Date: Jan. 16, 2009

Memo to: Industry Cooperators

From: Tim Brenneman

Subject: Field Trial Results

Attached are the results of our 2008 field trials on peanuts and pecans. This year was again extremely dry, but we were able to compensate for the most part with adequate irrigation. We also had some very high temperatures. While not as conducive for some diseases as major rain events, the weather was excellent for white mold development, and enough leaf spot was present to get good data. However, due to the drought there was very little pecan scab, the one exception being the test on Wichita which is an ultra-susceptible cultivar. Overall we obtained some good data on both crops and it could have been a lot worse.

I want to acknowledge the hard work of our crew lead by Russ Griffin, Lewis Mullis, and Pat Hilton. Summer workers included Amber Graham and Garrett Jones, and the cooperation of other scientists including Dr. Albert Culbreath, Dr. Bob Kemerait, Dr. Corley Holbrook, Dr. Patty Timper, Dr. Bill Branch, Dr. John Beasley, and Dr. Barry Tillman is much appreciated.

Once again we are making this available primarily as an online document, and it can be found at www.tomatospottedwiltinfo.org by clicking on “Publications”, and “2008 Field Trial Results on Diseases of Peanuts and Pecans”. If you have any problems or any questions feel free to call. We have printed a few bound copies and can send you one upon request, but the entire book is available as a pdf file. Thanks again for your support, and we look forward to cooperating with you again in the future.

TABLE OF CONTENTS
2008 PEANUT TESTS

LANG/RIGDON FARM

BLACKSHANK FARM

ATTAPULGUS

PLAINS

EVALUATION OF PEANUT SEED TREATMENTS, TEST I

A. PURPOSE: To evaluate the comparative effects of several peanut seed treatments on seedling emergence and development and pod yield.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: Georgia Green (NOTE - the % seed germination was 88, 90, 83, and 91% for treatments 2, 5, 6 and 7, respectively.

C. APPLICATION OF TREATMENTS:

1. Equipment: Fungicide treatments were applied to non-treated commercial seed by gently mixing the seed and appropriate amount of treatment in a plastic bag to obtain uniform coverage. Seed were planted with a Monosem air planter to obtain uniform spacing.

2. All plots were traveled by tractor and cover sprayed with Chlorothalonil 720 (1.5 pt/A) on 12 June, 24 June, 8 July, 24 July, 5 August, 18 August, and 2 September.

D. ADDITIONAL INFORMATION:

1:	Location:	Rigdon Farm, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 23 April
4.	Soil Fertility:	pH -5.9 P - 63 K - 72 Ca - 409 Mg - 38
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 25 April
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 2 May
7	Planting Info:	Georgia Green, 7 seed/ft on 2 May (70F at 4" deep)
8	Harvest Dates:	Dug - 10 Sept Picked - 15 Sep

E: SUMMARY: All commercial chemical treatments did a good job of increasing plant stands and yield. Kodiak was generally better than no seed treatment, but not as good as commercial standards. Yields were low due to high incidence of white mold.

BAYER SEED TREATMENT TEST I, 2008
RIGDON FARM, COTTON FIELD

Treatments	App's	Rate/A	Plants/ft[1]		Dead Plants/plot[2]			Vigor[3]	TSWV[4]	White Mold[5]	Yield
			16-May	28-May	16-May	28-May	12-Jun	12-Jun	29-Aug	10-Aug	lb/A
1. Nontreated			1.1	0.9	0.3	4.5	3.7	3.0	54.7	15.3	1326
2. Trilex Star	Seed Trt	4.0 oz/100 lb	3.3	3.4	0.0	1.3	0.3	8.0	34.0	34.0	2522
3. Trilex Optimum	Seed Trt	4.0 oz/100 lb	3.5	3.4	0.2	1.0	1.0	8.5	39.3	45.7	2197
4. Dynasty PD	Seed Trt	4.0 oz/100 lb	3.4	3.3	0.0	0.3	0.2	8.3	29.0	34.7	2957
5. Vitavax PC	Seed Trt	4.0 oz/100 lb	3.0	3.2	0.0	1.5	0.3	8.0	30.7	29.3	2870
6. Kodiak	Seed Trt	0.25 oz/100 lb	1.7	1.9	0.0	5.2	5.2	5.5	52.7	22.0	1781
7. Kodiak + Trilex Star	Seed Trt Seed Trt	0.25 oz/100 lb 4.0 oz/100 lb	3.6	3.3	0.0	0.8	0.8	8.3	35.3	34.7	2449
LSD (P<0.5)			0.4	0.4	0.3	1.7	1.8	0.8	9.6	13.4	687

[1]Stand count is the number of emerged plants per foot of row on 16 May and 28 May.

[2]The number of dead or dying plants per plot (50 row feet) on 17 May, 28 May and 12 June.

[3]Based on a scale of 1 - 10 with 10 being the most vigorous growth.

[4 & 5]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.

EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

A. PURPOSE: To evaluate the comparative efficacy of labeled fungicides for the control of southern stem rot on Georgia Green peanut.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.

2. Belt-pack spray treatments (1-7) were applied on 1 Jun, 26 Jun, 10 Jul, 24 Jul, 7 Aug, 21 Aug and 4 Sep. Spray timings 1.5 were sprayed on 18 Jun. This test was not coversprayed.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 22 April
4.	Soil Fertility:	pH - 6.2 P - 81 K - 62 Ca - 542 Mg - 40
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 29 April POST: Cadre 70 DG (1.44 oz/A) on 8 July
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 7 May
7.	Planting Info:	Ga Green, 7 seed/ft on 7 May
8.	Harvest Dates:	Dug - 9 Sep Picked - 12 Sep

E: SUMMARY: Excellent leaf spot data was obtained, and high incidence of white mold was found in control plots, and most fungicides gave reduced disease incidence. While yield differences among treatments were found, plot yields were generally not increased as much as expected by treatments for white mold.

MISCELLANEOUS FUNGICIDE TEST II, 2008

LANG FARM, SOUTH FIELD

Treatments	App's	Rate/A	White Mold[1] 18-Aug	White Mold[1] 10-Sep	TSWV[2] 18-Aug	Leaf Spot[3] 3-Sep	Yield lb/A
1. Nontreated			21.5	53.5	11.0	7.1	3165
2. Bravo W'stik	1 - 7	1.5 pt	26.0	48.5	16.5	3.4	3775
3. Bravo W'stik	1, 2, 7	1.5 pt	13.5	26.0	15.5	4.0	4116
Folicur 3.6	3 - 6	7.2 fl oz					
4. Elast	1 & 2	15 fl oz	8.0	23.5	23.5	4.0	3935
Folicur 3.6	3 - 6	7.2 fl ox					
Bravo W'stik	7	1.5 pt					
5. Bravo W'stik	1, 2,7	1.5 pt	13.0	22.5	23.5	3.1	4066
Folicur 3.6	3 - 6	7.2 fl oz					
+ Bravo W'stik		1.0 pt					
6. Bravo W'stik	1, 2, 7	1.5 pt	26.0	38.0	18.0	2.9	3891
Folicur 3.6	3 - 6	7.2 fl oz					
+ Elast		12.8 fl oz					
7. Headline	1.5	9.0 fl oz	6.0	30.0	24.0	2.1	4138
Artisan	3 & 4	26.0 fl oz					
+ Bravo		1.0 pt					
Topsin 4.5F	5	5.0 fl oz					
+ Bravo		1.5 pt					
8. Headline	1.5	9.0 fl oz	7.0	16.5	18.0	2.3	3833
Artisan	3, 4, 5	18.0 fl oz					
+ Bravo		1.0 pt					
Topsin 4.5F	6	5.0 fl oz					
+ Bravo		1.5 pt					
9. Headline	1.5	9.0 fl oz	18.0	27.5	27.5	2.6	3899
Artisan	3, 4, 5, 6	1.0 pt					
+ Bravo		1.0 pt					
Bravo		1.5 pt					
10. Headline	1.5	9.0 fl oz	7.5	26.5	20.0	2.4	3971
Convoy	3 & 4	21.0 fl oz					
+ Bravo		1.5 pt					
Topsin 4.5F	5	5.0 fl oz					
+ Bravo		1.5 pt					
11. Headline	1.5	9.0 fl oz	12.5	29.0	18.0	3.1	3964
Convoy	3, 4, 5	15.0 fl oz					
+ Bravo		1.5 pt					
Topsin 4.5F	6	5.0 fl oz					
+ Bravo		1.5 pt					
12. Headline	1.5	9.0 fl oz	6.5	22.5	21.0	4.1	3928
Convoy	3, 4, 5, 6	13.0 fl oz					

+ Bravo		1.0 pt					
Bravo	7	1.5 pt					
13. Headline	1.5	9.0 fl oz	6.0	23.5	12.0	2.9	4138
Moncut 70W	3 & 4	0.9 lb					
+ Bravo		1.5 pt					
Topsin 4.5F	6	5.0 fl oz					
+ Bravo		1.5 pt					
14. Headline	1.5	9.0 fl oz	4.5	18.5	19.5	2.6	4283
Moncut 70W	3, 4, 5	0.9 lb					
+ Bravo		1.5 pt					
Topsin 4.5F	6	5.0 fl oz					
+ Bravo		1.5 pt					
15. Bravo W'stik	1, 2, 7	1.5 pt	10.0	23.0	20.5	1.8	4167
Provost	3 - 6	8.0 fl oz					
16. Bravo W'stik	1 - 7	1.5 pt	22.0	52.5	20.5	2.2	3594
+ Kphite		3.0 pt					
LSD (P<0.5)			12.5	16.3	10.9	0.9	573

[1 & 2]Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

[3]Florida 1 - 10 scale where 1=no disease and 10=dead plant.

EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

A. PURPOSE: To evaluate the comparative efficacy of experimental and labeled fungicides for the control of southern stem rot on Georgia Green peanut.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.

2. Belt-pack spray treatments (1-7) were applied on 16 Jun, 30 Jun, 14 Jul, 28 Jul, 11 Aug, 28 Aug, and 8 Sep. Early emergence treatment (14 DAP) was applied on 23 May. This test was not coversprayed.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, New Field, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Cotton - 2006, Cotton - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 22 April
4.	Soil Fertility:	pH - 6.2 P - 81 K - 62 Ca - 542 Mg - 40
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.5 pt/A) on 29 April POST: Select 15fl oz/A + Crop Oil 1 pt/A on 15 Aug
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 7 May
7.	Planting Info:	Ga Green, 7 seed/ft on 7 May
8.	Harvest Dates:	Dug - 11 Sep Picked - 17 Sep

E: SUMMARY: This trial had reasonably good white mold and leaf spot data, and yields generally reflected levels of disease control.

MISCELLANEOUS FUNGICIDE TEST IV, 2008

LANG FARM, NEW FIELD

Treatments	App's	Rate/A	TSWV[1] 18-Aug	White Mold[2] 29-Aug	White Mold[2] 12-Sep	Leaf Spot[3] 3-Sep	Yield lb/A
1. Nontreated			22.7	32.7	45.0	5.7	2914
2. Bravo W'stik	1 - 7	1.5 pt	28.4	15.6	26.8	3.0	3223
3. Bravo W'stik	1, 2, 7	1.5 pt	28.0	16.7	30.0	3.8	3219
Topguard 1.04SC	3 - 6	10.0 fl oz					
4. Bravo W'stik	1, 2, 7	1.5 pt	25.3	14.7	27.3	3.7	3282
Topguard 1.04SC	3 - 6	14.0 fl oz					
5. Bravo W'stik	1, 2, 7	1.5 pt	25.6	7.2	32.0	3.9	3415
Folicur 3.6	3 - 6	7.2 fl oz					
6. LEM17 200SC	1 - 7	9.6 fl oz	27.0	3.7	17.0	3.6	3853
7. OFA61	1 - 7	19.2 fl oz	30.0	1.6	9.3	3.0	3566
8. LEM17 200SC	1 - 7	16.8 fl oz	25.3	3.3	9.3	2.5	4075
9. Tilt 3.6EC	1 & 2	2 fl oz	16.3	6.0	19.0	2.6	3538
+ Bravo W'stik		1.0 pt					
LEM17 200SC	3 & 5	16.8 fl oz					
Bravo W'stik	4, 6, 7	1.5 pt					
10. Tilt 3.6EC	1 & 2	2 fl oz	24.0	13.7	24.7	2.2	3436
+ Bravo W'stik		1.0 pt					
Abound	3 & 5	18.3 fl oz					
Bravo W'stik	4, 6, 7	1.5 pt					
11. Bravo W'stik	1, 2, 4, 6, 7	1.5 pt	26.3	8.0	23.3	2.7	3664
Evito	3 & 5	5.7 fl oz					
12. Bravo W'stik	1, 2, 4, 6, 7	1.5 pt	22.0	16.0	37.3	3.7	3577
Evito	3 & 5	3.8 fl oz					
13. Bravo W'stik	1, 2, 4, 6, 7	1.5 pt	26.3	7.7	20.3	2.9	3871
Evito T	3 & 5	9.0 fl oz					
14. Beyond	14 DAP	1.0 pt	24.0	15.0	31.7	2.9	3398
Bravo W'stik	1 - 7	1.5 pt					
+ Beyond		1.0 pt					
15. Beyond	14 DAP, 1 - 7	1.0 pt	27.7	18.7	39.7	5.4	2977
LSD(P<0.5)			9.9	7.8	13.2	0.5	524

[1 & 2]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.

[3]Florida 1 - 10 scale where 1=no disease and 10=dead plant.

EVALUATION OF VARIOUS FUNGICIDE PROGRAMS ADAPTED FOR LOW, MEDIUM OR HIGH RISK OF FUNGAL DISEASES IN A HIGH RISK FIELD.

A. PURPOSE: To evaluate the comparative efficacy of 3 levels of 3 different fungicide programs in a field at high risk of fungal diseases, mainly leaf spot and stem rot.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: GA-03L

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.
2. Belt-pack spray treatments (1-7) were applied on 12 Jun, 26 Jun, 10 Jul, 24 Jul, 7 Aug, 21 Aug, and 4 Sep. Spray timings 1.5, 3.5, and 6.5 were applied on 19 Jun, 17 Jul, and 29 Aug, respectively. This test was not coversprayed.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 22 April
4.	Soil Fertility:	pH - 6.0 P - 102 K - 81 Ca - 527 Mg - 34
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 29 April POST: Cadre 70 DF, 1.44 oz/A on 8 July
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 7 May
7.	Planting Info:	Ga-03L, 7 seed/ft on 7 May
8.	Harvest Dates:	Dug - 9 Sep Picked - 12 Sep

E: SUMMARY: The reduced input programs for all three fungicides provided similar disease control and yield as did the high input, high risk programs with the exception of the Provost. The low risk Provost program had more leaf spot and white mold, as well as lower yield, than the higher input programs, but overall the reduced inputs did very well considering the worst case scenario of disease pressure in this field. These results verify a measure of safety in using reduced inputs in lower risk fields.

RISK INDEX TEST, 2008
LANG FARM, SOUTH FIELD

Treatments	App's	Rate/A	White Mold[1] 18-Aug	White Mold[1] 10-Sep	TSWV[2] 18-Aug	Leaf Spot[3] 3-Sep	Yield lb/A
LOW RISK							
1. Tilt/Bravo	2	2.25 pt	8.0	12.8	13.2	2.6	4385
Bravo W'stik	3.5 & 5	16 fl oz					
+ Abound		12 fl oz					
Bravo W'stik	6.5	1.5 pt					
MODERATE RISK							
1. Tilt/Bravo	1.5 & 4	2.25 pt	16.8	23.2	8.4	2.0	4420
Abound	3 & 5	18 fl oz					
Bravo W'stik	6.5	1.5 pt					
HIGH RISK							
1. Tilt/Bravo	1, 2, 4	1.5 pt	6.4	6.0	10.0	1.8	4455
Abound	3 & 5	18 fl oz					
Bravo W'stik	6 & 7	1.5 pt					
LSD(P<0.5)			n.s.	n.s.	n.s.	n.s.	n.s.
LOW RISK							
2. Bravo W'stik	2 & 6.5	1.5 pt	23.2	31.6	10.4	2.4	4112
Provost	3.5 & 5	8.0 oz					
MODERATE RISK							
2. Bravo W'stik	1.5 & 6.5	1.5 pt	9.6	16.4	11.6	1.9	4780
Provost	3, 4, 5	8.0 oz					
HIGH RISK							
2. Bravo W'stik	1, 2, 7	1.5 pt	4.8	16.8	12.8	1.5	4495
Provost	3 - 6	8.0 oz					
LSD(P<0.5)			9.0	n.s.	n.s.	0.7	414
LOW RISK							
3. Headline	2	9.0 fl oz	10.8	18.0	11.2	2.7	4554
Folicur	3.5 & 5	7.2 fl oz					
Bravo W'stik	6.5	1.5 pt					
MODERATE RISK							
3. Headline	1.5	9.0 fl oz	11.6	22.0	12.4	2.4	4233
Folicur	3 & 4	7.2 fl oz					
Abound	5	12 fl oz					
Bravo W'stik	6.5	1.5 pt					
HIGH RISK							
3. Headline	1.5	9.0 fl oz	16.8	27.6	9.6	2.1	4583
Folicur	3, 5	7.2 fl oz					
Abound	4, 6	12 fl oz					
Bravo W'stik	7	1.5 pt					
LSD(P<0.5)			n.s.	n.s.	n.s.	0.5	n.s.

[1 & 2]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.

[3]Florida 1 - 10 scale where 1=no disease and 10=dead plant.

EVALUATION OF VARIOUS CULTIVARS FOR SUSCEPTIBILITY TO WHITE MOLD

A. PURPOSE: To evaluate the relative white mold susceptibility of new cultivars Georgia Greener, GA-03L, GA-07W, and GA-06G in a field naturally infested with Sclerotium rolfsii.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates. A paired planted was sprayed with Moncut to control white mold, or sprayed only with chlorothalonil to control leaf spot.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Varieties: Georgia Greener, GA-03L, GA-07W, and GA-06G.

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.

2. Chlorothionil 720 (1.5 pts/A) on 12 June, 24 June, 8 July, 24 July, 5 Aug, 18 Aug, and 2 Sep. Treatments 1/2 plots sprayed, Moncut 70DF (3 lb/A) on 11 July and 5 Aug.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 22 April
4.	Soil Fertility:	pH - 6.2 P - 81 K - 62 Ca - 542 Mg - 40
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.5 pt/A) on 29 April POST: Cadre 70 DF, 1.44 oz/A on 8 July
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 7 May
7.	Planting Info:	Ga Greener, GA-03, GA-07W, and GA-06G 7 seed/ft on 7 May
8.	Harvest Dates:	Dug - 9 Sep Picked - 12 Sep

E: SUMMARY: Differences were observed among cultivars in terms of white mold susceptibility, most notably the greater susceptibility of GA-06G which had greatly reduced yield in the Bravo-only treatments. Georgia-07W had higher yield without Moncut than GA-07G had with it.

WHITE MOLD CULTIVAR TEST, 2008
LANG FARM, SOUTH FIELD

Bravo & Moncut (1.3 lb 2x)	White Mold[1] 15-Aug	White Mold[1] 10-Sep	TSWV[2] 20-Aug	Yield lb/A
1. GA-03L	1.0	3.0	11.0	4247
2. GA-07W	0.0	6.5	7.0	4799
3. GA Greener	2.0	7.5	14.0	4646
4. GA-06G	3.5	13.0	15.0	4095
LSD(P<0.5)	3.9	9.4	8.1	554

Bravo Only Cultivars	White Mold[1] 15-Aug	White Mold[1] 10-Sep	TSWV[2] 20-Aug	Yield lb/A
1. GA-03L	17.0	29.5	6.0	3761
2. GA-07W	18.5	31.0	11.0	4204
3. GA Greener	25.0	37.5	18.0	3492
4. GA-06G	47.5	60.5	14.0	2868
LSD(P<0.5)	17.4	24.6	4.5	669

[1 & 2]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.

EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

A. PURPOSE: To evaluate the comparative efficacy of experimental and labeled fungicides for the control of southern stem rot (white mold) and leaf spot on Georgia Green peanut.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.

2. Belt-pack spray treatments (1-7) were applied on 1 Jun, 26 Jun, 10 Jul, 24 Jul, 7 Aug, 21 Aug, and 4 Sep. This test was not coversprayed.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 22 April
4.	Soil Fertility:	pH - 6.2 P - 81 K - 62 Ca - 542 Mg - 40
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.5 pt/A) on 29 April POST: Cadre 70 DF 1.44 oz/A on 8 Jul
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 7 May
7.	Planting Info:	Ga Green, 7 seed/ft on 7 May
8.	Harvest Dates:	Dug - 9 Sep Picked - 12 Sep

E: SUMMARY: Excellent leaf spot data was obtained in this test. A high incidence of white mold was found in control plots, and most fungicides gave reduced disease incidence. While yield differences among treatments were found, plot yields were generally not increased as much as expected by treatments for white mold.

MISCELLANEOUS FUNGICIDE TEST III, 2008
LANG FARM, SOUTH FIELD

Treatments	App's	Rate/A	White Mold[1] 18-Aug	White Mold[1] 10-Sep	TSWV[2] 18-Aug	Leaf Spot[3] 3-Sep	Yield lb/A
1. Nontreated			26.0	46.0	10.0	7.3	3187
2. Bravo W'stik	1 - 7	1.5 pt	31.5	42.5	13.0	3.6	3986
3. Bravo W'stik Topguard 1.04SC	1, 2, 7 3 - 6	1.5 pt 10.0 fl oz	25.0	30.0	17.0	3.3	4058
4. Bravo W'stik Topguard 1.04SC	1, 2, 7 3 - 6	1.5 pt 14.0 fl oz	24.5	34.5	14.0	2.7	3971
5. Bravo W'stik Provost	1, 2,7 3 - 6	1.5 pt 8.0 fl oz	18.5	38.5	13.0	1.6	4240
6. Bravo W'stik Provost	1, 2, 7 3 - 6	1.5 pt 10.3 fl oz	8.5	31.0	12.0	1.6	4131
7. Folicur3.6	1 - 7	7.2 fl oz	26.0	40.5	21.0	5.2	3906
8. MANA-TEB 3.6F	1 - 7	7.2 fl oz	23.5	45.5	18.5	5.6	3405
9. MANA-TEB 20EW	1 - 7	15.0 fl oz	19.0	27.0	22.0	4.1	4037
10. Equus 720 Folicur 3.6	1, 2, 7 3 - 6	1.5 pt 7.2 fl oz	18.0	29.5	19.0	4.6	4175
11. Equus 720 MANA-TEB 3.6F	1, 2, 7 3 - 6	1.5 pt 7.2 fl oz	11.5	31.5	17.5	4.5	4073
12. Equus 720 MANA-TEB 20EW	1, 2, 7 3 - 6	1.5 pt 15.0 fl oz	21.5	29.5	16.5	3.9	4233
13. Bravo W'stik Folicur 3.6	1, 2, 7 3 - 6	1.5 pt 7.2 fl oz	16.0	24.5	13.0	4.4	4443
14. Bravo W'stik Evito 4F	1, 2, 4, 6, 7 3 & 5	1.5 pt 5.7 fl oz	26.0	39.0	18.0	3.5	3870
15. Bravo W'stik Abound	1, 2, 4, 6, 7 3 & 5	1.5 pt 18.3 fl oz	14.0	26.5	16.0	2.5	4472
16. Echo 720 Artisan	1, 2, 5, 6, 7 3 & 4	1.5 pt 32.0 fl oz	14.5	23.0	18.0	3.2	4305
LSD(P<0.5)			13.6	18.8	9.2	0.8	528

[1 & 2]Percnet of row feet infected, based on disease loci (up to 12" of linear row) per plot.

[3]Florida 1 - 10 scale where 1=no disease and 10=dead plant.

EVALUATION OF SEED TREATMENTS FOR PEANUT SEEDLING AND SOILBORNE DISEASE CONTROL, TEST II

A. PURPOSE: To evaluate the comparative effects of fungicide seed treatments for control of seedling and soil-borne peanut diseases.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: Georgia Green (NOTE - the % seed germination was 88, 90, 83, and 91% for treatments 2, 5, 6 and 7, respectively.

C. APPLICATION OF TREATMENTS:

1. Equipment: Fungicide treatments were applied to non-treated commercial seed by gently mixing the seed and appropriate amount of treatment in a plastic bag to obtain uniform coverage.

2. All plots were traveled by tractor and cover sprayed with Chlorothalonil 720 (1.5 pt/A) on 12 June, 24 June, 8 July, 24 July, 5 August, 18 August, and 2 September.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 22 April
4.	Soil Fertility: Soil type:	pH -5.9 P - 63 K - 72 Ca - 409 Mg - 38 Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.5 pt/A) on 29 April POST: Cadre 70 DF (1.44 oz/A) on 8 July
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 7 May
7.	Planting Info:	Georgia Green, 7 seed/ft on 7 May (70F at 4" deep)
8.	Harvest Dates:	Dug - 9 Sept Picked - 12 Sep

E: SUMMARY: All seed treatments did a very good job of controlling disease, increasing stands, and greatly increasing pod yield.

BAYER SEED TREATMENT TEST II, 2008
LANG FARM, SOUTH FIELD

Treatments	App's	Rate/A	Plants/ft[1]		Dead Plants/plot[2]			Vigor[3]	TSWV[4]	Yield
			20-May	27-May	20-May	27-May	12-Jun	12-Jun	20-Aug	lb/A
1. Nontreated	Seed Trt		1.1	1.3	0.0	2.8	2.8	3.3	41.5	2301
2. Trilex Star	Seed Trt	4.0 oz/100 lb	3.5	3.5	0.0	0.0	0.3	8.0	20.0	4175
3. Trilex Optimum	Seed Trt	4.0 oz/100 lb	3.6	3.4	0.0	0.0	0.5	8.0	20.5	3971
4. Dynasty PD	Seed Trt	4.0 oz/100 lb	3.4	3.3	0.0	0.5	0.0	8.8	24.5	3986
5. Vitabax PC	Seed Trt	4.0 oz/100 lb	3.2	3.3	0.0	0.5	0.0	7.8	22.0	3942
6. Kodiak	Seed Trt	0.25 oz/100 lb	2.8	3.1	0.0	1.5	1.8	7.0	24.5	3841
7. Kodiak + Trilex Star	Seed Trt	0.25 oz/100 lb 4.0 oz/100 lb	3.3	3.3	0.0	0.3	0.3	7.8	20.5	3804
LSD (P<0.5)			0.4	0.3	0.0	1.6	1.0	1.0	13.7	671

[1]Stand count is the number of emerged plants per foot of row on 20 May and 27 May.
[2]The number of dead or dying plants per plot (50 row feet) on 20 May, 27 May and 12 June.
[3]Based on a scale of 1 - 10 with 10 being the most vigorous growth.
[4]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.

EVALUATION OF FULL AND REDUCED INPUT FUNGICIDE PROGRAMS FROM SYNGENTA FOR SOILBORNE DISEASE CONTROL ON VARIOUS CULTIVARS OF PEANUTS

A. PURPOSE: To evaluate 3 levels of fungicide programs from Syngenta on several medium and late maturity cultivars in a field with high risk of foliar and soil borne diseases.

B. EXPERIMENTAL DESIGN:

1. Two split-plot trials (one per maturity group) with whole plots being cultivars and sub-plots being fungicide treatments. Mid maturity test had 4 reps and late had 6 reps.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: Multiple varieties

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.

2. Belt-pack spray treatments (1-7) were applied on 16 Jun, 30 Jun, 14 Jul, 28 Jul, 11 Aug, 28 Aug, and 8 Sep. Spray timings 1.5, 3.5, and 6.5 were applied on 23 Jun, 21 Jul and 1 Sep respectively. This test was not coversprayed.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, New Field, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 22 Apr
4.	Soil Fertility:	pH - 6.0 P - 102 K - 81 Ca - 527 Mg - 34
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.5 pt/A) on 29 Apr POST: Select (15 fl oz/A) on 15 Aug
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 7 May
7.	Planting Info:	Ga Green, 7 seed/ft on 7 May
8.	Harvest Dates:	Dug - 11 Sep Mid, 29 Sep Late Picked - 17 Sep Mid, 3 Oct Late

E: SUMMARY: Clear differences were seen in susceptibility of cultivars to disease, but even in reduced input programs control was similar to full-input programs for disease control and yield. GA-03L actually had higher yield with fewer sprays, although the reverse was true for GA-02C. These results show there is a safety net in terms of using reduced input programs in low risk fields, since this was a non-rotated, high risk site.

REDUCED INPUT CULTIVAR MEDIUM MATURITY TEST, 2008
LANG FARM, NEW FIELD

Treatments	App's	Rate/A
Fungicide Treatments		
1. Low Risk		
Tilt/Bravo	2	2.25 pt
Bravo W'stik	3.5 & 5	16 fl oz
+ Abound		12 fl oz
Bravo W'stik	6.5	1.5 pt
2. Moderate Risk		
Tilt/Bravo	1.5	2.25 pt
Abound	3 & 5	18 fl oz
Tilt/Bravo	4	1.5 pt
Bravo W'stik	6.5	1.5 pt
3. High Risk		
Tilt/Bravo	1, 2 & 4	1.5 pt
Abound	3 & 5	18 fl oz
Bravo W'stik	6 & 7	1.5 pt

Cultivar 1=AT-3085A	TSWV[1]	White Mold[2]		Leaf Spot[3]	Yield
Treatments	**18-Aug**	**29-Aug**	**12-Sep**	**3-Sep**	**lb/A**
1. Low Risk	20.5	16.5	32.5	4.2	3732
2. Moderate Risk	19.5	10.5	17.0	3.8	3899
3. High Risk	21.0	9.0	18.0	3.8	3957
LSD (P<0.5)	n.s.	n.s.	n.s.	n.s.	n.s.

Cultivar 2=AP-3	TSWV[1]	White Mold[2]		Leaf Spot[3]	Yield
Treatments	**18-Aug**	**29-Aug**	**12-Sep**	**3-Sep**	**lb/A**
1. Low Risk	13.0	2.0	7.0	3.0	4366
2. Moderate Risk	11.0	3.0	9.5	2.7	4044
3. High Risk	9.0	1.5	5.0	2.8	4160
LSD (P<0.5)	n.s.	n.s.	n.s.	n.s.	n.s.

Cultivar 3=Georgia-03L	TSWV[1]	White Mold[2]		Leaf Spot[3]	Yield
Treatments	**18-Aug**	**29-Aug**	**12-Sep**	**3-Sep**	**lb/A**
1. Low Risk	17.5	7.0	10.0	2.7	4095
2. Moderate Risk	18.5	2.0	12.0	2.6	3601
3. High Risk	16.0	7.5	14.0	2.5	3739
LSD (P<0.5)	10.9	5.2	3.8	n.s.	452

Cultivar 4=McCloud	TSWV[1]	White Mold[2]		Leaf Spot[3]	Yield
Treatments	**18-Aug**	**29-Aug**	**12-Sep**	**3-Sep**	**lb/A**
1. Low Risk	25.5	4.0	24.0	3.0	3870
2. Moderate Risk	22.0	7.0	14.0	3.0	3906
3. High Risk	30.0	4.0	16.5	2.6	4075
LSD (P<0.5)	n.s.	n.s.	n.s.	n.s.	n.s.

[1 & 2]Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

[3]Florida 1 - 10 scale where 1=no disease and 10=dead plant.

REDUCED INPUT CULTIVAR LATE MATURITY TEST, 2008
LANG FARM, NEW FIELD

Cultivar 1=York	TSWV[1]	White Mold[2]		Leaf Spot[3]	Yield
Treatments	**18-Aug**	**29-Aug**	**29-Sep**	**3-Sep**	**lb/A**
1. Low Risk	14.7	3.3	17.7	3.3	4254
2. Moderate Risk	20.0	2.3	16.7	2.9	4037
3. High Risk	10.3	0.7	14.0	3.1	4395
LSD (P<0.5)	3.3	n.s.	n.s.	0.2	n.s.

Cultivar 2=GA-02C	TSWV[1]	White Mold[2]		Leaf Spot[3]	Yield
Treatments	**18-Aug**	**29-Aug**	**29-Sep**	**3-Sep**	**lb/A**
1. Low Risk	17.3	14.0	29.3	3.5	3359
2. Moderate Risk	17.7	8.7	23.0	3.5	3451
3. High Risk	19.3	7.0	21.7	3.3	3756
LSD (P<0.5)	n.s.	n.s.	n.s.	n.s.	374

Cultivar 3=Florida-07	TSWV[1]	White Mold[2]		Leaf Spot[3]	Yield
Treatments	**18-Aug**	**29-Aug**	**29-Sep**	**3-Sep**	**lb/A**
1. Low Risk	20.3	12.3	33.7	3.5	4264
2. Moderate Risk	15.0	7.0	31.7	2.8	4414
3. High Risk	17.7	8.0	23.7	2.5	4104
LSD (P<0.5)	n.s.	n.s.	8.4	0.2	n.s.

[1 & 2]Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

[3]Florida 1 - 10 scale where 1=no disease and 10=dead plant.

RAINFALL LANG/RIGDON FARM, 2008

Rainfall

DATE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1		0.8						1.1		
4			1.1							
5				2.5			0.8			
6		1.6								
7			1.9				0.2	0.4		
8										0.2
9										0.5
10										0.2
11	0.75			0.1			0.4			0.2
12	0.35	0.2								
13								0.9		
14							0.3		0.1	
15						0.5				
16	1.1				1.4			0.5		
17	0.1	2.4								
19	1.7		0.6					0.3		
20								0.3		
21		2.2								
22		1.5						4.3		
23	0.1				0.3	0.6		2.1		
24	0.15							0.8		4.1
25								0.2		
26	0.45							0.4		
28				0.4						
29	0.3					0.3				
30						0.3				
31								0.1		
TOTAL	5.0	8.6	3.6	3.0	1.7	1.6	1.7	11.4	0.1	5.2

Irrigation

DATE	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
1								0.9		
3						0.6				
5							0.7			
6								2.5		
7					0.8					
9						0.7				
10						0.9				
13					0.5					
14					0.4					
17						0.5	0.6			
18						0.7				
19						0.9				
20						0.7				
21					0.5		0.7			
24							0.7			
25						0.7				
27					0.6	1.5				
28					0.5		0.7			
29							0.7			
TOTAL	0.0	0.0	0.0	0.0	3.3	7.2	4.1	3.4	0.0	0.0
Rain & Irr	5.0	8.6	3.6	3.0	5.0	8.8	5.8	14.8	0.1	5.2

EVALUATION OF PEANUT BAYER NEMATODE SEED TREATMENTS, TEST I

A. PURPOSE: To evaluate the comparative effects of peanut seed treatments on seedling diseases, plant growth, nematode development and pod yield.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Seed were treated commercially by Bayer lab.

2. All plots were traveled by tractor and cover sprayed with Chlorothalonil 720 (1.5 pt/A) on 11 June, 25 June, 8 July, 24 July, 5 August, 19 August, and 2 September. Moncut 70 DF (1.3 lb/A) on 11 Jul and 5 Aug.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 9 April
4.	Soil Fertility:	pH -5.9 P - 63 K - 72 Ca - 409 Mg - 38
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.5 pt/A) on 1 May POST: Cadre 70 DF (1.44 oz/A) on 8 Jul
6.	Planting Info:	Georgia Green, 7 seed/ft on 5 May (70F at 4" deep)
7.	Harvest Dates:	Dug - 16 Sept Picked - 19 Sep

E: SUMMARY: Some differences in stand were observed but little difference in plant growth. Root knot nematode was present but highly variable, although there were some differences in root galling. Overall yields were low due to nematode damage and dry weather, although plots were irrigated.

BAYER NEMATODE SEED TREATMENT TEST I, 2008
BLACKSHANK FARM, POND FIELD

	Treatments	App's	Rate/A	Plants/ft[1] 23-May	Plants/ft[1] 3-Jun	Dead Plants/plot[2] 23-May	Dead Plants/plot[2] 3-Jun	TSWV[3] 20-Aug	Width[4] 1-Aug	Nema[5] root	Yield lb/A
1.	Trilex Optimum	Seed Trt	4 oz	3.4	3.2	0.2	1.5	23.5	37.3	2.0	2272
2.	Trilex Star	Seed Trt	4 oz	2.8	2.7	0.0	1.4	18.4	38.6	4.6	2428
3.	Test 1	Seed Trt	4 oz	2.8	2.9	0.4	0.4	22.8	39.2	4.1	2800
4.	Test 2	Seed Trt	4 oz	3.1	2.9	0.8	0.8	15.6	37.4	4.2	2422
5.	Trilex Optimum + LI460	Seed Trt	4 oz	3.0	2.9	0.2	0.8	26.4	38.1	4.3	2184
6.	Trilex Star + LI460	Seed Trt	4 oz	2.8	2.9	0.6	1.2	20.4	37.2	5.1	2259
7.	Test 1 + LI460	Seed Trt	4 oz	3.0	2.8	0.6	1.2	24.8	37.5	2.8	2230
8.	Test 2 + LI460	Seed Trt	4 oz	2.8	2.9	0.4	1.8	18.8	38.2	4.3	2434
	LSD(P<0.5)			0.3	0.3	n.s.	n.s.	n.s.	n.s.	2.0	413

[1]Stand count is the number of emerged plants per foot of row on 23 May and 3 June.
[2]The number of dead or dying plants per plot (50 row feet) on 23 May and 3 June.
[3]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.
[4]Width is the measurement across the top of canopy in cm (avg. of 6 places).
[5]Nema rating is the percent of roots with galls on a 0-10 scale with 10% increments and 0=no galling..

EVALUATION OF PEANUT BAYER NEMATODE SEED TREATMENTS, TEST II

A. PURPOSE: To evaluate the comparative effects of peanut seed treatments on seedling diseases, plant growth, nematode development and pod yield.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Seed were treated commercially by Bayer lab.

2. All plots were traveled by tractor and cover sprayed with Chlorothalonil 720 (1.5 pt/A) on 11 June, 25 June, 8 July, 24 July, 5 August, 19 August, and 2 September. Moncut 70 DF (1.3 lb/A) on 11 Jul and 5 Aug.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 9 April
4.	Soil Fertility:	pH -5.9 P - 63 K - 72 Ca - 409 Mg - 38
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.5 pt/A) on 1 May POST: Cadre 70 DF (1.44 oz/A) on 8 Jul
6.	Planting Info:	Georgia Green, 7 seed/ft on 6 May (70F at 4" deep)
7.	Harvest Dates:	Dug - 16 Sept Picked - 19 Sep

E: SUMMARY: No differences were observed in stand or plant growth. Root know nematode was present but highly variable, although there were some differences in root galling. Overall yields were low due to nematode damage and dry weather, although plots were irrigated.

BAYER NEMATODE SEED TREATMENT TEST II, 2008
BLACKSHANK FARM, POND FIELD

Treatments	App's	Rate/A	Plants/ft[1] 23-May	Plants/ft[1] 3-Jun	Dead Plants/plot[2] 23-May	Dead Plants/plot[2] 3-Jun	TSWV[3] 20-Aug	Width[4] 1-Aug	Nema[5] root	Yield lb/A
1. Trilex Optimum	Seed Trt	4 oz	3.2	2.8	0.0	2.8	24.5	32.9	5.5	1844
2. Trilex Star	Seed Trt	4 oz	2.9	2.6	0.0	4.2	30.4	33.8	6.8	1748
3. Test 1	Seed Trt	4 oz	3.1	2.6	0.2	4.6	29.2	31.3	6.2	1696
4. Test 2	Seed Trt	4 oz	2.9	3.0	0.0	3.2	22.8	33.5	2.7	1777
5. Trilex Optimum + LI460	Seed Trt	4 oz	3.0	2.8	0.0	4.8	23.2	33.0	7.0	1667
6. Trilex Star + LI460	Seed Trt	4 oz	2.9	2.8	0.4	3.2	28.0	32.8	7.1	1475
7. Test 1 + LI460	Seed Trt	4 oz	2.8	2.8	0.0	4.6	24.4	33.3	5.9	2236
8. Test 2 + LI460	Seed Trt	4 oz	2.9	2.7	0.0	3.2	26.0	33.9	6.2	1981
LSD(P<0.5)			n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	2.7	n.s.

[1]Stand count is the number of emerged plants per foot of row on 23 May and 3 June.
[2]The number of dead or dying plants per plot (50 row feet) on 23 May and 3 June.
[3]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.
[4]Width is the measurement across the top of canopy in cm (avg. of 6 places).
[5]Nema rating is the percent of roots with galls on a 0-10 scale with 10% increments and 0=no galling.

EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

A. PURPOSE: To evaluate the comparative efficacy of experimental and labeled fungicides for the control of southern stem rot and leaf spot on Georgia Green peanut.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.

2. Belt-pack spray treatments (1-7) were applied on 10 Jun, 24 Jun, 8 Jul, 22 Jul, 5 Aug, 19 Aug, and 2 Sep. This test was coversprayed with chlorothalonil 720 (1.5 pt/A) by tractor on 11 Jun, 25 Jun, 8 Jul, 24 Jul, 5 Aug, and 18 Aug.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 9 April
4.	Soil Fertility:	pH - 6.2 P - 81 K - 62 Ca - 542 Mg - 40
	Soil type:	Fuquay sand
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.5 pt/A) on 1 May. POST: Cadre 70 DF 1.44 oz/A on 8 Jul
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 6 May
7.	Nematicides:	Telone II 10 gal/A broadcast soil injected on 21 Apr
8.	Planting Info:	Ga Green, 7 seed/ft on 6 May
9.	Harvest Dates:	Dug - 22 Sep Picked - 26 Sep

E: SUMMARY: Although significant white mold developed in these plots, it was more variable than usual and was confounded by nematode damage and dry weather on this very sandy soil. Response to fungicides and yield increases were less than expected, and this was not a real definitive test to document relative fungicide efficacy.

MISCELLANEOUS FUNGICIDE TEST I, 2008
BLACKSHANK FARM, POND FIELD

Treatments	App's	Rate/A	White Mold[1] 15-Aug	White Mold[1] 23-Sep	TSWV[2] 20-Aug	Yield lb/A
1. Nontreated			15.5	35.0	20.0	2512
2. Keyplex 1000DP	1 - 7	1.0 qt	15.5	35.5	12.0	2664
3. Keyplex 1000DP	1 - 7	2.0 qt	8.0	31.0	17.5	2468
4. Keyplex Peanut	1 - 7	1.0 qt	13.5	33.5	14.0	2556
5. Keyplex Peanut	1 - 7	2. 0 qt	12.0	31.5	17.0	2461
6. Kphite	1 - 7	3.0 qt	21.5	46.5	14.5	2316
7. Topguard 1.04SC	3 - 6	14.0 fl oz	10.0	22.0	15.5	3165
8. Folicur 3.6	3 - 6	7.2 fl oz	5.0	18.0	11.0	3209
9. LEM17 200SC	3 & 5	16.8 fl oz	4.5	29.0	16.0	3202
10. Abound	3 & 5	18.3 fl oz	6.0	18.5	17.5	3369
11. Evito	3 & 5	5.7 fl oz	7.5	23.5	13.5	2556
12. Evito T	3 & 5	9.0 fl oz	10.5	28.0	15.0	3027
13. Convoy	3 & 5	21.0 fl oz	5.0	21.5	16.0	2752
14. Moncut 70W	3 & 5	0.9 lb	3.0	16.0	15.0	2824
15. Convoy	3 - 6	12.0 fl oz	6.5	18.5	14.0	2744
16. Moncut 70W	3 - 6	0.45 lb	3.5	20.0	14.5	3303
17. Provost	3 - 6	10.3 fl oz	4.5	16.5	23.0	2715
18. Provost	3 - 6	8.0 fl oz	7.5	15.0	13.0	2926
LSD(P<0.5)			8.0	13.9	n.s.	639

[1] [2]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.

EVALUATION OF CULTIVARS AND BREEDING LINES FOR DISEASE RESISTANCE

A. PURPOSE: To evaluate the relative 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 (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production, but fumigated prior to planting with methyl bromide (400 lb/A MBC 33, tarped). Six plants per plot were inoculated with Sclerotium rolfsii at midseason, and length of each disease locus measured at digging.
5. Variety: multiple

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.

2. This test was coversprayed with chlorothalonil 720 (1.5 pts/A) on 25 Jun, 8 Jul, 24 Jul, and 19 Aug.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 23 Apr
4.	Soil Fertility:	pH - 6.0 P - 102 K - 81 Ca - 527 Mg - 34
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 1 May and Mythel Bromide POST: Cadre 70 DF (1.44 oz/A) on 1 Jul
6.	Insecticides:	Orthene 97 (1 /b/A) on 12 Aug and 14 Aug.
7.	Planting Info:	Different varieties, 7 seed/ft on 15 May
9.	Harvest Dates:	Dug - 6 Oct Picked - 14-15 Oct

E: SUMMARY: The white mold inoculation was very successful and good leaf spot pressure was also present.

MULTI-STATE DISEASE EVALUATIONS, 2008
BLACKSHANK FARM

Variety	TRT	Leaf Spot[1] 29-Sep	TSWV[2] 29-Sep	Percent[3] Zeroes	White Mold[4] No Zeroes	White Mold[4] All	Yield lb/A
1	B1-1	2.8	0.8	0.0	56.3	56.3	2323
2	B3-2	3.1	0.8	12.5	53.5	48.3	3255
3	B3-6	2.8	2.5	0.0	52.9	52.9	3243
4	B4-2	2.8	2.5	8.3	41.9	37.7	3110
5	B4-4	2.9	0.0	0.0	50.6	50.6	2735
6	B4-6	3.3	2.1	4.2	41.4	40.0	3182
7	B4-10	2.8	4.1	0.0	53.3	49.3	3146
8	B6-7	2.5	0.0	0.0	42.3	42.3	3086
9	BA3-62	4.4	4.1	0.0	63.5	63.5	2577
10	BA7-5	4.4	4.1	4.2	49.0	46.9	2747
11	BA7-23	4.8	4.1	0.0	51.7	51.7	2831
12	BA8-30	4.6	7.0	0.0	51.0	51.0	2807
13	BA9-16	5.0	1.2	4.2	65.9	63.5	2335
14	BA9-18	3.9	7.4	0.0	57.5	57.5	2771
15	BA11-3	3.9	2.1	0.0	70.2	70.2	2118
16	C76-16	4.8	1.7	4.2	56.0	54.0	3279
17	C431-1-2	4.3	3.7	0.0	61.7	61.7	2142
18	C431-1-4	5.4	2.5	4.2	70.2	67.1	2045
19	C498-3	4.1	3.3	8.3	48.6	45.5	2263
20	C499-12	4.0	2.5	4.2	57.9	55.8	2710
21	98x107-28-2-1-b3-B	4.3	2.5	8.3	50.5	46.0	3799
22	98x107-9-1-2-1-3-1	3.1	2.5	0.0	60.4	60.4	2723
23	98x107-9-1-2-1-3-2	2.5	1.7	12.5	56.4	49.4	3219
24	98-42-1-B3G-5-1-2-1	3.4	3.3	12.5	50.4	44.0	2844
25	96x68-HO2-6-3-2-1-b3-B	4.1	2.5	16.7	33.9	28.1	4283
26	97x24HO-1-6-B2-7-1-2-B	2.9	0.0	4.2	31.9	30.2	3376
27	98x111-8-1-1-1-1-B	2.2	0.3	16.7	34.5	28.1	3666
28	96x73-3-1-1-2-1-1-1-1	3.5	2.1	12.5	25.8	22.9	3412
29	98x101-19-1-2-2-1-2	3.1	0.0	12.5	25.4	32.5	3352
30	98x101-19-1-2-2-1-1	3.5	2.9	0.0	37.5	37.5	3606
31	Seq 106sm	4.1	2.1	0.0	56.5	56.5	2674
32	Seq 621	3.5	1.7	0.0	50.6	50.6	2747
33	Seq 648M	3.5	5.0	0.0	51.0	51.0	2723
34	Seq 670	4.5	2.5	4.2	60.7	58.3	2553
35	Seq 701	4.3	0.8	4.2	41.6	40.0	3207
36	Seq 702	3.1	1.2	4.2	51.4	49.6	2517
37	Seq 708	2.8	3.3	0.0	54.0	54.0	2481
38	Seq 722	3.7	2.5	0.0	70.0	70.0	2662
39	Seq 755	3.4	2.5	4.2	55.7	52.7	3122
40	Seq 895	3.0	2.5	12.5	57.9	50.0	2735
41	Seq 910	3.2	4.5	16.7	29.7	24.4	3449
42	Seq 925	3.4	1.7	25.0	33.6	24.4	3340
43	Seq 963	3.4	2.5	0.0	38.5	38.5	3473
44	Seq 983	3.3	1.7	12.5	50.0	44.8	3509
45	Seq 993	3.4	2.1	4.2	45.9	44.4	3582
46	Seq 1104	3.7	5.0	12.5	19.1	17.1	2904
47	AP-3	4.0	2.1	4.2	36.3	34.8	3449
48	Georgia Green	5.6	10.3	0.0	57.9	57.9	2118
49	AT-3085A	4.0	3.3	0.0	71.5	71.5	2299
50	Florida 07	2.9	0.0	4.2	31.9	30.8	3037

51	**GA-03L**	2.8	1.7	16.7	23.7	20.8	3146
52	**AT-215**	3.1	3.3	0.0	69.0	69.0	2214
53	**Georgia Greener**	4.2	2.1	4.2	50.1	47.9	2602
54	**GA-06G**	2.9	5.0	0.0	44.4	45.1	2154
55	**GA-07W**	3.1	1.2	8.3	48.7	44.4	3207
56	**York**	2.5	0.8	20.8	17.1	13.8	3436
57	**Tifguard**	3.4	0.8	12.5	41.3	35.6	3279
58	**McCloud**	3.5	2.9	0.0	39.6	39.6	3328
	LSD(P<0.5)	2.3	8.7	29.5	34.1	36.2	1442

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

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

[3]Percent of plants inoculated with S. rolfsii that had no disease.

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

DAILY RAINFALL AND IRRIGATION, 2008
Blackshank Farm, Tifton, Ga

Rainfall

DATE	MAY	JUN	JUL	AUG	SEP	OCT
1			0.4			
4				1.6		
7			0.9			
11		0.2			0.3	
14				0.4		
15			0.7	0.7		
18				0.7		
22					0.2	
23		0.6				
25				8.1		
26				0.3		
27				0.4		
Total	0.0	0.8	2.0	12.2	0.5	0.0

Irrigation

DATE	MAY	JUN	JUL	AUG	SEP	OCT
2			1.0			
3						0.5
8	1.0					
10		1.0				
11					0.3	
12	1.0					
14				0.5		
15				0.5		
17			1.0			
18		1.0				
22	1.0					
29			1.0			
30					0.5	
31			1.0			
Total	3.0	2.0	3.0	1.0	0.8	0.5

Rain & Irr	3.0	2.8	5.0	13.2	1.3	0.5

RESPONSE OF TIFGUARD AND SISTER LINE C74-19-25 TO CBR AND ROOT KNOT NEMATODES WITH PROTHIOCONAZOLE AND/OR VAPAM

A. PURPOSE: To evaluate the response to Tifguard and sister line C74-19-25 to prothioconazole and Vapam treatments under CBR and nematode pressure.

B. EXPERIMENTAL DESIGN:

1. Split plot design with cultivars being whole plots and fungicides being subplots and 6 replications.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production and know propulations of *C. parasiticum* and *M. arenaria*…
5. Variety: Tifguard and C74-19-25

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI.

2. Belt-pack spray treatments (1-6) were applied on 7 Jul, 23 Jul, 6 Aug, and 20 Aug.

D. ADDITIONAL INFORMATION:

1. Location: Attapulgus Research and Education Center, Attapulgus, GA

2. Crop History: Peanut - 2007, Peanut - 2006, Peanut - 2005

3. Land Preparation: Moldboard plowed and marked rows on

4. Soil Fertility: pH - 6.0 P - 102 K - 81 Ca - 527 Mg - 34
   Soil type: Northfolk loamy sand

5. Herbicides: PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.5 pt/A) on

6. Insecticides: Temik 15G, 5 lb/A in furrow on 30 Apr

7. Planting Info: Tifguard, 7 seed/ft on 30 Apr

8. Harvest Dates: Dug - 22 Sep Picked - 26 Sep

E: SUMMARY: Nematode and CBR pressure were both lower than anticipated. Some treatments reduced levels of CBR and increased yield, and overall yields were higher in the nematode-resistant cultivar Tifguard.

TIFGUARD NEMATODE-CBR TEST, 2008
ATTAPULGUS

Cultivar C274-19-25			Plants/ft[1]		Dead Plants/Plot[2]	White Mold[3]	CBR[4]	% Roots w/CBR[5]	Gall Index[6]	Yield
Treatments	App's	Rate/A	21-May	4-Jun	26-Jun	22-Sep	22-Sep			lb/A
1. Proline 480SC Provost 433SC	In furrow 3 - 6	5.7 fl oz 10.3 fl oz	2.9	2.4	0.0	12.0	19.7	0.0	0.5	4054
2. Provost 433SC	3 - 6	10.3 fl oz	.	.	0.0	9.0	32.7	0.0	0.6	3582
3. Vapam	PP injected	15 GPA	2.5	2.2	0.0	20.0	24.7	0.2	0.5	3741
4. Proline 480SC Provost 433SC + Vapam	In furrow 3 - 6 PP injected	5.7 fl oz 10.3 fl oz 15 GPA	.	.	0.0	8.0	15.0	0.0	0.7	4448
5. Nontreated			3.0	2.4	0.0	13.0	26.3	0.5	0.6	3359
LSD (P<0.5)			0.2	n.s.	n.s.	10.9	14.4	n.s	n.s.	708

Cultivar Tifguard			Plants/ft[1]		Dead Plants/Plot[2]	White Mold[3]	CBR[4]	% Roots w/CBR[5]	Gall Index[6]	Yield
Treatments	App's	Rate/A	21-May	4-Jun	26-Jun	22-Sep	22-Sep			lb/A
1. Proline 480SC Provost 433SC	In furrow 3 - 6	5.7 fl oz 10.3 fl oz	2.8	2.4	0.2	8.7	11.0	0.2	0.0	4187
2. Provost 433SC	3 - 6	10.3 fl oz	.	.	0.0	11.7	19.3	0.2	0.0	4042
3. Vapam	PP injected	15 GPA	2.8	2.6	0.0	10.7	13.7	0.3	0.0	4830
4. Proline 480SC Provost 433SC + Vapam	In furrow 3 - 6 PP injected	5.7 fl oz 10.3 fl oz 15 GPA	.	.	0.0	8.7	10.0	0.2	0.0	4593
5. Nontreated			2.9	2.4	0.2	18.0	26.7	0.3	0.0	3867
LSD (P<0.5)			n.s.	n.s.	n.s.	n.s.	8.2	n.s.	n.s.	604

[1]Stand count is the number of emerged plants per foot of row on 21 May and 4 June.

[2]The number of dead or dying plants per plot (50 row feet) on 26 June.

[3 & 4]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.

[5]Based on 10 tap roots per plot with discloration that were plated on PDA for CBR or tested via ELISA for TSWV.

[6]Root galling on a 0-10 in increments of 10% with 0=no gallin.

EVALUATION OF FUNGICIDES FOR THE CONTROL OF CYLINDROCLADIUM BLACK ROT.

A. PURPOSE: To evaluate the comparative efficacy of various fungicides against peanut soil borne diseases, mainly Cylindrocladium black rot.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. One two- row bed (25 x 6 ft) per plot, 36 inch row spacing
3. Eight foot alleyways between blocks
4. Plots were established in an area with a history of peanut production and soil borne diseases.
5. Variety: Tifguard

C. APPLICATION OF TREATMENTS:

1. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on an approximately 2-week schedule. Belt-pack sprays (3-6) were applied on 7 Jul, 23 Jul, 6 Aug, and 20 Aug.

2. In furrow treatments were applied with a planter-mounted $C0_{2-}$ pressurized sprayer using a single TX-8 nozzle per row delivering 7 gallons per acre at 25 psi.

D. ADDITIONAL INFORMATION:

1.	Location:	Attapulgus Research and Education Center, Attapulgus, GA 31715
2.	Crop History:	Peanut - 2007, Peanut 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on
4.	Soil Fertility:	pH - 5.9 P - 63 K - 72 Ca - 409 Mg -38
	Soil type:	Northfolk loamy sand
5.	Herbicides:	PPI: Sonalan (2 pt /A) + Dual Magnum (1.5 pt/A) on
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 30 Apr
7.	Planting Info:	Tifguard, 7 seed/ft on 30 Apr
8.	Harvest Dates:	Dug - 22 Sep Picked - 26 Sep

E. SUMMARY: Overall CBR levels were lower than expected. Some treatments reduced disease and increased yield, but overall yield response was low, probably due to the lack of disease pressure.

FUNGICIDE CBR TEST, 2008
ATTAPUGLUS

Treatments	App's	Rate/A	Plants/ft[1] 21-May	Plants/ft[1] 4-Jun	Dead Plants/Plot[2] 26-Jun	White Mold[3] 22-Sep	CBR[4] 22-Sep	Yield lb/A
1. LEM 17 200SC	In furrow	24.0 fl oz	2.6	2.8	0.0	4.0	6.0	4022
Lem 17 200SC	3 & 5	24.0 fl oz						
2. INC201	In furrow	7.0 fl oz	2.7	2.6	0.0	8.0	12.0	3920
INC201	3 - 6	14.0 fl oz						
3. INC201	In furrow	10.0 fl oz	2.6	2.8	0.4	7.6	16.4	3623
INC201	3 - 6	14.0 fl oz						
4. INC201	In furrow	14.0 fl oz	2.4	2.7	0.0	2.8	14.4	3967
INC201	3 - 6	14.0 fl oz						
5. INC201	39513	14.0 fl oz	.	.	0.2	3.6	20.8	3642
6. Provost 433SC	3 - 6	8.0 fl oz	.	.	0.0	5.2	10.8	3880
7. Provost 433SC	3 - 6 (Night)	8.0 fl oz	.	.	0.0	5.6	18.8	3485
8. Provost 433SC	3 - 6	10.3 fl oz	.	.	0.0	3.6	12.4	3723
9. Provost 433SC	3 - 6 (Night)	10.3 fl oz	.	.	0.0	1.0	14.0	4146
10. Nontreated			2.6	2.9	0.0	5.2	13.6	3479
LSD (P<0.5)			n.s.	n.s.	n.s.	5.6	8.5	608

[1]Stand Count is the number of emberged plants per foot of row on 21 May and 4 June.
[2]The number of dead or dying plants per plot (50 row feet) on 26 June.
[3 & 4]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot on 22 Sep.

DAILY RAINFALL AND IRRIGATION, 2008
ATTAPULGUS, GA

Rainfall

Date	May	Jun	Jul	Aug	Sep
1	0.0	0.0	0.0	0.1	0.0
2	0.0	0.1	0.0	0.0	0.0
3	0.1	0.0	0.0	0.0	0.0
6	0.0	0.0	0.1	0.0	0.0
7	0.0	0.0	1.3	0.6	0.0
8	0.0	0.2	0.0	0.6	0.0
9	0.0	0.0	1.7	0.0	0.0
11	0.0	0.1	0.2	0.0	0.0
12	0.0	0.0	0.0	0.8	0.0
13	0.0	0.0	0.3	1.0	0.0
14	0.0	0.4	0.0	0.0	0.0
15	0.0	1.4	0.1	0.0	0.0
16	1.3	0.0	0.5	2.8	0.0
19	0.0	0.0	0.0	0.1	0.0
21	0.0	0.0	0.0	0.1	0.0
22	0.1	0.5	0.0	4.3	0.0
23	0.2	0.0	1.2	8.5	0.0
24	0.0	0.0	0.0	2.6	0.0
25	0.0	0.0	0.0	0.8	0.0
26	0.0	0.0	0.0	0.2	0.0
27	0.0	0.1	0.0	0.0	0.0
28	0.0	0.8	0.0	0.0	0.0
29	0.0	0.7	0.5	0.0	0.0
30	0.0	1.3	0.1	0.0	0.0
Total	0.1	0.2	0.3	0.9	0.0

Irrigation

Date	May	Jun	Jul	Aug	Sep
2	0.5				
3		0.5			
5	0.5			0.5	
6				0.5	
8	0.5				
9		0.5			
15	0.5				
17					0.5
19					0.5
20	0.5				
25		0.5			
28	0.5				
Total	0.5	0.5	0.0	0.5	0.5

Rain + Irr	0.3	0.4	0.3	0.7	0.5

EVALUATION OF PROLINE AND PROVOST IN VARIOUS COMBINATIONS FOR CONTROL, OF CYLINDROCLADIUM BLACK ROT (PLAINS)

A. PURPOSE: To evaluate the singular and combined effects of in furrow (Proline) and midseason applications of (Provost) on peanut cultivars various applications strategies.

B. EXPERIMENTAL DESIGN:

1. Two separate tests, one for mid maturity and one for late maturity cultivars each being a split plot design with randomized complete blocks and six replicates. Whole plots were fungicide treatments and subplots were cultivars.
2. One two- row bed (25 x 6 ft) per plot, 36 inch row spacing
3. Eight foot alleyways between blocks
4. Plots were established in an area with a history of high population of *Cylindrocladium parasiticum.*
5. Varieties: AP-3

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow treatments (Proline) were applied with a planter-mounted CO_2 pressurized sprayer using a single TX-8 nozzle per row delivering 7 gallons per acre at 24 PSI. Midseason treatments were applied with a CO_2 pressurized belt-pack sprayer consisting of 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 hollow cone nozzles per row at 40 PSI.

2. In furrow Proline treatments were applied at planting on 28 May, 11 Jun, and 25 Jun. Belt-pack sprays (3-6) were applied on 2 Jul, 16 Jul, 30 Jul, and 13 Aug.

D. ADDITIONAL INFORMATION:

1.	Location:	Southwest Georgia Branch Station, Plains, GA 31780
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on
4.	Soil Fertility:	pH - 5.9 P - 63 K - 72 Ca - 409 Mg - 38
	Soil type:	Greenville sandy clay
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) and Strongarm 0.45 oz/A on 8 May. POST:
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 14 May
7.	Planting Info:	Georgia Green, 7 seed/ft on 14 May (70 F at 4" soil depth)
9.	Harvest Dates:	Dug - 2 Oct Picked - 8 Oct

E. SUMMARY: The incidence of CBR was not high, but most treatments provided a good yield response regardless of how the Proline/Provost was applied.

BAYER IN FURROW CBR TEST, 2008

PLAINS

Treatments	App's	Rate/A	Plants/ft[1] 28-May	Plants/ft[1] 5-Jun	Dead Plants/plot[2] 24-Jun	TSWV[3] 2-Oct	White Mold[4] 2-Oct	CBR[5] 2-Oct	YIELD lb/A
1. Proline 480SC	Early emergence (EE)**	5.7 fl oz							
Provost 433SC	3 - 6	8.0 fl oz	.	.	0.3	8.9	1.3	5.7	5599
2. Proline 480SC	2 weeks after (EE)**	5.7 fl oz							
Provost 433SC	3 - 6	8.0 fl oz	.	.	0.8	8.4	4.0	8.4	5604
3. Proline 480SC	4 weeks after (EE)**	5.7 fl oz							
Provost 433SC	3 - 6	8.0 fl oz	.	.	0.7	8.4	1.7	6.7	5541
4. Proline 480SC	In furrow	5.7 fl oz							
Provost 433SC	3 - 6	8.0 fl oz	2.9	2.8	0.0	5.8	1.4	1.7	5826
5. Proline 480SC	In furrow	3.8 fl oz							
Provost 433SC	3 - 6	8.0 fl oz	3.0	2.6	0.0	8.9	6.1	4.5	5296
6. Proline 480SC	In furrow	1.9 fl oz							
Provost 433SC	3 - 6	8.0 fl oz	.	2.9	0.7	5.0	4.2	8.4	5599
7. Proline 480SC	In furrow	5.7 fl oz							
Provost 433SC	3 - 6	10.3 fl oz	.	.	0.0	7.2	1.9	1.9	5672
8. Provost 433SC	3 - 6	10.3 fl oz	.	.	0.5	10.6	2.1	8.8	5230
9. Provost 433SC	3 - 6	8.0 fl oz	.	.	0.5	7.8	4.7	8.4	5301
10. Proline 480SC	In furrow # #	5.7 fl oz							
Provost 433SC	3 - 6	8.0 fl oz	2.8	2.8	0.2	7.8	1.3	5.0	5677
11. Nontreated			3.0	3.0	0.2	7.0	3.3	8.4	4645
LSD(P<0.5)			n.s.	0.3	n.s.	3.1	3.6	4.0	696

NOTES

This test will get Bravo every 10-14 days with Moncut 70W (1.4 lb/A) at about 70 DAP

** Apply the early emergence spray with a single 80-10 nozzle per row in a narrow band (about 4") for a total spray volume of 40 GPA.

Applied in furrow as above but with the spray nozzle ahead of the seed so that the furrow but not the seed is sprayed.

[1]Stand count is the number of emerged plants per foot of row on 28 May and 5 June.

[2]The number of dead or dying plants per plot (50 row feet) on 24 June.

[3 & 4]Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

[5]Percent of row feet exhibiting symptoms of Cylindrocladium black rot (CBR), based on number of disease loci (up to 12" of linear row) per plot. The 2 Oct. evaluation was taken following digging.

PROTHIOCONAZOLE AND VAPAM TREATMENTS FOR CBR MANAGEMENT

A. PURPOSE: To evaluate the singular and combined effects of prothioconazole and Vapam treatments on CBR epidemics.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five replicates.
2. 0ne two-row bed (20 x 6 ft) per plot, 36-inch row spacing.
3. Fifteen foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: AP-3

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. In furrow treatments (Proline) were applied with a planter-mounted $C0_2$ pressurized sprayer using a single TX-8 nozzle per row delivering 7 gallons per acre at 24 PSI.

2. Belt-pack spray treatments (70 & 100 DAP) were applied the weeks of 24 Jul and 21 Aug. This test was coversprayed with chlorothalonil (1.5 pt/A) by tractor on 8 Jun, 19 Jun, 2 Jul, 16 Jul, 27 Jul, 9 Aug, 22 Aug, 5 Sep and 12 Sep. Vapam was applied 30 Apr on specified plots.

D. ADDITIONAL INFORMATION:

1:	Location:	Southwest Georgia Branch Station, Plains,GA 31780
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on 2 May
4.	Soil Fertility:	pH - 6.1 P - 98 K - 55 Ca - 587 Mg - 35
	Soil type:	Greenville sandy clay
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) and Strongarm 0.45 oz/A on 8 May
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 14 May
7.	Planting Info:	Tifrunner, 7 seed/ft on 14 May
8.	Harvest Dates:	Dug - 8 Oct Picked - 12 Oct

E: SUMMARY: There was no response to Vapam treatments in this study. Prothioconazole treatments resulted in suppression of CBR and in one case increased yield, but overall disease levels were low, and pod yields high, even in nontreated control plots.

VAPAM CBR TEST, 2008
PLAINS

FUNGICIDE PROGRAM

Treatments	App's	Rate/A	Plants/ft[1] 28-May	Plants/ft[1] 5-Jun	TSWV[2] 2-Oct	White Mold[3] Harvest	CBR[4] Harvest	% roots w/CBR[5]	% roots w/TSWV[6]	Yield (lb/A)
1. Proline 480SC	**In furrow**	**5.7 fl oz**	2.0	2.5	5.9	0.8	2.9	0.1	59.4	6067
Provost 433SC	**3 - 6**	**10.3 fl oz**								
2. Provost 433SC	**3 - 6**	**10.3 fl oz**	.	.	5.7	1.7	4.5	0.2	55.0	6428
3. Proline 480SC	**In furrow**	**5.7 fl oz**	.	.	5.1	2.0	4.4	0.0	45.6	6031
4. Nontreated			2.6	2.9	6.1	1.8	7.1	0.2	58.7	5864
LSD (P<0.5)			0.6	n.s.	n.s.	n.s.	2.0	n.s.	n.s.	490

FUMIGANT PROGRAM

Treatments	App's	Rate/A	Plants/ft[1] 28-May	Plants/ft[1] 5-Jun	TSWV[2] 2-Oct	White Mold[3] Harvest	CBR[4] Harvest	% roots w/CBR[5]	% roots w/TSWV[6]	Yield (lb/A)
Vapam	**preplant**	**10 GPA**	2.4	2.6	6.0	1.3	4.7	0.0	48.5	6061
No Vapam			2.2	2.8	5.4	1.8	4.8	0.2	60.8	6134
LSD (P<0.5)			n.s.	n.s.	n.s.	n.s.	n.s.	n.s.	8.1	n.s.

[1] Stand count is the number of emerged plants per foot of row on 28 May and 5 June.

[2, 3, & 4] Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

[5 & 6] Based on 10 tap roots per plot with discloration that were plated on PDA for CBR or tested via ELISA for TSWV.

EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF CYLINDROCLADIUM BLACK ROT ON AP-3 PEANUT

A. PURPOSE: To evaluate the comparative efficacy of various fungicides against peanut soil borne diseases, mainly Cylindrocladium Black Rot.

B EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of high *Cylindrocladium parasiticum*.
5. Variety: AP-3

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. The granular treatments were pre-weighed in the lab and applied by hand over the row. In furrow treatments (Proline) were applied with a planter-mounted $C0_2$-pressurized sprayer using a single TX-8 nozzle per row delivering 7 gallons per acre at 24 PSI.

2. Belt-pack spray treatments (3-6) were applied on 2 Jul, 16 Jul, 30 Jul, and 13 Aug. This test was coversprayed with chlorothalonil (1.5 pt/A) by tractor on 23 Jun, 8 Jul, 4 Aug, 1 Sep, and 16 Sep.

D. ADDITIONAL INFORMATION:

1.	Location:	Southwest Georgia Branch Station, Plains,GA 31780
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on
4.	Soil Fertility: Soil type:	pH - 6.2 P - 81 K - 62 Ca - 542 Mg - 40 Greenville sandy clay
5.	Herbicides:	PPI: Sonalan (1 qt/A) + Dual Magnum (1 pt/A) & Strongarm (0.45 oz/A) on 8 May
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 14 May
7.	Planting Info:	AP-3, 7 seed/ft on 14 May
8.	Harvest Dates:	Dug - 2 Oct Picked - 15 Oct

E: SUMMARY: Overall disease pressure was low, and the disease loci that were present were not severe. Some treatments reduced disease incidence, but no treatments increased pod yield.

FUNGICIDE CBR TEST, 2008
PLAINS

Treatments	App's	Rate/A	Plants/ft[1] 28-May	Plants/ft[1] 5-Jun	Dead Plants/Plot[2] 24-Jun	White Mold[3] 2-Oct	CBR[4] 2-Oct	Yield lb/A
1. LEM 17 200SC	In furrow	16.8 fl oz	.	3.0	0.5	3.1	10.6	5179
LEM 17 200SC	3 & 5	16.8 fl oz						
2. LEM 17 200SC	In furrow	24.0 fl oz	.	3.1	0.8	1.1	13.1	5478
LEM 17 200SC	3 & 5	24.0 fl oz						
3. INC201	In furrow	7.0 fl oz	.	3.1	0.5	3.3	11.4	5353
INC201	3 - 6	14.0 fl oz						
4. INC201	In furrow	10.0 fl oz	2.9	3.0	0.7	3.6	12.8	5462
INC201	3 - 6	14.0 fl oz						
5. INC201	In furrow	14.0 fl oz	2.8	3.0	0.2	3.9	8.9	5260
INC201	3 - 6	14.0 fl oz						
6. INC201	3 - 6	14.0 fl oz	.	.	2.5	4.5	15.9	5385
7. INC201 1.5 GR	T-Band @ plant #	7.6 lb	.	2.9	1.0	4.2	14.5	5103
INC201	3 - 6	14.0 fl oz						
8. Kphite	Emerge*	128 fl oz	.	.	0.8	5.0	18.9	5304
Kphite	3 - 6	14.0 fl oz						
9. Evito 4FL	In furrow	5.7 fl oz	.	3.2	0.8	4.5	12.2	5430
Evito 4FL	3 & 5	5.7 fl oz						
10. Proline 480SC	In furrow	5.7 fl oz	2.6	2.9	0.8	4.2	10.9	5450
Provost 433SC	3 & 5	8.0 fl oz						
11. Nontreated			2.7	3.3	0.5	5.8	16.1	5224
LSD (P<0.5)			n.s.	0.3	1.2	4.2	5.3	n.s.

[1]Stand count is the number of emerged plants per foot of row on 28 May and 5 June.
[2]The number of dead or dying plants per plot (50 row feet) on 24 June.
[3]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot.
[4]Percent of row feet infected, based on disease loci (up to 12" of linear row) per plot at digging.

EVALUATION OF CULTIVARS AND BREEDING LINES FOR DISEASE RESISTANCE AND YIELD POTENTIAL IN THE FIELD

A. PURPOSE: To evaluate germplasm for disease resistance in the field.

B EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six and seven replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Varieties: Mid's, GA Green, AT-3085, Georgia-06G, Georgia-Greener, Georgia-07W, AT-215, and AP-4; Late's, Florida-07, York, GA-01R, GA-02C, GA 052524, GA 052525 GA 052526, GA 052527, GA 052528, GA 052529, GA 052530, and GA 052531.

C. APPLICATION OF TREATMENTS:

1. All plots were coversprayed with chlorothalonil (1.5 pt/A) about every 2 weeks.

ADDITIONAL INFORMATION:

1.	Location:	Southwest Georgia Branch Station, Plains, GA 31780
2.	Crop History:	Peanut - 2007, Peanut - 2006, Peanut - 2005
3.	Land Preparation:	Moldboard plowed and marked rows on
4.	Soil Fertility: Soil type:	pH - 6.2 P - 81 K - 62 Ca - 542 Mg - 40 Greenville sandy clay
5.	Herbicides:	PPI: Sonalan EC (1 qt/A) + Dual Magnum (1 pt/A) and Strongarm 0.4 oz/A on 8 May
6.	Insecticides:	Temik 15G, 5 lb/A in furrow on 14 May
7.	Planting Info:	Different varieties seed/ft on 14 May
8.	Harvest Dates:	Dug - 2 Oct Picked - 15 Oct

E: SUMMARY: Overall disease pressure was low in this trial, and did not contribute much to the yield differences observed. The trial adds to our database on these genotypes, but is not definitive in terms of disease susceptibility.

CBR CULTIVAR TEST, 2008
PLAINS

Medium Maturity

Cultivar Comparison (Mean of treatments)

Cultivars	CBR[1] 2-Oct	White Mold[2] 2-Oct	Leaf Spot[3] 2-Oct	Yield (lb/A)
1. Georgia Green	17.3	7.2	5.5	4947
2. AT-3085	15.3	9.5	5.0	6050
3. Georgia-06G	12.2	9.7	5.3	5769
4. Georgia Greener	10.9	3.6	5.1	5735
5. Georgia-07W	11.4	5.3	4.0	5687
6. AT-215	17.5	9.7	5.3	4956
7. AP-4	18.9	5.0	5.0	5552
LSD(P<0.5)	5.0	7.2	0.3	928

[1 & 2] Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.
[3]Florida 1-10 scale where 1=no deisease and 10=dead plant.

Late Maturity

Cultivar Comparison (Mean of treatments)

Cultivars	CBR[1] 21-Oct	TSWV[2] 21-Oct	White Mold[3] 21-Oct	Yield (lb/A)
1. Florida-07	18.2	19.8	2.5	5147
2. York	15.3	21.5	0.2	6949
3. GA-01R	15.7	18.6	1.2	7194
4. GA-02C	19.6	11.0	0.2	6186
5. GA 052524	14.1	10.7	1.0	5708
6. GA 052525	20.0	11.9	1.9	4734
7. Ga 052526	14.1	11.5	0.5	5368
8. GA 052527	25.1	11.2	1.7	4821
9. GA 052528	22.7	12.4	1.4	5298
10. GA 052529	12.0	10.9	0.8	5285
11. GA 052530	18.1	13.8	1.2	4547
12. GA 052531	11.2	12.9	1.2	5352
LSD(P<0.5)	8.8	4.7	2.0	753

[1, 2, & 3] Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

DAILY RAINFALL AND IRRIGATION, 2008
PLAINS, GA

Rainfall

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1		2.1								
3				0.1						
4			0.1					0.1		
5			1.3		0.1					
6				2.7			0.5			
7		0.7	1.0	0.1					1.7	
8			0.1					0.4		0.0
9					0.0					0.2
10	0.2					0.4				0.1
11					1.3	0.4	0.4			
12							0.5	0.4		
13		0.1						2.4		0.1
14				0.1			0.6	0.5		
15			0.1				0.1			
16						0.5				
17	1.0								0.1	
18	0.1	1.3								
19	0.5		0.6	0.5						
20	0.9									0.3
21					0.5	0.5				
22		0.3					0.2			
23	0.1	1.1					0.2	2.2		
24							0.2	3.1		1.7
25								0.5		1.5
26	0.3							1.6		
27	0.1	0.5						1.1		
28				0.1						
29				0.3			0.1			
30	0.3					1.0				
Total	3.8	6.2	3.1	3.6	1.8	2.8	2.8	12.2	1.7	4.0

Irrigation

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
5					0.5			1.0		
19					0.5					
26					0.7					
29									0.6	
Total	0.0	0.0	0.0	0.0	1.7	0.0	0.0	1.0	0.6	0.0

Rain & Irr	3.8	6.2	3.1	3.6	3.5	2.8	2.8	13.2	2.3	4.0

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITA PECAN (NORTH BLOCK)

A PURPOSE: To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a standard commercial cultivar.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. Each replication consisted of single-tree treatments.
3. The orchard was established in 1988 with alternating rows of Wichita and Desirable trees planted on a 40 x 40 ft spacing running north and south. This test consisted of Desirable trees only.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.

2. Calendar-based spray treatments (1 - 10) were applied on 14 Apr,28 Apr, 12 May, 26 May, 9 Jun, 23 Jun, 7 Jul, 21 July, 4 Aug, and 18 Aug.

D. ADDITIONAL INFORMATION:

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

2. Soil Fertility: pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44
   Soil type: Tifton loamy sand, 2 - 5 % slope

4. Herbicide strips: Buccaneer Plus (4 qt/A) on 16 May, 26 July, & 5 Sep

5. Harvest Information: Desirable trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 3 Nov. Nuts were weighed and sampled from individual trees on 4 Nov to determine yield and quality.

E: SUMMARY: Significant scab pressure developed in this trial in spite of the extreme dry, low disease pressure year we experienced. Differences in efficacy were documented, but yields were low on all trees and too variable to be of interest.

PECAN FUNGICIDE TEST, 2008
PONDER FARM, WICHITA (NORTH ORCHARD)

Treatments	App's[1]	Rate/A	AVG[2] 23-May	LIN[3] 23-May	LIN[3] 17-Jul	NIN[4] 2-Jul	NIN[4] 17-Jul	NIN[4] 2-Sep	NSEV[5] 2-Jul	NSEV[5] 17-Jul	NSEV[5] 2-Sep	YIELD lb/A
1. Absolute 500SC	5.0 fl oz	1 - 8	2.4	6.7	3.5	1.0	5.5	7.3	0.2	0.6	0.8	192.0
+ Induce	0.06% v/v											
2. Stratego	10.0 fl oz	1 - 8	5.8	16.6	5.2	1.0	13.8	38.5	0.2	2.3	11.4	321.0
3. Quadris	11.2 fl oz	1 - 4	3.5	9.0	2.4	0.0	3.6	1.0	0.0	0.4	0.2	157.0
+ Inspire	7.0 fl oz											
A13703	14.0 fl oz	5 - 8										
4. A16001	16.0 fl oz	1 - 8	3.8	13.8	3.6	0.0	0.0	4.4	0.0	0.0	0.9	128.0
5. A16001	20.0 fl oz	1 - 8	2.7	7.8	2.5	1.0	4.7	15.9	0.2	1.1	4.4	136.0
6. A15909	21.0 fl oz	1 - 8	2.8	7.1	1.0	0.0	4.8	9.4	0.0	0.8	1.6	85.0
7. BmJ WP	4.2 oz	1 - 8	8.8	19.7	4.1	8.9	21.1	19.8	2.7	5.5	7.3	59.0
+ Elast 400F	25.0 fl oz											
8. Quilt	14.0 fl oz	1 - 8	6.4	15.4	6.6	0.6	5.7	9.4	0.5	0.5	2.0	78.0
9. Quilt	14.0 fl oz	1 - 8	5.3	17.5	5.3	1.8	7.8	25.5	1.1	2.8	6.9	118.0
+ BmJ WP	4.2 oz											
10. BmJ WP	4.2 oz	1 - 8	5.2	13.5	6.1	10.7	29.2	69.8	3.4	6.1	32.2	130.0
+ Super Tin 80 WP	3.75 oz											
11. Super Tin 80 WP	3.75 oz	1 - 8	3.6	10.3	5.1	1.8	12.8	36.7	0.3	2.7	13.3	186.0
+ Elast 400F	25.0 fl oz											
12. BmJ WP	4.2 oz	1 - 8	4.2	11.6	1.0	1.6	26.1	93.5	0.5	6.2	41.4	168.0
13. DPX-LEM 17 200SC	14.4 fl oz	1 - 10	8.2	20.4	4.1	8.3	41.8	94.8	2.0	12.4	40.2	135.0
14. Nontreated			12.0	28.6	10.2	31.3	60.8	100.0	7.0	21.0	61.1	120.0
LSD(P<0.5)			4.0	8.8	4.5	7.8	12.9	15.0	2.5	4.5	8.7	201.0

NOTE: Calculations based on sprayed 95 GPA at 125 psi running 2 MPH.

Spray Dates:

Application	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10
	14-Apr	28-Apr	12-May	26-May	9-Jun	23-Jun	7-Jul	21-Jul	4-Aug	18-Aug

[1]Based on a calendar Schedule (1 - 10) at 2-week intervals for the entire spray season.

[2]Based on ratings of eight terminals per tree. Severity is the percentage of middle leaflet area covered with scab.

[3]Based on ratings of eight terminals per tree. Incidence is the percentage of middle leaflet area covered with scab.

[4]Based on ratings of eight nut clusters per tree. Incidence is the percentage of nuts with any scab.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE PECAN (NORTH BLOCK)

A PURPOSE: To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a standard commercial cultivar.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. Each replication consisted of single-tree treatments.
3. The orchard was established in 1988 with alternating rows of Wichita and Desirable trees planted on a 40 x 40 ft spacing running north and south. This test consisted of Desirable trees only.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.

2. Calendar-based spray treatments (1 - 8) were applied on 14 Apr, 28 Apr, 12 May, 2 Jun, 23 Jun, 14 Jul, 4 Aug, and 25 Aug.

D. ADDITIONAL INFORMATION:

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

2. Soil Fertility: pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44
   Soil type: Tifton loamy sand, 2 - 5 % slope

4. Herbicide strips: Buccaneer Plus (4 qt/A) on 16 May, 26 July, & 5 Sep

5. Harvest Information: Desirable trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 11 Nov. Nuts were weighed and sampled from individual trees on 18 Nov to determine yield and quality.

E: SUMMARY: No disease occurred, even on nonsprayed trees.

PECAN FUNGICIDE TEST, 2008
PONDER FARM, DESIRABLE (NORTH ORCHARD)

Treatments	App's	Rate/A	AVG 23-May	LIN 23-May	LIN 17-Jul	NIN 2-Jul	NIN 17-Jul	NIN 2-Sep	NSEV 2-Jul	NSEV 17-Jul	NSEV 2-Sep
1. Absolute 500SC	5.0 fl oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Induce	0.06% v/v										
2. Stratego	10.0 fl oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3. Quadris	11.2 fl oz	1 - 4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Inspire	7.0 fl oz										
A13703	14.0 fl oz	5 - 8									
4. A16001	16.0 fl oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5. A16001	20.0 fl oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6. A15909	21.0 fl oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7. BmJ WP	4.2 oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Elast 400F	25.0 fl oz										
8. Quilt	14.0 fl oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9. Quilt	14.0 fl oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ BmJ WP	4.2 oz										
10. BmJ WP	4.2 oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Super Tin 80 WP	3.75 oz										
11. Super Tin 80 WP	3.75 oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
+ Elast 400F	25.0 fl oz										
12. BmJ WP	4.2 oz	1 - 8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
13. DPX-LEM 17 200SC	14.4 fl oz	1 - 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
14. Nontreated			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LSD (P<0.5)			0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

NOTE: Calculations based on sprayed 95 GPA at 125 psi running 2 MPH.

Spray Dates:

Application	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8
	14-Apr	28-Apr	12-May	2-Jun	23-Jun	14-Jul	4-Aug	25-Aug

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON YOUNG TREE X FERTILITY PECAN (NORTH BLOCK)

A. PURPOSE: To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a standard commercial cultivar.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six replicates.
2. Each replication consisted of single-tree treatments.
3. The orchard was established in 2007 with alternating rows of Wichita and Desirable trees planted on a 40 x 40 ft spacing running north and south.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallons per acre at 125 PSI traveling 2 MPH.

2. Calendar-based spray treatments (1 - 8) were applied on 15 Apr, 3 Jun, and 8 Jul. 2.5, 5.5 and 8.5 were applied 13 May, 24 June, and 29 July.

D. ADDITIONAL INFORMATION:

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

2. Soil Fertility: pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44
   Soil type: Tifton loamy sand, 2 - 5 % slope

4. Herbicide strips: Buccaneer Plus (4 qt/A) on 16 May, 26 July, & 5 Sep

5. Harvest Information: Trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 3 Nov. Nuts were weighed and sampled from individual trees on 4 Nov to determine yield and quality.

E: SUMMARY: No disease occurred, even on nonsprayed trees.

YOUNG TREE FUNGICIDE X FERTILITY TEST, 2008
PONDER FARM, NORTH ORCHARD
(WICHITA AND DESIRABLE PLANTED FEB. 2008)

Fertility Treatments

1a. **No fertilizer**

2b. **Minimal Program**

Year 1 (08)	1.0 lb/tree	5-10-15	June
Year 2 (09)	1.0 lb/tree	10-10-10	March and June
Year 3 (10)	2.0 lb/tree	10-10-10	March and June

3c. **Maximum Program**

Year 1 (08)	0.5 lb/tree	5-10-15	April
	1.0 lb/tree	5-10-15	June
Year 2 (09)	1.0 lb/tree	10-10-10	March, April, May, and June
Year 3 (10)	2.0 lb/tree	10-10-10	March, April, May, and June

Fungicide Treatments

White	No fungicide
Blue	Minimal Program, sprays 1 and 2.5
Red	Maximum Program, sprays 1, 2, 5, 4, 5.5, 7 and 8.5

NOTE - These sprays are based on applications 1, 2, 3, etc being on a 14-day interval, therefore these will be applied every 3 weeks. Fungicides used will be alternated applications of

Treatments	Rate	Leaf burn 5 Aug
1. Elast	25 fl oz	0.0
+ Super Tin	3.75 oz	
2. Stratego	10 fl oz	0.0
LSD(P<0.5)		0.0

Spray Dates:

Applications:

#1	#2	#3	#4	#5	#6
15 Apr	13 May (2.5)	13 Jun	24 Jun (5.5)	8 Jul	29 Jul (8.5)

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE PECAN (SOUTH BLOCK)

A. PURPOSE: To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a standard commercial cultivar.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with five 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 x 40 ft spacing running north and south. This test consisted of Desirable trees only.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.

2. Calendar-based spray treatments (1 - 8) were applied on 16 Apr, 30 Apr, 14 May, 2 Jun, 25 Jun, 16 Jul, 6 Aug, and 27 Aug.

D. ADDITIONAL INFORMATION:

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

2. Soil Fertility: pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44
   Soil type: Tifton loamy sand, 2 - 5 % slope

4. Herbicide strips: Buccaneer Plus (4 qt/A) on 16 May, 26 July, & 5 Sep

5. Harvest Information: Desirable trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 17 Nov. Nuts were weighed and sampled from individual trees on 18 Nov to determine yield and quality.

E: SUMMARY: No disease occurred, even on nonsprayed trees.

PECAN FUNGICIDE TEST II, 2008
PONDER FARM, DESIRABLE, SOUTH ORCHARD

Treatments	App's	Rate/A	AVG 23 May	NSEV 3 Jul	Nuts w/Scab 21 Jul	NSEV 21 Jul
1. SA-140201	1 - 3	16.0 fl oz	0.0	0.0	0.0	0.0
SA-140301 WP	5 - 8	7.5 oz				
2. SA-140301 WP	1 - 3	7.5 oz	0.0	0.0	0.0	0.0
SA-140201	5 - 8	16.0 fl oz				
3. Super Tin 80WP	1 - 8	7.5 oz	0.0	0.0	0.0	0.0
4. DPX-LEM17 200SC	1 - 8	14.4 fl oz	0.0	0.0	0.0	0.0
5. DPX-LEM17 200SC	1 - 9	20.6 fl oz	0.0	0.0	0.0	0.0
6. Enable 2F	1 - 8	4.0 fl oz	0.0	0.0	0.0	0.0
+ Elast 400F		25 fl oz				
7. Super Tin 80WP	1 - 8	3.75 oz	0.0	0.0	0.0	0.0
+ Elast 400F		25 fl oz				
8. Super Tin 80WP	1, 3, 5, 7	7.5 oz	0.0	0.0	0.0	0.0
Elast 400F	2, 4, 6, 8	50 fl oz				
9. Enable 2F	1, 3, 5, 7	8.0 fl oz	0.0	0.0	0.0	0.0
Elast 400F	2, 4, 6, 8	50 fl oz				
10. Super Tin 80WP	1 - 8	3.75 oz	0.0	0.0	0.0	0.0
+ Topsin 4.5F		10 fl oz				
11. Super Tin 80WP	1 - 8	3.75 oz	0.0	0.0	0.0	0.0
+ Topsin 4.5F		16 fl oz				
12. Topsin 4.5F	1 - 8	10 fl oz	0.0	0.0	0.0	0.0
+ Elast		25 fl oz				
13. Topsin 4.5F	1 - 8	16 fl oz	0.0	0.0	0.0	0.0
+ Elast 400F		25 fl oz				
14. Super Tin 4L	1 - 8	6.0 fl oz	0.0	0.0	0.0	0.0
+ Topsin 4.5F		16 fl oz				
15. Super Tin 4L	1 - 8	12 fl oz	0.0	0.0	0.0	0.0
16. Nontreated			0.0	0.0	0.0	0.0
LSD(P<0.5)			0.0	0.0	0.0	0.0

NOTE: Calculations based on sprayed 95 GPA at 125 psi running 2 MPH.

Spray Dates:

Application	# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8
	4-Jan	4-Jan	14-May	4-Jun	25-Jun	16-Jul	6-Aug	27-Aug

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON DESIRABLE PECAN YOUNGER TREES (SOUTH BLOCK)

A. PURPOSE: To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a standard commercial cultivar.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. Each replication consisted of single-tree treatments.
3. The orchard was established in 1988 with alternating rows of Wichita and Desirable trees planted on a 40 x 40 ft spacing running north and south. This test consisted of Desirable trees only.

C. APPLICATION OF TREATMENTS:

1. Equipment: All spray treatments were applied with a Durand Wayland PTO-driven air-blast sprayer (AF-100-32) delivering 95 gallon per acre at 125 PSI traveling 2 MPH.

2. Calendar-based spray treatments (1 - 12) were applied on 1 Apr, 15 Apr, 29 Apr, 27 May, 3 Jun, 17 Jun, 1 Jul, 8 July, 15 Jul, 29 Jul, 12 Aug, and 19 Aug.

D. ADDITIONAL INFORMATION:

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

2. Soil Fertility: pH - 6.0 P - 65 K - 71 Ca - 810 Mg - 44
   Soil type: Tifton loamy sand, 2 - 5 % slope

4. Herbicide strips: Buccaneer Plus (4 qt/A) on 16 May, 26 July, & 5 Sep

5. Harvest Information: Desirable trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 17 Nov. Nuts were weighed and sampled from individual trees on 18 Nov to determine yield and quality

E: SUMMARY: No disease occurred, even on nonsprayed trees.

PECAN FUNGICIDE TIMING TEST, 2008

PONDER FARM, DESIRABLE (SOUTH ORCHARD, YOUNGER TREES)

Treatments	Rate/A	App's	Timings	scab
1. Stratego	10.0 fl oz	1, 2, 5, 6	Standard	0.0
Super Tin 80WP	3.75 oz	3, 4, 7, 8		
+ Elast 400F	25 fl oz			
2. Stratego	10.0 fl oz	1, 2, 5, 6	Modified	0.0
Super Tin 80WP	3.75 oz	3, 4, 7, 8		
+ Elast 400F	25 fl oz			
3. Nontreated				0.0
LSD(P<0.5)				0.0

Calculations based on spraying 95 GPA at 125 psi running 2 MPH

Standard

1 = Bud bread
2 = Bud break + 2 weeks
3 = Bud break + 4 weeks
4 = Bud break + 7 weeks
5 = Bud break + 10 weeks
6 = Bud break + 13 weeks
7 = Bud break + 16 weeks
8 = Bud break + 19 weeks

Modified

1 = Bud bread
2 = Bud break + 2 weeks
3 = Bud break + 4 weeks
4 = Bud break + 8 weeks
5 = Bud break + 10 weeks
6 = Bud break + 12 weeks
7 = Bud break + 14 weeks
8 = Bud break + 18 weeks

Spray Dates:

Applications:

# 1	# 2	# 3	# 4	# 5	# 6	# 7	# 8	# 9	# 10	# 11	# 12
1-Apr	15-Apr	29-Apr	27-May	3-Jun	17-Jun	1-Jul	8-Jul	15-Jul	29-Jul	12-Aug	19-Aug

DAILY RAINFALL AND IRRIGATION, 2008
PONDER FARM, TY TY, GA

Rainfall

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1		0.9					0.3					3.3
4								0.9				
5			0.9									
7		1.0	2.0	2.0			0.9					
8								0.6	0.2			
9										0.3		
10										0.6		
11	1.1								0.3			4.2
12									1.2			0.5
13						0.1		0.7		0.2		
14				0.2			1.8	0.5			0.4	
16						0.3			0.3			
17	1.1										1.0	
18		2.5						0.5				
19					0.8							
20			0.7							0.3		
21								0.5				
22	1.7	2.3										
23	0.1					1.0	0.2					
24	0.1						0.2			1.0		
25	0.2	1.3						6.0				
26								0.1				
27		0.2						0.1		3.9		
28	0.5						0.8					
29				0.4	0.2		0.2					
30	0.4					0.6	0.1					
Total	5.1	8.0	3.6	2.5	1.0	1.9	4.3	9.8	1.9	6.2	1.4	4.7

Irrigation

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
3					1.0							
10									0.5			
14					1.0							
15						1.0						
24							1.0					
28					1.0							
Total	0.0	0.0	0.0	0.0	3.0	1.0	1.0	0.0	0.5	0.0	0.0	0.0

Rain & Irr	5.1	8.0	3.6	2.5	4.0	2.9	5.3	9.8	2.4	6.2	1.4	4.7