	1, 4, 7, 10	11.2	1.2	24.1	1.3	15.6	1.0	100.0	64.8	36.3
+ Elast 400F	25.0 fl oz										
Amistar Top	14.0 fl oz	2.5, 5.5, 8.5									
+ Remain	8.0 fl oz										
5. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	9.5	0.9	19.3	0.7	18.8	1.5	94.8	31.6	32.5
+ 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, 4, 7, 10	13.2	1.5	22.1	1.0	10.8	0.8	98.4	39.3	36.3
+ Elast 400F	25.0 fl oz										
Miravis Prime	6.84 fl oz	2.5, 5.5, 8.5									
+ Remain	8.0 fl oz										
7. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	12.0	1.1	23.2	0.9	17.5	1.2	99.0	15.6	28.8
+ Elast 400F	25.0 fl oz										
Miravis Top	13.6 fl oz	2, 4, 6, 8, 10									
+ Remain	8.0 fl oz										
8. Super Tin 4L	6.0 fl oz	1, 4, 7, 10	16.3	1.8	42.6	1.5	12.7	0.9	100.0	80.0	36.3
+ Elast 400F	25.0 fl oz										
Miravis Top	13.6 oz	2.5, 5.5, 8.5									
+ Remain	8.0 fl oz										
9. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	14.9	1.3	11.9	0.4	17.3	1.5	96.1	19.4	36.3
+ Elast 400F	25.0 fl oz										
Miravis Prime	9.1 fl oz	2, 4, 6, 8, 10									
+ Remain	8.0 fl oz										
10. Super Tin 4L	6.0 fl oz	1, 4, 7, 10	18.4	1.6	26.9	1.3	15.4	1.2	100.0	46.8	47.5
+ Elast 400F	25.0 fl oz										
Miravis Prime	9.1 fl oz	2.5, 5.5, 8.5									
+ Remain	8.0 fl oz										
11. Super Tin 4L	9.0 fl oz	1, 2.5, 4, 5.5,	19.5	1.8	51.4	1.8	19.1	1.7	100.0	67.3	35.0
+ Elast 400F	36.0 fl oz	7, 8.5, 10									
12. Kphite	2.0 qt	1 - 4	17.2	1.6	42.8	2.4	16.8	1.7	100.0	41.2	36.3
Super Tin 4L	6.0 fl oz	5 - 10									
+ Elast 400F	25.0 fl oz										
13. Super Tin 4L	6.0 fl oz	1 - 10	16.3	1.6	42.8	1.7	18.9	1.7	100.0	32.1	32.5
+ Elast 400F	25.0 fl oz										
14. Nontreated		-	28.3	3.0	94.5	14.1	37.6	3.1	100.0	98.7	75.0
LSD(P<0.05)			7.2	0.7	16.2	1.7	7.7	0.6	4.1	10.5	21.6

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

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

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

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

% Def[5]=Percent defoliation.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE (PECAN FUNGICIDE TEST I, 2022)

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 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. 4, Apr. 19, Apr. 26, May 2, May 18, June 1, June 9, June 16, June 30, July 18, July 22, July 29, and Aug. 11.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, North Orchard, 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: Intrepid Edge (8 oz/a) on May 27.

4. Herbicides: Alion (6 oz/a) + Roundup (2 qt/a) on April 11.

E: SUMMARY:

This was a very high-pressure test, especially for nut scab due to the frequent rains in the latter part of the summer. The early season was actually fairly dry, and the incidence of other foliar diseases like Neofusicoccum leaf dieback was quite low. Large and significant differences in efficacy of treatments for both leaf and nut scab were found.

PECAN FUNGICIDE TEST I, DESIRABLE, NORTH ORCHARD, 2022

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	Leaf Inc[1] 25-Aug	Leaf Sev[2] 25-Aug	Nut Inc[3] 25-Aug	Nut Sev[4] 25-Aug	% Def.[5] 11-Nov
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	10.4	1.1	20.6	0.7	19.0	1.8	100.0	21.3	63.8
+ Elast 400F	25.0 fl oz										
Cevya	3.0 fl oz	2, 4, 6, 8, 10									
+ Elast	25.0 fl oz										
2. Kphite	2.0 qt	1 & 3	13.8	1.7	30.7	1.3	14.0	1.1	100.0	39.4	58.8
Cevya	3.0 fl oz	2 & 4									
Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9									
+ Elast 400F	25.0 fl oz										
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	12.5	1.3	14.8	0.3	10.8	0.9	93.8	10.2	68.8
+ Elast 400F	25.0 fl oz										
Amistar Top	14.0 fl oz	2, 4, 6, 8, 10									
+ Remain	8.0 fl oz										
4. Super Tin 4L	6.0 fl oz	1, 4, 7, 10	15.1	1.1	17.2	0.4	12.4	1.1	100.0	26.3	58.8
+ Elast 400F	25.0 fl oz										
Amistar Top	14.0 fl oz	2.5, 5.5, 8.5									
+ Remain	8.0 fl oz										
5. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	9.1	1.0	3.1	0.1	9.5	0.7	95.3	7.9	68.8
+ 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, 4, 7, 10	17.0	1.4	20.3	0.6	15.2	0.7	100.0	19.8	65.0
+ Elast 400F	25.0 fl oz										
Miravis Prime	6.84 fl oz	2.5, 5.5, 8.5									
+ Remain	8.0 fl oz										
7. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	4.5	0.4	6.8	0.2	10.3	0.9	88.5	6.2	56.3
+ Elast 400F	25.0 fl oz										
Miravis Top	13.6 fl oz	2, 4, 6, 8, 10									
+ Remain	8.0 fl oz										
8. Super Tin 4L	6.0 fl oz	1, 4, 7, 10	12.9	1.1	12.0	0.4	9.8	0.8	100.0	31.0	61.3
+ Elast 400F	25.0 fl oz										
Miravis Top	13.6 oz	2.5, 5.5, 8.5									
+ Remain	8.0 fl oz										
9. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	4.9	0.6	11.5	0.2	5.2	0.4	100.0	8.0	56.3
+ Elast 400F	25.0 fl oz										
Miravis Prime	9.1 fl oz	2, 4, 6, 8, 10									
+ Remain	8.0 fl oz										
10. Super Tin 4L	6.0 fl oz	1, 4, 7, 10	13.3	1.2	24.0	0.5	8.0	0.8	100.0	20.4	66.3
+ Elast 400F	25.0 fl oz										
Miravis Prime	9.1 fl oz	2.5, 5.5, 8.5									
+ Remain	8.0 fl oz										
11. Super Tin 4L	9.0 fl oz	1, 2.5, 4, 5.5,	18.6	1.6	27.6	0.7	17.0	1.2	100.0	30.5	60.0
+ Elast 400F	36.0 fl oz	7, 8.5, 10									
12. Kphite	2.0 qt	1 - 4	14.9	1.5	33.9	0.9	10.2	0.8	98.4	16.3	62.5
Super Tin 4L	6.0 fl oz	5 - 10									
+ Elast 400F	25.0 fl oz										
13. Super Tin 4L	6.0 fl oz	1 - 10	15.0	1.4	18.8	0.6	9.9	0.8	100.0	15.8	61.3
+ Elast 400F	25.0 fl oz										
14. Nontreated		-	21.0	2.2	89.3	5.4	27.0	2.0	100.0	91.0	86.3
LSD(P<0.05)			6.2	0.6	16.8	0.8	6.2	0.5	5.9	7.7	19.7

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

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

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

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

% Def[5]=Percent defoliation.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITAS AND DESIRABLES (MISCELLANEOUS FUNGICIDE TEST I, 2022)

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. 7, Apr. 21, May 20, June 24, July 8, July 21, and Aug. 5.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, North Orchard, 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: Intrepid Edge (8 oz/a) on May 27.

4. Herbicides: Alion (6 oz/a) + Roundup (2 qt/a) on April 11.

E: SUMMARY:

This was a very high-pressure test, especially for nut scab due to the frequent rains in the latter part of the summer. The early season was actually fairly dry, and the incidence of other foliar diseases like Neofusicoccum leaf dieback was quite low. Large and significant differences in efficacy of treatments for both leaf and nut scab were found.

MISCELLANEOUS FUNGICIDE TEST I, 2022

PONDER FARM, NORTH ORCHARD

DESIRABLE

Treatments	Rate/A	Leaf Inc[1] 6-Jul	Nut Inc[2] 6-Jul	Nut Sev[3] 6-Jul	Leaf Inc[1] 19-Sep	Nut Inc[2] 19-Sep	Nut Sev[3] 19-Sep
1. Badge	1.5 pt	40.0	95.8	4.4	19.4	100.0	78.6
2. Kphite	1.0 qt	13.6	71.4	2.1	7.4	100.0	29.6
+ Badge	1.5 pt						
3. Kphite	2.0 qt	10.6	39.3	1.2	16.4	100.0	32.0
+ Badge	1.5 pt						
4. Ziram	4.0 lb	19.6	33.3	1.0	12.9	83.3	6.4
+ Elast	24 fl oz						
+ Badge	1.5 pt						
5. Kphite	1.0 qt	16.9	78.6	2.4	6.3	100.0	71.4
6. Kphite	2.0 qt	10.5	33.3	0.8	10.4	100.0	40.0
7. Ziram	4.0 lb	10.3	18.8	1.0	8.0	93.8	8.9
+ Elast	24 fl oz						
8. BAS700 08 F	3.5 oz	20.3	40.5	1.3	15.1	100.0	36.4
9. BAS700 08 F	5.5 oz	16.1	57.1	2.4	5.6	100.0	41.4
10. Cevya	5.0 oz	21.8	50.0	0.8	13.6	100.0	20.6
11. Nontreated	-	41.9	100.0	4.6	38.1	100.0	95.8
LSD(P<0.05)	-	14.7	42.4	2.1	10.2	10.4	14.8

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

Nut Inc[2]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[3]=Nut scab severity per terminal (% of shuck area covered with scab).

MISCELLANEOUS FUNGICIDE TEST I, 2022

PONDER FARM, NORTH ORCHARD

WICHITA

Treatments	Rate/A	Leaf Inc[1] 6-Jul	Nut Inc[2] 6-Jul	Nut Sev[3] 6-Jul	Leaf Inc[1] 6-Oct	Nut Inc[2] 6-Oct	Nut Sev[3] 6-Oct
1. Badge	1.5 pt	45.1	100.0	9.1	21.7	100.0	100.0
2. Kphite	1.0 qt	20.8	86.5	6.6	12.7	100.0	100.0
+ Badge	1.5 pt						
3. Kphite	2.0 qt	14.9	92.9	3.7	6.6	100.0	93.3
+ Badge	1.5 pt						
4. Ziram	4.0 lb	30.3	76.7	4.0	23.0	75.0	3.5
+ Elast	24 fl oz						
+ Badge	1.5 pt						
5. Kphite	1.0 qt	20.9	92.9	7.6	7.1	100.0	100.0
6. Kphite	2.0 qt	8.5	90.3	5.5	4.4	100.0	100.0
7. Ziram	4.0 lb	30.9	80.2	2.8	9.6	100.0	47.1
+ Elast	24 fl oz						
8. BAS700 08 F	3.5 oz	27.5	96.4	14.7	5.5	100.0	100.0
9. BAS700 08 F	5.5 oz	26.6	96.9	4.1	10.1	100.0	100.0
10. Cevya	5.0 oz	17.4	97.9	4.4	6.3	100.0	31.7
11. Nontreated	-	64.8	100.0	18.9	30.5	100.0	100.0
LSD(P<0.05)	-	15.6	18.3	10.0	11.2	9.5	14.3

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

Nut Inc[2]=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev[3]=Nut scab severity per terminal (% of shuck area covered with scab).

EVALUATION OF SPRAY TIMINGS AND RESIDUAL OF PHOSPHITE SPRAYS FOR SCAB CONTROL (KPHITE TIMING TEST, 2022)

A. PURPOSE: To evaluate the efficacy of single Kphite 7LP applications against pecan scab on standard commercial cultivars when applied at low and high rates at various times throughout the season.

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. 4, Apr. 11, Apr. 18, Apr. 25, and May 2.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, North Orchard, 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: Intrepid Edge (8 oz/a) on May 27.

4. Herbicides: Alion (6 oz/a) + Roundup (2 qt/a) on April 11.

E: SUMMARY:

While data were somewhat variable, overall the results indicated that residual effects of prepollination single-application sprays of Kphite could persist at least until late July, even on nut scab when the spray had been applied back in April. This was unexpected, and the trials will be repeated in 2023 to verify and further define these effects.

KPHITE TIMING TEST, 2022

PONDER FARM, NORTH ORCHARD

WICHITA

Treatments	Week	Rate/A	Leaf Inc[1] 24-Jun	Nut Inc[2] 24-Jun	Leaf Inc[1] 29-Jul	Leaf Sev[3] 29-Jul	Nut Inc[2] 29-Jul	Nut Sev[4] 29-Jul
1. Kphite 7LP	1	2 pt	27.2	52.6	21.5	1.9	100.0	44.3
2. Kphite 7LP	1	6 pt	22.9	67.7	15.6	1.6	100.0	42.1
3. Kphite 7LP	2	2 pt	23.2	70.8	15.1	1.6	100.0	43.1
4. Kphite 7LP	2	6 pt	10.4	39.4	9.4	1.0	100.0	25.6
5. Kphite 7LP	3	2 pt	15.1	34.8	13.6	1.1	100.0	27.9
6. Kphite 7LP	3	6 pt	11.8	62.9	18.4	1.1	100.0	39.2
7. Kphite 7LP	4	2 pt	28.9	52.4	18.9	1.5	100.0	45.0
8. Kphite 7LP	4	6 pt	18.8	40.6	9.5	1.0	100.0	31.9
9. Kphite 7LP	5	2 pt	34.7	71.0	17.4	1.8	100.0	36.3
10. Kphite 7LP	5	6 pt	24.6	54.6	24.7	2.4	100.0	36.3
11. Nontreated		-	52.5	96.9	24.5	2.5	100.0	63.1
LSD(P<0.05)			16.2	35.1	12.4	1.2	N. S.	17.8

Applications were made on a 1-week schedule.

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

Nut Inc[2]=Nut scab incidence per terminal (% of nuts with any scab).

Leaf Sev[3]=Leaf scab severity per terminal (% of middle leaflet covered with scab).

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

KPHITE TIMING TEST, 2022

PONDER FARM, NORTH ORCHARD

WICHITA

Treatments	Week	Rate/A	Leaf Inc[1] 24-Aug	Leaf Sev[3] 24-Aug	Nut Inc[2] 24-Aug	Nut Sev[4] 24-Aug
1. Kphite 7LP	1	2 pt	7.6	1.1	100.0	89.3
2. Kphite 7LP	1	6 pt	10.0	1.1	100.0	95.0
3. Kphite 7LP	2	2 pt	7.2	0.8	100.0	92.9
4. Kphite 7LP	2	6 pt	6.9	0.8	100.0	83.1
5. Kphite 7LP	3	2 pt	6.5	0.8	100.0	89.8
6. Kphite 7LP	3	6 pt	10.1	1.3	100.0	83.3
7. Kphite 7LP	4	2 pt	19.9	2.4	100.0	92.1
8. Kphite 7LP	4	6 pt	12.0	1.4	100.0	90.0
9. Kphite 7LP	5	2 pt	19.4	2.0	100.0	83.5
10. Kphite 7LP	5	6 pt	18.4	1.8	100.0	93.8
11. Nontreated		-	37.9	4.0	100.0	98.8
LSD(P<0.05)			10.8	1.2	N. S.	10.0

Applications were made on a 1-week schedule.

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

Nut Inc[2]=Nut scab incidence per terminal (% of nuts with any scab).

Leaf Sev[3]=Leaf scab severity per terminal (% of middle leaflet covered with scab).

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

KPHITE TIMING TEST, 2022

PONDER FARM, NORTH ORCHARD

DESIRABLE

Treatments	Week	Rate/A	Leaf Inc[1] 24-Jun	Nut Inc[2] 24-Jun	Leaf Inc[1] 29-Jul	Leaf Sev[3] 29-Jul	Nut Inc[2] 29-Jul	Nut Sev[4] 29-Jul
1. Kphite 7LP	1	2 pt	21.0	47.6	27.8	2.0	100.0	31.1
2. Kphite 7LP	1	6 pt	23.6	42.9	13.1	1.0	100.0	8.6
3. Kphite 7LP	2	2 pt	19.4	29.0	28.5	2.1	100.0	19.3
4. Kphite 7LP	2	6 pt	10.0	21.4	15.0	1.3	100.0	23.8
5. Kphite 7LP	3	2 pt	8.4	22.6	12.4	1.0	100.0	22.4
6. Kphite 7LP	3	6 pt	14.1	8.3	9.6	1.0	100.0	11.3
7. Kphite 7LP	4	2 pt	39.7	64.6	14.9	1.6	100.0	17.9
8. Kphite 7LP	4	6 pt	28.3	31.3	17.1	1.4	100.0	11.1
9. Kphite 7LP	5	2 pt	29.8	25.0	27.9	2.7	100.0	38.2
10. Kphite 7LP	5	6 pt	37.6	4.8	31.4	2.5	100.0	15.8
11. Nontreated		-	42.0	54.2	34.4	3.1	100.0	44.8
LSD(P<0.05)			13.2	35.0	12.9	1.1	N. S.	17.8

Applications were made on a 1-week schedule.

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

Nut Inc[2]=Nut scab incidence per terminal (% of nuts with any scab).

Leaf Sev[3]=Leaf scab severity per terminal (% of middle leaflet covered with scab).

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

KPHITE TIMING TEST, 2022

PONDER FARM, NORTH ORCHARD

DESIRABLE

Treatments	Week	Rate/A	Leaf Inc[1] 24-Aug	Leaf Sev[3] 24-Aug	Nut Inc[2] 24-Aug	Nut Sev[4] 24-Aug
1. Kphite 7LP	1	2 pt	10.7	0.9	100.0	77.5
2. Kphite 7LP	1	6 pt	13.9	1.4	100.0	51.0
3. Kphite 7LP	2	2 pt	11.1	1.3	100.0	81.3
4. Kphite 7LP	2	6 pt	3.0	0.2	100.0	66.0
5. Kphite 7LP	3	2 pt	7.1	0.8	100.0	79.2
6. Kphite 7LP	3	6 pt	7.0	0.8	100.0	68.8
7. Kphite 7LP	4	2 pt	12.4	1.4	100.0	79.8
8. Kphite 7LP	4	6 pt	17.9	2.0	100.0	58.8
9. Kphite 7LP	5	2 pt	18.0	1.6	100.0	82.6
10. Kphite 7LP	5	6 pt	14.8	1.3	100.0	80.6
11. Nontreated		-	29.0	3.1	100.0	95.4
LSD(P<0.05)			11.3	1.1	N. S.	21.3

Applications were made on a 1-week schedule.

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

Nut Inc[2]=Nut scab incidence per terminal (% of nuts with any scab).

Leaf Sev[3]=Leaf scab severity per terminal (% of middle leaflet covered with scab).

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

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE (PECAN FUNGICIDE TEST II, 2022)

A. PURPOSE: To evaluate the efficacy of registered 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: Drip treatments were applied by placing two buckets 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. 7, Apr. 20, May 2, May 19, June 1, June 16, June 30, July 21, July 29, and Aug. 11. Drip applications were applied on Apr. 8, Apr. 21, May 2, and May 20.

D. ADDITIONAL INFORMATION:

1. Location: Ponder Farm, South Orchard, 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: Intrepid Edge (8 oz/a) on May 27.

4. Herbicides: Alion (6 oz/a) + Roundup (2 qt/a) on April 11.

E: SUMMARY:

This was a very high-pressure test, especially for nut scab due to the frequent rains in the latter part of the summer. The early season was actually fairly dry, and the incidence of other foliar diseases like Neofusicoccum leaf dieback was quite low. Large and significant differences in efficacy of treatments for both leaf and nut scab were found.

PECAN FUNGICIDE TEST II, 2022

PONDER FARM, SOUTH ORCHARD

DESIRABLE

Treatments	Rate/A	App's	Leaf Inc[1] 25-Jul	Leaf Sev[2] 25-Jul	Nut Inc[3] 25-Jul	Nut Sev[4] 25-Jul	Leaf Inc[1] 25-Aug	Leaf Sev[2] 25-Aug	Nut Inc[3] 25-Aug	Nut Sev[4] 25-Aug	% Def.[5] 11-Nov
1. Super Tin 4L	6.0 fl oz	1 – 10	29.4	2.1	72.5	3.3	22.0	1.9	95.0	12.1	81.0
+ Elast 400F	25.0 fl oz										
2. Super Tin 4L	9.0 fl oz	1, 3, 5, 7, 9	33.1	1.9	67.1	2.7	13.4	1.1	97.5	23.7	80.0
+ Elast 400F	25.0 fl oz										
Regev HBX	8.5 fl oz	2, 4, 6, 8, 10									
3. Kphite	2.0 qt	1 - 4	37.9	2.5	80.8	4.5	17.9	1.7	98.8	22.4	84.0
Super Tin 4L	9.0 fl oz	5 - 10									
+ Elast 400F	36.0 fl oz										
4. Rhyme*	7.0 fl oz	1 - 4	34.0	2.3	100.0	22.2	23.8	2.1	100.0	82.1	83.0
5. Prophyt*	48.0 fl oz	1 - 4	49.8	3.6	100.0	28.1	36.2	3.3	99.5	78.3	90.0
6. Rhyme*	7.0 fl oz	1 - 4	38.5	2.8	100.0	25.8	28.8	2.4	100.0	93.4	81.0
+Prophyt	48.0 fl oz										
7. Rhyme*	7.0 fl oz	1 - 4	43.1	2.4	100.0	15.1	30.1	2.6	100.0	46.3	62.0
Super Tin 4L	6.0 fl oz	5 - 10									
+ Elast 400F	25.0 fl oz										
8. Topguard EQ	8.0 fl oz	1 - 4	20.3	1.5	48.8	1.8	15.3	1.2	96.7	7.4	83.0
Super Tin 4L	6.0 fl oz	5 - 10									
+ Elast 400F	25.0 fl oz										
9. Rhyme	7.0 fl oz	1 - 4	36.1	2.2	100.0	16.0	25.1	2.0	100.0	76.4	94.0
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	22.4	1.7	27.1	0.4	12.2	1.0	100.0	6.5	89.0
+ Elast 400F	25.0 fl oz										
+ Goodspray	16.0 fl oz										
Miravis Top	13.7 fl oz	2, 4, 6, 8, 10									
+ Goodspray	16.0 fl oz										
11. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	29.0	2.0	40.0	1.1	12.9	1.1	97.5	5.6	83.0
+ Elast 400F	25.0 fl oz										
+ Humispread	16.0 fl oz										
Miravis Top	13.7 fl oz	2, 4, 6, 8, 10									
+ Humispread	16.0 fl oz										
12. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	23.4	1.6	37.1	0.9	15.1	1.1	95.0	7.5	73.0
+ Elast 400F	25.0 fl oz										
+ Wetable	16.0 fl oz										
Miravis Top	13.7 fl oz	2, 4, 6, 8, 10									
+ Wetable	16.0 fl oz										
13. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	26.3	1.5	51.9	1.2	16.3	1.4	100.0	7.8	83.6
+ Elast 400F	25.0 fl oz										
Miravis Top	13.7 fl oz	2, 4, 6, 8, 10									
14. Nontreated	-	-	49.1	3.3	100.0	23.8	47.7	4.1	100.0	87.6	97.0
LSD(P<0.05)			8.1	0.7	14.8	4.6	6.9	0.7	4.8	7.1	20.0

*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.

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

% Def[5]=Percent defoliation.

OFFICIAL DAILY RAINFALL, 2022

PONDER FARM, NORTH & SOUTH ORCHARD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0.27	0	0.07	0
2	0	0	0	0	0	0	0	0
3	0	0	0	0	0	0	0.05	0
4	0	0	0	0	0	0	0.24	0
5	0	1.3	0	0	0.22	0	0.01	0
6	0	0.31	0.52	0.05	0	2.5	0	0
7	0.02	0	0	0	0.26	0.02	0	0
8	0	0	0	0	2.64	0.07	2.82	0
9	0.26	0	0	0	0.03	0.27	0.08	0
10	0.09	0	0	0	0	0.04	0.17	0
11	0.14	0	0	0	0.34	0.07	0	0
12	0.21	0	0.04	0	0.37	0.01	0	1.48
13	0	0	0	0	0.81	0.01	0	0.07
14	0	0	0	1.98	0.62	0	0	0
15	0.15	0	0	0	0.07	0	0	0
16	0.09	0	0	0	0	0	0	0
17	0	0.16	0	0	0.11	0.03	0	0.05
18	1.21	0.53	0	0	0.06	0.36	0	0
19	0.2	0	0	0	1.42	0.01	0	0
20	0	0	0	0	0.12	0	0	0
21	0	0	0	0	0.56	0	0	0
22	0	0	0	0	0	0	0	0
23	0.12	0	0.04	0.09	0.07	0	0	0
24	0	0	1.15	0	0.21	0	0	0
25	0.01	0	0.01	0	0.01	0.72	0	0
26	0	0	0.34	0	0	0.04	0	0.12
27	0	0	0	0	0	0.69	0	0
28	0	0	0	0	0	0.58	0	0
29	0	0	0	0.36	0.07	0	0	0
30	0	0	0	0.01	0	0	0	0
31	1.53	0	0	0	0	0	0	0
TOTAL (inches)	**4.03**	**2.3**	**2.1**	**2.49**	**8.26**	**5.42**	**3.44**	**1.72**

*Irrigated as needed.