

2024 TEST RESULTS



Peanut & Pecan Fungicide Evaluations

TIM BRENNEMAN

University of Georgia – Tifton Campus

Date: Dec. 20, 2024

Memo to: Industry Cooperators

From: Tim Brenneman

Subject: Field Trial Results

It is amazing how each year is different (I said that last year, and the year before!). Biological systems are driven by environmental conditions, and we have the extreme fluctuations in weather conditions that have characterized our recent years it can make life challenging. We again had some very wet conditions early that contributed to stand issues in peanuts, and then finished the year with hurricane Helene! To make matters worse, increasing intensity of deer damage certainly impacted peanut yields. Overall though we had some good levels of disease and some good trials. In several of our trials, we also intentionally utilized a “dirting” cultivation event in July, which increased the intensity and uniformity of our white mold epidemics. In fact, in the Cotton field with delayed digging due to the storm the disease pressure was almost overwhelming. I want to acknowledge the hard work of our crew lead by Corey Thompson, Lance Alberson, and Jessica Bell. Graduate students included Lucinda McEachin and Clint Herndon, and student workers were Wyatt Williams and Mayghan Hanner. The cooperation of other scientists including Dr. Albert Culbreath, Dr. Bob Kemeraite, Dr. Corley Holbrook, Dr. Bill Branch, Dr. Scott Tubbs, Dr. Scott Monfort, Dr. Nino Brown, Dr. David Bertioli, Dr. Soraya Bertioli and Dr. Barry Tillman is much appreciated.

Once again, we are making this available primarily as an online document available at **www.timbrenneman.org** by clicking on “Publications” then “2024 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.

P.S. I will be retiring on Sept. 1 of this coming year (2025), but a replacement will be in place by Aug. 1 of 2025 who can finish out the crop and get reports out. I have enjoyed these years and our collaboration tremendously, and I wish you all the very best.

TABLE OF CONTENTS

SOILBORNE DISEASES, 2024

POND FIELD

BLACKSHANK FARM

IN FURROW MIX TEST I	6
IN FURROW MIX TEST II	7
DAILY RAINFALL	10

IRRIGATED/NON-IRRIGATED FIELD

BLACKSHANK FARM

ADMA FUNGICIDE TEST II	11
FMC XYWAY TEST	14
NEMATODE CULTIVAR TEST	17
NICHINO FUNGICIDE TEST	19
DAILY RAINFALL	22

BANANA FIELD

BLACKSHANK FARM

MULTI-STATE DISEASE EVALUATION TEST	23
RHIZOCTONIA FUNGICIDE TEST	26
DAILY RAINFALL	28

SOUTH FIELD
LANG/RIGDON FARM

BASF SEEDLING DISEASE TEST.....	29
CERTIS SEED TREATMENT TEST.....	30
CORTEVA SEED TREATMENT TEST	32
EXPEL SEED TREATMENT TEST	34
HEADS UP – KANNAR SEED TREATMENT TEST II	37
KANNAR SEED TREATMENT TEST I.....	40
SYNGENTA SEED TREATMENT TEST I	42
SYNGENTA SEED TREATMENT TEST II	43
DAILY RAINFALL + IRRIGATION	46

NEW FIELD
LANG/RIGDON FARM

BASF FUNGICIDE TEST	48
SYNGENTA FUNGICIDE TEST	51
DAILY RAINFALL + IRRIGATION	54

COTTON FIELD
LANG/RIGDON FARM

ADAMA FUNGICIDE TEST I.....	55
FMC FUNGICIDE PROGRAMS TEST.....	58
FMC - BAYER TEST.	61
ISK/SIPCAM TEST	64
VALENT – ADAMA FUNGICIDE TEST	67
DAILY RAINFALL + IRRIGATION	71

ATTAPULGUS

BASF NEMATODE TEST	72
CORTEVA NEMATODE TEST	74
KANNAR NEMATODE TEST	77
UPL NEMATODE TEST	79
VALENT NEMATODE TEST	82
SYNGENTA NEMATODE TEST	84
DAILY RAINFALL + IRRIGATION	87

NORTH ORCHARD **PONDER FARM**

PECAN FUNGICIDE TEST I, WICHITA	88
PECAN FUNGICIDE TEST I, DESIRABLE	92
MISCELLANEOUS FUNGICIDE TERMINAL TEST I	98
MISCELLANEOUS FUNGICIDE TERMINAL TEST II	101

SOUTH ORCHARD **PONDER FARM**

PECAN FUNGICIDE TEST II, DESIRABLE	104
YOUNG TREE PHOSPHITE TEST	107
ROOT KNOT NEMATODE TEST	108
DAILY RAINFALL	109

IN FURROW MIX TEST I, 2024

- A. PURPOSE: To evaluate the comparative efficacy of in furrow fungicides with very different spectrums of activity on untreated compromised seed germination and development.
- 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. Eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
- 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 one 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. **Sprays:** In furrow sprays applied at planting on June 4. Plots were cover sprayed with Bravo (1.5 pt/a) on July 8, July 22, Aug. 5, Aug. 19, Sep. 3, and Sep. 13. Elatus (9 oz/a) covers prays were applied Aug. 5 and Sep. 3.
- D. ADDITIONAL INFORMATION:
1. Location:
 - i. Blackshank Farm, Pond Field, Tifton, GA 31794
 2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on May 6
 3. Soil Fertility:
 - i. pH: 5.79 P: 34.0 K: 10.65 Ca: 193.5 Mg: 8.14
 4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
 5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied May 7. Rototilled to incorporate.
 6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
 7. Planting Info:
 - i. Seed: untreated compromised GA-06G from Premium peanut 2023 (seed lot #718)
 - ii. Planted June 4.
 8. Harvest Dates:
 - i. Dug Oct. 21 and picked Oct. 25.

E. SUMMARY:

This test was late planted with compromised seed carried over from 2023. It had higher levels of Aspergillus which showed up in the dead plant counts, which are almost entirely from Aspergillus crown rot. Several in furrow treatments were as good as the Rancona seed treatment, with the Velum being particularly effective on the Aspergillus. Yields are always low in this deep sand field, and deer damage was severe also.

<u>IN FURROW MIX TEST I, 2024</u>										
BLACKSHANK FARM, POND FIELD										
Seed Treatment	In furow	Rate/A	Plant/ft¹		% Dead Plants²			TSWV³	Roots/ft⁴	Yield lb/A
			14-Jun	25-Jun	14-Jun	25-Jun	9-Jul	15-Aug	22-Oct	
1. None	None	-	1.1	1.2	0.0	7.4	24.4	.	0.7	549
2. None	Velum	4.3 fl oz	2.1	2.4	0.2	0.6	3.9	6.8	1.5	1133
3. None	Abound	6.0 fl oz	1.8	2.2	0.0	4.1	11.4	10.0	1.4	950
4. None	Kphite	32.0 fl oz	1.7	1.8	0.0	2.5	18.6	8.4	1.3	950
5. None	Velum	4.3 fl oz	1.9	2.2	0.0	0.7	11.3	7.6	1.5	950
	+ Abound	6.0 fl oz								
	+ Kphite	32.0 fl oz								
6. Rancona VPD*	None	-	1.9	2.2	0.0	0.3	2.2	8.0	1.4	1064
LSD(P<0.05)	-	-	0.4	0.4	N. S.	3.9	9.3	N. S.	0.3	370
* Rancona VPD applied at 4 oz/100 lb.										
Note: seed was untreated/compromised GA-06G from Premium (2023), lot #718.										
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.										

IN FURROW MIX TEST II, 2024

A. PURPOSE: To evaluate the comparative efficacy of labeled in furrow fungicides on untreated compromised seed.

B. EXPERIMENTAL DESIGN:

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

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 one 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. **Sprays:** In furrow sprays applied at planting on June 4. Plots were cover sprayed with Bravo (1.5 pt/a) on July 8, July 22, Aug. 5, Aug. 19, Sep. 3, and Sep. 13. Elatus (9 oz/a) covers prays were applied Aug. 5 and Sep. 3.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Blackshank Farm, Pond Field, Tifton, GA 31794
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on May 6.
3. Soil Fertility:
 - i. pH: 5.79 P: 34.0 K: 10.65 Ca: 193.5 Mg: 8.14
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied May 7. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: untreated compromised GA-06G from Scott Monfort (85% germination).
 - ii. Planted June 4.
8. Harvest Dates:
 - i. Dug Oct. 21 and picked Oct. 25.

E. SUMMARY:

This test was late planted with compromised seed of the current year. It had lower levels of Aspergillus crown rot than Trial 1, but Velum again had the best activity, either alone or in combination, and very similar to the Rancona seed treatment. Abound and Kphite in furrow treatments increased plant stands but were not as good as the Rancona seed treatment or the Velum on Aspergillus. Yields are always low in this deep sand field, and deer damage was severe also.

IN FURROW MIX TEST II, 2024

BLACKSHANK FARM, POND FIELD

Seed Treatment	In furrow	Rate/A	Plant/ft ¹		% Dead Plants ²			TSWV ³	Roots/ft ⁴	Yield
			14-Jun	26-Jun	14-Jun	26-Jun	9-Jul	15-Aug	22-Oct	lb/A
1. None	None	-	1.8	1.6	0.0	11.3	13.3	10.7	0.8	573
2. None	Velum	4.3 fl oz	2.5	2.4	0.0	2.2	4.4	8.8	1.6	991
3. None	Abound	6.0 fl oz	2.3	2.2	0.1	9.0	14.0	4.0	1.5	760
4. None	Kphite	32.0 fl oz	2.5	2.3	0.5	13.4	16.2	7.2	1.2	595
5. None	Velum	4.3 fl oz	2.8	3.0	0.1	4.6	5.0	10.0	1.5	906
	+ Abound	6.0 fl oz								
	+ Kphite	32.0 fl oz								
6. Rancona VPD*	None	-	3.4	3.2	0.0	2.1	2.7	8.4	1.8	839
LSD(P<0.05)	-	-	0.4	0.4	N. S.	5.6	5.8	N. S.	0.3	318

* Rancona VPD applied at 4 oz/100 lb.

Note: seed was untreated/compromised GA-06G from Monfort.

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

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

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

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

<u>DAILY RAINFALL, 2024</u>								
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	0.93	0.12	0.12	0
3	0	1.00	0	0	0.92	0	0	0
4	0	0	1.00	0	0	0	0	0
5	0.85	0	0	0.38	0	1.03	0	0.15
6	0	0	0	0	0	0	1.00	0.13
7	0	0	0	0	0.31	0	1.00	0
8	0	0	0	0	0.04	0	1.00	0
9	2.10	0	0	0	0.34	0	1.00	0
10	0	0	3.00	0	0.02	0	0	0
11	0	5.32	0	0	0	0	2.16	0
12	0	0	0	0	0	0	1.00	0
13	0	0	2.70	0	0	0	2.10	0
14	0	0	0	0	0	0	0	0
15	0.43	0	0	0	0.35	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0.15	0.20	0	0
18	0	0	3.19	0	0.35	0.18	0	0
19	0	0	0	0	0.35	0	0	0
20	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0
22	2.10	1.10	0	0	0	0	0	0
23	0.03	0	0	0	0	0	0	0
24	0	0	0	0	0.05	0	0	0
25	0	0	0.22	0	0	0	0	0
26	0	0	0	0	0	0	3.00	0
27	2.20	0	0.68	0.76	0	0	3.13	0
28	0	0	0	0	0	0	3.00	0
29	0	0	0	0.50	0.21	0	0	0
30	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0
TOTAL (inches)	7.71	7.42	10.79	1.64	4.02	1.53	18.51	0.28
*Irrigated as needed.								

ADAMA FUNGICIDE TEST II, 2024

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 (20ft x 6ft) per plot, 36-inch row spacing.
3. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment:** All Bravo treatments were applied as cover sprays at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens. All other treatments 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. **Sprays:** Plots were sprayed on June 12, June 25, July 11, July 25, Aug. 6, Aug. 22, and Sep. 3.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Blackshank Farm, Irrigated/Nonirrigated Field, Tifton, GA 31794
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on May 6.
3. Soil Fertility:
 - i. pH: 5.87 P: 25.1 K: 28.42 Ca: 289.60 Mg: 15.19
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied May 7. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: TifNV-HiOL
 - ii. Planted May 8.

8. Dirting cultivation:

- i. Dirting cultivation was done on July 23 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.

9. Harvest Dates:

- i. Dug Oct. 4 and picked Oct. 11.

E. SUMMARY:

White mold pressure was heavy in this field. Most treatments reduced the level of disease, but only Excalia provided a high level of control. Leaf spot pressure was modest at best, even on unsprayed plots.

ADAMA FUNGICIDE TEST II, 2024

BLACKSHANK FARM, IRRIGATED/NON FIELD

			LS ¹	WM ²	Yield
Treatment	App's	Rate/A	7-Oct	7-Oct	lb/A
1. Untreated	-	-	4.6	63.1	1948
2. Bravo	1, 2, 6, 7	1.5 pt	2.6	38.1	3461
Proline 480SC	3-5	2.3 fl oz			
+ Vantana		7.0 fl oz			
3. Bravo	1, 2, 6, 7	1.5 pt	2.9	40.0	3309
Proline 480SC	3-5	2.9 fl oz			
+ Vantana		8.3 fl oz			
4. Bravo	1, 2, 6, 7	1.5 pt	2.8	34.4	3285
ADM03521.F.1.H	3-5	13.2 fl oz			
5. Bravo	1, 2, 6, 7	1.5 pt	3.1	28.8	3670
ADM03521.F.1.I	3-5	13.2 fl oz			
6. Bravo	1, 2, 6, 7	1.5 pt	2.6	29.4	3525
ADM03521.F.1.J	3-5	13.2 fl oz			
7. Bravo	1, 2, 6, 7	1.5 pt	2.6	45.0	2895
ADM03521.F.1.K	3-5	13.2 fl oz			
8. Bravo	1, 2, 6, 7	1.5 pt	3.2	45.6	3096
ADM03521.F.4.B	3-5	8.5 fl oz			
9. Bravo	1, 2, 6, 7	1.5 pt	3.1	33.1	3358
Proline 480SC	3-5	2.3 fl oz			
10. Bravo	1, 2, 6, 7	1.5 pt	3.8	46.9	2831
Vantana	3-5	7.0 fl oz			
11. Bravo	1, 2, 6, 7	1.5 pt	3.3	43.8	3008
Vantana	3-5	24.0 fl oz			
12. Bravo	1, 2, 6, 7	1.5 pt	3.8	32.5	3432
Convoy	3-5	26.0 fl oz			
13. Bravo	1, 2, 6, 7	1.5 pt	2.9	7.5	3737
Excalia	3-5	3.0 fl oz			
14. Bravo	1-7	1.5 pt	2.8	56.9	2543
LSD(P<0.05)	-	-	0.6	23.8	1022

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

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

FMC XYWAY TEST, 2024

A. PURPOSE: To evaluate the comparative efficacy of Xyway LFR T Band applications and commercial applied fungicides on peanut stands for soil borne and foliar diseases.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six replicates.
2. One two-row bed (20ft x 6ft) per plot, 36-inch row spacing.
3. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment:** T band sprays were applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with one 80015 flat fan tip per row and 50 mesh ball check screens. Bravo sprays that could be applied as a cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens. All other 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. **Sprays:** T band sprays were applied at planting May 8. Other treatments were applied June 12, June 25, July 11, July 25, Aug. 6, Aug. 22, and Sep. 3.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Blackshank Farm, Irrigated/Nonirrigated Field, Tifton, GA 31794
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on May 6.
3. Soil Fertility:
 - i. pH: 5.87 P: 25.1 K: 28.42 Ca: 289.60 Mg: 15.19
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied May 7. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: TifNV-HiOL
 - ii. Planted May 8.
8. Dirting cultivation:
 - i. Dirting cultivation was done on July 23 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.

9. Harvest Dates:

- i. Dug Oct. 4 and picked Oct. 11.

E. SUMMARY:

Reasonable stands were obtained, but the high rate of Xyway in furrow did result in some stand reductions. Leaf spot pressure was modest and white mold severity was high, with only the Convoy applications resulting in significant reductions.

FMC XYWAY TEST, 2024

BLACKSHANK FARM, IRR/NON FIELD

Treatment	App's	Rate/A	Plant/ft ¹		% Dead Plants ²		TSWV ³	LS ⁴	WM ⁵	Yield
			23-May	29-May	23-May	29-May	11-Sep	4-Oct	7-Oct	lb/A
1. Untreated	-	-	3.9	3.9	0.0	0.1	25.0	4.9	62.5	2012
2. Xyway LFR	T Band*	12.7 fl oz	3.0	3.7	0.0	0.0	26.3	2.8	57.1	2115
Bravo	3 – 7	1.5 pt								
3. Xyway LFR	T Band*	25.4 fl oz	2.2	2.8	0.0	0.0	29.6	2.9	52.1	2142
Bravo	4 – 7	1.5 pt								
4. Bravo	1 – 7	1.5 pt	-	-	-	-	27.9	3.2	58.3	1936
5. Bravo	1 – 7	1.5 pt	-	-	-	-	27.1	3.9	49.2	2422
Convoy**	3 & 5	32.0 fl oz								
6. Xyway LFR	T Band*	12.7 fl oz	3.1	3.7	0.0	0.0	22.5	3.6	21.7	3746
Bravo	3	1.5 pt								
+ Convoy**	-	32.0 fl oz								
Lucento	4 & 6	5.5 fl oz								
Bravo	5	1.5 pt								
+ Convoy**	-	32.0 fl oz								
Bravo	3	1.5 pt								
7. Xyway LFR	T Band*	12.7 fl oz	-	-	-	-	18.3	2.8	27.5	3390
Bravo	4	1.5 pt								
+ Convoy**	-	32.0 fl oz								
Lucento	5	5.5 fl oz								
Bravo	6	1.5 pt								
+ Convoy**	-	32.0 fl oz								
Bravo	7	1.5 pt								
8. Bravo	1 & 7	1.5 pt	-	-	-	-	22.9	2.9	31.3	3566
Lucento	2 & 4	5.5 fl oz								
Bravo	3 & 5	1.5 pt								
+ Convoy**	-	32.0 fl oz								
Provost Silver	6	13.0 fl oz								
LSD(P<0.05)	-	-	0.6	0.4	N. S.	N. S.	11.1	0.6	15.0	528

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

** Convoy app's were broadcast by backpack.

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

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

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

Leaf Spot⁴ = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.

White Mold⁵ = Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

NEMATODE CULTIVAR TEST, 2024

- A. PURPOSE: To confirm the nematode resistance of current cultivars for nematode control, and to compare them to the susceptible standard GA-06G with and without fluopyram nematicides.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with eight replicates.
 2. One two-row bed (20ft x 6ft) per plot, 36-inch row spacing.
 3. Eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
- C. APPLICATION OF TREATMENTS:
1. **Equipment:** In furrow spray was applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with one 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
 2. **Sprays:** In furrow sprays were applied at planting May 9. The 60 DAP spray was never applied. Bravo (1.5 pt/a) cover sprays were applied June 12, June 25, July 11, July 25, Aug. 8, Aug. 22, and Sep. 3, and Elatus (9 oz/a) cover sprays were applied on July 11 and Aug. 8.
- D. ADDITIONAL INFORMATION:
1. Location:
 - i. Blackshank Farm, Irrigated/Nonirrigated Field, Tifton, GA 31794
 2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on May 6.
 3. Soil Fertility:
 - i. pH: 5.87 P: 25.1 K: 28.42 Ca: 289.60 Mg: 15.19
 4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
 5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied May 7. Rototilled to incorporate.
 6. Planting Info:
 - i. Seed: six different varieties
 - ii. Planted May 9.
 7. Dirting cultivation:
 - i. Dirting cultivation was done on July 23 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.
 8. Harvest Dates:
 - i. Dug Oct. 4 and picked Oct. 11.

E. SUMMARY:

Stands were not great with any cultivar due to extremely adverse conditions at planting. This no doubt contributed to having more severe TSWV. Substantial nematode damage was evident on GA-06G, but all the nematode-resistant lines help up very well in terms of both root galling and nematode numbers in the soil. It should be noted that this field has had continuous peanuts for many years, most of which were nematode-resistant lines such as Tifguard or TifNV-HiOL. If resistance was going to break, it would likely be in a field such as this.

<u>NEMATODE CULTIVAR TEST, 2024</u>									
BLACKSHANK FARM, IRR/NON FIELD									
			Plant/ft ¹	% Dead Plants ²	TSWV ³	Galling ⁴	Yield	Root Knot ⁵	Ring ⁶
Cultivar	App's	Rate/A	23-May	23-May	11-Sep	7-Oct	lb/A	17-Sep	17-Sep
1. Georgia-22MPR	None	-	1.6	0.0	26.9	0.0	4190	5.1	119.3
2. TifNV-HG	None	-	3.2	0.0	32.2	0.0	4220	0.1	119.9
3. GA-17SP	None	-	2.9	0.0	13.4	0.0	3931	5.5	78.8
4. TifNV-HiOL	None	-	3.2	0.0	21.3	0.3	4830	11.5	108.5
5. Georgia-19HP	None	-	2.8	0.0	34.7	0.0	3930	9.9	89.3
6. GA-06G	None	-	1.8	0.0	30.6	23.8	3703	308.4	134.9
7. GA-06G			2.1	0.0	31.8	13.6	3906	431.3	108.9
+ Velum	In furrow	6.84 fl oz							
Propulse*	60 DAP*	13.6 oz							
LSD(P<0.05)			0.4	N. S.	10.1	10.5	524	201.3	N. S.
*NOTE: the 60 DAP application was never applied.									
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 (<i>Aspergillus</i> crown rot).									
TSWV ³ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.									
Galling ⁴ = Visual rating of the percent of pods and roots (1-100) with visible damage from root-knot nematode.									
Root-knot ⁵ = Number of <i>M. arenaria</i> juvenile per 100 cc of soil.									
Ring ⁶ = Population of ring nematodes per 100 cc of soil.									

NICHINO FUNGICIDE TEST, 2024

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 (20ft x 6ft) per plot, 36-inch row spacing.
3. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

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. **Sprays:** Treatment sprays were applied on June 12, June 25, July 11, July 25, Aug. 6, Aug. 22, and Sep. 3.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Blackshank Farm, Irrigated/Nonirrigated Field, Tifton, GA 31794
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on May 6.
3. Soil Fertility:
 - i. pH: 5.87 P: 25.1 K: 28.42 Ca: 289.60 Mg: 15.19
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied May 7. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: TifNV-HiOL
 - ii. Planted May 8.
8. Dirting cultivation:
 - i. Dirting cultivation was done on July 23 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.

9. Harvest Dates:

- i. Dug Oct. 4 and picked Oct. 11.

E. SUMMARY:

Modest levels of leaf spot developed and there were differences between treatments. White mold pressure was significant but not extreme and there were treatment differences, although they did not generally result in significantly higher yields. All Convoy treatments resulted in significant reductions in white mold.

NICHINO FUNGICIDE TEST, 2024

BLACKSHANK FARM, IRRIGATED/NON FIELD

			LS ¹	WM ²	Yield
Treatment	App's	Rate/A	4-Oct	7-Oct	lb/A
1. Untreated	-	-	4.7	26.9	3621
2. Bravo	1, 2, & 7	1.5 pt	3.3	15.6	3870
Bravo	3-6	1.5 pt			
+ Convoy		16.0 fl oz			
3. Priaxor	2	6.0 fl oz	3.3	7.5	4273
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			
4. Lucento	2 & 4	5.5 fl oz	3.3	5.0	3988
Bravo	3 & 5	1.5 pt			
+ Convoy		32.0 fl oz			
Bravo	6	1.0 pt			
+ Orius		7.2 fl oz			
Bravo	7	1.0 pt			
5. Priaxor	2	6.0 fl oz	2.9	8.8	4060
Bravo	3 & 5	1.0 pt			
+ Umbra		36.0 fl oz			
Bravo	4 & 6	1.0 pt			
+ Orius		7.2 fl oz			
Bravo	7	1.5 pt			
6. Bravo	1, 2, 4, 6, 7	1.5 pt	3.5	10.6	3817
NAI-3367	3 & 5	29.5 fl oz			
7. Bravo	1, 2, 4, 6, 7	1.5 pt	3.5	12.5	4049
NAI-3367	3 & 5	14.8 fl oz			
8. Bravo	1, 2 & 7	1.5 pt	3.1	15.6	3979
NAI-3367	3-6	14.8 fl oz			
LSD(P<0.05)	-	-	0.6	11.2	539

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

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

DAILY RAINFALL, 2024

BLACKSHANK FARM, IRRIGATED/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	0.93	0.12	0.12	0
3	0	1.00	0	0	0.92	0	0	0
4	0	0	1.00	0	0	0	0	0
5	0.85	0	0	0.38	0	1.03	0	0.15
6	0	0	0	0	0	0	1.00	0.13
7	0	0	0	0	0.31	0	1.00	0
8	0	0	0	0	0.04	0	1.00	0
9	2.10	0	0	0	0.34	0	1.00	0
10	0	0	3.00	0	0.02	0	0	0
11	0	5.32	0	0	0	0	2.16	0
12	0	0	0	0	0	0	1.00	0
13	0	0	2.70	0	0	0	2.10	0
14	0	0	0	0	0	0	0	0
15	0.43	0	0	0	0.35	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0.15	0.20	0	0
18	0	0	3.19	0	0.35	0.18	0	0
19	0	0	0	0	0.35	0	0	0
20	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0
22	2.10	1.10	0	0	0	0	0	0
23	0.03	0	0	0	0	0	0	0
24	0	0	0	0	0.05	0	0	0
25	0	0	0.22	0	0	0	0	0
26	0	0	0	0	0	0	3.00	0
27	2.20	0	0.68	0.76	0	0	3.13	0
28	0	0	0	0	0	0	3.00	0
29	0	0	0	0.50	0.21	0	0	0
30	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0
TOTAL (inches)	7.71	7.42	10.79	1.64	4.02	1.53	18.51	0.28
*Irrigated as needed.								

MULTI-STATE DISEASE EVALUATION

TEST, 2024

- 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. Eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
- 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. **Sprays:** Bravo (1.5 pt/a) cover sprays were applied July 2, July 19, Aug. 8, Aug. 26, and Sep. 30.
 3. Inoculated test with *Agroathelia rolfsii* PDA plugs on August 6.
- D. ADDITIONAL INFORMATION:
1. Location:
 - i. Blackshank Farm, Banana Field, Tifton, GA 31794
 2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on May 6.
 3. Soil Fertility:
 - i. pH: 5.96 P: 12.3 K: 19.90 Ca: 235.2 Mg: 12.50
 4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
 5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied May 7. Rototilled to incorporate.
 6. Planting Info:
 - i. Seed: Multiple breeding lines and cultivars.
 - ii. Planted on May 23.
 7. Harvest Dates:
 - i. Dug Oct. 14 and picked Oct. 18.

E. SUMMARY:

This trial had somewhat lower levels of disease than expected, but certainly enough to separate cultivars with known differential levels of resistance to white mold like GA-09B and GA-12Y. Leaf spot and TSWV were both less severe than other years, but again able to separate the most and least resistant cultivars. The nematode assay in the greenhouse clearly shows which genotypes are resistant to peanut root knot nematode.

MULTISTATE/RIL FIELD TEST, 2024										
BLACKSHANK FARM, BANANA FIELD										
Genotypes	TSWV¹	FLS²	LS³	White Mold (4-Oct)			Eggs⁶	Galls⁶	Root Vigor⁷	Yld
	9-Sep	9-Sep	9-Sep	% Zeroes⁴	No Zeroes⁵	All⁵				
1. 17-223	4.2	2.0	2.8	33.3	17.5	11.7	4.6	4.9	3.2	4811
2. TifGP-5	0.8	3.3	2.3	25.0	43.4	31.4	4.7	4.8	3.6	5123
3. TifGP-6	0.8	3.8	1.9	25.0	40.3	32.9	4.5	4.6	3.6	4339
4. CB 20	0.8	4.3	2.6	4.2	37.8	32.9	0.0	0.0	3.4	4697
5. C2604-3	4.2	3.3	2.0	4.2	47.3	44.2	5.0	5.0	4.4	4230
6. C2605-8	11.7	1.3	2.2	4.2	46.3	45.4	3.6	3.8	3.2	3756
7. C2606-8	3.3	3.5	2.5	29.2	41.0	29.2	2.5	2.5	3.0	4535
8. C2610-6	8.3	2.5	2.5	8.3	42.9	35.4	1.3	1.3	3.0	4777
9. C2610-8	11.7	2.5	2.5	12.5	30.3	26.5	4.0	4.0	3.3	5121
10. C2611-7	10.8	2.5	1.8	8.3	35.9	33.5	1.3	1.3	3.0	3966
11. 17-2214	0.0	1.8	2.3	8.3	42.8	39.6	1.0	1.0	3.8	5150
12. C2470-3-22	2.5	2.0	2.5	4.2	56.8	54.4	0.2	0.0	3.6	4737
13. C2558-1-1C	3.3	1.8	2.3	8.3	58.8	55.0	0.0	0.0	4.0	4165
14. C2552-5&7-11C	0.8	1.0	2.5	0.0	31.7	31.7	0.0	0.0	3.3	4898
15. C2552-5&7-16C	5.0	1.5	2.5	16.7	31.5	26.0	0.8	0.3	3.5	5123
16. C2498-5-12	1.7	1.8	2.5	8.3	60.3	55.8	0.0	0.6	3.0	4143
17. 17-2237	1.7	2.5	2.2	16.7	36.7	30.2	0.0	0.0	3.4	5421
18. 14-2464	3.3	2.0	2.6	4.2	31.9	30.2	0.2	0.5	3.6	4748
19. 15-4508	0.0	2.0	2.2	0.0	41.4	41.4	1.0	1.5	3.3	4972
20. 11-1050	5.8	2.3	2.9	25.0	31.1	23.5	1.0	1.0	3.8	5902
21. 23MSI-5_124	0.8	1.0	2.3	16.7	33.1	27.9	3.7	3.8	3.3	5939
22. 23MSI-5_128	3.3	1.5	2.1	20.8	29.8	23.1	4.3	4.4	3.0	5486
23. 23MSI-5_129	2.5	4.0	1.6	12.5	51.3	45.2	3.5	4.0	3.0	3850
24. 23MSI-5_30	0.0	2.0	2.2	20.8	28.6	19.2	5.0	5.0	4.0	4939
25. 23MSI-5_1	4.2	1.0	2.8	16.7	44.5	36.3	4.5	4.8	3.3	5232
26. 23MSI-4_204	3.3	1.0	2.4	12.5	37.1	33.5	4.5	4.6	3.5	4765
27. 23MSI-5_125	1.7	1.5	2.8	16.7	40.0	34.8	5.0	5.0	3.6	4874
28. 23MSI-5_126	4.2	2.3	2.6	12.5	61.8	51.9	5.0	5.0	3.5	3911
										Cont.

MULTISTATE/RIL FIELD TEST, 2024

BLACKSHANK FARM, BANANA FIELD

	TSWV ¹	FLS ²	LS ³	White Mold (4-Oct)						
Genotypes	9-Sep	9-Sep	9-Sep	% Zeroes ⁴	No Zeroes ⁵	All ⁵	Eggs ⁶	Galls ⁶	Root Vigor ⁷	Yld
29. 23MSI-5_4	3.3	2.3	2.1	12.5	43.5	33.5	5.0	4.9	4.2	5051
30. 23MSI-5_44	10.8	1.0	3.3	37.5	34.2	20.6	5.0	5.0	4.0	5508
31. IPG2401	12.5	4.5	2.5	8.3	46.7	44.6	1.3	1.3	2.0	3778
32. IPG2402	3.3	4.8	1.9	8.3	47.9	42.5	0.0	0.0	2.7	2989
33. IPG913	3.3	1.3	2.0	8.3	50.0	42.5	4.7	4.7	3.7	4308
34. M15-0129	5.0	3.8	2.3	8.3	35.7	33.3	4.2	4.4	4.2	4707
35. ACI-3321	3.3	2.8	2.0	25.0	43.9	34.0	4.0	4.2	3.7	5031
36. ACI-N104	1.7	2.5	2.0	37.5	28.1	17.7	0.0	0.0	4.0	3848
37. M14-1453	21.6	2.0	1.8	8.3	36.4	32.9	N.D.	N.D.	N.D.	3139
38. ACI-222	2.5	2.3	2.3	8.3	37.0	33.1	0.0	0.0	3.3	5210
39. GA-22MPR	0.0	1.5	2.7	8.3	40.3	37.3	N.D.	N.D.	N.D.	3879
40. TifJumbo	1.7	1.3	2.1	33.3	34.4	25.0	1.0	1.0	4.6	5348
41. TifNV-HG	3.3	2.0	2.3	16.7	37.9	32.1	0.3	0.0	3.7	5002
42. TifNV-High O/L	6.7	3.0	2.0	29.2	28.6	18.6	0.0	0.5	3.2	5140
43. GA-06G	8.3	1.0	2.4	4.2	43.8	41.5	4.0	4.0	3.6	4095
44. GA-21GR	7.5	1.0	2.5	16.7	36.5	30.4	N.D.	N.D.	N.D.	3887
45. Arnie	1.7	1.3	2.2	16.7	27.8	23.0	N.D.	N.D.	N.D.	4737
46. GA-20VHO	1.7	1.5	2.5	0.0	56.7	56.7	N.D.	N.D.	N.D.	3175
47. GA-23RKN	4.2	1.3	2.5	0.0	54.7	54.7	N.D.	N.D.	N.D.	4340
48. Florun 52N	4.2	1.5	2.5	4.2	46.6	44.2	N.D.	N.D.	N.D.	5437
49. Florun T61	7.5	1.5	2.9	8.3	30.1	27.5	N.D.	N.D.	N.D.	4859
50. Tif-CB7	4.2	1.8	1.5	0.0	55.0	55.0	4.6	4.7	3.4	4194
51. GA-09B	10.0	2.3	3.1	8.3	43.6	40.6	N.D.	N.D.	N.D.	4199
52. GA-12Y	1.7	1.0	2.1	25.0	22.6	16.7	N.D.	N.D.	N.D.	5794
LSD(P<0.05)	6.9	0.9	0.6	18.0	14.4	15.0	1.6	1.5	0.8	1073

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

Funky Leaf Spot²=1-5 scale, where 1=none and 5=bad FLS.

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

⁴Percent of plants inoculated with *A. rolfsii* that had no disease.

⁵Average length of the white mold "hits" (cm) calculated with and without "0's".

Root-gall and egg-mass⁶=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.

Root-Vigor⁷=1 to 5 scale, with 1 being very small, and 5 being very large.

RHIZOCTONIA FUNGICIDE TEST, 2024

- A. PURPOSE: To evaluate the comparative efficacy of registered and experimental fungicides applied for the control of *Rhizoctonia* limb rot.
- 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. Eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
- C. APPLICATION OF TREATMENTS:
1. **Equipment**: Cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens. All other 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. **Sprays**: Bravo (1.5 pt/a) cover sprays were applied on July 2, July 19, Aug. 8, Aug. 26, Sep. 16, and Sep. 30. Treatment sprays (apps 4-6) were applied on Aug. 1, Aug. 15, and Aug. 29.
 3. Inoculated test with *Rhizoctonia solani* (isolate RS13, AG-4) on Aug. 6 by applying 950 ml of oat grain inoculum per row of plot.
- D. ADDITIONAL INFORMATION:
1. Location:
 - i. Blackshank Farm, Banana Field, Tifton, GA 31794
 2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on May 6.
 3. Soil Fertility:
 - i. pH: 5.96 P: 12.3 K: 19.90 Ca: 235.2 Mg: 12.50
 4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
 5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied May 7. Rototilled to incorporate.
 6. Planting Info:
 - i. Seed: GA-12Y
 - ii. Planted May 23.
 7. Harvest Dates:
 - i. Dug Oct. 14 and picked Oct. 18.

E. SUMMARY:

Very good levels of limb rot developed as evidenced by comparison of disease levels and yield of Trt 1 and 9, the nontreated plots either inoculated or not inoculated. All treatments significantly reduced limb rot, and some were better than others for disease control

<u>RHIZOCTONIA FUNGICIDE TEST, 2024</u>					
BLACKSHANK FARM, BANANA FIELD					
				RHIZ¹	Yield
Treatments	App's	Inoculated?	Rate/A	16-Oct	lb/A
1. Untreated	-	YES	-	36.7	4369
2. Lucento	4 – 6	YES	5.5 fl oz	27.7	4711
3. Adastrio	4 – 6	YES	8.96 fl oz	26.7	5431
4. GWN-XXX	4 – 6	YES	32.0 oz	17.5	4492
5. GWN-XXX	4 – 6	YES	50.0 oz	13.8	5150
6. Excalia 2.84SC	4 – 6	YES	2.5 fl oz	10.0	4264
7. Elatus 45WG	4 – 6	YES	7.14 oz	10.5	4620
8. Priaxor	4 – 6	YES	8.0 fl oz	22.5	4697
9. Untreated	-	NO	-	5.8	5515
LSD(P<0.05)	-	-	-	8.9	1162
Note: ratings were taken after plots were inverted.					
RHIZ ¹ =% of limbs affected by <i>Rhizoctonia solani</i> . Inoculated plots with oat grain inoculum on Aug. 6 (950 ml per row).					

DAILY RAINFALL, 2024

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	0.93	0.12	0.12	0
3	0	1.00	0	0	0.92	0	0	0
4	0	0	1.00	0	0	0	0	0
5	0.85	0	0	0.38	0	1.03	0	0.15
6	0	0	0	0	0	0	1.00	0.13
7	0	0	0	0	0.31	0	1.00	0
8	0	0	0	0	0.04	0	1.00	0
9	2.10	0	0	0	0.34	0	1.00	0
10	0	0	3.00	0	0.02	0	0	0
11	0	5.32	0	0	0	0	2.16	0
12	0	0	0	0	0	0	1.00	0
13	0	0	2.70	0	0	0	2.10	0
14	0	0	0	0	0	0	0	0
15	0.43	0	0	0	0.35	0	0	0
16	0	0	0	0	0	0	0	0
17	0	0	0	0	0.15	0.20	0	0
18	0	0	3.19	0	0.35	0.18	0	0
19	0	0	0	0	0.35	0	0	0
20	0	0	0	0	0	0	0	0
21	0	0	0	0	0	0	0	0
22	2.10	1.10	0	0	0	0	0	0
23	0.03	0	0	0	0	0	0	0
24	0	0	0	0	0.05	0	0	0
25	0	0	0.22	0	0	0	0	0
26	0	0	0	0	0	0	3.00	0
27	2.20	0	0.68	0.76	0	0	3.13	0
28	0	0	0	0	0	0	3.00	0
29	0	0	0	0.50	0.21	0	0	0
30	0	0	0	0	0	0	0	0
31	0	0	0	0	0	0	0	0
TOTAL (inches)	7.71	7.42	10.79	1.64	4.02	1.53	18.51	0.28
*Irrigated as needed.								

BASF SEEDLING DISEASE TEST, 2024

A. PURPOSE: To evaluate the efficacy of various BASF peanut seed treatments on peanut stands.

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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment**: Cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
2. **Sprays**: Bravo (1.5 pt/a) cover sprays were applied on June 12, June 25, July 31, Aug. 14, Aug. 28, and Sep. 13, and Elatus (9 oz/a) sprays were applied on July 31 and Aug. 28.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, South Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on April 11.
3. Soil Fertility:
 - i. pH: 6.21 P: 38.3 K: 68.2 Ca: 740 Mg: 44.1
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: Treated GA-06G from BASF.
 - ii. Planted May 13.
8. Harvest Dates:
 - i. Dug Sep. 18 and picked Sep. 23.

E. SUMMARY:

Clear differences were seen in plant stands between the nontreated and treated seed, although resulting yield differences were not as great as might be expected. Overall yields were low due to the combined effect of unfavorable environmental conditions and deer damage. There also was very little *Aspergillus* crown rot, even on the nontreated seed.

<u>BASF SEEDLING DISEASE TEST, 2024</u>								
LANG FARM, SOUTH FIELD								
	Plant/ft¹		% Dead Plants²			TSWV³	Roots/ft⁴	Yield
Seed Trt	23-May	3-Jun	23-May	3-Jun	18-Jun	14-Aug	20-Sep	lb/A
1. Nontreated	1.0	2.7	0.0	0.1	0.5	15.5	1.9	2781
2. Obvius Plus	1.5	3.8	0.0	0.0	0.0	11.5	3.3	3196
3. Obvius Plus + llevo	1.6	3.5	0.0	0.0	0.0	11.0	3.4	3196
4. Trebuset	1.4	4.2	0.0	0.1	0.1	11.0	3.6	3149
5. Rancona VPL	1.8	4.1	0.0	0.0	0.0	14.5	3.5	3218
LSD(P<0.05)	0.5	0.7	N. S.	N. S.	0.3	N. S.	0.5	376
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.								

CERTIS SEED TREATMENT TEST, 2024

A. PURPOSE: To evaluate the efficacy of Convergence when applied at different rates or combinations.

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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment:** In furrow sprays were applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with one 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
2. **Sprays:** In furrow sprays were applied at planting (May 6). Bravo (1.5 pt/a) cover sprays were applied on June 12, June 25, July 31, Aug. 14, Aug. 28, and Sep. 13, and Elatus (9 oz/a) sprays were applied on July 31 and Aug. 28

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, South Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on April 11.
3. Soil Fertility:
 - i. pH: 6.86 P: 56.1 K: 54.8 Ca: 955 Mg: 44.9
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: compromised untreated 06-G seed from Scott Monfort (85% germination).
 - ii. Planted May 6.
8. Harvest Dates:
 - i. Dug Sep. 18 and picked Sep. 24.

E. SUMMARY:

Clear differences were seen in plant stands between the nontreated and treated seed, although resulting yield differences were not as great as might be expected. Overall yields were low due to the combined effect of unfavorable environmental conditions at planting and deer damage. There was some *Aspergillus* crown rot as seen in the “Dead Plant” counts. Differences were also seen in Vigor with the higher rate of Convergence having a somewhat negative effect compared to the lower rate. The lower rate looked to be as good as the Velum in furrow treatment.

CERTIS SEED TREATMENT TEST, 2024

LANG FARM, SOUTH FIELD

Treatment	In Furrow	Plant/ft ¹		% Dead Plants ²			Vigor ³	TSWV ⁴	Roots/ft ⁵	Yield lb/A
		16-May	28-May	16-May	28-May	11-Jun	4-Jun	14-Aug	18-Sep	
1. Untreated	-	1.0	1.8	0.0	5.8	13.4	5.4	39.2	1.3	1221
2. Velum	6.8 oz	1.1	2.7	0.0	0.0	0.0	7.8	34.8	2.5	1379
3. Convergence	8.0 fl oz	1.7	3.0	0.0	0.4	1.5	7.8	34.8	2.2	1377
4. Convergence	16.0 fl oz	1.2	2.0	0.0	3.1	11.0	5.8	39.6	1.4	1075
5. Velum	6.8 oz	1.7	2.5	0.0	1.1	4.2	7.6	30.0	2.2	1451
+ Convergence	8.0 fl oz									
6. Velum	6.8 oz	1.5	2.9	0.0	0.1	0.3	8.2	28.4	2.7	1551
+ Convergence	16.0 fl oz									
LSD(P<0.05)	-	0.4	0.6	N. S.	3.0	7.5	1.2	10.9	0.4	355

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

% Dead Plants² = The % of emerged plants that were dead or dying (*Aspergillus* crown rot).

Vigor³ = 1-10 scale, where 10=best.

TSWV⁴ = Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

Roots/ft⁵ = Number of tap roots per foot of row after the plots were inverted.

CORTEVA SEED TREATMENT TEST, 2024

A. PURPOSE: To evaluate the efficacy of various Corteva commercial products on peanut stands.

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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

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 one 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
2. **Sprays**: In furrow sprays were applied at planting (May 6). Bravo (1.5 pt/a) cover sprays were applied on June 12, June 25, July 31, Aug. 14, Aug. 28, and Sep. 13, and Elatus (9 oz/a) sprays were applied on July 31 and Aug. 28.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, South Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on April 11.
3. Soil Fertility:
 - i. pH: 6.86 P: 56.1 K: 54.8 Ca: 955 Mg: 44.9
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: compromised untreated 06-G seed from Scott Monfort (85% germination).
 - i. Planted May 6.
8. Harvest Dates:
 - i. Dug Sep. 18 and picked Sep. 24.

E. SUMMARY:

Clear differences were seen in plant stands between the nontreated and treated seed in emergence, plant stand, and yield. Overall yields were low due to the combined effect of unfavorable environmental conditions, TSWV and deer damage. There also was significant *Aspergillus* crown rot (% dead plants) on the nontreated seed. Both Velum and Bexfond did a very good job of control which resulted in a significant yield increase.

CORTEVA SEED TREATMENT TEST, 2024

LANG FARM, SOUTH FIELD

		Plant/ft ¹		% Dead Plants ²			Vigor ³	TSWV ⁴	Roots/ft ⁵	Yield
Seed Treatment	In Furrow	16-May	28-May	16-May	28-May	11-Jun	4-Jun	14-Aug	19-Sep	lb/A
Untreated Seed										
1. Untreated	-	0.8	1.5	0.0	5.0	24.7	3.8	35.0	0.9	1002
2. Bexfond	7.0 fl oz	1.1	2.5	0.0	2.2	6.5	7.3	32.0	1.9	1615
3. Utrisha P	3.5 fl oz	1.0	1.9	0.0	5.3	24.6	6.0	29.0	1.2	1311
4. Velum	6.8 fl oz	1.3	3.0	0.0	0.0	1.3	8.5	37.5	2.4	1526
Treated Seed*										
5. Untreated	-	1.9	3.7	0.0	0.1	0.5	9.0	29.0	3.2	1822
6. Bexfond	7.0 fl oz	1.4	3.3	0.0	0.2	0.6	8.8	35.0	3.2	1779
7. Utrisha P	3.5 fl oz	1.5	3.4	0.0	0.5	0.5	8.3	23.0	3.4	1716
8. Velum	6.8 fl oz	1.3	3.7	0.0	0.0	0.1	9.0	22.5	3.4	1831
LSD(P<0.05)	-	0.6	0.7	N. S.	1.2	5.4	1.4	13.5	0.6	315
*Treated seed treated with Rancona WPD, 4 Oz/100 lbs.										
Planted May 6, 6 seed / ft										
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 (<i>Aspergillus</i> crown rot).										
Vigor ³ = 1-10 scale, where 10=best.										
TSWV ⁴ =Percent of row feet infectd based on disease loci (up to 12" linear row) per plot.										
Roots/ft ⁵ =Number of tap roots per foot of row after the plots were inverted.										

EXPEL SEED TREATMENT TEST, 2024

A. PURPOSE: To evaluate the comparative efficacy of various peanut seed treatments on peanut stands.

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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment:** Cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
2. **Sprays:** Bravo (1.5 pt/a) cover sprays were applied on June 12, June 25, July 31, Aug. 14, Aug. 28, and Sep. 13, and Elatus (9 oz/a) sprays were applied on July 31 and Aug. 28.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, South Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on April 11.
3. Soil Fertility:
 - i. pH: 6.86 P: 56.1 K: 54.8 Ca: 955 Mg: 44.9
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: GA-12Y.
 - ii. Planted May 3.
8. Harvest Dates:
 - i. Dug Sep. 18 and picked Sep. 24.

E. SUMMARY:

Differences were seen in plant stands between the nontreated and various seed treatments in emergence, plant stand, and vigor. Overall yields were not significantly different among treatments and were low due to the combined effect of unfavorable environmental conditions, TSWV and deer damage. There was very little *Aspergillus* crown rot (% dead plants) on the nontreated seed.

EXPEL SEED TREATMENT TEST, 2024

LANG FARM, SOUTH FIELD

Seed Treatment	Plant/ft ¹		% Dead Plants ²			Vigor ³	% Germ.	TSWV ⁴	Roots/ft ⁵	Yield
	13-May	24-May	13-May	24-May	7-Jun	4-Jun	17-Jun	14-Aug	18-Sep	lb/A
1. Untreated	2.1	3.5	0.0	1.5	2.7	7.0	-	18.8	3.0	1752
2. Trebuset	2.6	4.0	0.0	0.0	0.0	8.4	90.0	21.6	3.9	1826
+ inoculant										
3. Trebuset (no inoculant)	3.3	4.4	0.0	0.0	0.0	9.0	89.0	29.2	4.0	1525
4. Trebuset	3.2	4.4	0.0	0.0	0.3	9.0	93.0	26.0	3.4	1471
+ Seed Max										
+ inoculant										
5. Trebuset	2.6	4.1	0.0	0.0	0.0	7.8	87.0	22.8	3.8	1677
+ Seed Max										
+ inoculant										
+ biocontrol										
6. Trebuset	3.0	4.2	0.0	0.0	0.2	9.0	88.0	23.2	4.0	1626
+ Expel polymer L										
+ Seed Max										
+ inoculant										
7. Trebuset	3.1	4.3	0.0	0.0	0.0	8.6	84.0	20.4	4.0	1648
+ Expel polymer R										
+ Seed Max										
+ inoculant										
8. Trebuset	2.2	3.8	0.0	0.0	0.1	8.2	88.0	24.4	3.6	1569
+ Expel polymer R										
+ Seed Max										
+ inoculant										
+ biocontrol										
LSD(P<0.05)	0.6	0.3	N. S.	0.8	1.2	0.7	-	N. S.	0.6	338

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

% Dead Plants²=The % of emerged plants that were dead or dying (*Aspergillus* crown rot).

Vigor³ = 1-10 scale, where 10=best.

TSWV⁴=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

Roots/ft⁵=Number of tap roots per foot of row after the plots were inverted.

HEADS UP/KANNAR II TEST, 2024

A. PURPOSE: To evaluate the efficacy of various peanut seed treatments on peanut stands and development. Application of treatments to seed either before or during seed treatment vs an in furrow application were also compared.

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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment**: In furrow spray was applied at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with one 80015 flat fan tip per row and 50 mesh ball check screens. Cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
2. **Sprays**: In furrow spray was applied at planting on May 9. Bravo (1.5 pt/a) cover sprays were applied on June 12, June 25, July 31, Aug. 14, Aug. 28, and Sep. 13, and Elatus (9 oz/a) sprays were applied on July 31 and Aug. 28.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, South Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on April 11.
3. Soil Fertility:
 - i. pH: 6.21 P: 38.3 K: 68.2 Ca: 740 Mg: 44.1
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - ii. Seed: untreated compromised GA-06G from Scott Monfort (85% germination) and treated seed from Kannar.
 - i. Planted May 9.

8. Harvest Dates:

- i. Dug Sep. 18 and picked Sep. 23.

E. SUMMARY:

Few if any differences were seen in plant stands between the nontreated and treated seed in any of the parameters evaluated. Overall yields were low due to the combined effect of unfavorable environmental conditions, TSWV and deer damage. There also was almost no Aspergillus crown rot (% dead plants) on the nontreated seed. Note that Trt's 1-5 were from a different seed lot.

HEADS UP/KANNAR II TEST, 2024

LANG FARM, SOUTH FIELD

		Rate/A or 100 lbs	Plant/ft ¹		% Dead Plants ²			% Germ.	TSWV ³	Roots/ft ⁴	Yield
Treatment	App's		20-May	31-May	20-May	31-May	14-Jun	17-Jun	14-Aug	20-Sep	lb/A
Heads Up Seed (GA-06G from Dr. Monfort)											
1. Untreated	-	-	1.5	3.2	0.0	0.0	0.3	-	12.0	3.1	2850
2. Rancona VPL	Seed Trt	Liquid	0.9	2.8	0.0	0.0	0.2	85.0	17.0	2.8	2566
3. Rancona VPL + Heads up (mixed with polymer)	Seed Trt	Liquid	0.7	3.1	0.0	0.0	0.3	87.0	20.5	2.9	2804
4. Rancona VPD	Seed Trt	4 oz	1.3	3.1	0.0	0.0	0.3	90.0	17.5	3.0	3038
5. Rancona VPD + Heads up (sprayed 1st)	Seed Trt	4 oz Drench seed	1.2	3.1	0.0	0.0	0.0	90.0	20.0	2.9	2855
Kannar Seed (Growth and Vigor Test, repeat – LP24002 protocol)											
6. Kannar 1	Seed Trt		1.9	3.6	0.0	0.0	0.1	-	18.5	3.5	2805
7. Kannar 2	Seed Trt		1.4	3.5	0.0	0.0	0.0	-	18.5	3.5	3274
8. Kannar 3	Seed Trt		2.0	3.6	0.0	0.0	0.3	-	17.0	3.4	2955
Expel											
9. Rancona VPD + Expel Biocontrol	Seed Trt In Furrow	4.0 oz 6.8 fl oz	2.0	3.3	0.0	0.0	0.1	-	18.5	3.2	3290
LSD(P<0.05)			0.9	0.5	N. S.	N. S.	N. S.	-	N. S.	0.4	N. S.
Planted May 9, 6 seed / ft											
Trt 1-5 and 9 are GA-06G from Dr. Monfort											
Trt 6-8 are Kannar Protocol LP24002											
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.											

KANNAR SEED TREATMENT TEST I, 2024

A. PURPOSE: To evaluate the efficacy of seed treatments on peanut stands, plant development and pod yield.

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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment**: Cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
2. **Sprays**: Bravo (1.5 pt/a) cover sprays were applied on June 12, June 25, July 31, Aug. 14, Aug. 28, and Sep. 13, and Elatus (9 oz/a) sprays were applied on July 31 and Aug. 28.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, South Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on April 11.
3. Soil Fertility:
 - i. pH: 6.86 P: 56.1 K: 54.8 Ca: 955 Mg: 44.9
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: Already treated seed provided by Kannar.
 - ii. Planted May 9.
8. Harvest Dates:
 - i. Dug Sep. 18 and picked Sep. 24.

E. SUMMARY:

Clear differences were seen in plant stands and vigor between the nontreated and treated seed, although resulting yield differences were not significant. Overall yields were low due to the combined effect of unfavorable environmental conditions at planting and deer damage. There was some *Aspergillus* crown rot as seen in the “Dead Plant” counts and all treatments were highly effective.

KANNAR SEED TREATMENT TEST I, 2024											
LANG FARM, SOUTH FIELD											
		Plant/ft ¹		% Dead Plants ²			Vigor ³	% Germ.	TSWV ⁴	Roots/ft ⁵	Yield
LP Code	Seed Treatment	20-May	31-May	20-May	31-May	14-Jun	4-Jun	17-Jun	14-Aug	19-Sep	lb/A
Seedling Disease Test											
LP24015.01	K-542 + Peanut Shine + Color + Water	1.3	2.1	0.0	4.0	12.1	5.0	10.0	29.5	1.6	1886
LP24015.02	Peanut Prep One and Done Red v2.5 + K-542	2.1	3.6	0.0	0.0	0.1	8.0	85.0	24.5	3.2	1949
LP24015.03	Peanut Prep One and Done Red v2.5	2.4	3.6	0.0	0.1	0.3	8.3	86.0	25.0	3.4	2226
LP24015.04	Rancona VPL	1.8	3.6	0.0	0.0	0.1	8.3	87.0	23.5	3.2	2107
Growth and Vigor Test											
LP24002.01	Peanut Prep One and Done Red v2.0	2.4	3.8	0.0	0.0	0.1	8.0	85.0	35.5	3.4	2121
LP24002.02	Peanut Prep One and Done Red v2.5	2.6	4.1	0.0	0.0	0.0	8.5	89.0	28.5	3.6	2220
LP24002.03	Rancona VPL	2.2	3.7	0.0	0.0	0.1	8.3	88.0	29.0	3.4	2229
LSD(P<0.05)	LSD(P<0.05)	0.4	0.3	N. S.	0.5	2.3	1.2	-	8.8	0.4	N. S.
Planted May 9, 2024											
Treatments 1-4 are Kannar Protocol LP24015											
Treatments 5-7 are 1, 2 and 3, respectively from Protocol LP24002											
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 (<i>Aspergillus</i> crown rot).											
Vigor ³ = 1-10 scale, where 10=best.											
TSWV ⁴ =Percent of row feet infectd based on disease loci (up to 12" linear row) per plot.											
Roots/ft ⁵ =Number of tap roots per foot of row after the plots were inverted.											

SYNGENTA SEED TREATMENT TEST I, 2024

- A. PURPOSE: To evaluate the efficacy of commercial and experimental seed treatments on peanut stands when applied to compromised seed.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with five replicates.
 2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
 3. Eight-foot alleyways between blocks.
 4. Plots were established in an area of continuous peanut production.
- C. APPLICATION OF TREATMENTS:
1. **Equipment**: Cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
 2. **Sprays**: Bravo (1.5 pt/a) cover sprays were applied on June 12, June 25, July 31, Aug. 14, Aug. 28, and Sep. 13, and Elatus (9 oz/a) sprays were applied on July 31 and Aug. 28.
- D. ADDITIONAL INFORMATION:
1. Location:
 - i. Lang/Rigdon Farm, South Field, Tifton, GA 31794.
 2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on April 11.
 3. Soil Fertility:
 - i. pH: 6.21 P: 38.3 K: 68.2 Ca: 740 Mg: 44.1
 4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
 5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
 6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
 7. Planting Info:
 - i. Seed: compromised GA-06G provided and treated by Syngenta.
 - ii. Planted May 3.
 8. Harvest Dates:
 - i. Dug Sep. 18 and picked Sep. 23.

E. SUMMARY:

Clear differences were seen in initial and final plant stands between the nontreated and treated seed, although surprisingly resulting yield differences were not significant. This was lower germination seed (about 85%). Overall yields were low due to the combined effect of unfavorable environmental conditions at planting and deer damage. There was almost no *Aspergillus* crown rot as seen in the “Dead Plant” counts.

SYNGENTA SEED TREATMENT TEST I, 2024

LANG FARM, SOUTH FIELD

	Plant/ft ¹			% Dead Plants ²				% Germ.	TSWV ³	Roots/ft ⁴	Yield
Seed Treatment	13-May	17-May	24-May	13-May	17-May	24-May	7-Jun	17-Jun	15-Aug	18-Sep	lb/A
1. Trebuset	1.7	2.7	3.0	0.0	0.0	0.0	0.0	85.0	21.6	3.0	2128
2. Rancona PD	1.8	2.7	2.9	0.0	0.0	0.0	0.1	85.0	22.8	2.8	2492
3. Rancona PL	1.6	2.7	2.9	0.0	0.0	0.0	0.0	74.0	31.2	2.8	1996
4. Exp 1	1.3	2.4	2.7	0.0	0.0	0.0	0.0	84.0	26.4	2.6	1956
5. Exp 2	1.4	2.4	2.8	0.0	0.0	0.0	0.0	83.0	19.6	2.7	2151
6. Untreated	1.2	2.0	1.9	0.0	0.0	0.0	4.7	-	28.4	1.7	2251
LSD(P<0.05)	0.6	0.4	0.5	N. S.	N. S.	N. S.	1.8	-	9.7	0.5	518
"Bad" seed test											
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 (<i>Aspergillus</i> crown rot).											
TSWV ³ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.											
Roots/ft ⁴ =Number of tap roots per foot of row after the plots were inverted.											

SYNGENTA SEED TREATMENT TEST II, 2024

A. PURPOSE: To evaluate the efficacy of commercial and experimental seed treatments on peanut stands when applied to good seed.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. **Equipment:** Cover sprays were applied at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens.
2. **Sprays:** Bravo (1.5 pt/a) cover sprays were applied on June 12, June 25, July 31, Aug. 14, Aug. 28, and Sep. 13, and Elatus (9 oz/a) sprays were applied on July 31 and Aug. 28.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, South Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on April 8. Deep turned field and marked beds on April 11.
3. Soil Fertility:
 - i. pH: 6.21 P: 38.3 K: 68.2 Ca: 740 Mg: 44.1
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: good GA-06G seed provided and treated by Syngenta.
 - ii. Planted May 3.
8. Harvest Dates:
 - i. Dug Sep. 18 and picked Sep. 23.

E. SUMMARY:

This test used good seed with germination in the 90's. However, there were still clear differences seen in initial and final plant stands between the nontreated and treated seed, and some resulting yield differences were significant. Overall yields were low due to the combined effect of unfavorable environmental conditions at planting, TSWV and deer damage. There was almost no Aspergillus crown rot as seen in the "Dead Plant" counts with a high of only 3.8% in the Untreated plots.

SYNGENTA SEED TREATMENT TEST II, 2024

LANG FARM, SOUTH FIELD

Seed	Plant/ft ¹			% Dead Plants ²				% Germ.	TSWV ³	Roots/ft ⁴	Yield
Treatment	13-May	17-May	24-May	13-May	17-May	24-May	7-Jun	17-Jun	15-Aug	19-Sep	lb/A
1. Trebuset	1.3	2.9	3.3	0.0	0.0	0.0	0.1	91.0	20.8	3.3	2650
2. Rancona PD	1.4	3.0	3.5	0.0	0.0	0.0	0.1	93.0	17.2	3.6	2928
3. Rancona PL	1.7	2.8	3.2	0.0	0.0	0.0	0.3	93.0	21.6	3.2	2279
4. Exp 1	1.5	2.7	3.3	0.0	0.0	0.0	0.2	96.0	21.2	3.2	2463
5. Exp 2	1.1	2.8	3.5	0.0	0.0	0.0	0.0	90.0	20.4	3.2	2286
6. Untreated	1.2	2.1	2.1	0.0	0.0	0.0	3.8	-	22.4	1.9	2178
LSD(P<0.05)	0.5	0.6	0.5	N. S.	N. S.	N. S.	0.8	-	N. S.	0.4	385

"Good" seed test

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

% Dead Plants² = The % of emerged plants that were dead or dying (*Aspergillus* crown rot).

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

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

DAILY RAINFALL + IRRIGATION, 2024

LANG/RIGDON FARM, SOUTH FIELD (EAST END)

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0.37	0	0	0	0	0.50	0	0
2	0	0	0	0	1.00	0	0.50	0
3	0	1.50	0.70	0	0.40	0	0	0
4	0	0	0.60	0	0	0	0	0
5	0	0	0	0.50	0	1.50	0	0
6	0.06	0	0	0	0	0	0	0.20
7	0	0	0	0	0	0	2.60	0
8	0.05	0	0	0	1.25	0	0.70	0
9	1.15	0	1.30	0	0	0	0.30	0
10	0	4.50	1.00	0.50	0	0	0	0
11	0	0	0	0	0	0	0	0
12	0	0	0	0.50	0	0.50	2.60	0
13	0	0	1.10	0	0	0	1.20	0
14	0	0	0.30	0	0	0	0.20	0
15	0.70	0	0	0	0.50	0.50	0	0
16	0.06	0	0	0	0	0	0	0
17	0	0	1.20	0	1.10	0.30	0	0
18	0	0	1.80	0.50	0.75	0.50	0	0
19	0	0	0.50	0	0	0	0	0
20	0	0	0	0.50	0.20	0	0	0
21	0	1.00	0	0	0.60	0	0	0
22	1.80	0	0	0	0	0.50	0	0
23	0	0	0	0	0	0	0	0
24	0	0	0	0.50	0	0	0	0
25	0	0	0.40	0	0	0	0	0
26	0	0	0	0.50	0	0.50	8.20	0
27	1.80	0	0.80	0.40	0.25	0	0	0
28	0	0	0	0	0	0	0	0
29	0	0	0	0.90	0.80	0.50	0	0
30	0	0	0	0	0	0	0	0
31	0	0	0	0	0.20	0	0	0
TOTAL (inches)	5.99	7.00	9.70	4.80	7.05	5.30	16.30	0.20

NOTE: This table is for the BASF Seed Treatment Test, the Syngenta 1 and 2 Tests, and the Heads Up/Kannar II Test.

DAILY RAINFALL + IRRIGATION, 2024

LANG/RIGDON FARM, SOUTH FIELD (WEST END)

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0.37	0	0	0	0	0.60	0	0
2	0	0	0	0	1.00	0	0	0
3	0	1.50	0.70	0	0.40	0	0	0
4	0	0	0.60	0	0	0	0	0
5	0	0	0	0.50	0.50	1.50	0	0
6	0.06	0	0	0	0	0	0	0.20
7	0	0	0	0	0	0	2.60	0
8	0.05	0	0	0	1.25	0	0.70	0
9	1.15	0	0.90	0	0	0	0.30	0
10	0	4.50	1.00	0.50	0	0	0	0
11	0	0	0	0	0.60	0	0	0
12	0	0	0	0	0	0.60	2.60	0
13	0	0	1.10	0.75	0	0	1.20	0
14	0	0	0.30	0	0	0	0.20	0
15	0.70	0	0	0	0.75	0.60	0	0
16	0.06	0	0	0	0	0	0	0
17	0	0	1.20	0	0.60	0.30	0	0
18	0	0	1.80	0	0.75	0.50	0	0
19	0	0	0.50	0	0	0	0	0
20	0	0	0	0.75	0.20	0	0	0
21	0	1.00	0	0	0.60	0	0	0
22	1.80	0	0	0	0	0.60	0	0
23	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0
25	0	0	0.40	0	0.75	0	0	0
26	0	0	0	0	0	0	8.20	0
27	1.80	0	0.80	0.40	0.25	0	0	0
28	0	0	0	0	0	0	0	0
29	0	0	0	0.90	0.90	0	0	0
30	0	0	0	0	0	0	0	0
31	0	0	0	0	0.20	0	0	0
TOTAL (inches)	5.99	7.00	9.30	3.80	8.75	4.70	15.80	0.20

NOTE: This table is for the Corteva, Expel, Certis, and Kannar I Seed Treatment Tests.

BASF FUNGICIDE TEST, 2024

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 four replicates.
2. One two-row bed (25ft x 6ft) per plot, 36-inch row spacing.
3. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

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. **Sprays:** Treatment sprays were applied on June 20, July 4, July 16, July 31, Aug. 12, Aug. 28, and Sep. 11.

D. **ADDITIONAL INFORMATION:**

1. Location:
 - i. Lang/Rigdon Farm, New Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on Apr. 8. Deep turned field and marked beds on Apr. 11.
3. Soil Fertility:
 - i. pH: 6.61 P: 29.6 K: 47.7 Ca: 655 Mg: 39.2
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: TifNV-HiOL
 - ii. Planted May 17.
8. Dirting cultivation:
 - i. Dirting cultivation was done on July 24 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.

9. Harvest Dates:

- i. Dug Oct. 1 and picked Oct. 7.

E. SUMMARY:

The “dirting” cultivation in July helped bring on significant white mold with a 45% incidence in the nontreated plots. Some of the better treatments had greatly reduced white mold incidence and higher yields which reflected the improved disease control. Leaf spot was evaluated just prior to digging the plots nut levels were very low, even in nontreated plots.

BASF FUNGICIDE TEST, 2024

LANG FARM, NEW FIELD

Treatment	App's	Rate/A	LS ¹ 3-Oct	WM ² 4-Oct	Yield lb/A	Treatment	App's	Rate/A	LS ¹ 3-Oct	WM ² 4-Oct	Yield lb/A
1. Nontreated	-	-	3.4	45.0	2532	9. Revytek	2	10.0 fl oz	2.3	4.0	3536
2. Bravo	2 & 7	1.5 pt	2.5	30.5	2325	Bravo	3 & 5	1.5 pt			
Bravo	3 - 6	1.5 pt				Elatus 45WG	3 & 5	9.5 oz			
+ Orius		7.2 fl oz				Provysol	4 & 6	3.0 fl oz			
						+ Orius		7.2 fl oz			
3. Priaxor	2	6.0 fl oz	2.4	25.5	3046	Bravo	7	1.5 pt			
Bravo	3 - 6	1.5 pt				+ Topsin		5.0 fl oz			
+ Orius		7.2 fl oz									
Bravo	7	1.5 pt				10. Revylok	3 & 5	6.5 fl oz	2.5	5.9	3284
4. Revylok	2	6.5 fl oz	2.6	31.0	2897	Bravo	3 & 5	1.5 pt			
Bravo	3-6	1.5 pt				Elatus 45WG	3 & 5	9.5 oz			
+ Orius		7.2 fl oz				Provysol	4 & 6	3.0 fl oz			
Bravo	7	1.5 pt				+ Orius		7.2 fl oz			
						Bravo	7	1.5 pt			
						+ Topsin		5.0 fl oz			
5. Revytek	2	10.0 fl oz	2.6	19.5	3537	11. Bravo	1 & 4	1.5 pt	2.5	9.5	3592
Bravo	3-6	1.5 pt				+ Orius 3.6		7.2 fl oz			
+ Orius		7.2 fl oz				Alto	2 & 6	5.5 fl oz			
Bravo	7	1.5 pt				+ Bravo		1.5 pt			
6. Priaxor	2	6.0 fl oz	2.5	23.5	2884	Elatus 45WG	3 & 5	9.5 oz			
Provysol	3 & 5	3.0 fl oz				+ Miravis		3.4 fl oz			
+ Orius		7.2 fl oz				Bravo	7	1.5 pt			
Bravo	4 & 6	1.5 pt				12. Bravo	1 & 4	1.5 pt	2.4	10.6	3302
+ Orius		7.2 fl oz				+ Orius 3.6		7.2 fl oz			
Bravo	7	1.5 pt				Provysol	2 & 6	3.0 fl oz			
7. Priaxor	2	6.0 fl oz	2.4	13.0	3491	+ Bravo		1.5 pt			
Revylok	3 & 5	6.5 fl oz				Elatus 45WG	3 & 5	9.5 oz			
+ Orius		7.2 fl oz				+ Miravis		3.4 fl oz			
Bravo	4 & 6	1.5 pt				Bravo	7	1.5 pt			
+ Orius		7.2 fl oz				LSD(P<0.05)	-	-	0.5	16.9	854
Bravo	7	1.5 pt				Leaf Spot ¹ = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.					
8. Priaxor	2	6.0 fl oz	2.6	10.0	3549	White Mold ² =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.					
Bravo	3 & 5	1.5 pt									
Elatus 45WG	3 & 5	9.5 oz									
Provysol	4 & 6	3.0 fl oz									
+ Orius		7.2 fl oz									
Bravo	7	1.5 pt									
+ Topsin		5.0 fl oz									

SYNGENTA FUNGICIDE TEST, 2024

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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment**: All 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. **Sprays**: Sprays were applied on June 20 (#1), July 2 (#1.5), July 4 (#2), July 16 (#3), July 31 (#4), Aug. 12 (#5), Aug. 28 (#6), and Sep. 11 (#7).

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, New Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on Apr. 8. Deep turned field and marked beds on Apr. 11.
3. Soil Fertility:
 - i. pH: 6.61 P: 29.6 K: 47.7 Ca: 655 Mg: 39.2
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: TifNV-HiOL
 - ii. Planted May 17.
8. Dirting cultivation:
 - i. Dirting cultivation was done on July 24 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.

9. Harvest Dates:

- i. Dug Oct. 1 and picked Oct. 7.

E. SUMMARY:

The “dirting” cultivation in July helped bring on significant white mold with a 22% incidence in the nontreated plots. Some of the better treatments had greatly reduced white mold incidence and higher yields which reflected the improved disease control. Leaf spot was evaluated just prior to digging the plots and levels were very low, even in nontreated plots.

SYNGENTA FUNGICIDE TEST, 2024

LANG FARM, NEW FIELD

			LS ¹	WM ²	Yield					LS ¹	WM ²	Yield
Treatment	App's	Rate/A	3-Oct	4-Oct	lb/A		Treatment	App's	Rate/A	3-Oct	4-Oct	lb/A
1. Untreated			4.4	22.0	2259		7. Bravo	1.5	1.5 pt	2.0	6.8	3200
							Elatus 45WG	3 & 5	7.3 oz			
2. Bravo	1	1.5 pt	2.4	10.0	2990		+ Miravis		3.4 fl oz			
+ Orius 3.6		7.2 fl oz					+ A17414A		5.7 oz			
Alto	2	5.5 fl oz					Bravo	4 & 6	1.5 pt			
+ Bravo		1.5 pt					Bravo	7	1.5 pt			
Elatus 45WG	3 & 5	9.5 oz					+ Orius 3.6		7.2 fl oz			
+ Miravis		3.4 fl oz										
Orius	7	7.2 fl oz					8. Bravo	1.5	1.5 pt	1.8	6.0	2796
+ Bravo		1.5 pt					Elatus 45WG	3 & 5	7.3 oz			
+ Alto		5.5 fl oz					+ Miravis		3.4 fl oz			
							+ Alto		5.5 fl oz			
3. Alto	1.5	5.5 fl oz	2.5	9.6	2985		Bravo	4 & 6	1.5 pt			
+ Bravo		1.5 pt					Bravo	7	1.5 pt			
Elatus 45WG	3 & 5	7.3 oz					+ Orius 3.6		7.2 fl oz			
+ Miravis		3.4 fl oz										
Elatus 45WG	4	7.3 oz					9. Bravo	1.5	1.5 pt	2.1	11.2	2846
+ Alto		5.5 fl oz					A24031A	3 & 5	9.0 oz			
Provost Silver	6	13.0 fl oz					Bravo	4 & 6	1.5 pt			
Bravo	7	1.5 pt					Bravo	7	1.5 pt			
+ Orius 3.6		7.2 fl oz					+ Orius 3.6		7.2 fl oz			
4. Alto	1.5	5.5 fl oz	2.2	5.6	2802		10. Priaxor	1.5	6.0 fl oz	1.9	6.8	3127
+ Bravo		1.5 pt					Elatus 45WG	3 & 5	9.5 oz			
Elatus 45WG	3 & 5	7.3 oz					+ Bravo		1.5 pt			
+ Miravis		3.4 fl oz					Provysol	4 & 6	3.0 fl oz			
Bravo	4 & 6	1.5 pt					+ Orius 3.6		7.2 fl oz			
+ Alto		5.5 fl oz					Provost Silver	7	13.0 fl oz			
Bravo	7	1.5 pt										
+ Orius 3.6		7.2 fl oz					11. Bravo	1	1.0 pt	1.9	10.0	2831
							Bravo	2 & 7	1.5 pt			
5. Alto	1.5	5.5 fl oz	2.3	6.8	3182		+ Orius 3.6		7.2 fl oz			
+ Bravo		1.5 pt					Elatus 45WG	3 & 5	9.5 oz			
Elatus 45WG	3 & 5	7.3 oz					+ Miravis		3.4 fl oz			
+ Miravis		3.4 fl oz					Alto	4 & 6	5.5 fl oz			
+ Induce		0.25% v/v					+ Bravo		1.5 pt			
Bravo	4 & 6	1.5 pt										
+ Alto		5.5 fl oz					12. Bravo	1-7	1.5 pt	2.5	24.4	2143
Bravo	7	1.5 pt										
+ Orius 3.6		7.2 fl oz					13. Bravo W'stik	1 & 7	1.5 pt	2.5	5.6	3469
							Absolute Max	2	3.5 oz			
6. Alto	1.5	5.5 fl oz	2.0	13.2	2976		Elatus 45WG	3 & 5	9.5 oz			
+ Bravo		1.5 pt					Provost Silver	4 & 6	13.0 fl oz			
Elatus 45WG	3 & 5	7.3 oz										
+ Miravis		3.4 fl oz					14. Bravo	1, 4 & 7	1.5 pt	2.1	11.2	2743
Bravo	4	1.5 pt					Excalia	2	2.0 oz			
Bravo	6	1.5 pt					+ Bravo		1.5 pt			
+ Alto		5.5 fl oz					Excalia	3 & 5	3.0 oz			
Bravo	7	1.5 pt					+ Bravo		1.5 pt			
+ Orius 3.6		7.2 fl oz					Bravo	6	1.5 pt			
							+ Orius		7.2 fl oz			
							LSD(P<0.05)	-	-	0.8	7.5	518
							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.					

DAILY RAINFALL + IRRIGATION, 2024

LANG/RIGDON FARM, NEW FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0.37	0	0	0	0	0	0	0
2	0	0	0	0	1.00	0	0	0
3	0	1.50	0.70	0	0.40	0	0	0
4	0	0	0.60	0	0	0	0	0
5	0	0	0	0.50	0	1.50	0	0
6	0.06	0	0	0	0	0	0	0.20
7	0	0	0	0	0	0	2.60	0
8	0.05	0	0	0	0.75	0	0.70	0
9	1.15	0	0.90	0	0	0	0.30	0
10	0	4.50	1.00	0	0	0	0	0
11	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	2.60	0
13	0	0	1.10	0	0	0	1.20	0
14	0	0	0.30	0	0	0	0.20	0
15	0.70	0	0	0	0	0	0	0
16	0.06	0	0	0	0	0	0	0
17	0	0	1.20	0	0.60	0.30	0	0
18	0	0	1.80	0	0.75	0.50	0	0
19	0	0	0.50	0	0	0	0	0
20	0	0	0	0	0.20	0	0	0
21	0	1.00	0	0	0.60	0	0	0
22	1.80	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0
25	0	0	0.40	0	0	0	0	0
26	0	0	0	0	0	0	8.20	0
27	1.80	0	0.80	0.40	0.25	0	0	0
28	0	0	0	0	0	0	0	0
29	0	0	0	0.90	0.30	0	0	0
30	0	0	0	0	0	0	0	0
31	0	0	0	0	0.20	0	0	0
TOTAL (inches)	5.99	7.00	9.30	1.80	5.05	2.30	15.80	0.20

ADAMA FUNGICIDE TEST I, 2024

A. PURPOSE: To evaluate the comparative efficacy of commercial and experimental applied fungicides for the control of soil borne and foliar 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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment**: All Bravo treatments were applied as a cover spray at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens. All other 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. **Sprays**: Sprays were applied June 12, June 24, July 10, July 24, Aug. 7, Aug. 21, and Sep. 3.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, Cotton Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on Apr. 8. Deep turned field and marked beds on Apr. 11.
3. Soil Fertility:
 - i. pH: 6.49 P: 71.4 K: 50.6 Ca: 697 Mg: 44.1
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: TifNV-HiOL
 - ii. Planted May 2.
8. Dirting cultivation:
 - i. Dirting cultivation was done on July 12 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.

9. Harvest Dates:

- i. Dug Oct. 3 and picked Oct. 9.

E. SUMMARY:

The “dirting” cultivation in July helped bring on a severe white mold with a 90% incidence in the nontreated plots. Some of the better treatments had greatly reduced white mold incidence and higher yields which reflected the improved disease control. However, this was a “nuclear “ test for white mold, in part due to delayed digging times and severe wet weather associated with hurricane Helene. Leaf spot was evaluated just prior to digging the plots but levels were so low, even in nontreated plots, they did not justify evaluating them.

ADAMA FUNGICIDE TEST I, 2024

LANG FARM, COTTON FIELD

			WM¹	Yield
Treatment	App's	Rate/A	4-Oct	lb/A
1. Untreated	-	-	89.5	1343
2. Bravo	1, 2, 6, 7	1.5 pt	69.5	2233
Proline 480SC	3-5	2.3 fl oz		
+ Vantana		7.0 fl oz		
3. Bravo	1, 2, 6, 7	1.5 pt	62.5	2390
Proline 480SC	3-5	2.9 fl oz		
+ Vantana		8.3 fl oz		
4. Bravo	1, 2, 6, 7	1.5 pt	83.5	1510
ADM03521.F.1.H	3-5	13.2 fl oz		
5. Bravo	1, 2, 6, 7	1.5 pt	67.5	2695
ADM03521.F.1.I	3-5	13.2 fl oz		
6. Bravo	1, 2, 6, 7	1.5 pt	65.5	2460
ADM03521.F.1.J	3-5	13.2 fl oz		
7. Bravo	1, 2, 6, 7	1.5 pt	72.0	1997
ADM03521.F.1.K	3-5	11.0 fl oz		
8. Bravo	1, 2, 6, 7	1.5 pt	67.5	1917
ADM03521.F.4.B	3-5	8.5 fl oz		
9. Bravo	1, 2, 6, 7	1.5 pt	77.5	1883
Proline 480SC	3-5	2.3 fl oz		
10. Bravo	1, 2, 6, 7	1.5 pt	77.0	2140
Vantana	3-5	7.0 fl oz		
11. Bravo	1, 2, 6, 7	1.5 pt	47.5	3279
Vantana	3-5	24.0 fl oz		
12. Bravo	1, 2, 6, 7	1.5 pt	23.0	4050
Convoy	3-5	26.0 fl oz		
13. Bravo	1, 2, 6, 7	1.5 pt	25.0	4298
Excalia	3-5	3.0 fl oz		
14. Bravo	1-7	1.5 pt	73.5	2187
LSD(P<0.05)	-	-	18.1	758

White Mold¹=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

FMC FUNGICIDE PROGRAMS TEST, 2024

A. PURPOSE: To evaluate the comparative efficacy of commercial and experimental applied fungicides for the control of soil borne and foliar 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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment**: All 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. **Sprays**: Sprays were applied June 12, June 24, July 11, July 24, Aug. 7, Aug. 21, and Sep. 3.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, Cotton Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on Apr. 8. Deep turned field and marked beds on Apr. 11.
3. Soil Fertility:
 - i. pH: 6.49 P: 71.4 K: 50.6 Ca: 697 Mg: 44.1
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: TifNV-HiOL
 - ii. Planted May 2.
8. Dirting cultivation:
 - i. Dirting cultivation was done on July 12 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.
9. Harvest Dates:
 - i. Dug Oct. 3 and picked Oct. 9.

E. SUMMARY:

The “dirting” cultivation in July helped bring on a heavy white mold epidemic with a 49% incidence in the nontreated plots. Some of the better treatments had greatly reduced white mold incidence and higher yields which reflected the improved disease control. This was an excellent test for white mold due to the somewhat lower levels of disease compared to other trials in this field. Leaf spot was assessed just prior to digging the plots but levels were so low, even in nontreated plots, they did not justify evaluating them.

FMC PROGRAMS TEST, 2024

LANG FARM, COTTON FIELD

Treatment	App's	Rate/A	WM ¹ 4-Oct	Yield lb/A	Treatment	App's	Rate/A	WM ¹ 4-Oct	Yield lb/A
1. Untreated			49.0	3594	7. Bravo W'stik	1	1.5 pt	15.0	4722
					Lucento	2 & 4	5.5 fl oz		
2. Bravo W'stik	1	1.5 pt	20.5	4238	Convoy	3	32.0 fl oz		
Lucento	2 & 4	5.5 fl oz			+ Bravo		1.5 pt		
Convoy	3	32.0 fl oz			Umbra	5	36.0 fl oz		
+ Bravo		1.5 pt			+ Bravo		16.0 fl oz		
Elatus 45WG	5	9.5 oz			Provost Silver	6	13.0 fl oz		
Adastrio	6	9.0 fl oz			Bravo	7	1.5 pt		
Bravo W'stik	7	1.5 pt			+ Muscle		7.2 fl oz		
+ Alto		5.5 fl oz							
					8. Bravo W'stik	1	1.5 pt	13.0	4750
3. Bravo W'stik	1	1.5 pt	8.5	4660	Lucento	2 & 4	5.5 fl oz		
Adastrio	2	9.0 fl oz			Umbra	3 & 5	36.0 fl oz		
Convoy	3	32.0 fl oz			+ Bravo		16.0 fl oz		
+ Bravo		1.5 pt			Provost Silver	6	13.0 fl oz		
Elatus 45WG	5	9.5 oz			Bravo	7	1.5 pt		
Lucento	4 & 6	5.5 fl oz			+ Muscle		7.2 fl oz		
Elatus 45WG	5	9.5 oz							
Bravo W'stik	7	1.5 pt			9. Bravo	1	1.5 pt	5.0	5159
+ Alto		5.5 fl oz			Priaxor	2	6.0 fl oz		
					Convoy	3 & 5	32.0 fl oz		
4. Bravo W'stik	1	1.5 pt	16.0	4452	+ Bravo		1.5 pt		
Lucento	2 & 4	5.5 fl oz			Provysol	4 & 6	3.0 fl oz		
Adastrio	3 & 5	9.0 fl oz			+ Muscle		7.2 fl oz		
+ Bravo		1.5 pt			Bravo	7	1.5 pt		
Lucento	4	5.5 fl oz							
Provost Silver	6	13.0 fl oz			10. Alto	1	5.5 fl oz	13.5	4495
Bravo W'stik	7	1.5 pt			+ Bravo		1.5 pt		
+ Alto		5.5 fl oz			Bravo	2	1.5 pt		
					Elatus 45WG	3 & 5	9.5 oz		
5. Bravo W'stik	1	1.5 pt	10.5	4103	+ Miravis		3.4 fl oz		
Lucento	2 & 4	5.5 fl oz			Bravo	7	1.5 pt		
Elatus 45WG	3 & 5	9.5 oz							
Provost Silver	6	13.0 fl oz			LSD(P<0.05)	-	-	14.9	847
Bravo W'stik	7	1.5 pt			White Mold ¹ =Percent of row feet infected based on disease loci (up to 12" linear row) per plot.				
+ Alto		5.5 fl oz							
6. Bravo W'stik	1	1.5 pt	10.0	4321					
Lucento	2 & 4	5.5 fl oz							
Convoy	3 & 5	32.0 fl oz							
+ Bravo		1.5 pt							
Provost Silver	6	13.0 fl oz							
Bravo W'stik	7	1.5 pt							
+ Alto		5.5 fl oz							

FMC-BAYER TEST, 2024

A. PURPOSE: To evaluate the comparative efficacy of commercial and experimental applied fungicides for the control of soil borne and foliar 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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment**: Bravo treatments (sprays 6 and 7) were applied as a cover spray at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens. All other 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. **Sprays**: Sprays were applied June 12, June 24, July 10, July 24, Aug. 7, Aug. 21, and Sep. 3.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, Cotton Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on Apr. 8. Deep turned field and marked beds on Apr. 11.
3. Soil Fertility:
 - i. pH: 6.49 P: 71.4 K: 50.6 Ca: 697 Mg: 44.1
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: TifNV-HiOL
 - ii. Planted May 2.
8. Dirting cultivation:
 - i. Dirting cultivation was done on July 12 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.

9. Harvest Dates:

- i. Dug Oct. 3 and picked Oct. 9.

E. SUMMARY:

The “dirting” cultivation in July helped bring on a “nuclear” white mold epidemic with a 92% incidence in the nontreated plots. Some of the better treatments had greatly reduced white mold incidence and higher yields which reflected the improved disease control, but none of the treatments were exceptional. However, this was a severe test for white mold, in part due to delayed digging times and severe wet weather associated with hurricane Helene. Leaf spot was evaluated just prior to digging the plots but levels were so low, even in nontreated plots, they did not justify evaluating them.

FMC-BAYER FUNGICIDE TEST, 2024

LANG FARM, COTTON FIELD

			WM ¹	Yield
Treatment	App's	Rate/A	4-Oct	lb/A
1. Untreated	-	-	92.0	1297
2. Bravo	1 & 2	1.5 pt	34.0	3447
+ Muscle		7.2 fl oz		
TST98-R001	3-5	4.2 fl oz		
Bravo W'stik	6 & 7	1.5 pt		
3. Bravo	1 & 2	1.5 pt	24.0	4016
+ Muscle		7.2 fl oz		
TST98-R001	3-5	7.0 fl oz		
Bravo W'stik	6 & 7	1.5 pt		
4. Bravo	1 & 2	1.5 pt	52.5	3139
+ Muscle		7.2 fl oz		
X4Q56-R002	3-5	4.2 fl oz		
Bravo W'stik	6 & 7	1.5 pt		
5. Bravo	1 & 2	1.5 pt	29.5	4201
+ Muscle		7.2 fl oz		
X4Q56-R002	3-5	8.4 fl oz		
Bravo W'stik	6 & 7	1.5 pt		
6. Bravo	1 & 2	1.5 pt	31.0	3753
+ Muscle		7.2 fl oz		
Adastrio	3-5	9.0 fl oz		
Bravo W'stik	6 & 7	1.5 pt		
7. Bravo	1 & 2	1.5 pt	40.0	3710
+ Muscle		7.2 fl oz		
Elatus 45WG	3 & 5	9.5 oz		
Bravo W'stik	4, 6 & 7	1.5 pt		
8. Bravo	1 & 2	1.5 pt	57.5	2651
Provost Silver	3-5	13.0 fl oz		
Bravo W'stik	6 & 7	1.5 pt		
9. Bravo	1 & 2	1.5 pt	71.0	2492
USF0115	3-5	10.3 fl oz		
Bravo W'stik	6 & 7	1.5 pt		
10. Bravo	1-7	1.5 pt	67.5	2564
LSD(P<0.05)	-	-	17.5	697

White Mold¹=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

ISK/SIPCAM TEST, 2024

A. PURPOSE: To evaluate the comparative efficacy of commercial and experimental applied fungicides for the control of soil borne and foliar 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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment**: Bravo treatments (sprays 1, 2 and 7) were applied as a cover spray at 32 PSI going 4.3 MPH in 19.7 GPA using six TX-12 tips and 50 mesh ball check screens. All other 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. **Sprays**: Sprays were applied June 12, June 24, July 10, July 24, Aug. 7, Aug. 21, and Sep. 3.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, Cotton Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on Apr. 8. Deep turned field and marked beds on Apr. 11.
3. Soil Fertility:
 - i. pH: 6.49 P: 71.4 K: 50.6 Ca: 697 Mg: 44.1
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: TifNV-HiOL
 - ii. Planted May 2.
8. Dirting cultivation:
 - i. Dirting cultivation was done on July 12 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.

9. Harvest Dates:

- i. Dug Oct. 3 and picked Oct. 9.

E. SUMMARY:

The “dirting” cultivation in July helped bring on a “nuclear” white mold epidemic with a 92% incidence in the nontreated plots. Some of the better treatments had somewhat reduced white mold incidence and higher yields which reflected the improved disease control, but none of the treatments were exceptional. However, this was a severe test for white mold, in part due to delayed digging times and severe wet weather associated with hurricane Helene. Leaf spot was evaluated just prior to digging the plots but levels were so low, even in nontreated plots, they did not justify evaluating them.

ISK/SIPCAM TEST, 2024

LANG FARM, COTTON FIELD

			WM ¹	Yield
Treatment	App's	Rate/A	4-Oct	lb/A
1. Untreated	-	-	82.4	1172
2. Bravo	1-7	1.5 pt	83.6	1215
3. Bravo	1, 2 & 7	1.5 pt	80.4	2341
Tebustar	3-6	7.2 fl oz		
4. Bravo	1, 2 & 7	1.5 pt	88.0	1174
IKF-5411	3-6	8.0 fl oz		
5. Bravo	1, 2 & 7	1.5 pt	73.6	1814
IKF-1216	3-6	10.0 fl oz		
6. Bravo	1, 2 & 7	1.5 pt	75.2	1805
IKF-1216	3-6	10.0 fl oz		
+ IKF-5411		8.0 fl oz		
7. Bravo	1, 2 & 7	1.5 pt	86.4	1287
IBA-415	3-6	16.4 fl oz		
8. Bravo	1, 2 & 7	1.5 pt	83.6	1494
Bravo	3-6	1.5 pt		
+ SA-0130310		18.5 fl oz		
9. Bravo	1, 2 & 7	1.5 pt	84.8	1255
Bravo	3-6	1.5 pt		
+ SA-0310120		16.0 fl oz		
10. Bravo	1, 2 & 7	1.5 pt	74.0	2532
Bravo	3-6	1.5 pt		
+ Convoy		16.0 fl oz		
LSD(P<0.05)	-	-	11.8	787

White Mold¹=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

VALENT – ADAMA FUNGICIDE TEST, 2024

A. PURPOSE: To evaluate the comparative efficacy of commercial and experimental applied fungicides for the control of soil borne and foliar 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. Eight-foot alleyways between blocks.
4. Plots were established in an area of continuous peanut production.

C. APPLICATION OF TREATMENTS:

1. **Equipment:** All 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. **Sprays:** Sprays were applied June 12, June 24, July 10, July 24, Aug. 7, Aug. 21, and Sep. 3.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Lang/Rigdon Farm, Cotton Field, Tifton, GA 31794.
2. Land Preparation:
 - i. Applied 550 lbs of fertilizer (10-34-60) on Apr. 8. Deep turned field and marked beds on Apr. 11.
3. Soil Fertility:
 - i. pH: 6.49 P: 71.4 K: 50.6 Ca: 697 Mg: 44.1
4. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
5. Herbicides:
 - i. PPI: Tank mix of Sonalan (1 qt/a) + Dual Magnum (1.3 pt/a) was applied Apr. 29. Rototilled to incorporate.
6. Insecticides:
 - i. Thimet (5 lbs/a) at planting.
7. Planting Info:
 - i. Seed: TifNV-HiOL
 - ii. Planted May 2.
8. Dirting cultivation:
 - i. Dirting cultivation was done on July 12 by running the cultivator through the field to throw dirt on the peanut vines in order to amplify white mold disease.
9. Harvest Dates:
 - i. Dug Oct. 3 and picked Oct. 9

E. SUMMARY:

The “dirting” cultivation in July helped bring on a “nuclear” white mold epidemic with a 91% incidence in the nontreated plots. Some of the better treatments had somewhat reduced white mold incidence and higher yields which reflected the improved disease control, but none of the treatments were exceptional. However, this was a severe test for white mold, in part due to delayed digging times and severe wet weather associated with hurricane Helene. Leaf spot was evaluated just prior to digging the plots but levels were so low, even in nontreated plots, they did not justify evaluating them.

VALENT-ADAMA FUNGICIDE TEST, 2024

LANG FARM, COTTON FIELD

			WM¹	Yield
Treatment	App's	Rate/A	4-Oct	lb/A
1. Untreated	-	-	90.8	1257
2. Bravo	1, 4, 6 & 7	1.5 pt	61.6	2376
Bravo	2, 3 & 5	1.5 pt		
+ Excalia		2.0 fl oz		
3. Bravo	1, 4, 6 & 7	1.5 pt	48.8	2765
Bravo	2	1.5 pt		
+ Excalia		2.0 fl oz		
Bravo	3 & 5	1.5 pt		
+ Excalia		3.0 fl oz		
4. Bravo	1, 4, 6 & 7	1.5 pt	44.8	2954
Elatus 45WG	2, 3 & 5	7.3 oz		
5. Bravo	1 & 7	1.5 pt	52.4	2873
Bravo	2	1.5 pt		
+ Excalia		2.0 fl oz		
Bravo	3 & 5	1.5 pt		
+ Excalia		3.0 fl oz		
Provost Silver	4 & 6	13.0 fl oz		
6. Bravo	1 & 7	1.5 pt	48.4	2961
Bravo	2	1.5 pt		
+ Excalia		2.0 fl oz		
Bravo	3 & 5	1.5 pt		
+ Excalia		3.0 fl oz		
Provysol	4 & 6	3.0 fl oz		
+ Orius		7.2 fl oz		
				Cont.

VALENT-ADAMA FUNGICIDE TEST, 2024

LANG FARM, COTTON FIELD

			WM¹	Yield
Treatment	App's	Rate/A	4-Oct	lb/A
7. Bravo	2-7	1.5 pt	77.6	1452
8. Bravo	2 & 4	1.5 pt	62.8	2168
+ Orius		7.2 fl oz		
Bravo	3 & 5	1.5 pt		
+ Vantana		16.0 fl oz		
Bravo	6 & 7	1.5 pt		
9. Bravo	2	1.5 pt	74.0	1630
+ Soratel		10.9 fl oz		
Bravo	3 & 5	1.5 pt		
+ Vantana		16.0 fl oz		
Bravo	4	1.5 pt		
+ Maxentis		13.0 fl oz		
Bravo	6 & 7	1.5 pt		
10. Bravo	2	1.5 pt	60.8	2223
+ Soratel		10.9 fl oz		
Bravo	3	1.5 pt		
+ Vantana		24.0 fl oz		
Bravo	4	1.5 pt		
+ Maxentis		15.0 fl oz		
Bravo	5 & 6	1.5 pt		
+ Vantana		16.0 fl oz		
Bravo	7	1.5 pt		
LSD(P<0.05)	-	-	16.9	775

White Mold¹=Percent of row feet infected based on disease loci (up to 12" linear row) per plot.

DAILY RAINFALL + IRRIGATION, 2024

LANG/RIGDON FARM, COTTON FIELD

DATE	Mar	Apr	May	June	July	Aug	Sep	Oct
1	0.37	0	0	0	0	0	0	0
2	0	0	0	0	1.00	0	0	0
3	0	1.50	0.70	0	0.40	0	0	0
4	0	0	0.60	0	0	0	0	0
5	0	0	0	0.50	0	1.50	0	0
6	0.06	0	0	0	0	0	0	0.20
7	0	0	0	0	0	0	2.60	0
8	0.05	0	0	0	0.75	0	0.70	0
9	1.15	0	0.90	0	0	0	0.30	0
10	0	4.50	1.00	0	0	0	0	0
11	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	2.60	0
13	0	0	1.10	0	0	0	1.20	0
14	0	0	0.30	0	0	0	0.20	0
15	0.70	0	0	0	0	0	0	0
16	0.06	0	0	0	0	0	0	0
17	0	0	1.20	0	0.60	0.30	0	0
18	0	0	1.80	0	0.75	0.50	0	0
19	0	0	0.50	0	0	0	0	0
20	0	0	0	0	0.20	0	0	0
21	0	1.00	0	0	0.60	0	0	0
22	1.80	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0	0
24	0	0	0	0	0	0	0	0
25	0	0	0.40	0	0	0	2.91	0
26	0	0	0	0	0	0	3.04	0
27	1.80	0	0.80	0.40	0.25	0	1.43	0
28	0	0	0	0	0	0	0	0
29	0	0	0	0.90	0.30	0	0	0
30	0	0	0	0	0	0	0	0
31	0	0	0	0	0.20	0	0	0
TOTAL (inches)	5.99	7.00	9.30	1.80	5.05	2.30	14.98	0.20

BASF NEMATODE TEST, 2024

A. PURPOSE: To evaluate seed treatment management for peanut root-knot nematodes.

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. Eight-foot alleyways between blocks.

C. APPLICATION OF TREATMENTS:

1. **Equipment/Sprays**: In furrow spray was applied at planting on May 22 at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with one 80015 flat fan tip per row and 50 mesh ball check screens. See Table 1 below for all other spray information, including fungicide cover sprays.

Table 1						
PESTICIDE APPLICATIONS IN ADDITION TO APPLICATIONS IN SECTION "C" ABOVE						
Spray Date	Treatment	Rate				
5/23/2024	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulugus staff. Sprays were applied to all tests in this field.			
	Valor	3 oz/A				
	Strongarm	.45 oz/A				
	Roundup	1 qt/A	Herbicides were applied using AI-11004VS tips @ 40 PSI traveling 5.8 MPH applying 20 GPA.			
6/28/2024	Headline	9 oz/A				
7/10/2024	Select	12 oz/A	Fungicides and insecticides were applied using AI-11003VS tips @ 35 PSI traveling 5 MPH applying 20 GPA.			
7/11/2024	Baythriod	2 oz/A				
7/12/2024	Bravo	1.5 pt/A				
	Umbra	1 qt/A				
	Boron	1 qt/A				
7/13/2024	Cadre	4 oz/A				
7/25/2024	Provost Silver	12 oz/A				
	Manganese	1 pt/A				
	Dimilin	4 oz/A				
8/7/2024	Provost Silver	12 oz/A				
	Convoy	1 qt/A				
	Sulfur	1 qt/A				
8/16/2024	Intrepid Edge	8 oz/A				
8/22/2024	Bravo	1.5 pt/A				
	Tebuconazole	7.2 oz/A				
9/3/2024	Select Max	16 oz/A				
9/6/2024	Provost Silver	12 oz/A				
9/25/2024	Bravo	1.5 pt/A				
	Tebuconazole	7.2 oz/A				

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Attapulgis Research and Education Center, Decatur County, GA.
2. Soil Fertility:
 - i. pH: 7.1 P: 137 K: 90.0 Ca: 916 Mg: 112
3. Planting Info:
 - i. Seed: GA-06G + TifNV-HiOL
 - ii. Planted May 22.
4. Harvest Dates:
 - i. Dug Oct. 16 and picked Oct. 22.

E. SUMMARY:

Although this plot area had higher nematode numbers the previous year, the trials this year in the same field had very low counts and little damage. The yields were excellent due to the lack of disease and nematode damage.

<u>BASF NEMATODE TEST, 2024</u>								
ATTAPULGUS								
			Plant/ft ¹	% Dead Plants ²	Galling ³	Root Knot ⁴	Ring ⁵	Yield
Treatment	App's	Rate/A	10-Jun	10-Jun	5-Oct	17-Sep	17-Sep	lb/A
<u>GA-06G</u>								
1. Obvious Plus	Seed Trt	-	2.4	0.0	0.0	0.0	89.0	5657
2. Obvious Plus	Seed Trt	-	2.3	0.0	0.0	0.0	152.3	5743
+ Ileva	Seed Trt	-						
3. Obvious Plus	Seed Trt	-	2.1	0.0	0.5	0.0	143.8	5783
+ BAS 494001	Seed Trt	-						
4. Obvious Plus	Seed Trt	-	2.2	0.0	0.0	0.0	208.3	6161
+ BAS 494001	Seed Trt	-						
Velum	In Furrow	6.84 fl oz						
<u>TIFNV-HiOL</u>								
5. Rancona	Seed Trt	-	3.6	0.0	0.0	0.0	214.8	6287
LSD(P<0.05)	-	-	0.5	N. S.	N. S.	N. S.	93.3	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 (<i>Aspergillus</i> crown rot).								
Galling ³ = Visual rating of the percent of pods and roots (1-100) with visible damage from root-knot nematode.								
Root-knot ⁴ = Number of <i>M. arenaria</i> juvenile per 100 cc of soil.								
Ring ⁵ = Population of ring nematodes per 100 cc of soil.								

CORTEVA NEMATODE TEST, 2024

A. PURPOSE: To evaluate seed treatment management for peanut root-knot nematode.

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. Eight-foot alleyways between blocks.

C. APPLICATION OF TREATMENTS:

1. **Equipment/Sprays**: In furrow spray was applied at planting on May 22 at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with one 80015 flat fan tip per row and 50 mesh ball check screens. 60 DAP application was applied on July 25 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. See Table 1 below for all other spray information, including fungicide cover sprays.
 - i. NOTE: BIO CNTR 0031 treatment was put out at 12.7 fl oz instead of 14.0 fl oz.

PESTICIDE APPLICATIONS IN ADDITION TO APPLICATIONS IN SECTION "C" ABOVE					
Spray Date	Treatment	Rate			
5/23/2024	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulugus staff. Sprays were applied to all tests in this field.		
	Valor	3 oz/A			
	Strongarm	.45 oz/A			
	Roundup	1 qt/A	Herbicides were applied using AI-11004VS tips @ 40 PSI traveling 5.8 MPH applying 20 GPA.		
6/28/2024	Headline	9 oz/A			
7/10/2024	Select	12 oz/A	Fungicides and insecticides were applied using AI-11003VS tips @ 35 PSI traveling 5 MPH applying 20 GPA.		
7/11/2024	Baythriod	2 oz/A			
7/12/2024	Bravo	1.5 pt/A			
	Umbara	1 qt/A			
	Boron	1 qt/A			
7/13/2024	Cadre	4 oz/A			
7/25/2024	Provost Silver	12 oz/A			
	Manganese	1 pt/A			
	Dimilin	4 oz/A			
8/7/2024	Provost Silver	12 oz/A			
	Convoy	1 qt/A			
	Sulfur	1 qt/A			
8/16/2024	Intrepid Edge	8 oz/A			
8/22/2024	Bravo	1.5 pt/A			
	Tebuconazole	7.2 oz/A			
9/3/2024	Select Max	16 oz/A			
9/6/2024	Provost Silver	12 oz/A			
9/25/2024	Bravo	1.5 pt/A			
	Tebuconazole	7.2 oz/A			

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Attapulgus Research and Education Center, Decatur County, GA.
2. Soil Fertility:
 - i. pH: 7.1 P: 137 K: 90.0 Ca: 916 Mg: 112
3. Planting Info:
 - i. Seed: GA-06G + TifNV-HiOL
 - ii. Planted May 22.
4. Harvest Dates:
 - i. Dug Oct. 16 and picked Oct. 22.

E. SUMMARY:

Although this plot area had higher nematode numbers the previous year, the trials this year in the same field had very low counts and little damage. The yields were excellent due to the lack of disease and nematode damage. Note the high yield of TifNV-HiOL even with very little nematode pressure.

CORTEVA NEMATODE TEST, 2024

ATTAPULGUS

			Plant/ft ¹	% Dead Plants ²	Galling ³	Root Knot ⁴	Ring ⁵	Yield
Treatment	App's	Rate/A	23-May	23-May	5-Oct	17-Sep	17-Sep	lb/A
1. Salibro	In Furrow	7.7 fl oz	2.4	0.0	8.0	119.8	66.5	5622
2. Salibro	In Furrow	11.5 fl oz	2.2	0.0	0.5	67.8	32.0	5808
3. Salibro	In Furrow	15.3 fl oz	2.3	0.0	4.8	46.3	82.3	4857
4. Salibro	In Furrow	23.0 fl oz	2.3	0.0	1.3	9.0	102.3	5274
5. Salibro + Vydate C-LV	In Furrow	7.7 fl oz 34.0 fl oz	1.8	0.0	0.5	71.5	52.3	4858
6. Salibro + Vydate C-LV	In Furrow	7.7 fl oz 17.0 fl oz	1.9	0.0	1.3	8.0	48.5	5207
7. Salibro + Vydate C-LV Vydate C-LV	In Furrow 60 DAP	7.7 fl oz 34.0 fl oz 17.0 fl oz	1.6	0.0	5.5	40.0	62.0	4716
8. Salibro + Fontelis	In Furrow	15.3 fl oz 16.0 fl oz	2.4	0.0	3.8	4.3	46.3	5992
9. Salibro + BIO CNTR 0031	In Furrow	15.3 fl oz 12.7 fl oz	2.5	0.0	5.0	58.8	20.3	5754
10. Salibro + Velum	In Furrow	7.7 fl oz 6.84 fl oz	2.3	0.0	2.5	28.5	65.3	5460
11. Velum	In Furrow	6.84 fl oz	2.7	0.0	0.8	29.0	35.0	5869
12. Untreated	-	-	2.8	0.0	3.3	20.8	46.3	5961
13. TifNV-HiOL	-	-	3.6	0.0	0.8	1.0	80.0	6165
LSD(P<0.05)	-	-	0.4	N. S.	N. S.	N. S.	41.0	944

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

% Dead Plants² = The % of emerged plants that were dead or dying (*Aspergillus* crown rot).

Galling³ = Visual rating of the percent of pods and roots (1-100) with visible damage from root-knot nematode.

Root-knot⁴ = Number of *M. arenaria* juvenile per 100 cc of soil.

Ring⁵ = Population of ring nematodes per 100 cc of soil.

KANNAR NEMATODE TEST, 2024

A. PURPOSE: To evaluate seed treatment management for peanut root-knot nematode.

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. Eight-foot alleyways between blocks.

C. APPLICATION OF TREATMENTS:

1. **Equipment/Sprays**: In furrow spray was applied at planting on May 22 at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with one 80015 flat fan tip per row and 50 mesh ball check screens. See Table 1 below for all other spray information, including fungicide cover sprays.

Table 1					
PESTICIDE APPLICATIONS IN ADDITION TO APPLICATIONS IN SECTION "C" ABOVE					
Spray Date	Treatment	Rate			
5/23/2024	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulugus staff. Sprays were applied to all tests in this field.		
	Valor	3 oz/A			
	Strongarm	.45 oz/A			
	Roundup	1 qt/A	Herbicides were applied using AI-11004VS tips @ 40 PSI traveling 5.8 MPH applying 20 GPA.		
6/28/2024	Headline	9 oz/A			
7/10/2024	Select	12 oz/A			
7/11/2024	Baythriod	2 oz/A	Fungicides and insecticides were applied using AI-11003VS tips @ 35 PSI traveling 5 MPH applying 20 GPA.		
7/12/2024	Bravo	1.5 pt/A			
	Umbra	1 qt/A			
	Boron	1 qt/A			
7/13/2024	Cadre	4 oz/A			
7/25/2024	Provost Silver	12 oz/A			
	Manganese	1 pt/A			
	Dimilin	4 oz/A			
8/7/2024	Provost Silver	12 oz/A			
	Convoy	1 qt/A			
	Sulfur	1 qt/A			
8/16/2024	Intrepid Edge	8 oz/A			
8/22/2024	Bravo	1.5 pt/A			
	Tebuconazole	7.2 oz/A			
9/3/2024	Select Max	16 oz/A			
9/6/2024	Provost Silver	12 oz/A			
9/25/2024	Bravo	1.5 pt/A			
	Tebuconazole	7.2 oz/A			

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Attapulgus Research and Education Center, Decatur County, GA.
2. Soil Fertility:
 - i. pH: 7.1 P: 137 K: 90.0 Ca: 916 Mg: 112
3. Planting Info:
 - i. Seed: GA-06G from Kannar (LP 24003)
 - ii. Planted May 22.
4. Harvest Dates:
 - i. Dug Oct. 14 and picked Oct. 22.

E. SUMMARY:

Although this plot area had higher nematode numbers the previous year, the trials this year in the same field had generally low and variable nematode counts and generally little damage. No phytotoxicity was observed or effects of in furrow treatments on plant stand. The yields were excellent due to the lack of disease and nematode damage.

<u>KANNAR NEMATODE TEST, 2024</u>								
ATTAPULGUS								
			Plant/ft ¹	% Dead Plants ²	Galling ³	Root Knot ⁴	Ring ⁵	Yield
Treatment	App's	Rate/A	10-Jun	10-Jun	5-Oct	17-Sep	17-Sep	lb/A
1. Kannar 1	Seed Trt	-	3.6	0.0	18.0	533.8	46.0	5609
2. Kannar 2	Seed Trt	-	3.5	0.0	13.3	409.0	47.0	5355
3. Kannar 3	Seed Trt	-	3.5	0.0	0.5	21.8	45.5	5846
4. Kannar 4	Seed Trt	-	3.5	0.0	12.8	134.5	41.5	5701
5. Kannar 5	Seed Trt	-	3.5	0.0	0.3	8.8	24.8	5913
+ Nematicide	In Furrow	1.0 qt/A						
6. Kannar Base Trt	Seed Trt	-	3.6	0.1	2.5	3.8	33.5	6181
+ Velum	In Furrow	6.84 fl oz						
LSD(P<0.05)	-	-	N. S.	N. S.	17.5	364.4	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 (Aspergillus crown rot).								
Galling ³ = Visual rating of the percent of pods and roots (1-100) with visible damage from root-knot nematode.								
Root-knot ⁴ = Number of <i>M. arenaria</i> juvenile per 100 cc of soil.								
Ring ⁵ = Population of ring nematodes per 100 cc of soil.								

UPL NEMATODE TEST, 2024

A. PURPOSE: To evaluate seed treatment management for peanut root-knot nematode.

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. Eight-foot alleyways between blocks.

C. APPLICATION OF TREATMENTS:

1. **Equipment/Sprays**: In furrow spray was applied at planting on May 22 at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with one 80015 flat fan tip per row and 50 mesh ball check screens. 60 DAP applications were applied on July 25 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. See Table 1 below for all other spray information, including fungicide cover sprays.

Table 1

PESTICIDE APPLICATIONS IN ADDITION TO APPLICATIONS IN SECTION "C" ABOVE

Spray Date	Treatment	Rate	
5/23/2024	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulugus staff. Sprays were applied to all tests in this field.
	Valor	3 oz/A	
	Strongarm	.45 oz/A	
	Roundup	1 qt/A	
6/28/2024	Headline	9 oz/A	Herbicides were applied using AI-11004VS tips @ 40 PSI traveling 5.8 MPH applying 20 GPA.
7/10/2024	Select	12 oz/A	
7/11/2024	Baythriod	2 oz/A	Fungicides and insecticides were applied using AI-11003VS tips @ 35 PSI traveling 5 MPH applying 20 GPA.
7/12/2024	Bravo	1.5 pt/A	
	Umbra	1 qt/A	
	Boron	1 qt/A	
7/13/2024	Cadre	4 oz/A	
7/25/2024	Provost Silver	12 oz/A	
	Manganese	1 pt/A	
	Dimilin	4 oz/A	
8/7/2024	Provost Silver	12 oz/A	
	Convoy	1 qt/A	
	Sulfur	1 qt/A	
8/16/2024	Intrepid Edge	8 oz/A	
8/22/2024	Bravo	1.5 pt/A	
	Tebuconazole	7.2 oz/A	
9/3/2024	Select Max	16 oz/A	
9/6/2024	Provost Silver	12 oz/A	
9/25/2024	Bravo	1.5 pt/A	
	Tebuconazole	7.2 oz/A	

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Attapulgus Research and Education Center, Decatur County, GA.
2. Soil Fertility:
 - i. pH: 7.1 P: 137 K: 90.0 Ca: 916 Mg: 112
3. Planting Info:
 - i. Seed: GA-06G from UPL.
 - ii. Planted May 22.
4. Harvest Dates:
 - i. Dug Oct. 14 and picked Oct. 22.

E. SUMMARY:

Although this plot area had higher nematode numbers the previous year, the trials this year in the same field had very low counts and little damage. There was no phytotoxicity observed from in furrow treatments or effects on plant stand. The yields were excellent due to the lack of disease and nematode damage.

UPL NEMATODE TEST, 2024

ATTAPULGUS

			Plant/ft ¹	% Dead Plants ²	Galling ³	Root Knot ⁴	Ring ⁵	Yield
Treatment	App's	Rate/A	10-Jun	10-Jun	5-Oct	17-Sep	17-Sep	lb/A
1. Rancona	Seed Trt	-	2.5	0.0	1.0	33.0	130.8	5144
2. Rancona	Seed Trt	-	2.4	0.0	0.0	22.5	150.8	5750
+ KFD-414-01	Seed Trt	16.3 ml/100 kg						
3. Rancona	Seed Trt	-		0.0	0.0	4.3	195.3	5762
+ KFD-427-01	Seed Trt	48.9 ml/100 kg	2.5					
4. Rancona	Seed Trt	-	2.5	0.0	5.0	109.3	128.3	5695
+ KFD-414-01	Seed Trt	16.3 ml/100 kg						
+ KFD-427-01	Seed Trt	48.9 ml/100 kg						
5. Rancona	Seed Trt	-	.	.	0.0	0.0	23.3	6087
+ KFD-414-01	Seed Trt	16.3 ml/100 kg						
KFD-414-01	60 DAP	2.0 fl oz						
6. Rancona	Seed Trt	-	.	.	0.0	31.8	64.0	5958
+ KFD-427-01	Seed Trt	48.9 ml/100 kg						
KFD-427-01	60 DAP	8.0 fl oz						
+ Conditioner		8.0 fl oz						
7. Rancona	Seed Trt	-			5.0	301.8	135.0	5719
+ KFD-414-01	Seed Trt	16.3 ml/100 kg	.	.				
+ KFD-427-01	Seed Trt	48.9 ml/100 kg						
KFD-414-01	60 DAP	2.0 fl oz						
+ KFD-427-01		8.0 fl oz						
+ Conditioner		8.0 fl oz						
8. Rancona	Seed Trt	-	2.6	0.0	0.0	91.5	121.0	5810
Velum	In Furrow	6.84 fl oz						
LSD(P<0.05)	-	-	N. S.	N. S.	N. S.	N. S.	105.7	872

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

% Dead Plants² = The % of emerged plants that were dead or dying (*Aspergillus* crown rot).

Galling³ = Visual rating of the percent of pods and roots with visible damage from root-knot nematode.

Root-knot⁴ = Number of *M. arenaria* juvenile per 100 cc of soil.

Ring⁵ = Population of ring nematodes per 100 cc of soil.

VALENT NEMATODE TEST, 2024

A. PURPOSE: To evaluate seed treatment management for peanut root-knot nematode.

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. Eight-foot alleyways between blocks.

C. APPLICATION OF TREATMENTS:

1. **Equipment/Sprays**: In furrow spray was applied at planting on May 22 at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with one 80015 flat fan tip per row and 50 mesh ball check screens. See Table 1 below for all other spray information, including fungicide cover sprays.

Table 1			
PESTICIDE APPLICATIONS IN ADDITION TO APPLICATIONS IN SECTION "C" ABOVE			
Spray Date	Treatment	Rate	
5/23/2024	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulugus staff. Sprays were applied to all tests in this field.
	Valor	3 oz/A	
	Strongarm	.45 oz/A	
	Roundup	1 qt/A	
6/28/2024	Headline	9 oz/A	Herbicides were applied using AI-11004VS tips @ 40 PSI traveling 5.8 MPH applying 20 GPA.
7/10/2024	Select	12 oz/A	
7/11/2024	Baythriod	2 oz/A	Fungicides and insecticides were applied using AI-11003VS tips @ 35 PSI traveling 5 MPH applying 20 GPA.
7/12/2024	Bravo	1.5 pt/A	
	Umbra	1 qt/A	
	Boron	1 qt/A	
7/13/2024	Cadre	4 oz/A	
7/25/2024	Provost Silver	12 oz/A	
	Manganese	1 pt/A	
	Dimilin	4 oz/A	
8/7/2024	Provost Silver	12 oz/A	
	Convoy	1 qt/A	
	Sulfur	1 qt/A	
8/16/2024	Intrepid Edge	8 oz/A	
8/22/2024	Bravo	1.5 pt/A	
	Tebuconazole	7.2 oz/A	
9/3/2024	Select Max	16 oz/A	
9/6/2024	Provost Silver	12 oz/A	
9/25/2024	Bravo	1.5 pt/A	
	Tebuconazole	7.2 oz/A	

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Attapulgus Research and Education Center, Decatur County, GA.
2. Soil Fertility:
 - i. pH: 7.1 P: 137 K: 90.0 Ca: 916 Mg: 112
3. Planting Info:
 - i. Seed: GA-06G (AL Foundation seed)
 - ii. Planted May 22.
4. Harvest Dates:
 - i. Dug Oct. 14 and picked Oct. 22.

E. SUMMARY:

Although this plot area had higher nematode numbers the previous year, the trials this year in the same field had very low counts and little damage. The yields were excellent due to the lack of disease and nematode damage. There were no effects of in furrow applications on plant stands or any visible phytotoxicity.

VALENT NEMATODE TEST, 2024

ATTAPULGUS

			Plant/ft ¹	% Dead Plants ²	Galling ³	Root Knot ⁴	Ring ⁵	Yield
			10-Jun	10-Jun	5-Oct	17-Sep	17-Sep	lb/A
Treatment	App's	Rate/A						
1. Admire Pro	In Furrow	8.5 fl oz	2.2	0.0	6.3	82.5	31.3	5595
2. VBC-90063B	In Furrow	8.0 fl oz	2.4	0.0	3.0	3.0	50.0	5484
+ Admire Pro		8.5 fl oz						
3. Velum	In Furrow	6.5 fl oz	2.5	0.0	10.0	50.8	106.5	6042
+ Admire Pro		8.5 fl oz						
4. VBC-90062B	In Furrow	8.0 fl oz	2.3	0.0	0.0	2.5	58.0	5539
+ Admire Pro		8.5 fl oz						
LSD(P<0.05)	-	-	N. S.	N. S.	N. S.	N. S.	64.1	N. S.

NOTE: Seed is AL Foundation GA-06G seed.

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

% Dead Plants² = The % of emerged plants that were dead or dying (*Aspergillus* crown rot).

Galling³ = Visual rating of the percent of pods and roots (1-100) with visible damage from root-knot nematode.

Root-knot⁴ = Number of *M. arenaria* juvenile per 100 cc of soil.

Ring⁵ = Population of ring nematodes per 100 cc of soil.

SYNGENTA NEMATODE TEST, 2024

A. PURPOSE: To evaluate seed treatment management for peanut root-knot nematode.

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. Eight-foot alleyways between blocks.

C. APPLICATION OF TREATMENTS:

1. **Equipment/Sprays**: In furrow spray was applied at planting on May 22 at 18 PSI going 3.3 MPH in 3.4 GPA using a CO2 unit with one 80015 flat fan tip per row and 50 mesh ball check screens. See Table 1 below for all other spray information, including fungicide cover sprays.

Table 1					
PESTICIDE APPLICATIONS IN ADDITION TO APPLICATIONS IN SECTION "C" ABOVE					
Spray Date	Treatment	Rate			
5/23/2024	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulgis staff. Sprays were applied to all tests in this field.		
	Valor	3 oz/A			
	Strongarm	.45 oz/A			
	Roundup	1 qt/A	Herbicides were applied using AI-11004VS tips @ 40 PSI traveling 5.8 MPH applying 20 GPA.		
6/28/2024	Headline	9 oz/A			
7/10/2024	Select	12 oz/A			
7/11/2024	Baythriod	2 oz/A	Fungicides and insecticides were applied using AI-11003VS tips @ 35 PSI traveling 5 MPH applying 20 GPA.		
7/12/2024	Bravo	1.5 pt/A			
	Umbra	1 qt/A			
	Boron	1 qt/A			
7/13/2024	Cadre	4 oz/A			
7/25/2024	Provost Silver	12 oz/A			
	Manganese	1 pt/A			
	Dimilin	4 oz/A			
8/7/2024	Provost Silver	12 oz/A			
	Convoy	1 qt/A			
	Sulfur	1 qt/A			
8/16/2024	Intrepid Edge	8 oz/A			
8/22/2024	Bravo	1.5 pt/A			
	Tebuconazole	7.2 oz/A			
9/3/2024	Select Max	16 oz/A			
9/6/2024	Provost Silver	12 oz/A			
9/25/2024	Bravo	1.5 pt/A			
	Tebuconazole	7.2 oz/A			

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Attapulgis Research and Education Center, Decatur County, GA.
2. Soil Fertility:
 - i. pH: 7.1 P: 137 K: 90.0 Ca: 916 Mg: 112
3. Planting Info:
 - i. Seed: GA-06G from Syngenta's "good seed" test in the South Field.
 - ii. Planted May 22.
4. Harvest Dates:
 - i. Dug Oct. 14 and picked Oct. 22.

E. SUMMARY:

Although this plot area had higher nematode numbers the previous year, the trials this year in the same field had very low counts and little damage. The yields were excellent due to the lack of disease and nematode damage. There were no effects of in furrow applications on plant stands or any visible phytotoxicity

<u>SYNGENTA NEMATODE TEST, 2024</u>								
ATTAPULGUS								
			Plant/ft ¹	% Dead Plants ²	Galling ³	Root Knot ⁴	Ring ⁵	Yield
Treatment	App's	Rate/A	10-Jun	10-Jun	5-Oct	17-Sep	17-Sep	lb/A
5. Trebuset (Trt #1)	Seed Trt	-	3.3	0.0	1.3	289.5	45.5	5743
+ Admire Pro	In Furrow	8.5 fl oz						
6. Trebuset (Trt # 4)	Seed Trt	-	3.1	0.0	6.3	48.3	55.0	5718
+ Admire Pro	In Furrow	8.5 fl oz						
7. Trebuset (Trt #5)	Seed Trt	-	3.2	0.0	1.8	58.8	63.0	5512
+ Admire Pro	In Furrow	8.5 fl oz						
LSD(P<0.05)	-	-	N. S.	N. S.	N. S.	N. S.	N. S.	N. S.
NOTE: Seed is GA-06G Trts 1, 4, and 5 from the good seed source in the South Field test.								
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 (<i>Aspergillus</i> crown rot).								
Galling ³ = Visual rating of the percent of pods and roots (1-100) with visible damage from root-knot nematode.								
Root-knot ⁴ = Number of <i>M. arenaria</i> juvenile per 100 cc of soil.								
Ring ⁵ = Population of ring nematodes per 100 cc of soil.								

DAILY RAINFALL + IRRIGATION, 2024

ATTAPULGUS

DATE	Apr	May	June	July	Aug	Sep	Oct
1	0.00	0.00	0.42	0.00	0.01	0.00	0.00
2	0.30	0.00	0.04	1.09	0.04	0.50	0.00
3	0.18	0.81	0.00	0.48	0.00	0.00	0.00
4	0.40	0.09	0.00	0.00	0.15	0.50	0.30
5	0.00	0.00	0.50	0.00	0.38	0.00	0.00
6	0.00	0.11	0.00	0.12	0.00	3.89	0.00
7	0.00	0.01	0.50	0.14	0.00	0.02	0.00
8	0.40	0.00	0.00	0.62	0.00	0.92	0.50
9	0.00	0.35	0.40	0.11	0.00	0.00	0.00
10	2.57	1.66	0.00	0.18	0.00	0.00	0.00
11	1.62	0.00	0.00	0.00	0.00	0.09	0.40
12	0.00	0.00	0.54	0.00	0.30	1.11	0.00
13	0.00	1.91	0.00	0.00	0.00	0.11	0.40
14	0.00	0.57	0.50	0.00	0.60	0.01	0.00
15	0.50	0.00	0.30	1.04	0.50	0.19	0.40
16	0.00	0.00	1.05	0.01	0.00	0.04	0.00
17	0.30	0.62	0.00	0.00	0.50	0.00	0.00
18	0.00	0.87	0.00	0.74	0.34	0.00	0.00
19	0.00	0.00	0.00	0.16	0.01	0.00	0.00
20	0.40	0.00	0.00	0.32	0.50	0.00	0.00
21	0.19	0.00	0.50	1.65	0.00	0.30	0.00
22	0.00	0.00	0.40	0.04	0.60	0.00	0.50
23	0.40	0.40	0.00	0.00	0.00	0.00	0.00
24	0.00	0.00	0.00	0.16	0.30	0.00	0.00
25	0.50	0.40	0.60	0.79	0.00	1.86	0.50
26	0.00	0.00	0.03	0.03	0.05	4.84	0.00
27	0.00	0.05	0.60	0.50	0.26	0.17	0.00
28	0.00	0.28	0.50	0.26	0.50	0.00	0.50
29	0.00	0.00	1.43	0.30	0.00	0.00	0.00
30	0.55	0.00	0.01	0.14	0.50	0.00	0.50
31	0.00	0.40	0.00	0.11	0.00	0.00	0.00
TOTAL (inches)	8.31	8.53	8.32	8.99	5.54	14.55	4.00

PECAN FUNGICIDE TEST I, WICHITA, 2024

A. PURPOSE: To evaluate the comparative efficacy of registered fungicides against pecan foliar and nut diseases (primarily 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. **Sprays:** Calendar-based spray treatments were applied on Apr. 16, Apr. 29, May 14, May 29, June 10, June 25, July 8, July 23, Aug. 5, and Aug. 19.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Ponder Farm, North Orchard, Tifton, GA, 31794.
2. Soil Fertility:
 - i. pH: 5.96 P: 12.3 K: 19.90 Ca: 235.2 Mg: 12.50
 1. NOTE: soil samples were not taken in 2024, so these are results from 2023.
3. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
4. Herbicides:
 - i. Roundup (2 qts/a) + Liberty (20 oz/a) was sprayed on Apr. 5.
 - ii. Roundup (2 qts/a) + Tuscany (9 oz/a) was sprayed on June 13.

E. SUMMARY:

This year was characterized by alternating very dry and wet months. Wet weather in May, July and August were more than enough to drive a severe scab epidemic on our two susceptible cultivars. Nut scab was significant on the nontreated trees by July and severe by the late August evaluation. All treatments provided significant control with Miravis Top and Miravis Prime being the most effective as in previous years. There was also a severe level of Pecan Leaf Dieback caused by *Neofusicoccum* on Wichita, which contributed to major late season defoliation.

PECAN FUNGICIDE TEST I, WICHITA, NORTH ORCHARD, 2024

			Neo. ¹	Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev ⁵	Neo. ¹
Treatments	Rate/A	App's	26-Jun	1-Jul	1-Jul	1-Jul	1-Jul	18-Jul
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	5.5	47.9	4.7	91.1	7.5	6.0
+ Elast 400F	25.0 fl oz							
Cevya	5.0 fl oz	2, 4, 6, 8, 10						
+ Elast	25.0 fl oz							
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	7.3	61.3	4.6	89.8	7.9	6.8
+ Elast 400F	25.0 fl oz							
Revylok	6.5 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz							
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	7.8	56.2	4.6	90.3	8.0	10.0
+ Elast 400F	25.0 fl oz							
Revylok	6.5 fl oz	2, 4, 6, 8, 10						
+ Elast 400F	25.0 fl oz							
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	6.5	57.3	5.1	96.9	17.4	8.3
+ Elast 400F	25.0 fl oz							
Axios	5.0 fl oz	2, 4, 6, 8, 10						
5. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	6.3	55.4	4.2	93.5	6.5	3.8
+ Elast 400F	25.0 fl oz							
Miravis Prime	6.84 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz							
6. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	13.3	63.2	6.2	99.0	16.2	14.8
+ Elast 400F	25.0 fl oz							
Luna Flex	6.84 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz							
7. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	2.5	44.4	3.0	84.7	4.3	5.8
+ Elast 400F	25.0 fl oz							
Miravis Top	13.6 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz							
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	8.8	62.8	7.0	100.0	15.1	12.8
+ Elast 400F	25.0 fl oz							
9. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	4.8	60.0	4.3	90.3	9.3	4.5
+ Elast 400F	25.0 fl oz							
Super Tin 4L	9.0 fl oz	2, 4, 6, 8, 10						
+ Elast 400F	36.0 fl oz							Cont.

PECAN FUNGICIDE TEST I, WICHITA, NORTH ORCHARD, 2024

			Neo. ¹	Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev ⁵	Neo. ¹
Treatments	Rate/A	App's	26-Jun	1-Jul	1-Jul	1-Jul	1-Jul	18-Jul
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	7.3	63.1	4.8	92.6	12.8	8.3
+ Elast 400F	25.0 fl oz							
Prophyt	5.0 pt	2, 4, 6, 8, 10						
11. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	4.0	48.8	4.3	97.7	13.0	10.5
+ Elast 400F	25.0 fl oz							
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10						
+ Elast 400F	25.0 fl oz							
+ Topsin 4.5FL	20.0 fl oz							
12. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	10.3	68.2	5.0	96.9	12.1	9.3
+ Elast 400F	25.0 fl oz							
Regev HBX	8.5 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz							
13. Super Tin 4L	6.0 fl oz	1 - 10	6.0	68.4	4.8	96.6	9.3	9.0
+ Elast 400F	25.0 fl oz							
14. Nontreated	-	-	27.0	73.8	8.4	100.0	49.7	22.8
LSD(P<0.05)			5.7	12.1	1.6	8.8	4.7	4.9
Neo. ¹ = Percent neofusicoccum.								
Leaf Inc ² =Leaf scab incidence, based on 8 terminals per tree (% of leaflets on middle of leaf with scab).								
Leaf Sev ³ =Leaf scab severity, based on middle leaf of 8 terminals per tree.								
Nut Inc ⁴ =Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).								
Nut Sev ⁵ =Nut scab severity, based on 8 nuts clusters per tree (% of shuck covered with scab).								
								Cont.

PECAN FUNGICIDE TEST I, WICHITA, NORTH ORCHARD, 2024

			Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev ⁵	Neo. ¹	Def. ⁶
Treatments	Rate/A	App's	26-Aug	26-Aug	26-Aug	26-Aug	29-Oct	11-Nov
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	61.7	6.3	100.0	53.3	17.0	8.8
+ Elast 400F	25.0 fl oz							
Cevya	5.0 fl oz	2, 4, 6, 8, 10						
+ Elast	25.0 fl oz							
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	71.7	7.8	100.0	61.1	18.8	13.8
+ Elast 400F	25.0 fl oz							
Revylok	6.5 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz							
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	56.1	5.3	100.0	63.4	25.0	22.5
+ Elast 400F	25.0 fl oz							
Revylok	6.5 fl oz	2, 4, 6, 8, 10						
+ Elast 400F	25.0 fl oz							
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	75.3	8.9	100.0	87.6	43.8	31.3
+ Elast 400F	25.0 fl oz							
Axios	5.0 fl oz	2, 4, 6, 8, 10						
5. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	59.1	5.4	100.0	33.8	21.3	18.8
+ Elast 400F	25.0 fl oz							
Miravis Prime	6.84 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz							
6. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	84.8	10.4	100.0	81.2	36.3	31.3
+ Elast 400F	25.0 fl oz							
Luna Flex	6.84 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz							
7. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	44.4	3.6	99.0	39.7	16.3	15.0
+ Elast 400F	25.0 fl oz							
Miravis Top	13.6 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz							
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	72.1	8.4	100.0	88.6	51.3	45.0
+ Elast 400F	25.0 fl oz							
9. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	71.1	8.0	100.0	70.4	35.0	35.0
+ Elast 400F	25.0 fl oz							
Super Tin 4L	9.0 fl oz	2, 4, 6, 8, 10						
+ Elast 400F	36.0 fl oz							Cont.

PECAN FUNGICIDE TEST I, WICHITA, NORTH ORCHARD, 2024

			Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev ⁵	Neo. ¹	Def. ⁶
Treatments	Rate/A	App's	26-Aug	26-Aug	26-Aug	26-Aug	29-Oct	11-Nov
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	72.0	8.4	100.0	80.1	33.8	25.0
+ Elast 400F	25.0 fl oz							
Prophyt	5.0 pt	2, 4, 6, 8, 10						
11. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	50.7	5.1	100.0	64.7	28.8	17.5
+ Elast 400F	25.0 fl oz							
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10						
+ Elast 400F	25.0 fl oz							
+ Topsin 4.5FL	20.0 fl oz							
12. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	70.0	7.8	100.0	73.5	25.0	12.5
+ Elast 400F	25.0 fl oz							
Regev HBX	8.5 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz							
13. Super Tin 4L	6.0 fl oz	1 - 10	69.6	8.0	100.0	66.7	28.8	26.3
+ Elast 400F	25.0 fl oz							
14. Nontreated	-	-	91.9	12.3	100.0	99.3	87.5	82.5
LSD(P<0.05)			12.9	2.1	0.8	11.6	16.8	17.4

Neo.¹ = Percent neofusicoccum.

Leaf Inc²=Leaf scab incidence, based on 8 terminals per tree (% of leaflets on middle of leaf with scab).

Leaf Sev³=Leaf scab severity, based on middle leaf of 8 terminals per tree.

Nut Inc⁴=Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).

Nut Sev⁵=Nut scab severity, based on 8 nuts clusters per tree (% of shuck covered with scab).

Def.⁶=Percent defoliation.

PECAN FUNGICIDE TEST I, **DESIRABLE, 2024**

A. PURPOSE: To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases (primarily 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. **Sprays:** Calendar-based spray treatments were applied on Apr. 16, Apr. 29, May 14, May 29, June 10, June 25, July 8, July 23, Aug. 5, and Aug. 19.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Ponder Farm, North Orchard, Tifton, GA, 31794.
2. Soil Fertility:
 - i. pH: 5.96 P: 12.3 K: 19.90 Ca: 235.2 Mg: 12.50
 1. NOTE: soil samples were not taken in 2024, so these are results from 2023.
3. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
4. Herbicides:
 - i. Roundup (2 qts/a) + Liberty (20 oz/a) was sprayed on Apr. 5.
 - ii. Roundup (2 qts/a) + Tuscany (9 oz/a) was sprayed on June 13.

E. SUMMARY:

This year was characterized by alternating very dry and wet months. Wet weather in May, July and August were more than enough to drive a severe scab epidemic on our two susceptible cultivars. Nut scab was significant on the nontreated trees by July and severe by the late August evaluation. All treatments provided significant control with Miravis Top and Miravis Prime being the most effective as in previous years. There was only a low level of Pecan Leaf Dieback caused by *Neofusicoccum* on Desirable.

PECAN FUNGICIDE TEST I, DESIRABLE, NORTH ORCHARD, 2024

			Neo. ¹	Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev ⁵
Treatments	Rate/A	App's	26-Jun	1-Jul	1-Jul	1-Jul	1-Jul
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.8	21.0	1.6	62.1	2.4
+ Elast 400F	25.0 fl oz						
Cevya	5.0 fl oz	2, 4, 6, 8, 10					
+ Elast	25.0 fl oz						
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.8	42.1	3.7	92.2	4.5
+ Elast 400F	25.0 fl oz						
Revylok	6.5 fl oz	2, 4, 6, 8, 10					
+ Humispread	16.0 fl oz						
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.8	36.3	3.3	76.6	3.8
+ Elast 400F	25.0 fl oz						
Revylok	6.5 fl oz	2, 4, 6, 8, 10					
+ Elast 400F	25.0 fl oz						
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.8	38.7	3.4	78.1	4.5
+ Elast 400F	25.0 fl oz						
Axios	5.0 fl oz	2, 4, 6, 8, 10					
5. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.5	30.9	3.3	72.4	3.5
+ Elast 400F	25.0 fl oz						
Miravis Prime	6.84 fl oz	2, 4, 6, 8, 10					
+ Humispread	16.0 fl oz						
6. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	1.5	41.0	3.9	91.7	6.2
+ Elast 400F	25.0 fl oz						
Luna Flex	6.84 fl oz	2, 4, 6, 8, 10					
+ Humispread	16.0 fl oz						
7. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.0	26.6	1.8	32.6	1.3
+ Elast 400F	25.0 fl oz						
Miravis Top	13.6 fl oz	2, 4, 6, 8, 10					
+ Humispread	16.0 fl oz						
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	1.0	32.0	3.3	93.8	5.1
+ Elast 400F	25.0 fl oz						Cont.

PECAN FUNGICIDE TEST I, DESIRABLE, NORTH ORCHARD, 2024

			Neo. ¹	Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev ⁵
Treatments	Rate/A	App's	26-Jun	1-Jul	1-Jul	1-Jul	1-Jul
9. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.3	34.6	3.2	81.8	4.2
+ Elast 400F	25.0 fl oz						
Super Tin 4L	9.0 fl oz	2, 4, 6, 8, 10					
+ Elast 400F	36.0 fl oz						
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.5	40.6	4.1	90.1	6.8
+ Elast 400F	25.0 fl oz						
Prophyt	5.0 pt	2, 4, 6, 8, 10					
11. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.3	25.6	2.3	70.3	3.0
+ Elast 400F	25.0 fl oz						
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10					
+ Elast 400F	25.0 fl oz						
+ Topsin 4.5FL	20.0 fl oz						
12. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	0.3	44.0	4.5	100.0	5.9
+ Elast 400F	25.0 fl oz						
Regev HBX	8.5 fl oz	2, 4, 6, 8, 10					
+ Humispread	16.0 fl oz						
13. Super Tin 4L	6.0 fl oz	1 - 10	0.3	46.5	4.6	95.3	6.7
+ Elast 400F	25.0 fl oz						
14. Nontreated	-	-	2.0	46.7	4.6	100.0	10.8
LSD(P<0.05)			1.1	11.2	1.4	15.3	1.9
Neo. ¹ = Percent neofusicoccum.							
Leaf Inc ² =Leaf scab incidence, based on 8 terminals per tree (% of leaflets on middle of leaf with scab).							
Leaf Sev ³ =Leaf scab severity, based on middle leaf of 8 terminals per tree.							
Nut Inc ⁴ =Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).							
Nut Sev ⁵ =Nut scab severity, based on 8 nuts clusters per tree (% of shuck covered with scab).							
							Cont.

PECAN FUNGICIDE TEST I, DESIRABLE, NORTH ORCHARD, 2024

			Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev ⁵
Treatments	Rate/A	App's	26-Aug	26-Aug	26-Aug	26-Aug
1. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	28.8	2.2	100.0	25.1
+ Elast 400F	25.0 fl oz					
Cevya	5.0 fl oz	2, 4, 6, 8, 10				
+ Elast	25.0 fl oz					
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	37.6	3.5	100.0	41.8
+ Elast 400F	25.0 fl oz					
Revylok	6.5 fl oz	2, 4, 6, 8, 10				
+ Humispread	16.0 fl oz					
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	27.5	2.8	100.0	42.8
+ Elast 400F	25.0 fl oz					
Revylok	6.5 fl oz	2, 4, 6, 8, 10				
+ Elast 400F	25.0 fl oz					
4. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	37.0	3.9	100.0	48.4
+ Elast 400F	25.0 fl oz					
Axios	5.0 fl oz	2, 4, 6, 8, 10				
5. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	29.4	2.8	98.4	17.4
+ Elast 400F	25.0 fl oz					
Miravis Prime	6.84 fl oz	2, 4, 6, 8, 10				
+ Humispread	16.0 fl oz					
6. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	34.2	3.5	100.0	46.6
+ Elast 400F	25.0 fl oz					
Luna Flex	6.84 fl oz	2, 4, 6, 8, 10				
+ Humispread	16.0 fl oz					
7. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	27.5	2.0	90.1	15.4
+ Elast 400F	25.0 fl oz					
Miravis Top	13.6 fl oz	2, 4, 6, 8, 10				
+ Humispread	16.0 fl oz					
8. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	35.1	3.3	100.0	57.3
+ Elast 400F	25.0 fl oz					Cont.

PECAN FUNGICIDE TEST I, DESIRABLE, NORTH ORCHARD, 2024

			Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev ⁵
Treatments	Rate/A	App's	26-Aug	26-Aug	26-Aug	26-Aug
9. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	38.6	3.5	100.0	31.8
+ Elast 400F	25.0 fl oz					
Super Tin 4L	9.0 fl oz	2, 4, 6, 8, 10				
+ Elast 400F	36.0 fl oz					
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	39.3	3.7	100.0	45.6
+ Elast 400F	25.0 fl oz					
Prophyt	5.0 pt	2, 4, 6, 8, 10				
11. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	24.5	2.3	98.4	23.3
+ Elast 400F	25.0 fl oz					
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10				
+ Elast 400F	25.0 fl oz					
+ Topsin 4.5FL	20.0 fl oz					
12. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	39.1	3.7	100.0	55.2
+ Elast 400F	25.0 fl oz					
Regev HBX	8.5 fl oz	2, 4, 6, 8, 10				
+ Humispread	16.0 fl oz					
13. Super Tin 4L	6.0 fl oz	1 - 10	38.8	3.7	100.0	36.6
+ Elast 400F	25.0 fl oz					
14. Nontreated	-	-	49.1	5.2	100.0	91.6
LSD(P<0.05)			11.1	1.2	4.0	9.5

Leaf Inc²=Leaf scab incidence, based on 8 terminals per tree (% of leaflets on middle of leaf with scab).

Leaf Sev³=Leaf scab severity, based on middle leaf of 8 terminals per tree.

Nut Inc⁴=Nut scab incidence, based on ratings of 8 nut clusters per tree (% of nuts with any scab).

Nut Sev⁵=Nut scab severity, based on 8 nuts clusters per tree (% of shuck covered with scab).

MISCELLANEOUS TERMINAL

TEST I, 2024

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete block design with eight replicates for Desirable and Wichita, with 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.
2. **Sprays**: Calendar-based spray treatments were applied on Apr. 9, Apr. 26, May 7, May 22, June 5, June 18, July 5, July 23, and Aug. 9.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Ponder Farm, North Orchard, Tifton, GA, 31794.
2. Soil Fertility:
 - i. pH: 5.96 P: 12.3 K: 19.90 Ca: 235.2 Mg: 12.50
 1. NOTE: soil samples were not taken in 2024, so these are results from 2023.
3. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
4. Herbicides:
 - i. Roundup (2 qts/a) + Liberty (20 oz/a) was sprayed on Apr. 5.
 - ii. Roundup (2 qts/a) + Tuscany (9 oz/a) was sprayed on June 13.

E. SUMMARY:

A severe scab epidemic developed on both of our two susceptible cultivars on nontreated terminals (90-100% severity). Nut scab was significant on the nontreated trees by July, especially on Wichita. Most treatments provided significant control with Miravis Top being the most effective as in previous years, although Ziram + Elast + Badge did an excellent job as in previous years. Unfortunately, Ziram will no longer be available in future years. This was an excellent trial to demonstrate the relative scab control with these different fungicides.

MISCELLANEOUS TERMINAL TEST I, 2024

PONDER FARM, NORTH ORCHARD

WICHITA								
			JULY 3				AUG. 26	
Treatments	Rate/A	Timing	Leaf Inc ¹	Leaf Sev ²	Nut Inc ³	Nut Sev ⁴	Nut Inc ³	Nut Sev ⁴
1. Badge	1.5 pt	1 - 10	83.3	8.8	100.0	36.7	100.0	93.0
2. Elast	24 fl oz	1 - 10	73.7	5.4	100.0	17.5	100.0	86.0
+ Badge	1.5 pt							
3. Super Tin	6.0 oz	1 - 10	75.1	6.0	57.1	2.8	100.0	14.8
+ Elast	24 fl oz							
+ Badge	1.5 pt							
4. Ziram	4.0 lb	1 - 10	79.5	5.1	36.9	1.6	100.0	2.7
+ Elast	24 fl oz							
+ Badge	1.5 pt							
5. Super Tin	6.0 oz	1 - 10	73.1	4.8	85.6	3.0	100.0	15.5
+ Elast	24 fl oz							
6. Elast	24 fl oz	1 - 10	62.0	4.3	100.0	6.8	100.0	62.6
+ Top Guard	6.0 fl oz							
7. Badge	1.5 pt	1 - 10	50.7	3.0	83.3	11.1	100.0	50.7
+ Elast	24 fl oz							
+ Top Guard	6.0 fl oz							
8. Badge	1.5 pt	1 - 10	68.1	5.3	100.0	20.3	100.0	98.3
+ Top Guard	6.0 fl oz							
9. Miravis Top	13.7 oz	1 - 10	61.0	2.9	11.9	0.8	100.0	2.3
10. Nontreated	-	-	86.3	9.9	100.0	65.0	100.0	99.5
11. Elast	48 oz	1 - 10	80.8	5.4	88.8	5.1	100.0	30.9
LSD(P<0.05)	-	-	22.7	2.6	21.3	11.2	NS	18.8

Leaf Inc¹=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev²=Leaf scab severity per terminal (% of leaf area covered with scab).

Nut Inc³=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev⁴=Nut scab severity per terminal (% of shuck area covered with scab).

MISCELLANEOUS TERMINAL TEST I, 2024

PONDER FARM, NORTH ORCHARD

			DESIRABLE					
			JULY 3				AUG. 26	
Treatments	Rate/A	Timing	Leaf Inc ¹	Leaf Sev ²	Nut Inc ³	Nut Sev ⁴	Nut Inc ³	Nut Sev ⁴
1. Badge	1.5 pt	1 - 10	64.2	3.9	91.7	6.3	100.0	63.6
2. Elast	24 fl oz	1 - 10	46.5	3.3	93.8	6.5	100.0	46.3
+ Badge	1.5 pt							
3. Super Tin	6.0 oz	1 - 10	52.9	2.6	31.3	1.3	100.0	5.0
+ Elast	24 fl oz							
+ Badge	1.5 pt							
4. Ziram	4.0 lb	1 - 10	38.1	2.0	16.7	1.1	100.0	4.1
+ Elast	24 fl oz							
+ Badge	1.5 pt							
5. Super Tin	6.0 oz	1 - 10	49.4	3.1	56.3	1.5	100.0	14.7
+ Elast	24 fl oz							
6. Elast	24 fl oz	1 - 10	34.0	2.0	43.8	1.4	100.0	39.0
+ Top Guard	6.0 fl oz							
7. Badge	1.5 pt	1 - 10	37.2	2.1	37.5	2.0	100.0	29.4
+ Elast	24 fl oz							
+ Top Guard	6.0 fl oz							
8. Badge	1.5 pt	1 - 10	37.3	2.6	100.0	4.5	100.0	61.3
+ Top Guard	6.0 fl oz							
9. Miravis Top	13.7 oz	1 - 10	15.8	1.3	14.6	0.8	87.5	1.8
10. Nontreated	-	-	65.1	4.3	100.0	12.3	100.0	89.4
11. Elast	48 oz	1 - 10	35.4	2.0	57.1	1.6	100.0	28.9
LSD(P<0.05)	-	-	21.0	1.1	33.0	3.1	11.1	15.0

Leaf Inc¹=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev²=Leaf scab severity per terminal (% of leaf area covered with scab).

Nut Inc³=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev⁴=Nut scab severity per terminal (% of shuck area covered with scab).

MISCELLANEOUS TERMINAL

TEST II, 2024

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete block design with eight replicates for Desirable and Wichita, with 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.
2. **Sprays**: Calendar-based spray treatments were applied on Apr. 9, Apr. 26, May 7, May 22, June 4, June 17, July 6, July 24, and Aug. 10.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Ponder Farm, North Orchard, Tifton, GA, 31794.
2. Soil Fertility:
 - i. pH: 5.96 P: 12.3 K: 19.90 Ca: 235.2 Mg: 12.50
 1. NOTE: soil samples were not taken in 2024, so these are results from 2023.
3. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
4. Herbicides:
 - i. Roundup (2 qts/a) + Liberty (20 oz/a) was sprayed on Apr. 5.
 - ii. Roundup (2 qts/a) + Tuscany (9 oz/a) was sprayed on June 13.

E. SUMMARY:

A severe scab epidemic developed on both of our two susceptible cultivars on nontreated terminals (90-100% severity). Nut scab was significant on the nontreated trees by July, especially on Wichita. Most treatments provided some level of control in July but were overcome by disease by late August. Miravis Top was clearly the most effective as in previous years. Axios did really well on Desirable but did not hold up on the severe scab on Wichita. This was an excellent trial to demonstrate the relative scab control with these different fungicides.

MISCELLANEOUS TERMINAL TEST II, 2024

PONDER FARM, NORTH ORCHARD

WICHITA

JULY 5

Aug. 26

Treatments	Rate/A	Timing	Leaf Inc ¹	Leaf Sev ²	Nut Inc ³	Nut Sev ⁴	Nut Inc ³	Nut Sev ⁴
1. CS2005 + Elast	32.0 fl oz 24 fl oz	1 - 10	91.4	6.6	100.0	12.8	100.0	83.3
2. CS2005 + Kphite	32.0 fl oz 32.0 fl oz	1 - 10	82.9	8.9	100.0	18.4	100.0	98.0
3. CS2005 CS2005	32.0 fl oz 48.0 fl oz	1 - 5 6 - 10	89.0	7.0	100.0	63.1	100.0	99.7
4. SA-0650120	41.0 fl oz	1 - 10	93.5	6.9	92.9	49.3	100.0	98.6
5. SA-0650120	55.0 fl oz	1 - 10	80.1	6.9	100.0	66.9	100.0	99.7
6. SA-0650120	20.5 fl oz	1 - 10	89.3	7.4	100.0	62.5	100.0	100.0
7. Axios	5.0 fl oz	1 - 10	48.8	6.8	100.0	5.3	100.0	91.1
8. Axios + Kphite	5.0 fl oz 2.0 qt	1 - 10	49.6	3.5	100.0	4.1	100.0	57.5
9. Axios + Vacciplant	5.0 fl oz 20.0 fl oz	1 - 10	69.0	6.8	100.0	11.6	100.0	96.4
10. Miravis Top	13.7 oz	1 - 10	57.6	2.8	22.9	0.6	84.4	1.8
11. Nontreated	-	-	88.2	10.1	100.0	66.3	100.0	100.0
LSD(P<0.05)	-	-	16.5	3.2	10.8	13.8	11.4	12.3

Leaf Inc¹=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev²=Leaf scab severity per terminal (% of leaf area covered with scab).

Nut Inc³=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev⁴=Nut scab severity per terminal (% of shuck area covered with scab).

MISCELLANEOUS TERMINAL TEST II, 2024

PONDER FARM, NORTH ORCHARD

DESIRABLE								
			JULY 5				Aug. 26	
Treatments	Rate/A	Timing	Leaf Inc ¹	Leaf Sev ²	Nut Inc ³	Nut Sev ⁴	Nut Inc ³	Nut Sev ⁴
1. CS2005	32.0 fl oz	1 - 10	56.2	3.0	81.3	5.0	100.0	51.3
+ Elast	24 fl oz							
2. CS2005	32.0 fl oz	1 - 10	69.0	3.6	95.8	6.3	100.0	63.0
+ Kphite	32.0 fl oz							
3. CS2005	32.0 fl oz	1 - 5	63.4	4.4	100.0	27.6	100.0	99.3
CS2005	48.0 fl oz	6 - 10						
4. SA-0650120	41.0 fl oz	1 - 10	68.3	3.8	100.0	25.6	100.0	98.7
5. SA-0650120	55.0 fl oz	1 - 10	62.7	4.6	100.0	30.5	100.0	90.8
6. SA-0650120	20.5 fl oz	1 - 10	52.9	4.5	100.0	28.3	100.0	93.8
7. Axios	5.0 fl oz	1 - 10	12.9	1.3	45.8	0.8	100.0	6.3
8. Axios	5.0 fl oz	1 - 10	16.8	1.6	28.6	0.4	100.0	3.7
+ Kphite	2.0 qt							
9. Axios	5.0 fl oz	1 - 10	22.0	2.6	81.3	1.8	100.0	21.3
+ Vacciplant	20.0 fl oz							
10. Miravis Top	13.7 oz	1 - 10	37.4	2.0	21.4	0.7	71.4	2.0
11. Nontreated	-	-	67.3	5.1	100.0	17.8	100.0	96.9
LSD(P<0.05)	-	-	20.5	1.8	27.9	14.5	17.1	17.8

Leaf Inc¹=Leaf scab incidence per terminal (% of leaflets on end leaf with scab).

Leaf Sev²=Leaf scab severity per terminal (% of leaf area covered with scab).

Nut Inc³=Nut scab incidence per terminal (% of nuts with any scab).

Nut Sev⁴=Nut scab severity per terminal (% of shuck area covered with scab).

PECAN FUNGICIDE TEST II, 2024

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**: 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. **Sprays**: Calendar-based spray treatments were applied on Apr. 16, Apr. 30, May 15, May 30, June 10, June 26, July 8, July 24, Aug. 6, and Aug. 20.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Ponder Farm, South Orchard, Tifton, GA, 31794.
2. Soil Fertility:
 - i. pH – 6.1 P – 98 K – 94 Ca – 961 Mg – 109
 1. NOTE: soil samples were not taken in 2024, so these are results from 2023.
3. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
4. Herbicides:
 - i. Roundup (2 qts/a) + Liberty (20 oz/a) was sprayed on Apr. 5.
 - ii. Roundup (2 qts/a) + Tuscany (9 oz/a) was sprayed on June 13.

E. SUMMARY:

This year was characterized by alternating very dry and wet months. Wet weather in May, July and August were more than enough to drive a severe scab epidemic on Desirable. Nut scab was significant on the nontreated trees by July and severe by the late August evaluation. All treatments provided some level of control with Miravis Top being the most effective as in previous years. Reliant + Dodine and Super Tin alone at 12 oz both held up well also. There was only a low level of Pecan Leaf Dieback caused by *Neofusicoccum* on Desirable.

PECAN FUNGICIDE TEST II, SOUTH ORCHARD, 2024

			Leaf Inc ¹	Leaf Sev ²	Nut Inc ³	Nut Sev ⁴	Nut Inc ³	Nut Sev ⁴	% Def. ⁵
Treatments	Rate/A	App's	2-Jul	2-Jul	2-Jul	2-Jul	9-Sep	9-Sep	11-Nov
1. Super Tin 4L	6.0 fl oz	1 – 10	22.9	1.8	44.2	1.8	97.9	31.1	43.0
+ Dodine FL	25.0 fl oz								
2. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	27.2	2.0	38.8	1.4	100.0	27.7	36.0
+ Dodine FL	25.0 fl oz								
Dodine FL	48.0 fl oz	2, 4, 6, 8, 10							
3. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	19.5	1.6	28.3	1.0	100.0	37.8	13.0
+ Dodine FL	25.0 fl oz								
Reliant	2.0 qt	2, 4, 6, 8, 10							
+ Dodine FL	25.0 fl oz								
4. Rhyme*	7.0 fl oz	1 – 4	45.1	3.8	92.1	5.0	100.0	55.3	58.0
Super Tin 4L	6.0 fl oz	5 – 10							
+ Dodine FL	25.0 fl oz								
5. Rhyme*	7.0 fl oz	1, 3	34.3	3.2	90.0	7.2	100.0	36.9	29.0
Topguard EQ	8.0 fl oz	2, 4							
Super Tin 4L	6.0 fl oz	5 – 10							
+ Dodine FL	25.0 fl oz								
6. Rhyme*	7.0 fl oz	1, 3	36.3	3.5	88.3	4.4	100.0	33.9	31.0
Prophyt	48 fl oz	2, 4							
Super Tin 4L	6.0 fl oz	5 – 10							
+ Dodine FL	25.0 fl oz								
7. Rhyme	7.0 fl oz	1 – 4	29.8	2.6	78.2	4.4	100.0	35.8	31.0
Super Tin 4L	6.0 fl oz	5 – 10							
+ Dodine FL	25.0 fl oz								
8. Topguard EQ	8.0 fl oz	1 – 4	35.4	3.1	82.3	4.8	97.5	46.1	33.0
Super Tin 4L	6.0 fl oz	5 – 10							
+ Dodine FL	25.0 fl oz								Cont.

PECAN FUNGICIDE TEST II, SOUTH ORCHARD, 2024

			Leaf Inc ¹	Leaf Sev ²	Nut Inc ³	Nut Sev ⁴	Nut Inc ³	Nut Sev ⁴	% Def. ⁵
Treatments	Rate/A	App's	2-Jul	2-Jul	2-Jul	2-Jul	9-Sep	9-Sep	11-Nov
9. Topguard EQ	8.0 fl oz	1, 3	32.2	2.8	71.5	3.2	100.0	39.2	44.0
Prophyt	48 fl oz	2, 4							
Super Tin 4L	6.0 fl oz	5 – 10							
+ Dodine FL	25.0 fl oz								
10. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	30.3	2.3	38.3	1.0	100.0	20.5	22.5
+ Dodine FL	25.0 fl oz								
Super Tin 4L	12.0 fl oz	2, 4, 6, 8, 10							
11. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	28.2	2.3	45.4	1.7	96.3	25.9	30.0
+ Dodine FL	25.0 fl oz								
Super Tin 4L	6.0 fl oz	2, 4, 6, 8, 10							
+ Dodine FL	25.0 fl oz								
+ Reliant	1.0 qt								
12. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	21.1	1.7	30.6	1.0	88.7	9.8	25.0
+ Dodine FL	25.0 fl oz								
Miravis Top	13.7 fl oz	2, 4, 6, 8, 10							
+ Humispread	16.0 fl oz								
13. Super Tin 4L	6.0 fl oz	1, 3, 5, 7, 9	19.4	1.7	24.2	1.0	100.0	21.6	36.0
+ Dodine FL	25.0 fl oz								
Reliant	1.0 qt	2, 4, 6, 8, 10							
+ Dodine FL	36.0 fl oz								
14. Nontreated	-	-	41.3	3.6	97.9	6.4	100.0	86.7	72.6
LSD(P<0.05)	-	-	9.6	0.9	16.5	1.3	4.5	8.9	25.5

*Astrisks denote drip treatments, where 2 buckets per tree, each containing 2 gallons of water, were placed near an emitter on opposite sides of the tree. Irrigation was run prior to and during application.

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

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

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

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

% Def.⁵=Percent defoliation.

YOUNG TREE PHOSPHITE TEST, 2024

A. PURPOSE: To evaluate the effect of Kphite and Pro-Sil13 against pecan scab when applied to tree trunks of young pecan trees.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with seven replicates.
2. Each replication consisted of single-tree treatments.
3. This test used Pawnee trees only.

C. APPLICATION OF TREATMENTS:

1. **Equipment**: All spray treatments were applied with a hand-held 2 L sprayer. Coverage and runoff for the entire trunk and foliage flush was achieved. Based on a dilution of 100 GPA.
2. **Sprays**: Treatments 1, 2, 6, and 7 were sprayed on April 1. Treatments 1-4 and 6 were sprayed on April 24. Treatments 3 and 4 were sprayed on May 16.

D. ADDITIONAL INFORMATION:

1. Location:
 - i. Ponder Farm, South Orchard, Tifton, GA, 31794.
2. Soil Fertility:
 - i. pH – 6.1 P – 98 K – 94 Ca – 961 Mg – 109
 1. NOTE: soil samples were not taken in 2024, so these are results from 2023.
3. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
4. Herbicides:
 - i. Roundup (2 qts/a) + Liberty (20 oz/a) was sprayed on Apr. 5.
 - ii. Roundup (2 qts/a) + Tuscany (9 oz/a) was sprayed on June 13.

E. SUMMARY:

Thes trees were very young and the orchard dd not have a history of Pawnee production. Therefore, there was no scab development to assess. The treatments will be repeated again next year.

ROOT KNOT NEMATODE TEST, 2024

- A. PURPOSE: To evaluate the effect of at plant and pre-pollination nematicide applications on pecan root-knot nematode.
- B. EXPERIMENTAL DESIGN:
1. Randomized complete blocks with eight replicates.
 2. Each replication consisted of single-tree treatments.
 3. This test used Pawnee trees only.
- C. APPLICATION OF TREATMENTS:
1. **Equipment & Treatments**: At plant applications were diluted in 2 gallons of water and poured into the hole at planting on Feb. 8. Pre-pollination applications were applied on June 7 using 1 gallon of water in watering cans that was poured around the base of the tree.
- D. ADDITIONAL INFORMATION:
1. Location:
 - i. Ponder Farm, South Orchard, Tifton, GA, 31794.
 2. Soil Fertility:
 - i. pH – 6.1 P – 98 K – 94 Ca – 961 Mg – 109
 1. NOTE: soil samples were not taken in 2024, so these are results from 2023.
 3. Soil Type:
 - i. Tifton loamy sand, 2 – 5% slope.
 4. Herbicides:
 - i. Roundup (2 qts/a) + Liberty (20 oz/a) was sprayed on Apr. 5.
 - ii. Roundup (2 qts/a) + Tuscany (9 oz/a) was sprayed on June 13.
- E. SUMMARY:

Initial growth measurements were taken in this orchard to establish baseline growth of the trees. There were no obvious differences in the trees due to the at-plant treatments. This trial will be taken on by Dr. Chowdury who will handle data reporting.

DAILY RAINFALL, 2024

PONDER ORCHARD

DATE	Apr	May	June	July	Aug	Sep	Oct
1	0	0	0	0	0.01	0	0
2	0	0	0	0.76	0	0	0
3	1.60	0	0	0.33	0	0	0
4	0	0.83	0	0	0.22	0	0
5	0	0	0	0	0.84	0	0
6	0	0	0	0	0.05	1.18	0.12
7	0	0	0	0	0	0.37	0
8	0	0	0	0.04	0	0.41	0
9	0	0.67	0	0.42	0	0.17	0
10	2.71	1.03	0	0	0.01	0.01	0
11	1.73	0	0	0	0.01	1.65	0
12	0	0	0	0	0	0.15	0
13	0	1.10	0	0	0	0.68	0
14	0	0.18	0	0	0	0.17	0
15	0	0	0	0.22	0	0	0
16	0	0	0	0.01	0	0	0
17	0	0.96	0	0.15	0.48	0	0
18	0	1.35	0	0.60	0.61	0	0
19	0	0.94	0	0.07	0.01	0	0
20	0	0.01	0	0.71	0	0	0
21	1.01	0	0	0.75	0	0	0
22	0	0	0	0	0	0	0
23	0	0	0	0	0	0	0
24	0	0	0	0.32	0	0	0
25	0	0.44	0	0.12	0	4.06	0
26	0	0	0	0	0	3.14	0
27	0	0.62	1.27	0.11	0	1.53	0
28	0	0	0	0	0.02	0	0
29	0	0	0.66	0.18	0	0	0
30	0	0	0	0.05	0	0	0
31	0	0	0	0.19	0	0	0
TOTAL (inches)	7.05	8.13	1.93	5.03	2.26	13.52	0.12