2024 TEST RESULTS



Peanut & Pecan Fungicide Evaluations

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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 Kemerait, 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.

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IN FURROW MIX TEST I, 2024

- A. <u>PURPOSE</u>: 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.

- 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.

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.

			FURRO							
BLACKSHANK FARM, POND FIELD										
Seed			Plan	t/ft ¹	%	Dead Plan	ts²	TSWV ³	Roots/ft ⁴	Yield
Treatment	In furow	Rate/A	14-Jun	25-Jun	14-Jun	25-Jun	9-Jul	15-Aug	22-Oct	lb/A
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 + Kphite	6.0 fl oz 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 ap	plied at 4 oz/1	00 lb.								
Note: seed was un	treated/comp	romised GA-0	06G from P	remium (2	2023), lot :	#718.				
Plant/ft ¹ = Stand c	ount is the nur	mber of emer	ged plants	per foot	of row.					
% Dead Plants ² =Th	ne % of emerge	d plants that	t were dea	d or dying	per plot.					
TSWV ³ =Percent of	row feet infect	td based on o	disease loc	i (up to 12	" linear ro	ow) per pl	ot.			
Roots/ft ⁴ =Number	of tap roots p	er foot of ro	w after the	plots wer	e inverte	d.				

IN FURROW MIX TEST II, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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.

		<u>in f</u>			TEST I	I, 2024						
	BLACKSHANK FARM, POND FIELD											
Seed			Plan	t/ft ¹	% [Dead Plan	ts ²	TSWV ³	Roots/ft ⁴	Yield		
Treatment	In furow	Rate/A	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 + Kphite	6.0 fl oz 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 ap	plied at 4 oz/	100 lb.										
Note: seed was ur	ntreated/comp	promised GA	-06G from	Monfort.								
Plant/ft ¹ = Stand o	count is the nu	umber of eme	erged plan [.]	ts per foot	of row.							
% Dead Plants ² =Tl	he % of emerg	ed plants that	at were de	ad or dyin	g per plot							
TSWV ³ =Percent of	f row feet infe	ctd based on	disease lo	ci (up to 1	2" linear	row) per p	olot.					
Roots/ft ⁴ =Numbe												

DAILY RAINFALL, 2024 BLACKSHANK FARM, POND FIELD

	Mor	٨٣٣	May	luna	lul.	A	Ser	
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
TAL (inches)	7.71	7.42	10.79	1.64	4.02	1.53	18.51	0.28

ADAMA FUNGICIDE TEST II, 2024

- A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

- 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.

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.

BLACKS	HANK FAR	RM, IRRIGA	TED/NO	N 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	2.5	10.0	5565
+ Vantana		8.3 fl oz			
4. Bravo	1, 2, 6, 7	1.5 pt	2.8	34.4	3285
4. Bravo ADM03521.F.1.H	3-5	13.2 fl oz	2.0	54.4	5205
ADIVIO3321.F.1.II	5-5	13.2 11 02			
5. Bravo	1, 2, 6, 7	1.5 pt	3.1	28.8	3670
ADM03521.F.1.I	3-5	13.2 fl oz	5.1	20.0	3370
//b///00021///1/	3.5	13.2 11 02			
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			
12 Prove	1267	1 5 ~+	2.0	7 5	2727
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)	T_/	1.5 pt	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. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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.

- 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.

Treatment App's Rate/A 23-May 23-May 29-May 11-Sep 4-Oct 7-Oct 1b// 1. Untreated - - 3.9 3.9 0.0 0.1 25.0 4.9 62.5 201 2. Myway LFR T Band* 12.7 fl oz 3.0 3.7 0.0 0.0 26.3 2.8 57.1 2119 Bravo 3 - 7 1.5 pt -<			В			<u>EST, 202</u> IRR/NON					
Treatment App's Rate/A 23-May 23-May 29-May 11-Sep 4-Oct 7-Oct 1b// 1. Untreated - - 3.9 3.9 0.0 0.1 25.0 4.9 62.5 201. 2. Xyway LFR T Band* 12.7 fl oz 3.0 3.7 0.0 0.0 26.3 2.8 57.1 2114 Bravo 3 -7 1.5 pt -<						init, itori					
Treatment App's Rate/A 23-May 23-May 29-May 11-Sep 4-Oct 7-Oct 1b// 1. Untreated - - 3.9 3.9 0.0 0.1 25.0 4.9 62.5 201 2. Myway LFR T Band* 12.7 fl oz 3.0 3.7 0.0 0.0 26.3 2.8 57.1 2119 Bravo 3 - 7 1.5 pt -<				Plan	t/ft ¹	% Dead	l Plants ²	TSWV ³	LS⁴	WM⁵	Yield
1. Untreated - - 3.9 3.9 0.0 0.1 25.0 4.9 62.5 201 2. Xyway LFR T Band* 12.7 fl oz 3.0 3.7 0.0 0.0 26.3 2.8 57.1 211 Bravo 3 – 7 1.5 pt - - - - 2.9 52.1 214 Bravo 4 – 7 1.5 pt - - - - 2.7 3.2 58.3 193 5. Bravo 1 – 7 1.5 pt - - - - 2.7 3.2 58.3 193 5. Bravo 1 – 7 1.5 pt - - - 7.1 3.9 49.2 242 Convoy** 3 & 5 32.0 fl oz 3.1 3.7 0.0 0.0 22.5 3.6 21.7 374 Bravo 3 1.5 pt - - - - 1.5 - - - - - - - - - - - - - - - -<	Treatment	App's	Rate/A		-						lb/A
Bravo 3 - 7 1.5 pt Image: state of the state	1. Untreated	-	-				-				2012
Bravo 3 - 7 1.5 pt Image: state											
Number of the second	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 4 - 7 1.5 pt	Bravo	3 – 7	1.5 pt								
Bravo 4 – 7 1.5 pt											
4. Bravo 1 - 7 1.5 pt - - - - 27.9 3.2 58.3 193 5. Bravo 1 - 7 1.5 pt - - - - 27.9 3.2 58.3 193 5. Bravo 1 - 7 1.5 pt - - - - 27.1 3.9 49.2 242 Convoy** 3 & 5 32.0 fl oz 3.1 3.7 0.0 0.0 22.5 3.6 21.7 374 Bravo 3 1.5 pt -	3. Xyway LFR		25.4 fl oz	2.2	2.8	0.0	0.0	29.6	2.9	52.1	2142
Image: constraint of the state of the	Bravo	4 – 7	1.5 pt								
Image: constraint of the state of the								07.0		50.0	4000
Convoy** 3 & 5 32.0 fl oz <td>4. Bravo</td> <td>1-/</td> <td>1.5 pt</td> <td>-</td> <td>-</td> <td>-</td> <td>-</td> <td>27.9</td> <td>3.2</td> <td>58.3</td> <td>1936</td>	4. Bravo	1-/	1.5 pt	-	-	-	-	27.9	3.2	58.3	1936
Convoy** 3 & 5 32.0 fl oz A	5. Bravo	1 – 7	1 5 nt	-	-	_	-	27 1	3 9	49 2	2422
Image: constraint of the sector of								27.1	5.5	-+J.2	LTLL
Bravo 3 1.5 pt Image: state sta											
Bravo 3 1.5 pt Image: state of the state of t	6. Xyway LFR	T Band*	12.7 fl oz	3.1	3.7	0.0	0.0	22.5	3.6	21.7	3746
+ Convoy** - 32.0 fl oz Image: state structure st											
Lucento 4 & 6 5.5 fl oz Image: second			-								
Bravo 5 1.5 pt Image: constraint of the sector of t		4 & 6									
+ Convoy** - 32.0 fl oz Image: Single											
Bravo 3 1.5 pt Image: second s			-								
Bravo 4 1.5 pt <		3									
Bravo 4 1.5 pt <											
+ Convoy** - 32.0 fl oz Image: state of the state of				-	-	-	-	18.3	2.8	27.5	3390
Lucento 5 5.5 fl oz Image: constraint of the sector											
Bravo 6 1.5 pt <											
+ Convoy**-32.0 fl oz											
Bravo 7 1.5 pt <			-								
8. Bravo1 & 71.5 pt22.92.931.33560Lucento2 & 45.5 fl oz22.92.931.33560Bravo3 & 51.5 pt22.92.931.33560+ Convoy**-32.0 fl oz <td></td>											
Lucento2 & 45.5 fl ozImage: second constraints of the second constraints and the	Bravo	7	1.5 pt								
Lucento2 & 45.5 fl ozImage: constraint of the set of th	8 Bravo	1&7	1 5 nt	_	_	_	_	22.9	29	31 3	3566
Bravo $3 \& 5$ 1.5 pt <t< td=""><td></td><td></td><td>-</td><td></td><td></td><td></td><td></td><td>22.5</td><td>2.5</td><td>01.0</td><td></td></t<>			-					22.5	2.5	01.0	
+ Convoy**-32.0 fl oz0.60.4N.S.N.S.11.10.615.0528LSD(P<0.05)0.60.4N.S.N.S.11.10.615.0528* T Band used in furrow nozzle raised to band 4-6 inches over open furrow0.60.4N.S.N.S.11.10.615.0528** Convoy app's were broadcast by backpack0.60.4N.S.N.S.11.10.615.0528Plant/ft ¹ = Stand count is the number of emerged plants per foot of row<											
Provost Silver613.0 fl ozImage: constraint of the sector		-	-								
LSD(P<0.05)0.60.4N. S.N. S.11.10.615.0528* T Band used in furrow nozzle raised to band 4-6 inches over open furrow.528** Convoy app's were broadcast by backpack. <td></td> <td>6</td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td> <td></td>		6									
 * 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 infectd based on disease loci (up to 12" linear row) per plot. 		-	-	0.6	0.4	N. S.	N. S.	11.1	0.6	15.0	528
** Convoy app's were broadcast by backpack. Image: Convoy app's were broadcast by backpack by backpackbackbackbackback by backpack by backpackback by backp	i	rrow nozzle ra	ised to band 4-								
Plant/ft ¹ = Stand count is the number of emerged plants per foot of row. Image: Comparison of the emerged plants and the emerged plants per foot of row. % Dead Plants ² =The % of emerged plants that were dead or dying per plot. Image: Comparison of the emerged plants per foot of row. TSWV ³ =Percent of row feet infect based on disease loci (up to 12" linear row) per plot. Image: Comparison of the 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.				d nlants ner	foot of row						
TSWV ³ =Percent of row feet infectd based on disease loci (up to 12" linear row) per plot.											
			-								
Leaf Spot ⁴ = Florida 1 - 10 scale, where 1=no disease and 10=dead plant.					•		plot.				

NEMATODE CULTIVAR TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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.

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.

		NEMA	ATODE (CULTIVAR TE	EST, 20	24			
				FARM, IRR/NO					
								Root	
			Plant/ft ¹	% Dead Plants ²	TSWV ³	Galling ⁴	Yield	Knot⁵	Ring⁶
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 a	pplied.						
Plant/ft ¹ = Stand cou	int is the nu	mber of em	erged plant	ts per foot of row.					
% Dead Plants ² =The	% of emerg	ed plants th	at were dea	ad or dying (Asper	gillus cro	wn rot).			
TSWV ³ =Percent of ro	ow feet infe	td based or	n disease lo	ci (up to 12" linea	r row) per	⁻ plot.			
Galling ⁴ = Visual ratio	ng of the pe	rcent of pod	ls and roots	s (1-100) with visit	ole damag	e from roo	t-knot ne	matode.	
Root-knot ⁵ = Numbe	r of <i>M. aren</i>	<i>aria</i> juvenile	e per 100 co	c of soil.					
$Ring^6$ = Population of	f ring nemat	odes per 10	0 cc of soil.						

NICHINO FUNGICIDE TEST, 2024

- A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

- 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			
LS	D(P<0.05)	_	-	0.6	11.2	539

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

	BLAC	KSHAN	K FARM	, IRRIGA	ATED/N	ON FIEL	D	
DATE	Mar	Anr	Mov	June	lukz.	Δυσ	Son	Oct
1	0	Apr 0	May 0	0	July 0	Aug 0	Sep 0	000
2	0	0	0	0	0.93	0.12	0.12	0
3	0	1.00	0	0	0.93	0.12	0.12	0
4	0	0	1.00	0	0.52	0	0	0
5	0.85	0	0	0.38	0	1.03	0	0.15
6	0	0	0	0.00	0	0	1.00	0.13
7	0	0	0	0	0.31	0	1.00	0.10
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
AL (inches)	7.71	7.42	10.79	1.64	4.02	1.53	18.51	0.28

MULTI-STATE DISEASE EVALUATION TEST, 2024

- A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.
 - 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.

- 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.

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												
			BLACK	SHANK FAR	M, BANANA F	IELD							
	TSWV ¹	FLS ²	LS ³	Whit	te Mold (4-Oct)							
Genotypes	9-Sep	9-Sep	9-Sep	% Zeroes ⁴	No Zeroes ⁵	All⁵	Eggs ⁶	Galls ⁶	Root Vigor ⁷	Yld			
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.			
										cont.			

					FIELD TEST					
			BLACK	SHANK FAR	M, BANANA F	IELD				
	TSWV ¹	FLS ²	LS ³		te Mold (4-Oct	•				
Genotypes	9-Sep	9-Sep	9-Sep	% Zeroes ⁴	No Zeroes ⁵	All⁵	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
TSWV ¹ =Percent of row 1	feet infectd b	ased on dise	ease loci (ur	o to 12" linear r	ow) per plot.					
Funky Leaf Spot ² =1-5 scale, where 1=none and 5=bad FLS.										
Leaf Spot ³ =Florida 1 - 10 scale where 1=no disease and 10=dead plant.										
⁴ Percent of plants incou				-						
⁵ Average length of the w		-)'s".					
Root-gall and egg-ma						7·7 2_1∩	· 4 31_100	5 more	than 100	
galls or egg masses p			aie. 0, 110 §	sans of no eg	5 11103363, 1, 1-	2, 2, 3-10	, -, , , , , , , , , , , , , , , , , , ,	, ,, ,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		
Root-Vigor ⁷ =1 to 5 s	•									
ROOL-VIGOT = 1 (0.5 S)	cale, with I	being very	smail, and	a 5 being very	riarge.					

RHIZOCTONIA FUNGICIDE TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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.

- 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.

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

BLACKSHANK FARM, BANANA FIELD											
				RHIZ ¹	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						

RHIZ¹=% of limbs affected by *Rhizcoctonia solani*. Inoculated plots with oat grain inoculum on Aug. 6 (950 ml per row).

	ום		LY RAI		•			
	DI	LACKOL	IANK FA	KM, DA	INANA r	TELD		
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
OTAL (inches)	7.71	7.42	10.79	1.64	4.02	1.53	18.51	0.28

BASF SEEDLING DISEASE TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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.

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.

		LAN	NG FARM	, SOUTI	H FIELD			
	Plan	t/ft ¹	% D	ead Plar	nts ²	TSWV ³	Roots/ft ⁴	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 +	1.6	3.5	0.0	0.0	0.0	11.0	3.4	3196
llevo								
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 o	count is the	e number	of emerge	d plants	per foot of	f row.		
% Dead Plants ² =1	The % of er	nerged pl	ants that v	vere dead	d or dying	per plot.		
TSWV ³ =Percent o	of row feet	infectd b	ased on dis	ease loc	i (up to 12	" linear ro	w) per plot.	
Roots/ft ⁴ =Numbe								

CERTIS SEED TREATMENT TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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. Th lower rate looked to be as good as the Velum in furrow treatment.

			LANG F	ARM, SO	DUTH FIE	LD				
		Plant/ft ¹		%	Dead Plan	its ²	Vigor ³	TSWV⁴	Roots/ft ⁵	Yield
Treatment	In Furrow	16-May	28-May	16-May	28-May	11-Jun	4-Jun	14-Aug		lb/A
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/ft ¹ = Stand coun	t is the numbe	r of emerg	ed plants p	per foot of	row.					
% Dead Plants ² =The %	6 of emerged p	lants that	were dead	or dying (Aspergillus	s crown ro	t).			
Vigor ³ = 1-10 scale, w	here 10=best.									

CORTEVA SEED TREATMENT TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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.

<u>CORTEVA</u>	SEED TREAT	MENT TEST,	2024	
	LANG FARM, SO	UTH 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 tre	ated with Rai	ncona WPI	D, 4 0z/100) lbs.						
Planted May 6, 6 s	eed / ft									
Plant/ft ¹ = Stand co	ount is the nur	nber of em	erged plan	ts per foot	of row.					
% Dead Plants ² =Th	ne % of emerge	ed plants tl	hat were d	ead or dyir	ng (<i>Asperg</i>	<i>illus</i> crov	vn rot).			
Vigor ³ = 1-10 scale, where 10=best.										
TSWV ⁴ =Percent of	row feet infec	td based o	n disease	loci (up to	12" linear	row) per	plot.			
Roots/ft ⁵ =Number										

EXPEL SEED TREATMENT TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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. <u>SUMMARY:</u>

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.

		APELS					<u>, 2024</u>			
			LANG	FARM, S	OUTH F	IELD				
	Plan	t/ft ¹	% Dead Plants ²			Vigor ³	% Germ.	TSWV⁴	Roots/ft ⁵	Yield
Seed Treatment	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	3.3	4.4	0.0	0.0	0.0	9.0	89.0	29.2	4.0	1525
(no inoculant)										
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	5.0	7.2	0.0	0.0	0.2	5.0	00.0	25.2	0	1020
+ 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	0.0	0.2		0.0	4.2	0.7			0.0	220
LSD(P<0.05)	0.6	0.3	N. S.	0.8	1.2	0.7	-	N. S.	0.6	338
Plant/ft ¹ = Stand count										
% Dead Plants ² =The %		-	at were de	ead or dyir	ng (<i>Asper</i>	<i>gillus</i> cro	wn rot).			
Vigor ³ = 1-10 scale, wł	nere 10=bes	st.								
TSWV ⁴ =Percent of row	/ feet infect	d based o	n disease l	oci (up to	12" linea	ir row) pe	r plot.			
Roots/ft ⁵ =Number of t										

HEADS UP/KANNAR II TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

- 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.

			LAN	G FARM	, SOUTH	FIELD					
							2		-		
		Rate/A or		t/ft ¹		Dead Plan		% Germ.	TSWV ³	Roots/ft ⁴	Yield
Treatment	App's	100 lbs	20-May	31-May	20-May	31-May	14-Jun	17-Jun	14-Aug	20-Sep	lb/A
Heads Up Seed (GA-06	G from Dr. I	<u>Monfort)</u>									
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	Seed Trt	Liquid	0.7	3.1	0.0	0.0	0.3	87.0	20.5	2.9	2804
+ Heads up											
(mixed with polymer)											
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	Seed Trt	4 oz	1.2	3.1	0.0	0.0	0.0	90.0	20.0	2.9	2855
+ Heads up		Drench seed									
(sprayed 1st)											
Kannar Seed (Growth a	and Vigor To	est, 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
<u>Expel</u>											
9. Rancona VPD	Seed Trt	4.0 oz	2.0	3.3	0.0	0.0	0.1	-	18.5	3.2	3290
+ Expel Biocontrol	In Furrow	6.8 fl oz									
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-06											
Trt 6-8 are Kannar Proto				<u> </u>							
Plant/ft ¹ = Stand count i											
% Dead Plants ² =The % of TSWV ³ =Percent of row f											

KANNAR SEED TREATMENT TEST I, 2024

- A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

- 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.

	K		R SEED	TREA	TMEN	IT TES	T I, 20)24			
			LANG	G FARM,	SOUTH	FIELD					
			t/ft ¹		Dead Plan		Vigor ³	% Germ.	TSWV⁴	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 Disea											
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
	Done neu v2.5 + N 542										
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 V	/igor 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 L	P24015									
Treatments 5-	-7 are 1, 2 and 3, respect	ively from	Protocol	LP24002							
Plant/ft ¹ = Star	nd count is the number of	emerged p	olants per f	oot of row	•						
% Dead Plants	² =The % of emerged plan	ts that wer	e dead or d	dying (Asp	e <i>rgillus</i> cr	own rot).					
Vigor ³ = 1-10 s	cale, where 10=best.										
TSWV ⁴ =Percer	nt of row feet infectd base	ed on disea	se loci (up	to 12" line	ear row) p	er plot.					
	nber of tap roots per foot					·					

SYNGENTA SEED TREATMENT TEST I, 2024

- A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

				LANG F	ARM, SOL	JTH FIELD				1	
	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 c	ount is the	number of	emerged p	lants per fo	ot of row.						
% Dead Plants ² =T	he % of en	nerged plan	ts that were	e dead or dy	ying (Asperg	gillus crown	rot).				
TSWV ³ =Percent of	f row feet i	nfectd base	ed on diseas	se loci (up t	o 12" linea	r row) per pl	ot.				

SYNGENTA SEED TREATMENT TEST II, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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 F	ARM, SO)				
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 te	st										
Plant/ft ¹ = Stand	count is th	ne number c	f emerged	plants per f	oot of row.						
% Dead Plants ² =	The % of e	merged pla	nts that we	re dead or o	dying (Aspe	rgillus crow	/n rot).				
TSWV ³ =Percent	of row feet	infectd bas	sed on disea	ase loci (up	to 12" linea	ar row) per	plot.				
Roots/ft ⁴ =Numb											

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
TAL (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
TAL (inches)		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. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

- 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

				LA	NG FARI	N, NEW FIELD					
Treatment	Appic	Rate/A	LS ¹	WM ² 4-Oct	Yield Ib/A	Treatment	Annic	Pata / A	LS ¹	WM ²	Yield Ib/A
1. Nontreated	App's	- Kale/A	3-Oct	45.0	2532		App's	Rate/A 10.0 fl oz	3-Oct 2.3	4-Oct	
1. Nontreated	-	-	3.4	45.0	2532	9. Revytek Bravo	3 & 5		2.3	4.0	3536
2. Bravo	2&7	1.5 pt	2.5	30.5	2325	Elatus 45WG	3 & 5	1.5 pt 9.5 oz			
Bravo	3 - 6	1.5 pt	2.5	50.5	2325	Provysol	4 & 6	3.0 fl oz			
+ Orius	3-0	7.2 fl oz				+ Orius	400	7.2 fl oz			
i Ollus		7.2 11 02				Bravo	7	1.5 pt			
3. Priaxor	2	6.0 fl oz	2.4	25.5	3046	+ Topsin	1	5.0 fl oz			
Bravo	3 – 6	1.5 pt	2.4	23.5	5040	Горзін		5.0 11 02			
+ Orius	5 0	7.2 fl oz				10. Revylok	3 & 5	6.5 fl oz	2.5	5.9	3284
Bravo	7	1.5 pt				Bravo	3 & 5	1.5 pt	2.5	5.5	5204
Diavo	1	1.5 pt				Elatus 45WG	3 & 5	9.5 oz			
4. Revylok	2	6.5 fl oz	2.6	31.0	2897	Provysol	4 & 6	3.0 fl oz			
Bravo	3-6	1.5 pt	2.0	51.0	2057	+ Orius	400	7.2 fl oz			
+ Orius	50	7.2 fl oz				Bravo	7	1.5 pt			
Bravo	7	1.5 pt				+ Topsin	,	5.0 fl oz			
Diavo		1.5 pt				(Topsin		5.0 11 02			
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			
2.0.0		210 pt				Elatus 45WG	3 & 5	9.5 oz			
6. Priaxor	2	6.0 fl oz	2.5	23.5	2884	+ Miravis		3.4 fl oz			
Provysol	3 & 5	3.0 fl oz				Bravo	7	1.5 pt			
+ Orius		7.2 fl oz									
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			
						+ Bravo		1.5 pt			
7. Priaxor	2	6.0 fl oz	2.4	13.0	3491	Elatus 45WG	3 & 5	9.5 oz			
Revylok	3 & 5	6.5 fl oz				+ Miravis		3.4 fl oz			
+ Orius		7.2 fl oz				Bravo	7	1.5 pt			
Bravo	4 & 6	1.5 pt				LSD(P<0.05)	-	-	0.5	16.9	854
+ Orius		7.2 fl oz				Leaf Spot ¹ = Florida	1 - 10 scale	where 1=no	disease ar	nd 10=dear	1 nlant
Bravo	7	1.5 pt				White Mold ² =Percent					
Diavo	/	1.5 pt				linear row) per plot.	. of tow reet		i on uiseas		5 12
8. Priaxor	2	6.0 fl oz	2.6	10.0	3549	inica row) per plot.					
Bravo	3 & 5	1.5 pt									
Elatus 45WG	3 & 5	9.5 oz									
Provysol	4 & 6	3.0 fl oz									
+ Orius	- 0.0	7.2 fl oz									
Bravo	7	1.5 pt									
+ Topsin	/	5.0 fl oz								-	

SYNGENTA FUNGICIDE TEST, 2024

- A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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).

- 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

			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			20.0
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	1	7.2 fl oz				+ Orius 3.6	,	7.2 fl oz			
+ 01103 5.0		7.2 11 02				+ 01103 5.0		7.2 11 02			
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	1.5 pt	2.2	5.0	2002	Elatus 45WG	3 & 5	9.5 oz	1.9	0.0	5127
Elatus 45WG	3 & 5	7.3 oz				+ Bravo	303				
+ Miravis	202						4 & 6	1.5 pt			
	4 & 6	3.4 fl oz				Provysol + Orius 3.6	4 & 0	3.0 fl oz			
Bravo	4 & 0	1.5 pt					7	7.2 fl oz			
+ Alto	7	5.5 fl oz				Provost Silver	7	13.0 fl oz			
Bravo	7	1.5 pt				44.5		4.0.1	4.0	40.0	2024
+ 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	r - to scale,	where T=DO (usease ar	и то=аеа	u piant.

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
OTAL (inches)	5.99	7.00	9.30	1.80	5.05	2.30	15.80	0.20

ADAMA FUNGICIDE TEST I, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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 greatley 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

			WM ¹	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)	_	I	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. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

- 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 greatley 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 rials 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

			WM1	Yield				WM ¹	Yield
Treatment	App's	Rate/A	4-Oct	lb/A	Treatment	App's	Rate/A	4-Oct	lb/A
. 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		
+ Alto		5.5 fl oz			LSD(P<0.05)	-	-	14.9	847
					White Mold ¹ =Perce	nt of row fee	et infected ba	sed on disea	se loci (ı
5. Bravo W'stik	1	1.5 pt	10.0	4321	to 12" linear row) pe				- (-
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. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

- 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 greatley 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

			WM ¹	Yield
Treatment	App's	Rate/A	4-Oct	lb/A
I. Untreated	-	-	92.0	1297
2. Bravo	1&2	1.5 pt	34.0	3447
+ Muscle	102	7.2 fl oz	54.0	5447
TST98-R001	3-5	4.2 fl oz		
Bravo W'stik	6&7	4.21102 1.5 pt		
	007	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		
	100			
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	01.0	0,00
Adastrio	3-5	9.0 fl oz		
Bravo W'stik	6&7	1.5 pt		
Brave w stik	007	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	/1.0	2492
Bravo W'stik	6&7			
	001	1.5 pt		
10. Bravo	1-7	1.5 pt	67.5	2564
LSD(P<0.05)	_	_	17.5	697

to 12" linear row) per plot.

ISK/SIPCAM TEST, 2024

- A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

- 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			
2. 01000	1 /	1.5 pt	05.0	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	, 0.10	1011			
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 E nt	83.6	1494			
Bravo	3-6	1.5 pt	05.0	1494			
+ SA-0130310	3-0	1.5 pt 18.5 fl oz					
		0					
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							
+ Convoy		1.5 pt 16.0 fl oz					
LSD(P<0.05)	- 1	-	11.8	787			

12" linear row) per plot.

VALENT – ADAMA FUNGICIDE TEST, 2024

- A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

- 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 lb/A Treatment App's Rate/A 4-Oct 1. Untreated 1257 90.8 _ _ 1, 4, 6 & 7 2. Bravo 1.5 pt 61.6 2376 2,3&5 Bravo 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 2,3&5 Elatus 45WG 7.3 oz 1&7 52.4 5. Bravo 1.5 pt 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 2 1.5 pt Bravo + Excalia 2.0 fl oz Bravo 3&5 1.5 pt + Excalia 3.0 fl oz Provysol 4&6 3.0 fl oz

7.2 fl oz

+ Orius

Cont.

LANG FARM, COTTON FIELD							
			WM ¹	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
OTAL (inches)	5.99	7.00	9.30	1.80	5.05	2.30	14.98	0.20

BASF NEMATODE TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

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 A	APPLICATIONS I	N ADDITIC	N TO APPLICATIONS IN SECTION "C" ABOVE					
Spray Date	Treatment	Rate						
	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulgus staff.					
5/23/2024	Valor	3 oz/A	Sprays were applied to all tests in this field.					
5/25/2024	Strongarm	.45 oz/A						
	Roundup	1 qt/A	Herbicides were applied using AI-11004VS tips @ 40 PSI					
6/28/2024	Headline	9 oz/A	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-					
	Bravo	1.5 pt/A	11003VS tips @ 35 PSI traveling 5 MPH applying 20 GP/					
7/12/2024	Umbra	1 qt/A	11005V5 tips @ 55 PSI travelling 5 WPH applying 20 GPA					
	Boron	1 qt/A						
7/13/2024	Cadre	4 oz/A						
	Provost Silver	12 oz/A						
7/25/2024	Manganese	1 pt/A						
	Dimilin	4 oz/A						
	Provost Silver	12 oz/A						
8/7/2024	Convoy	1 qt/A						
	Sulfur	1 qt/A						
8/16/2024	Intrepid Edge	8 oz/A						
8/22/2024	Bravo	1.5 pt/A						
0/ 22/ 2024	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						
5/25/2024	Tebuconazole	7.2 oz/A						

- 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. <u>SUMMARY</u>:

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.

		DAJEIN		DDE TEST, 2	024			
			ΑΤΤΑΡ	PULGUS				
				-		Root	_	
			Plant/ft ¹	% Dead Plants ²	Galling ³	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
+ llevo	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						
TIFNV-HiOL								
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 cou	int is the num	ber of emer	ged plants	per foot of row.				
% Dead Plants ² =The					illus crow	n rot).		
Galling ³ = Visual rati							knot nema	tode
Root-knot ⁴ = Number					ie damage	10111001		itouc.

Root-knot⁴ = Number of *M. arenaria* juvenile per 100 cc of soil. Ring⁵ = Population of ring nematodes per 100 cc of soil.

CORTEVA NEMATODE TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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.

Table 1 PESTICIDE APPLICATIONS IN ADDITION TO APPLICATIONS IN SECTION "C" ABOVE

Spray Date	Treatment	Rate	
	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulgus staff.
5/23/2024	Valor	3 oz/A	Sprays were applied to all tests in this field.
5/ 25/ 2024	Strongarm	.45 oz/A	
	Roundup	1 qt/A	Herbicides were applied using AI-11004VS tips @ 40 PSI
6/28/2024	Headline	9 oz/A	traveling 5.8 MPH applying 20 GPA.
7/10/2024	Select	12 oz/A	
7/11/2024	Baythriod	2 oz/A	Europicidos and insecticidos wore applied using Al
	Bravo	1.5 pt/A	Fungicides and insecticides were applied using AI- 11003VS tips @ 35 PSI traveling 5 MPH applying 20 GPA.
7/12/2024	Umbra	1 qt/A	11005 V3 tips @ 55 P31 travening 5 WPH applying 20 GPA.
	Boron	1 qt/A	
7/13/2024	Cadre	4 oz/A	
	Provost Silver	12 oz/A	
7/25/2024	Manganese	1 pt/A	
	Dimilin	4 oz/A	
	Provost Silver	12 oz/A	
8/7/2024	Convoy	1 qt/A	
	Sulfur	1 qt/A	
8/16/2024	Intrepid Edge	8 oz/A	
8/22/2024	Bravo	1.5 pt/A	
0/ 22/ 2024	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	
9/23/2024	Tebuconazole	7.2 oz/A	

- 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. <u>SUMMARY:</u>

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											
						Root					
			Plant/ft ¹	% Dead Plants ²	Galling ³	Knot⁴	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	In Furrow	7.7 fl oz	1.8	0.0	0.5	71.5	52.3	4858			
+ Vydate C-LV	interior	34.0 fl oz						1000			
6. Salibro	In Furrow	7.7 fl oz	1.9	0.0	1.3	8.0	48.5	5207			
+ Vydate C-LV		17.0 fl oz									
7. Salibro	In Furrow	7.7 fl oz	1.6	0.0	5.5	40.0	62.0	4716			
+ Vydate C-LV		34.0 fl oz									
Vydate C-LV	60 DAP	17.0 fl oz									
8. Salibro	In Furrow	15.3 fl oz	2.4	0.0	3.8	4.3	46.3	5992			
+ Fontelis		16.0 fl oz									
9. Salibro	In Furrow	15.3 fl oz	2.5	0.0	5.0	58.8	20.3	5754			
+ BIO CNTR 0031		12.7 fl oz									
10. Salibro	In Furrow	7.7 fl oz	2.3	0.0	2.5	28.5	65.3	5460			
+ Velum		6.84 fl oz									
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			
			0.4	N. S.	N. S.	N. S.	41.0	944			

Gailing = Visual rating of the percent of pods and roots (1-100) V Root-knot⁴ = Number of *M. arenaria* juvenile per 100 cc of soil.

 $Ring^5$ = Population of ring nematodes per 100 cc of soil.

KANNAR NEMATODE TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

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 A	APPLICATIONS I	N ADDITIO	N TO APPLICATIONS IN SECTION "C" ABOVE
Spray Date	Treatment	Rate	
	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulgus staff.
5/23/2024	Valor	3 oz/A	Sprays were applied to all tests in this field.
5/25/2024	Strongarm	.45 oz/A	
	Roundup	1 qt/A	Herbicides were applied using AI-11004VS tips @ 40 PSI
6/28/2024	Headline	9 oz/A	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-
	Bravo	1.5 pt/A	11003VS tips @ 35 PSI traveling 5 MPH applying 20 GPA.
7/12/2024	Umbra	1 qt/A	
	Boron	1 qt/A	
7/13/2024	Cadre	4 oz/A	
	Provost Silver	12 oz/A	
7/25/2024	Manganese	1 pt/A	
	Dimilin	4 oz/A	
	Provost Silver	12 oz/A	
8/7/2024	Convoy	1 qt/A	
	Sulfur	1 qt/A	
8/16/2024	Intrepid Edge	8 oz/A	
8/22/2024	Bravo	1.5 pt/A	
0, 22, 2024	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	
3, 23, 202 1	Tebuconazole	7.2 oz/A	

- 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>K</u>	ANNAR	NEMA [®]	TODE TEST,	2024						
ATTAPULGUS											
			Plant/ft ¹	% Dead Plants ²	Galling ³	Root Knot ⁴	Ring⁵	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.			

% 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.

UPL NEMATODE TEST, 2024

A. <u>PURPOSE</u>: To evaluate seed treatment management for peanut root-knot nematode.

B. EXPERIMENTAL DESIGN:

Table 1

- 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. <u>APPLICATION OF TREATMENTS:</u>

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.

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

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

- 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. <u>SUMMARY:</u>

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

						Root		
			Plant/ft ¹	% Dead Plants ²	Galling ³	Knot⁴	Ring⁵	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			5.0	501.6	155.0	5719
+ KFD-427-01	Seed Trt	48.9 ml/100 kg	•	•				
KFD-414-01	60 DAP	2.0 fl oz						
+ KFD-427-01	00 DAI	8.0 fl oz						
+ Conditioner		8.0 fl oz						
		0.01102						
3. 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

% 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.

 $Ring^5$ = Population of ring nematodes per 100 cc of soil.

VALENT NEMATODE TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

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	N ADDITIO	N TO APPLICATIONS IN SECTION "C" ABOVE
Spray Date	Treatment	Rate	
	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulgus staff.
5/23/2024	Valor	3 oz/A	Sprays were applied to all tests in this field.
5/25/2024	Strongarm	.45 oz/A	
	Roundup	1 qt/A	Herbicides were applied using AI-11004VS tips @ 40 PSI
6/28/2024	Headline	9 oz/A	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-
	Bravo	1.5 pt/A	11003VS tips @ 35 PSI traveling 5 MPH applying 20 GPA.
7/12/2024	Umbra	1 qt/A	
	Boron	1 qt/A	
7/13/2024	Cadre	4 oz/A	
	Provost Silver	12 oz/A	
7/25/2024	Manganese	1 pt/A	
	Dimilin	4 oz/A	
	Provost Silver	12 oz/A	
8/7/2024	Convoy	1 qt/A	
	Sulfur	1 qt/A	
8/16/2024	Intrepid Edge	8 oz/A	
8/22/2024	Bravo	1.5 pt/A	
0/22/2024	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	
5/25/2024	Tebuconazole	7.2 oz/A	

- 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. <u>SUMMARY:</u>

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.

	V	ALENT	NEMAT	ODE TEST,	2024			
			ΑΤΤΑΡ	ULGUS				
						Root		
			Plant/ft ¹	% Dead Plants ²	Galling ³	Knot⁴	Ring ⁵	Yield
Treatment	App's	Rate/A	10-Jun	10-Jun	5-Oct	17-Sep	17-Sep	lb/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 Fo	undation GA-	06G seed.						
Plant/ft ¹ = Stand cour	nt is the numb	er of emerg	ged plants p	er foot of row.				
% Dead Plants ² =The	% of emerged	plants that	were dead	or dying (Aspergi	llus crown	rot).		
Galling ³ = Visual ratir							knot nema	tode.
Root-knot ⁴ = Number	of <i>M. arenaric</i>	, juvenile p	oer 100 cc o	f soil.				
Ring ⁵ = Population of	ring nematode	es per 100 (cc of soil.					

SYNGENTA NEMATODE TEST, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

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 I	N ADDITIO	N TO APPLICATIONS IN SECTION "C" ABOVE
Spray Date	Treatment	Rate	
	Prowl H2O	1 qt/A	NOTE: these sprays were applied by the Attapulgus staff.
5/23/2024	Valor	3 oz/A	Sprays were applied to all tests in this field.
5/25/2024	Strongarm	.45 oz/A	
	Roundup	1 qt/A	Herbicides were applied using AI-11004VS tips @ 40 PSI
6/28/2024	Headline	9 oz/A	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-
	Bravo	1.5 pt/A	11003VS tips @ 35 PSI traveling 5 MPH applying 20 GPA.
7/12/2024	Umbra	1 qt/A	11005V 5 tips @ 55 PSI travening 5 WPH applying 20 GPA.
	Boron	1 qt/A	
7/13/2024	Cadre	4 oz/A	
	Provost Silver	12 oz/A	
7/25/2024	Manganese	1 pt/A	
	Dimilin	4 oz/A	
	Provost Silver	12 oz/A	
8/7/2024	Convoy	1 qt/A	
	Sulfur	1 qt/A	
8/16/2024	Intrepid Edge	8 oz/A	
8/22/2024	Bravo	1.5 pt/A	
0/ 22/ 2024	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	
5/25/2024	Tebuconazole	7.2 oz/A	

- 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 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

	SYI	NGENT	A NEMA	TODE TEST	, 2024			
			ΑΤΤΑΡ	ULGUS				
						Root		
			Plant/ft ¹	% Dead Plants ²	Galling ³	Knot⁴	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	5.1	0.0	0.5	-0.5		5710
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-06	G Trts 1, 4, ar	nd 5 from t	he good se:	ed source in the	South Fie	ld test.		
Plant/ft ¹ = Stand coun	it is the numb	er of emerg	ged plants p	er foot of row.				
% Dead Plants ² =The 9	% of emerged	plants that	were dead	or dying (Aspergi	llus crown	rot).		
Galling ³ = Visual ratin	g of the perce	nt of pods	and roots (1	L-100) with visible	damage f	rom root-l	knot nema	tode.
Root-knot ⁴ = Number of	of <i>M. arenaric</i>	i juvenile p	er 100 cc o	f soil.				
Ring ⁵ = Population of	ring nematode	es per 100 (cc of soil.					

DA	DAILY RAINFALL + IRRIGATION, 2024										
		Α	TTAPUL	GUS							
DATE	-				• -						
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				

<u>PECAN FUNGICIDE TEST I,</u> <u>WICHITA, 2024</u>

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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. <u>SUMMARY:</u>

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.

			Neo. ¹	Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev⁵	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	_, _, _, _, _						
Сеvya	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							
5. 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							
3. 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.

			Neo.1	Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev⁵	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 neofus	icoccum.							
Leaf Inc ² =Leaf scab inc	cidence, based	on 8 terminals pe	r tree (% of le	eaflets on midd	e of leaf with so	cab).		
_eaf Sev ³ =Leaf scab se	everity, based o	n middle leaf of 8	B terminals p	er tree.				

<u> </u>		GICIDE TES						
			Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev⁵	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	1, 3, 3, 7, 3	75.5	0.5	100.0	07.0	45.0	51.5
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	1, 3, 3, 7, 3	55.1	5.4	100.0	55.0	21.5	10.0
Miravis Prime	6.84 fl oz	2, 4, 6, 8, 10						
+ Humispread	16.0 fl oz	2, 4, 0, 8, 10						
(Humispieau	10.0 11 02							
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							
3. 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.

<u>PE</u>	CAN FUN	GICIDE TES	ST I, WICH	HITA, NOF	RTH ORC	HARD, 20)24	
			Leaf Inc ²	Leaf Sev ³	Nut Inc ⁴	Nut Sev⁵	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 neofusi								
Leaf Inc ² =Leaf scab inc		•	•		f leaf with scal	o).		
Leaf Sev ³ =Leaf scab se	verity, based or	n middle leaf of 8	terminals per t	ree.				
Nut Inc ⁴ =Nut scab incid	dence, based or	ratings of 8 nut c	lusters per tree	(% of nuts with	any scab).			
Nut Sev ⁵ =Nut scab seve	erity, based on	8 nuts clusters pe	r tree (% of shu	ck covered with	scab).			
Def. ⁶ =Percent defoliati	on.							

PECAN FUNGICIDE TEST I, DESIRABLE, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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 Inc⁴	Nut Sev⁵
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.

			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 neofus	icoccum.						
Leaf Inc ² =Leaf scab in	cidence, base	d on 8 terminals	per tree (%	of leaflets	on middle of	leaf with s	cab).
Leaf Sev ³ =Leaf scab se	everity, based	on middle leaf of	f 8 termina	als per tree.			
Nut Inc ⁴ =Nut scab inci	dence, based	on ratings of 8 nu	ut clusters	per tree (%	of nuts with	any scab).	
Nut Sev ⁵ =Nut scab sev	verity, based o	n 8 nuts clusters	per tree (%	6 of shuck c	overed with	scab).	
							Cont.

PECAN FUNGICIDE TEST I, DESIRABLE, NORTH ORCHARD, 2024

			Leaf Inc ²	Leaf Sev ³	Nut Inc⁴	Nut Sev⁵
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					
Сеvya	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.

			Leaf Inc ²	Leaf Sev ³	Nut la s4	Nut Cau ⁵
Tuestassate	Dete /A	A no ni n			Nut Inc⁴	Nut Sev⁵
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					
LO. 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				
L1. 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					
L4. Nontreated	_	-	49.1	5.2	100.0	91.6
LSD(P<0.05)			11.1	1.2	4.0	9.5
eaf Inc ² =Leaf scab in	cidence, based	d on 8 terminals p	er tree (% of le	aflets on middle	of leaf with so	cab).
eaf Sev ³ =Leaf scab so						
lut Inc ⁴ =Nut scab inci					th any scah)	

MISCELLANEOUS TERMINAL TEST I, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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.

	MISC				L TEST	/		
		PONDE	R FARM,	NORTH C	DRCHARD			
					WIC	HITA		
				<u>JU</u>	LY <u>3</u>		AU	G. 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	1 - 10	/3.1	4.0	0.0	5.0	100.0	15.5
	24 11 02							
5. Elast	24 fl oz	1 - 10	62.0	4.3	100.0	6.8	100.0	62.6
+ Top Guard	6.0 fl oz	1 10	02.0		100.0	0.0	100.0	02.0
. op easte								
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							
3. 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
			00.0		400.0	67.0	100.0	00 5
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)	-+0 02	-	22.7	2.6	21.3	11.2	NS	18.8
Leaf Inc ¹ =Leaf sca	ah incidonco	nor tormi						20.0
-								
Leaf Sev ² =Leaf sc	•	•	-			scab).		
Nut Inc ³ =Nut sca								
Nut Sev ⁴ =Nut sca	ab severity p	per termin	al (% of sh	uck area c	overed wit	th scab).		Cont.

	MISC			RMINA		<i>i</i>		
		PONDE	R FARM,	NORTH O	RCHARD			
					DESIR	ABLE		
				JUL	<u>Y 3</u>		AUC	G. 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							
	1 Et	1 10	27.2	2.4	27.5	2.0	100.0	20.4
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	1 - 10	57.5	2.0	100.0	4.5	100.0	01.5
i top Guara	0.0 11 02							
9. Miravis Top	13.7 oz	1 - 10	15.8	1.3	14.6	0.8	87.5	1.8
	2017 02	1 10	1010	1.0	1.110	0.0	0710	210
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 Inc ¹ =Leaf sca	ab incidence	per termi	÷	<u>.</u>		ò		
Leaf Sev ² =Leaf sc		•	-					
	-	•	-			scabj.		
Nut Inc ³ =Nut sca					-			
Nut Sev ⁴ =Nut sca	ab severity p	per termin	al (% of sh	uck area co	overed wit	h scab).		100

MISCELLANEOUS TERMINAL TEST II, 2024

A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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. <u>SUMMARY:</u>

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.

<u>N</u>	/IISCELL	ANEO	US TEI	RMINA	AL TES	T II, 20	<u>24</u>	
		PONDER	FARM,	NORTH C	RCHARE)		
					WIC	HITA		
				JUL	<u>.Y 5</u>		<u>Au</u> g	<u>g. 26</u>
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	91.4	6.6	100.0	12.8	100.0	83.3
+ Elast	24 fl oz							
2. CS2005	32.0 fl oz	1 - 10	82.9	8.9	100.0	18.4	100.0	98.0
+ Kphite	32.0 fl oz							
3. CS2005	32.0 fl oz	1 - 5	89.0	7.0	100.0	63.1	100.0	99.7
CS2005	48.0 fl oz	6 - 10	69.0	7.0	100.0	05.1	100.0	33.7
032003	48.0 11 02	0-10						
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	5.0 fl oz	1 - 10	49.6	3.5	100.0	4.1	100.0	57.5
+ Kphite	2.0 qt							
9. Axios	5.0 fl oz	1 - 10	69.0	6.8	100.0	11.6	100.0	96.4
+ Vacciplant	20.0 fl oz							
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 Inc ¹ =Leaf sc	ab incidenc	e per tern	ninal (% of	leaflets o	n end leat	f with scab).	
Leaf Sev ² =Leaf so	-	•	-			-		
Nut Inc ³ =Nut sca								
Nut Sev ⁴ =Nut sc	ab severity	per termi	nal (% of s	huck area	covered	with scab).	•	

				RMINA NORTH C				
					DESIF	RABLE		
				JUL	.Y <u>5</u>		Aug	<u>g. 26</u>
Treatments	Rate/A	Timing	Leaf Inc ¹	Leaf Sev ²	Nut Inc ³	Nut Sev ⁴	Nut Inc ³	Nut Sev
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	03.4	4.4	100.0	27.0	100.0	55.5
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 Inc ¹ =Leaf sc	ab incidenc	e per tern						
Leaf Sev ² =Leaf so								
Nut Inc ³ =Nut sca	ab incidence	per term	inal (% of	nuts with	n any scab)		

PECAN FUNGICIDE TEST II, 2024

- A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

- 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. <u>SUMMARY:</u>

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.

			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
+ Dodine FL Reliant + Dodine FL 14. Nontreated	25.0 fl oz 1.0 qt 36.0 fl oz - reatments, wh tion was run p dence, based o erity, based o	2, 4, 6, 8, 10 - ere 2 buckets per rior to and during on 8 terminals per n end leaf of 8 ter	41.3 9.6 tree, each cor application. tree (% of lea minals per tree	3.6 0.9 ntaining 2 gall aflets on end l ee.	97.9 16.5 ons of water eaf with scal	6.4 1.3 , were placed	100.0 4.5	86.7 8.9	

YOUNG TREE PHOSPHITE TEST, 2024

- A. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>
 - 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. <u>PURPOSE</u>: 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. <u>APPLICATION OF TREATMENTS:</u>

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. <u>SUMMARY:</u>

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
OTAL (inches)	7.05	8.13	1.93	5.03	2.26	13.52	0.12