Date: Jan. 30, 2009

Memo to: Industry Cooperators

From: Tim Brenneman

Subject: Field Trial Results

Attached are the results of our 2009 field trials on peanuts and pecans. This year was interesting in that it started out cool and wet, turned dry and hot during June, and then started raining which continued through harvest. These conditions lead to heavy disease pressure on both peanuts and pecans, and in fact some normally good treatments were overwhelmed by the extreme disease levels on susceptible cultivars and/or short rotations. Overall it was a good year for disease data and peanut yields.

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 Michael Lawhorn, 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. Dr. Joao Augusto, a post-doc in my program, was also an important part of these investigations.

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 "2009 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.

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EVALUATION OF PEANUT SEED TREATMENTS

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 four replicates.
2 One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: Georgia Green, 92% germination

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 Tilt, Bravo (1.5 pt/A) on 30 June, then Chlorothalonil 720 (1.5 pt/A) on 14 July, 28 July, 11 August, 25 August, and 8 September, then Moncut 70DF (1.3 lb/A) on 21 July, 10 August and 25 August.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 5 May
4.	Soil Fertility:	pH -5.4 P - 36 K - 94 Ca - 713 Mg - 105
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1 pt/A) on 7 May POST: Cadre DF (1.44 oz/A) + nonionic surfactant (1pt/100gal H_20) at (17 gal/H_20/A)
6.	Nematicides:	Temik 15G, (10 lb/A) in a 16” band on 11 May.
7.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 12 May
8.	Planting Info:	Georgia Green, 7 seed/ft on 12 May (70F at 4" deep)
9.	Harvest Dates:	Dug - 28 Sept Picked - 1 Oct

E. SUMMARY: Cold temperatures and packing rains after planting resulted in severe pressure from seed and seedling diseases with excellent separation of treatments and large yield differences.

SEED TREATMENT TEST
LANG FARM, SOUTH FIELD

Treatments	App's	Rate/A	Plants/ft[1]		Dead Plants/plot[2]		TSWV[3]	Vigor[4]	YIELD
			25-May	3-Jun	25-May	3-Jun	20-Aug	15-Jun	lb/A
1. Nontreated			0.7	0.5	0.0	3.3	15.0	3.3	1271
2. Trilex Star	Seed Trt	4.0 oz/100 lb	3.9	3.3	0.0	0.0	18.0	10.0	2759
3. Trilex Optimum	Seed Trt	4.0 oz/100 lb	3.7	3.2	0.0	0.0	20.0	8.3	3006
4. Dynasty PD	Seed Trt	4.0 oz/100 lb	3.4	3.0	0.0	0.0	20.0	8.5	3187
5. CUS04	Seed Trt	4.0 oz/100 lb	1.3	1.6	0.0	2.3	18.8	5.8	2309
6. Actinovate	Seed Trt	4.0 oz/100 lb	0.7	0.8	0.0	1.5	14.3	2.8	1532
7. Kodiak	Seed Trt	0.25 o/100 lb	1.0	1.0	0.0	2.0	18.0	4.8	1692
8. Kodiak	Seed Trt	1.00 oz/100 lb	0.9	0.9	0.0	3.3	15.8	3.5	1532
LSD (P<0.5)			0.3	0.3	n.s.	2.6	n.s.	2.0	637

[1]Stand count is the number of emerged plants per foot of row on 25 May and 3 June.

[2]The number of dead or dying plants per plot (50 row feet) on 25 May, and 3

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

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

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. All plots were sprayed with Chlorothalonil for foliar diseases and adjacent blocks were sprayed or unsprayed with Moncut to control white mold.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. There are eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: 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. All plots were traveled by tractor and cover sprayed with Tilt/Bravo (1.5 pt/A) on 30 June and then Chlorothalonil 720 (1.5 pts/A) on 14 July, 28 July, 11 August, 25 August and 8 September. Moncut 70DF (1.3 lb/A) treatments were applied on 21 July, 10 August and 25 August.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 5 May
4.	Soil Fertility:	pH - 5.4 P - 36 K - 94 Ca - 713 Mg - 105
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (1 pt/A) + Dual Magnum (2 pt/A) on 6 May POST: Cadre 70 DF (1.44 oz/A) and a nonionic surfactant, (1 pt/100 gal H_20) at (17 gal H_20/A) on 13 July.
6.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 12 May
7.	Nematicides:	Temik 15G, (10 lb/A) in a 16" band on 11 May.
8.	Planting Info:	Ga Greener, GA-03L, GA-07W, and GA-06G 7 seed/ft on 12 May
9.	Harvest Dates:	Dug – 28 Sept Picked - 1 Oct

E. SUMMARY: Severe white mold developed and caused large yield losses. Some white mold even occurred in the Moncut treatments, which normally does an excellent job.

WHITE MOLD CULTIVAR TEST, 2009
LANG FARM, SOUTH FIELD

Moncut	Plants/ft[1]		White Mold[2]		TSWV[3]	Yield
Cultivars	26-May	3-Jun	26-Aug	28-Sep	20-Aug	lb/A
1. GA-03L	2.4	2.3	0.0	19.0	8.0	3165
2. GA-07W	1.7	1.7	0.0	14.5	9.5	3724
3. GA Greener	2.2	2.1	1.0	26.5	10.3	3398
4. GA-06G	2.1	2.3	1.0	25.5	5.8	3761
LSD(P<0.5)	0.7	0.5	1.3	9.3	3.4	673

Bravo	White Mold[2]		TSWV[3]	Yield
Cultivars	26-Aug	28-Sep	20-Aug	lb/A
1. GA-03L	10.5	46.5	9.5	3303
2. GA-07W	13.0	48.0	9.3	3761
3. GA Greener	13.5	68.5	7.0	3071
4. GA-06G	25.0	72.0	7.8	2948
LSD(P<0.5)	14.0	9.5	n.s.	753

[1]Stand count is the number of emerged plants per foot of row on 26 May and 3 Jun.
[2 & 3]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 and experimental fungicides for the control of southern stem rot on GA-06G peanut.

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. There are eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: 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. Belt-pack spray treatments (1-6) were applied on14 July, 28 July, 10 August, 25 August, 8 Sept and 22 Sept. This test was not cover-sprayed. Spray #7 was not applied due to proximity to harvest.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 5 May
4.	Soil Fertility:	pH - 5.4 P - 36 K - 94 Ca - 713 Mg - 105
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1 pt/A) on 7 May POST: Cadre 70 DF, (1.44 oz/A) and nonionic surfactant (1 pt/100 gal H_20) at (17 gal H_20/A) on 12 May.
6.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 3 June
7.	Nematicides:	Temik 15G, (10 lb/A) in 16” band on 3 June
8.	Planting Info:	Ga-06G, 7 seed/ft on 3 June
9.	Harvest Dates:	Dug - 12 Oct Picked - 22 Oct

E. SUMMARY: The peanuts had to be replanted due to poor stands and thus it was a late crop. Although white mold developed, it also was very late and did not impact yield as much as would normally be seen. Severe leaf spot was present (mainly early leaf spot) and greatly affected yield as well.

SYNGENTA FUNGICIDE TEST II, 2009
LANG FARM, SOUTH FIELD

Treatments	App's	Rate/A	Leaf Spot[1] 8-Sep	Leaf Spot[1] 12-Oct	TSWV[2] 2-Sep	White Mold[3] 17-Sep	White Mold[3] 12-Oct	Yield lb/A
1. Nontreated			5.7	9.0	8.4	5.2	54.0	2718
2. Bravo W'stik Abound	1, 2, 4, 6, 7 3 & 5	1.5 pt 12 fl oz	3.7	5.8	10.0	0.0	15.2	3862
3. Bravo W'stik Abound	1, 2, 4, 6, 7 3 & 5	1.5 pt 15 fl oz	3.3	5.2	6.0	2.4	13.6	4019
4. Bravo W'stik Abound	1, 2, 4, 6, 7 3 & 5	1.5 pt 18 fl oz	2.8	5.3	6.4	3.2	15.6	4310
5. Bravo W'stik Abound + A9898 100SL	1, 2, 4, 6, 7 3 & 5	1.5 pt 12 fl oz 5.5 fl oz	3.0	4.3	6.4	3.6	11.2	3700
6. Bravo W'stik Abound + A9898 100SL	1, 2, 4, 6, 7 3 & 5	1.5 pt 15 fl oz 5.5 fl oz	3.2	4.4	8.8	4.8	11.2	4159
7. Bravo W'stik Abound + A9898 100SL	1, 2, 4, 6, 7 3 & 5	1.5 pt 18 fl oz 5.5 fl oz	3.0	4.2	6.0	1.6	9.2	4275
8. Bravo W'stik A9898 100SL	1, 2, 4, 6, 7 3 & 5	1.5 pt 5.5 fl oz	3.3	6.5	5.2	6.4	24.0	3694
9. Bravo W'stik Bravo W'stik + Convoy	1, 2, 4, 6, 7 3 & 5	1.5 pt 1.5 pt 1.5 pt	3.9	6.7	8.8	1.2	12.4	3868
10. Bravo W'stik Provost	1, 6, 7 2 - 5	1.5 pt 10.7 fl oz	2.7	4.1	6.8	3.6	16.0	4188
11. Bravo W'stik Headline	1, 2, 4, 6, 7 3 & 5	1.5 pt 12 fl oz	2.9	3.9	6.0	6.8	22.0	4379
12. Bravo W'stik	1 - 7	1.5 pt	3.6	6.8	7.6	4.0	24.0	3630
LSD(P<0.5)			0.5	0.6	n.s.	4.0	8.5	725

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

[2 & 3]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 and experimental fungicides for the control of southern stem rot on GA-06G 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. There eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: 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. Belt-pack spray treatments (1-6) were applied on 14 July, 21 July, 28 July, 12 August, 25 August 8 Sept and 22 Sept. This test was not cover-sprayed. Spray #7 was not applied due to proximity to harvest.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 5 May
4.	Soil Fertility:	pH - 5.4 P - 36 K - 94 Ca - 713 Mg - 105
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1 pt/A) on 7 May POST: Cadre DF (1.44 oz/A) + nonionic surfactant (1 pt/100 gal H_20) at (17 gal/H_20/A) on 13 July.
6.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 3 June
7.	Nematicides:	Temik 15G, (10 lb/A) in 16” band on 3 June.
8.	Planting Info:	GA-06G, 7 seed/ft on 3 June
9.	Harvest Dates:	Dug - 12 Oct Picked - 22 Oct

E. SUMMARY: The peanuts had to be replanted due to poor stands and thus it was a late crop. Although white mold developed, it also was very late and did not impact yield as much as would normally be seen. Severe leaf spot was present (mainly early leaf spot) and greatly affected yield as well.

MISCELLANEOUS FUNGICIDE TEST II, 2009
LANG FARM, SOUTH FIELD

			Leaf Spot[1]		TSWV[2]	White Mold[3]		Yield
Treatments	App's	Rate/A	8 - Sep	12-Oct	3-Sep	17 - Sep	12 - Oct	lb/A
1. Non-treated			5.7	9.2	7.0	0.5	.	2403
2. Bravo W'stik	1 - 7	1.5 pt	3.7	6.8	5.0	4.0	24.0	3173
3. Tilt/Bravo	1 & 2	18 fl oz	3.3	5.1	7.0	2.0	11.5	3194
Abound	3 & 5	18 fl oz						
Bravo W'stik	4, 6, 7	1.5 pt						
4. Headline	1.5	9.0 fl oz	3.0	4.2	7.0	3.5	11.0	3862
Abound	3 & 5	18 fl oz						
Bravo W'stik	4, 6, 7	1.5 pt						
5. QFA 61	1 & 2	14.5 fl oz	3.7	5.2	7.5	1.0	14.5	3717
Abound	3 & 5	18 fl oz						
Bravo W'stik	4, 6, 7	1.5 pt						
6. Picoxystrobin	1 & 2	6.0 fl oz	3.3	5.8	5.0	1.5	11.0	3753
Lem17	3, 4, 5	16 fl oz						
Bravo W'stik	6 & 7	1.5 pt						
7. Headline	1.5	9.0 fl oz	3.2	5.4	9.0	0.0	8.0	4211
Lem17	3, 4, 5	16 fl oz						
Bravo W'stik	6 & 7	1.5 pt						
8. Picoxystrobin	1.5	9.0 fl oz	4.2	6.6	7.0	1.0	16.5	3289
Lem17	3, 4, 5	16 fl oz						
Bravo W'stik	6 & 7	1.5 pt						
9. Bravo W'stik	1 - 7	1.5 pt	3.8	5.6	5.0	10.5	18.5	3942
+ Kphite		4. 0 pt						
10. Equus 720	1, 2, 7	1.5 pt	3.5	5.9	5.5	2.0	17.5	3260
T-methyl 85WDG	3 - 6	0.4 lb						
11. Equus 720	1 - 7	1.5 pt	3.9	6.9	10.5	4.5	22.5	3216

12. Equus 720	1, 2, 7	1.5 pt	3.8	4.7	7.0	3.5	15.5	3528
Equus 720	3 - 6	1.0 pt						
+ T-methyl 85WDG		0.2 lb						
13. Equus 720	1, 2, 7	1.5 pt	3.4	5.3	7.0	3.5	21.0	3267
Equus 720	3 - 6	0.75 pt						
+ T-methyl 85WDG		0.2 lb						
14. Equus 720	1, 2, 7	1.5 pt	3.7	5.1	6.0	7.0	30.5	2853
Equus 720	3 - 6	0.75 pt						
+ T-methyl 85WDG		0.3 lb						
15. Equus 720	1, 2, 7	1.5 pt	3.7	4.4	6.0	3.5	25.0	2839
Equus 720	3 - 6	1.0 pt						
+ T-methyl 85WDG		0.4 lb						
16. Equus 720	1, 2, 7	1.5 pt	3.3	5.6	8.0	7.5	23.0	3223
Topsin M 4.5F	3 - 6	10 fl oz						
LSD(P<0.5)			0.4	1.1	4.4	5.7	10.2	1004

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

[2 & 3]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 GA-06G 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. There eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: 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. Belt-pack spray treatments (1-6) were applied on 14 July, 28 July, 12 August, 24 August, 9 Sept and 22 Sept. This test was not cover-sprayed. Spray #7 was not applied due to proximity to harvest.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 5 May
4.	Soil Fertility:	pH - 5.4 P - 36 K - 94 Ca - 713 Mg - 105
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1 pt/A) on 7 May POST: Cadre DF (1.44 oz/A) + nonionic surfactant (1 pt/100 gal H_20) at (17 gal/H_20/A) on 13 July.
6.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 3 June
7.	Nematicides:	Temik 15G, (10 lb/A) in 16” band on 3 June.
8.	Planting Info:	GA-06G, 7 seed/ft on 3 June
9.	Harvest Dates:	Dug - 12 Oct Picked - 22 Oct

E. SUMMARY: The peanuts had to be replanted due to poor stands and thus it was a late crop. Although white mold developed, it also was very late and did not impact yield as much as would normally be seen. Severe leaf spot was present (mainly early leaf spot) and greatly affected yield as well.

MISCELLANEOUS FUNGICIDE TEST III, 2009
LANG FARM, SOUTH FIELD

			Leaf Spot[1]		TSWV[2]	White Mold[3]		Yield
Treatments	**App's**	**Rate/A**	**8-Sep**	**12-Oct**	**3-Sep**	**18-Sep**	**12-Oct**	**lb/A**
1. Non-treated			5.4	9.1	6.5	1.0	38.5	2243
2. Equus 720	1 - 7	1.5 pt	4.2	6.5	6.5	4.5	13.5	3318
3. Equus 720	1, 2, 7	1.5 pt	4.1	8.0	4.5	1.5	21.5	2672
Folicur 3.6	3 - 6	7.2 fl oz						
4. Equus 720	1, 2, 7	1.5 pt	4.1	7.7	6.0	1.0	15.0	3470
Orius 3.6F	3 - 6	7.2 fl oz						
5. Equus 720	1, 2, 7	1.5 pt	3.9	6.6	6.0	4.0	13.5	3318
Orius 20AQ	3 - 6	15.5 fl oz						
6. Equus 720	1, 2, 7	1.5 pt	4.0	7.0	8.0	4.5	15.0	2991
Bumper 41.8EC	3 - 6	2.5 fl oz						
7. Equus 720	1, 2, 7	1.5 pt	3.6	6.5	5.0	3.5	15.0	3608
Bumper 41.8EC	3 - 6	4.0 fl oz						
8. Equus 720	1, 2, 7	1.5 pt	3.9	6.9	5.0	3.0	15.0	3347
Orius 3.6F	3 - 6	3.6 fl oz						
+ Bumper 41.8EC		2.5 fl oz						
9. Equus 720	1, 2, 7	1.5 pt	3.7	6.2	6.0	3.5	12.0	3790
Orius 20AQ	3 - 6	7.8 fl oz						
+ Bumper 41.8EC		2.5 fl oz						
10. Equus 720	1, 2, 7	1.5 pt	3.8	6.2	6.0	3.5	16.5	3209
Orius 3.6F	3 - 6	3.6 fl oz						
+ Bumper 41.8EC		4.0 fl oz						
11. Equus 720	1, 2, 7	1.5 pt	3.5	5.6	8.0	1.5	10.0	3216
Orius 20AQ	3 - 6	7.8 fl oz						
+ Bumper 41.8EC		4.0 fl oz						

12. Equus 720 Orius 3.6F + Bumper 41.8EC	1, 2, 7 3 - 6	1.5 pt 7.2 fl oz 4.0 fl oz	3.8	6.1	6.5	1.5	12.5	3405
13. Equus 720 Orius 20AQ + Bumper 41.8EC	1, 2, 7 3 - 6	1.5 pt 15.5 fl oz 4.0 fl oz	3.3	5.1	4.5	4.0	10.0	3369
14. Equus 720 Headline SC	1, 2, 7 3 - 6	1.5 pt 9.0 fl oz	3.4	3.4	7.0	1.5	7.5	3601
15. Equus 720 Headline EC	1, 2, 7 3 - 6	1.5 pt 9.0 fl oz	3.4	3.3	6.0	1.5	13.0	3231
16. Equus 720 Artisan	1, 2, 4, 6, 7 3 & 5	1.5 pt 32.0 fl oz	3.8	7.1	4.5	1.5	11.0	3659
LSD(P<0.5)			0.5	1.1	4.6	3.1	9.0	999

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

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

EVALUATION OF VARIOUS FUNGICIDES APPLIED IN THE DAY OR AT NIGHT 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 GA-06G peanut when applied at night or in the day.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with three replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. There eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: 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. Belt-pack spray treatments (3-6) were applied on 14 Jul, 28 Jul, 11 Aug, and 25 Aug. This test was not cover-sprayed except for sprays 1 and 2, and 7 with Chlorothalonil. Treatments were applied either before dawn or near mid-day of the same 24-hour period.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 5 May
4.	Soil Fertility:	pH - 5.4 P - 36 K - 94 Ca - 713 Mg - 105
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1 pt/A) on 7 May POST: Cadre DF (1.44 oz/A) + nonionic surfactant (1 pt/100 gal H_20) at (17 gal/ H_20/A) on 13 July.
6.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 7 May
7.	Nematicides:	Temik 15G, (10 lb/A) in 16" band on 11 May.
8.	Planting Info:	GA-06G, 7 seed/ft on 3 June
9.	Harvest Dates:	Dug - 12 Oct Picked - 22 Oct

E. SUMMARY: Clear differences were observed between different fungicides with day vs night timings. Protectant fungicides controlled leaf spot better when sprayed at day, but with systemmics the time of day did not matter. Night sprayings usually improved control of stem rot.

Effect of fungicide application timing on TSWV, leaf spots, stem rot and peanut yield at Lang Farm, South Field, in Tifton, GA, 2009.[a]

Treatment[b]	Rate/A	TSWV (%)[c]	Leaf spot[d]		Stem rot (%)[e]		Yield
		8/31	9/17	10/8	9/17	10/12	(kg/ha)
Bravo day	1.5 pt	9.5 abcd	3.5 b	4.0 cd	42.0 a	58.5 a	4,050 de
Bravo night	1.5 pt	12.5 abc	4.1 a	7.5 a	42.5 a	54.5 ab	3,708 ef
Headline SC day	9.0 fl oz	13.0 ab	2.4 c	2.6 ef	16.5 cd	26.5 ef	4,591 bc
Headline SC night	9.0 fl oz	7.0 d	2.3 c	2.6 ef	11.5 d	19.0 fg	5,033 ab
Headline EC day	9.0 fl oz	14.0 a	2.3 c	2.4 f	34.5 ab	45.0 bcd	4,116 de
Headline EC night	9.0 fl oz	8.5 bcd	2.2 c	2.4 f	7.5 d	14.0 g	5,208 a
Elast day	15 fl oz	8.0 cd	3.1 b	4.7 c	35.5 ab	49.5 abc	3,550 f
Elast night	15 fl oz	7.0 d	3.2 b	5.9 b	32.5 ab	36.0 de	4,066 de
Echo + Eminent day	(1.0 pt) (7.2 fl oz)	8.5 bcd	3.4 b	3.2 de	33.0 ab	42.5 cd	4,258 cd
Echo + Eminent night	(1.0 pt) (7.2 fl oz)	6.5 d	3.4 b	4.2 c	19.0 cd	26.0 ef	4,041 de
Echo + Muscle day	(1.0 pt) (7.2 fl oz)	7.0 d	3.4 b	3.4 de	27.0 bc	28.5 ef	4,116 de
Echo + Muscle night	(1.0 pt) (7.2 fl oz)	10.5 abcd	3.4 b	4.2 c	12.0 d	19.0 fg	3,875 def

[a] Numbers within a column with different letter(s) are significantly different according to the protected $LSD_{0.05}$.
[b] The fungicide treatments were applied at sprays 3 and 6; sprays 1, 2 and 7 were cover-sprays with chlorothalonil.
[c] The percent TSWV was based on number of hits in a plot.
[d] Leaf spots were assessed using Florida 1-10 intensity scale.
[e] The number of hits per plot was used to calculate the percent stem rot incidence.

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 four replicates.
2. One two-row bed (24 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-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. Belt-pack spray treatments (1-7) were applied on 29 Jun, 13 Jul, 27 Jul, 10 Aug, 24 Aug, 7 Sep and 21 Sep. Spray timings 1.5, 3.5 and 6.5 were applied on 6 Jul, 6 Aug, and 14 Sep, respectively. This test was not cover-sprayed.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, Cotton Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 4 May
4.	Soil Fertility: Soil type:	pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72 Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (1 pt/A) + Dual Magnum (2 pt/A) on 6 May POST: Cadre DF (1.44 oz/A) + nonionic surfactant (1 pt/100 gal H_20) on 13 July
6.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 7 May
7.	Nematicides:	Temik 15G, (10 lb/A) in 16" band on 11 May.
8.	Planting Info:	GA-06G, 7 seed/ft on 13 May
9.	Harvest Dates:	Dug - 28 Sept Picked - 1 Oct

E. Summary: It should be noted that this test was in a very high risk due to the lack of crop rotation and reduced input spray programs would never be recommended in this setting. There were also root knot nematode issues which developed and contributed to the variability in results, especially on GA-06G. There was severe white mold pressure in this test, and the GA-06G had much higher levels than did GA-07W, but yields of the two cultivars were generally similar. All of the treatments had fairly high levels of white mold, especially at the Low Risk levels which had reduced fungicide inputs; Medium and High Risk inputs generally had similar levels of disease. Leaf spot was also severe in this test, and Low Risk programs had consistently more leaf spot. The Evito programs also had higher levels of leaf spot than the other treatments. Yields were generally similar across treatments and risk levels in spite of the disease differences, reinforcing the conservative nature of the Peanut Disease Risk Index values.

RISK INDEX TEST, 2009
LANG FARM, COTTON FIELD

Treatments	App's	Rate/A	White Mold[1] 26-Aug GA-06G	White Mold[1] 28-Sep GA-06G	White Mold[1] 26-Aug GA-07W	White Mold[1] 28-Sep GA-07W	Leaf Spot[2] 2-Sep GA-06G	Leaf Spot[2] 28-Sep GA-06G	Leaf Spot[2] 2-Sep GA-07W	Leaf Spot[2] 28-Sep GA-07W
LOW RISK										
1. Tilt/Bravo	2	2.25 pt	7.5	59.5	1.0	35.5	3.8	6.0	3.4	4.6
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	6.5	36.5	4.0	16.5	2.7	4.0	2.5	3.7
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	6.0	34.0	1.5	19.0	2.2	4.1	2.1	3.8
Abound	3 & 5	18 fl oz								
Bravo W'stik	6 & 7	1.5 pt								
LSD(P<0.5)			4.6	19.4	3.7	14.6	0.5	0.6	0.4	0.6
LOW RISK										
2. Bravo W'stik	2 & 6.5	1.5 pt	7.0	60.0	0.5	28.0	4.6	6.5	4.1	5.2
Evito	3.5 & 5	5.7 oz								
MODERATE RISK										
2. Bravo W'stik	1.5, 4 & 6.5	1.5 pt	6.0	49.5	3.0	27.5	3.6	5.4	3.4	4.6
Evito	3 & 5	5.7 oz								
HIGH RISK										
2. Bravo W'stik	1, 2, 4, 6, & 7	1.5 pt	10.0	45.5	1.0	33.5	2.9	5.1	3.0	4.5
Evito	3 & 5	5.7 oz								
LSD(P<0.5)			10.8	12.5	2.2	17.7	0.4	0.6	0.7	0.6
LOW RISK										
3. Bravo W'stik	2 & 6.5	1.5 pt	9.0	46.0	1.0	25.0	3.8	5.2	3.4	4.5
Provost	3.5 & 5	8.0 oz								
MODERATE RISK										
3. Bravo W'stik	1.5, & 6.5	1.5 pt	3.0	36.5	1.0	17.5	2.9	4.1	2.7	3.8
Provost	3, 4, & 5	8.0 oz								
HIGH RISK										
3. Bravo W'stik	1, 2, & 7	1.5 pt	4.0	45.0	6.5	26.0	2.2	3.0	2.1	2.8
Provost	3 - 6	8.0 oz								
LSD(P<0.5)			8.6	12.0	4.7	9.9	0.4	1.0	0.6	1.0

See Footnotes at End of next Table

RISK INDEX TEST, 2009
LANG FARM, COTTON FIELD

Treatments	App's	Rate/A	TSWV[3] 1-Sep GA-06G	TSWV[3] 1-Sep GA-07W	Yield lb/A GA-06G	Yield lb/A GA-07W
LOW RISK						
1. Tilt/Bravo	2	2.25 pt	17.5	17.0	3543	3274
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	18.0	12.5	3214	3899
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	13.0	15.0	3681	3812
Abound	3 & 5	18 fl oz				
Bravo W'stik	6 & 7	1.5 pt				
LSD(P<0.5)			4.6	14.6	1019	558
LOW RISK						
2. Bravo W'stik	2 & 6.5	1.5 pt	14.0	14.5	3426.7	3478
Evito	3.5 & 5	5.7 oz				
MODERATE RISK						
2. Bravo W'stik	1.5, 4 & 6.5	1.5 pt	17.5	20.5	3175.0	3441
Evito	3 & 5	5.7 oz				
HIGH RISK						
2. Bravo W'stik	1, 2, 4, 6, & 7	1.5 pt	14.5	20.5	3448.5	3703
Evito	3 & 5	5.7 oz				
LSD(P<0.5)			7.1	11.3	1073.3	496
LOW RISK						
3. Bravo W'stik	2 & 6.5	1.5 pt	18.5	15.5	3571.9	3557
Provost	3.5 & 5	8.0 oz				
MODERATE RISK						
3. Bravo W'stik	1.5, & 6.5	1.5 pt	15.0	15.0	3346.9	3899
Provost	3, 4, & 5	8.0 oz				
HIGH RISK						
3. Bravo W'stik	1, 2, & 7	1.5 pt	14.5	14.0	3361.4	3645
Provost	3 - 6	8.0 oz				
LSD(P<0.5)			7.8	7.2	505.9	519

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

[2]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 labeled fungicides for the control of southern stem rot on GA-06G 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. There eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: GA-06G

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays were applied with an 80015E tip at 22 PSI for a volume of 3.7 GPA.

2. Belt-pack spray treatments (1.5-7) were applied on 6 July, 27 July, 10 August, 24 August, 7 Sept, and 21 Sept. Spray 7 was not applied due to proximity to harvest. This test was not cover-sprayed.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, Cotton Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 4 May
4.	Soil Fertility:	pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (1 pt/A) + Dual Magnum (2 pt/A) on 6 May POST: Cadre DF (1.44 oz/A) + nonionic surfactant (1 pt/100 gal H_20) on 13 July
6.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 7 May
7.	Nematicides:	Temik 15G, (10 lb/A) in 16" band on 11 May.
8.	Planting Info:	GA-06G, 7 seed/ft on 13 May
9.	Harvest Dates:	Dug - 28 Sept Picked - 1 Oct

E. SUMMARY: Convoy applied IF improved plant stands but had little effect on stem rot. Severe stem rot developed and plots treated with Artisan or Convoy had greatly improved yields. This trial did develop significant root knot nematode which added variability to all the data and reduced yields.

NICHINO SYSTEMICITY TEST, 2009
LANG FARM, COTTON FIELD

			Plants/ft[1]		Dead Plants/Plot[2]			White Mold[3]		Leaf Spot[4]		TSWV[5]	Yield
Treatments	**App's**	**Rate/A**	**27-May**	**4-Jun**	**27-May**	**4-Jun**	**1-Jul**	**26-Aug**	**28-Sep**	**2-Sep**	**28-Sep**	**1-Sep**	**lb/A**
1. Proline	IF	5.7 fl oz	1.8	2.0	0.0	0.0	0.5	6.5	21.0	2.4	4.5	18.0	4000
Headline	1.5	9.0 fl oz											
Artisan	3 & 5	32.0 fl oz											
Bravo	4, 6, 7	1.5 pt											
2. Convoy	IF	25 fl oz	1.8	2.4	0.0	0.0	0.3	7.5	35.0	3.0	4.9	16.0	3746
Headline	1.5	9.0 fl oz											
Artisan	3 & 5	32.0 fl oz											
Bravo	4, 6, 7	1.5 pt											
3. Convoy	IF	18.0 fl oz	2.2	2.5	0.0	0.0	0.0	7.0	32.0	3.0	5.1	16.5	4414
Headline	1.5	9.0 fl oz											
Artisan	3 & 5	32.0 fl oz											
Bravo	4, 6, 7	1.5 pt											
4. Convoy	IF	12.5 fl oz	2.1	2.4	0.0	0.0	0.5	11.0	32.0	2.9	4.7	14.5	3882
Headline	1.5	9.0 fl oz											
Artisan	3 & 5	32.0 fl oz											
Bravo	4, 6, 7	1.5 pt											
5. Convoy	IF	25 fl oz	.	.	0.0	0.0	0.3	30.5	62.0	3.0	4.1	20.5	2643
Headline	1.5	9.0 fl oz											
Bravo	3 - 7	1.5 pt											
6. Headline	1.5	9.0 fl oz	.	.	0.0	0.0	0.5	6.0	30.0	2.8	4.8	19.0	3359
Artisan	3 & 5	32.0 fl oz											
Bravo	4, 6, 7	1.5 pt											
7. Headline	1.5	9.0 fl oz	1.9	2.0	0.0	0.0	1.0	27.5	70.0	2.7	3.8	18.0	2331
Bravo W'stik	3 - 7	1.5 pt											
8. Non-treated			.	.	0.0	0.3	1.5	31.5	81.0	3.7	7.4	15.5	2265
9. Headline	1.5	9.0 fl oz	.	.	0.0	0.0	0.0	7.5	36.7	2.5	3.3	20.0	3901
Artisan		26 oz											
+ Bravo	3 & 4	1.5 pt											
Topsin M 4.5F		5.0 oz											
+ Bravo	5	1.5 pt											

10. Headline	1.5	9.0 fl oz	.	.	0.0	0.0	1.5	8.5	36.0	2.6	3.1	19.0	4008
Artisan	3, 4 & 5	18 oz											
+ Bravo		1.5 pt											
Topsin M 4.5F		5.0 oz											
+ Bravo	6	1.5 pt											
11. Headline	1.5	9.0 fl oz	.	.	0.0	0.0	0.5	4.5	31.3	2.7	3.8	16.5	3465
Artisan	3 - 6	16 oz											
+ Bravo		16 oz											
Bravo	7	1.5 pt											
LSD (P<0.5)			0.6	0.3	0.0	0.2	1.2	11.3	14.9	0.6	0.6	9.8	1060

[1]Stand count is the number of emerged plants per foot of row on 27 May and 4 Jun.

[2]The number of dead or dying plants per plot (50 row feet) on 27 May, 4 Jun and 1 Jul.

[3 & 5]Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.

[4]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 labeled fungicides for the control of southern stem rot on GA-06G peanut.

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. There are eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: 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. Belt-pack spray treatments (1-7) were applied on 30 June, 14 July, 28 July, 11 August, 25 August, 8 Sept and 22 Sept. Spray 1.5 was on 6 July. This test was not cover-sprayed.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, Cotton Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 5 May
4.	Soil Fertility:	pH - 5.9 P - 76 K - 64 Ca - 762 Mg - 72
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (1 pt/A) + Dual Magnum (2 pt/A) on 6 May POST: Cadre 70 DF, 1.44 oz/A + nonionic surfactant (1 pt/100 gal/H_20) on 13 July.
6.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 3 June
7.	Nematicides:	Temik 15G, (10 lb/A) in 16” band on 3 June.
8.	Planting Info:	Ga-06G, 7 seed/ft on 3 June
9.	Harvest Dates:	Dug - 9 Oct Picked - 20 Oct

E. SUMMARY: Severe leaf spot and stem rot developed, but both were later in the season and not as damaging to yield at the final evaluations would indicate. The disease date gave good separation of treatment efficacy.

SYNGENTA FUNGICIDE TEST I, 2009

LANG FARM, COTTON FIELD

Treatments	App's	Rate/A	Leaf Spot[1] 7-Sep	Leaf Spot[1] 6-Oct	TSWV[2] 2-Sep	White Mold[3] 21-Sep	White Mold[3] 9-Oct	YIELD lb/A
1. Non-treated			5.2	8.5	4.8	4.8	76.4	3078
2. Bravo W'stik Abound	1, 2, 4, 6, 7 3 & 5	1.5 pt 12 fl oz	3.1	4.9	3.6	7.6	34.8	3647
3. Bravo W'stik Abound	1, 2, 4, 6, 7 3 & 5	1.5 pt 15 fl oz	3.2	4.8	7.6	16.0	35.3	3901
4. Bravo W'stik Abound	1, 2, 4, 6, 7 3 & 5	1.5 pt 18 fl oz	3.1	4.8	4.4	9.6	25.0	4102
5. Bravo W'stik Abound + A9898 100SL	1, 2, 4, 6, 7 3 & 5	1.5 pt 12 fl oz 5.5 fl oz	2.9	4.3	6.4	7.2	26.8	3886
6. Bravo W'stik Abound + A9898 100SL	1, 2, 4, 6, 7 3 & 5	1.5 pt 15 fl oz 5.5 fl oz	2.8	3.8	3.2	6.8	29.5	3862
7. Bravo W'stik Abound + A9898 100SL	1, 2, 4, 6, 7 3 & 5	1.5 pt 18 fl oz 5.5 fl oz	2.8	3.9	6.0	9.2	29.2	4298
8. Bravo W'stik A9898 100SL	1, 2, 4, 6, 7 3 & 5	1.5 pt 5.5 fl oz	3.6	5.8	6.8	8.4	45.6	3647
9. Bravo W'stik Bravo W'stik + Convoy	1, 2, 4, 6, 7 3 & 5	1.5 pt 1.5 pt 1.5 pt	4.2	6.5	3.6	6.8	43.2	3706
10. Bravo W'stik Provost	1, 6, 7 2 – 5	1.5 pt 10.7 fl oz	2.3	3.5	8.4	9.6	32.0	4262
11. Bravo W'stik Headline	1, 2, 4, 6, 7 3 & 5	1.5 pt 12 fl oz	2.4	3.4	2.0	12.8	45.6	3752
12. Bravo W'stik	1 – 7	1.5 pt	4.2	6.6	5.6	14.0	71.6	3491

13. Headline	1.5	9.0 fl oz	2.8	5.2	6.4	16.4	44.0	3906
Convoy	3 & 4	21 oz						
+ Bravo		1.5 pt						
Topsin M 4.5F	5	5.0 oz						
+ Bravo		1.5 pt						
14. Headline	1.5	9.0 fl oz	3.0	5.0	7.2	11.2	33.6	4002
Convoy	3, 4, 5	15 oz						
+ Bravo		1.5 pt						
Topsin M 4.5F	6	5.0 oz						
+ Bravo		1.5 pt						
15. Headline	1.5	9.0 fl oz	2.8	5.4	6.0	7.6	32.4	4100
Convoy	3 – 6	13 oz						
+ Bravo		1.5 pt						
Bravo	7	1.5 pt						
16. Headline	1.5	9.0 fl oz	2.6	5.1	7.2	7.6	31.0	4334
Moncut 70W	3 – 6	0.43 lb						
+ Bravo		1.5 pt						
Bravo	7	1.5 pt						
17. Bravo W'stik	1, 2, 7	1.5 pt	3.3	5.0	6.0	14.4	50.4	3711
Topguard	3 – 6	10.0 fl oz						
18. Bravo W'stik	1, 2, 7	1.5 pt	3.1	5.0	6.0	11.2	48.7	3746
Topguard	3 – 6	14.0 fl oz						
LSD (P<0.5)			0.6	0.6	4.6	6.8	16.5	696

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

[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, 2009
Lang/Rigdon Farms, Tifton, GA

Rainfall					
Date	**May**	**Jun**	**Jul**	**Aug**	**Sep**
1				1.2	
2				0.9	
3				0.2	
4	0.2	0.4	0.4		
5	1.1	0.8			
6			0.4		
7		0.4	0.4		
8			0.6		
9			0.8		
12				0.5	
13		1.7			
14	0.1		0.8		
16	0.8			2.2	
17			0.9	0.1	0.1
18	0.1				
20				1.1	0.3
21	0.7			3.1	
22	0.6				
23	0.6				
24	0.5				
25	0.3			0.3	
26	0.4				0.9
27	5.8				
28			0.3	0.3	
30				0.7	
31			5.3	0.5	
Total	11.2	3.3	9.9	11.1	1.3

Irrigation Date	May	Jun	Jul	Aug	Sep
2			0.7		
3		0.5			
10				0.7	
14					0.5
15	0.5	0.6			
18					1.1
19		0.5			
23		1.1	0.5		
24		0.8			
25		0.9			
29		0.7			
30			0.5		
Total	0.5	5.1	1.7	0.7	1.6
Rain + Irrig.	11.7	8.4	11.6	11.8	2.9

EVALUATION OF VARIOUS FUNGICIDES APPLIED IN FURROW FOR DISEASE CONTROL ON GA-03L PEANUTS

A. PURPOSE: To evaluate the comparative efficacy of in furrow fungicides against foliar and soil borne diseases of 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: GA-03L

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays were applied with an 80015E tip at 22 PSI for a total volume of 3.7 GPA.

2. This test was cover-sprayed by tractor with chlorothalonil on a 2-week schedule except for the first 2 sprays which were intentionally omitted..

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, Woods Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 28 April
4.	Soil Fertility: Soil type:	pH - 6.4 P - 64 K - 26 Ca - 324 Mg - 65 Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (1 pt/A) + Dual Magnum (2 pt/A) on 30 April. POST: Cadre 70 DF, 1.44 oz/A + crop oil (1 qt/A) on 8 July
6.	Insecticides:	Lannate LV (2.5 pt/A) on 28 August.
7.	Nematicides:	Temik 15G, (10 lb/A) in 16” band on 11 May.
8.	Planting Info:	Ga-03L, 7 seed/ft on 13 May
9.	Harvest Dates:	Dug - 21 Sep Picked - 25 Sep

E. SUMMARY: In furrow treatments did not affect plant stands but had some affect on both leaf spot and white mold at harvest. One treatment also increased pod yield.

IN FURROW SYSTEMICITY TESTS, 2009
BLACKSHANK FARM, WOODS FIELD

Treatments	App's	Rate/A	Plants/ft[1]		Dead Plants/Plot[2]		White Mold[3]		TSWV[4]	Leaf Spot[5]	Yield
			27-May	3-Jun	27-May	3-Jun	28-Aug	21-Sep	21-Aug	18-Sep	lb/A
1. Proline 480SC	IF	5.7 fl oz	2.7	2.9	0.0	0.0	20.6	36.4	23.4	4.2	2245
2. Abound	IF	6.0 fl oz	2.7	2.9	0.0	0.4	29.8	40.0	23.0	4.7	2181
3. LEM 17	IF	24.0 fl oz	2.9	3.0	0.0	0.2	23.0	34.0	20.8	4.8	2556
4. Nontreated			2.8	3.0	0.0	0.2	31.2	43.8	22.8	4.9	2044
LSD (P<0.05)			0.3	0.3	0.0	0.5	8.2	6.4	5.5	0.2	268

[1]Stand count is the number of emerged plants per foot of row on 27 May and 3 June.

[2]The number of dead or dying plants per plot (50 row feet) on 27 May and 3 June.

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

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

EVALUATION OF NIGHT SPRAYS FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

A. PURPOSE: To evaluate night verses day applications of Headline and Bravo for the control of peanut soil borne and foliar diseases.

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-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. Chlorothalonil 720 (1.5 pts/A) was applied by tractor for sprays 1, 2 and 7. Treatments were sprayed by back pack on 30 Jun, 14 Jul, 28 Jul, and 11 Aug.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, Pond Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 28 April
4.	Soil Fertility:	pH – 6.3 P - 58 K - 16 Ca – 358 Mg - 40
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (1 pt/A) + Dual Magnum (2 pt/A) on 30 April. POST: Cadre 70 DF, 1.44 oz/A + crop oil on 8 July
6.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 8 May
7.	Nematicides:	Temik 15G, (10 lb/A) in 16” band on 11 May.
8.	Planting Info:	GA-06G seed/ft on 8 May
9.	Harvest Dates:	Dug - 21 Sep Picked - 24 Sep

E. SUMMARY: Severe leaf spot and stem rot developed. Bravo sprayed at night gave reduced control of leaf spot, but with Headline spray timing did not matter. Night applications of Headline gave better stem rot control and higher yields. Sprayer configuration had some effect on leaf spot control with Bravo, but did not alter other ratings.

Effect of fungicide, spray timing and sprayer nozzle on leaf spot, stem rot, TSWV and peanut yield at Blackshank Farm, 2009.[a]

Fungicide	Spray timing	Spray set up[b]	Rate/A	Pressure	leaf spot[c]	stem rot[d] (%)	stem rot[e] (%)	tswv (%)	Yield (kg/ha)
Bravo	Day	TX-SS6	1.5 pt	40 psi	6.3	31.2	39.2	10.0	2,286
Bravo	Day	11003VS	1.5 pt	30 psi	5.5	27.6	35.2	8.4	2,200
Bravo	Day	AI11003VS	1.5 pt	50 psi	5.6	24.8	33.2	9.2	2,266
Bravo	Night	TX-SS6	1.5 pt	40 psi	7.1	27.4	32.0	8.4	2,220
Bravo	Night	11003VS	1.5 pt	30 psi	6.2	26.6	33.2	11.2	2,493
Bravo	Night	AI11003VS	1.5 pt	50 psi	6.9	21.4	34.4	8.0	2,053
Headline	Day	TX-SS6	9.0 fl oz	40 psi	2.8	21.4	36.8	10.4	2,686
Headline	Day	11003VS	9.0 fl oz	30 psi	2.6	16.8	29.2	12.0	2,833
Headline	Day	AI11003VS	9.0 fl oz	50 psi	2.6	19.2	30.4	8.0	2,613
Headline	Night	TX-SS6	9.0 fl oz	40 psi	2.6	9.0	18.4	13.6	3,233
Headline	Night	11003VS	9.0 fl oz	30 psi	2.6	15.2	23.6	13.2	3,220
Headline	Night	AI11003VS	9.0 fl oz	50 psi	2.2	11.0	17.2	8.0	3,153
		$LSD_{0.05}$			0.7	8.8	10.4	7.1	450

a Sprays 1, 2 and 7 were day coversprays of Bravo applied by tractor while sprays 3 to 6 were applied as indicated in the table. Fungicide treatments were Bravo W'Stik and Headline 2.09EC.
b The spray nozzles were set up to spray at following rates: TX-SS6 (3, 12 in apart) at 20 GPA, 11003VS (2, 18 in apart) at 26 GPA and AI11003VS (2, 18 in apart) at 38 GPA;
c 1- 10 Florida rating scale and disease assessment was one day before digging.
d Stem rot incidence (%) was taken two weeks before digging.
e Stem rot incidence (%) immediately after digging and inverting.

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: Tifguard

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 Jul, 15 Jul, 29 Jul, 12 Aug, 26 Aug, and 9 Sep, and spray 1.5 was applied 8 Jul. This test was not cover-sprayed.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, Pond Field CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 28 April
4.	Soil Fertility:	pH – 6.3 P - 58 K - 16 Ca - 358 Mg - 40
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (1 pt/A) + Dual Magnum (2 pt/A) on 30 April. POST: Cadre 70 DF 1.44 oz/A + crop oil on 8 July
6.	Insecticides:	Lannate LV 2.5 pt/A on 28 Aug
7.	Nematicides:	Temik 15G, (10 lb/A) in 16” band on 11 May.
8.	Planting Info:	Tifguard, 7 seed/ft on 8 May
9.	Harvest Dates:	Dug - 21 Sep Picked - 25 Sep

E. SUMMARY: The sprays were initiated late in this test and severe epidemics developed of both leaf spot and white mold. Treatment differences were observed for both disease control and yield.

MISCELLANEOUS FUNGICIDE TEST IV, 2009

BLACKSHANK, POND FIELD

Treatments	App's	Rate/A	Leaf Spot[1]		White Mold[2]		TSWV [3]	YIELD
			25-Aug	18-Sep	28-Aug	21-Sep	21-Aug	lb/A
1. Echo 720	1 - 7	1.5 pt	4.9	6.8	12.7	34.7	10.0	2197
2. KPX-A2	1 - 7	1.0 qt	4.4	6.1	22.0	32.7	11.3	3059
+ Bravo W'stik		1.5 pt						
3. KPX-A2	1 - 7	2.0 qt	4.9	5.9	18.0	46.0	12.7	2333
+ Bravo W'stik		1.5 pt						
4. Bravo W'stik	1, 2, 7	1.5 pt	3.6	3.8	14.7	31.3	6.7	2769
Headline SC	3 - 6	9.0 fl oz						
5. Bravo W'stik	1, 2, 7	1.5 pt	4.0	4.0	12.7	29.3	5.3	3098
Headline EC	3 - 6	9.0 fl oz						
6. Bravo W'stik	1, 2, 7	1.5 pt	4.8	6.9	13.3	21.3	10.7	2856
Bravo W'stik	3 - 6	12 fl oz						
+ Evito T		6 fl oz						
7. Bravo W'stik	1, 2, 4, 6, 7	1.5 pt	4.5	6.2	6.7	21.3	11.3	3098
Evito T	3 & 5	10 fl oz						
8. Bravo W'stik	1, 2, 4, 6, 7	1.5 pt	5.1	6.5	16.0	27.3	12.0	2594
Evito	3 & 5	5.7 fl oz						
9. Bravo W'stik	1, 2, 7	1.5 pt	4.8	6.9	8.0	20.0	9.3	2856
Folicur 3.6	3 - 6	7.2 fl oz						
10. Bravo W'stik	1, 2, 7	1.5 pt	4.2	5.3	22.7	34.0	10.0	2062
Topguard	3 - 6	10 fl oz						
11. Bravo W'stik	1, 2, 7	1.5 pt	4.4	5.6	8.7	32.0	8.0	2827
Topguard	3 - 6	14 fl oz						
12. Bravo W'stik	1, 2, 7	1.5 pt	4.4	5.3	7.3	15.3	8.0	3427
Provost	3 - 6	8.0 fl oz						
13. Bravo W'stik	1, 2, 7	1.5 pt	4.8	6.2	7.3	18.0	10.0	3417
Topguard	3 - 6	10 fl oz						
+ Convoy		12 fl oz						

14. Echo 720	1.5	1.0 pt	3.8	5.6	4.7	18.0	6.7	3398
+ Eminent 125SL		7.2 oz						
Echo 720	3 - 6	1.0 pt						
+ Muscle 3.6F		7.2 oz						
Echo 720	7	1.5 pt						
15. Echo 720	1.5	1.0 pt	3.5	4.8	5.3	16.0	7.3	3601
+ Eminent 125SL		10.2 oz						
Echo 720	3 - 6	1.0 pt						
+ Muscle 3.6F		7.2 oz						
Echo 720	7	1.5 pt						
16. Echo 720	1.5	1.0 pt	3.7	5.6	4.7	15.3	10.0	3369
+ Eminent 125SL		13.0 oz						
Echo 720	3 - 6	1.0 pt						
+ Muscle 3.6F		7.2 oz						
Echo 720	7	1.5 pt						
17. Headline	1.5	9.0 oz	3.5	4.3	10.7	19.3	10.0	3582
Echo 720	3 - 6	1.0 pt						
+ Muscle 3.6F		7.2 oz						
Echo 720	7	1.5 pt						
LSD(P<0.5)			0.7	0.7	11.5	12.6	6.8	686

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

[2 & 3]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 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. This test was sprayed with Chlorothalonil 720 (1.5 pt/A) on 15 Jul, 13 Aug, and 8 Sept.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 22 April
4.	Soil Fertility: Soil type:	pH – 6.5 P - 29 K - 32 Ca - 431 Mg - 59 Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (1 pt/A) + Dual Magnum (2 pt/A) on 30 April. And Mythel Bromide POST: Cadre 70 DF (1.44 oz/A) + crop oil (1 qt/A) on 8 July.
6.	Insecticides:	Sprayed Butoxone 175 (20 fl oz/A) on 19 Aug.
7.	Nematicides:	Temik 15G, (10 lb/A) in 16” band on 11 May.
8.	Planting Info:	Different varieties, 7 seed/ft on 20 May.
9.	Harvest Dates:	Dug – 19 Oct Picked – 23 Oct

E. SUMMARY: This test is designed to quantify susceptibility of advanced germplasm and cultivars to our major foliar and soil-borne diseases.

	Leaf Spot[1]		Percent[2]	White Mold[3]		Yield
Genotype	30-Sep	13-Oct	Zeroes	No Zeroes	All	lb/A
A100-4	5.9	8.9	0.0	108.5	108.5	2408
A100-32	6.6	9.5	0.0	142.9	142.9	1706
A104-12	4.6	8.0	0.0	60.0	60.0	2977
A152-8	7.1	9.6	0.0	146.7	146.7	1863
C76-16-17	6.0	8.9	0.0	98.5	98.5	1984
C76-16-28	7.1	9.0	4.2	111.3	107.1	2493
C321-2-1	4.6	6.6	4.2	45.8	44.4	2844
C321-2-6	4.6	6.5	4.2	48.7	46.0	3582
C431-1-34	4.9	7.5	0.0	59.2	59.2	2662
C431-1-46	4.6	7.4	0.0	61.5	61.5	2154
C437-2-38	6.3	8.9	0.0	117.1	117.1	2178
C437-3-25	4.9	7.6	4.2	94.2	77.1	2432
C495-1-7	5.3	7.4	0.0	108.8	108.8	1815
C724-19-25	3.8	5.8	8.3	44.7	40.8	3146
UF1	5.2	7.5	0.0	54.4	54.4	3243
UF2	5.5	7.4	0.0	92.7	92.7	1839
UF3	4.9	7.1	0.0	49.6	49.6	3340
UF4	5.1	6.8	4.2	51.6	50.2	3436
UF5	3.4	5.1	4.2	37.0	34.7	3727
UF6	4.5	6.2	16.7	39.1	34.0	3291
UF7	5.1	6.6	8.3	77.3	72.9	2118
UF8	3.5	6.1	12.5	44.5	39.4	3836
UF9	4.1	6.1	29.2	67.2	51.7	3545
SEQ910	4.2	6.2	12.5	50.0	43.8	3812
CRSP963	3.1	4.9	12.5	49.6	44.6	2735
CRSP993	3.8	4.9	16.7	37.8	31.5	2952
CRSP983	2.7	4.8	12.5	37.4	34.2	3461
SEQ702	3.0	5.3	4.2	30.7	28.6	2747
SEQ895	3.4	5.9	12.5	32.3	29.0	3545
SEQ910-2-8-11	3.7	6.3	12.5	32.4	29.0	3557
SEQ911	3.6	6.2	4.2	63.1	59.4	2723
SEQ925	4.2	6.1	41.7	41.2	24.8	3787
SEQ925bP3	3.0	5.5	45.8	24.9	13.8	3872
SEQ963-6	2.8	5.3	8.3	41.6	38.3	3570
SEQ1048-266T	6.3	7.8	0.0	51.0	54.0	2626
SEQ1050-26	4.1	5.3	8.3	54.7	51.5	2916
SEQ1050-52	3.6	5.3	8.3	45.8	42.3	3594
SEQ1050-53	3.9	5.7	0.0	52.5	52.5	2940
SEQ1050-83	4.5	5.8	4.2	49.3	47.1	3122
SEQ1050-111	4.8	5.8	0.0	51.0	51.0	2940
SEQ1050-128	3.8	5.6	16.7	40.3	34.0	3025
27-156	5.4	8.3	0.0	67.7	67.7	2287
YORK	3.3	5.0	45.8	32.4	19.0	4429
Tifquard	3.8	6.4	4.2	37.5	36.1	2747

Georganic	3.2	5.7	16.7	31.6	24.8	3654
GA-07W	4.9	7.0	12.5	36.7	31.9	3110
AP-4	4.8	6.8	0.0	51.7	51.7	3340
Georgia Green	5.6	7.5	0.0	74.4	74.4	2251
Florida Fancy	4.4	5.8	8.3	48.3	44.0	3412
Florida 07	5.1	6.9	4.2	42.5	41.3	3557
GA-08V	5.0	7.5	0.0	59.0	59.0	3098
GA-02C	5.0	6.9	4.2	34.2	33.8	2638
Georgia Greener	5.3	7.4	4.2	56.5	73.5	2311
GA-06G	6.4	8.9	4.2	81.8	78.8	3142
GA-01R	3.9	6.3	4.2	68.2	64.6	3098
GA-052524	4.8	6.9	4.2	30.4	29.6	3691
GA-052527	4.5	6.4	20.8	39.8	32.1	3654
GA-052529	4.7	6.7	12.5	26.3	22.1	4102
LSD (P<0.5)	?	3.2	32.2	61.3	64.4	2385

[1]Florida 1 – 10 scale where 1=no disease and 10=dead plant.
[2]Percent of plants inoculated with S. rolfsii that had no disease.
[3]Average length of white mold “hits” (cm) calculated with and without “0’s’.

EVALUATION OF NIGHT SPRAYS FOR THE CONTROL OF PEANUT SOILBORNE DISEASES UNDER IRRIGATED AND NONIRRIGATED CONDITIONS

A. PURPOSE: To evaluate commonly used peanut fungicides applied at night verses day under irrigated or non-irrigated conditions.

B. EXPERIMENTAL DESIGN:

1. Split-plot design with whole plots being irrigation and sub-plots being fungicide treatments, replicated 5 times.
2. Each plot is a two-row bed (25 x 6 ft) with a 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. Night sprays were applied before daylight while the leaves were still folded. The daytime sprays were applied on the same date after daybreak as usual.

2. Belt-pack spray treatments (3 – 6) were applied on 30 Jun, 14 Jul, 28 Jul, and 11 Aug. All plots were cover sprayed with Tilt/Bravo (1.5 pts/A) on applications 1, 2 and 7.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 28 April
4.	Soil Fertility: Soil type:	pH – 6.3 P - 37 K - 43 Ca - 408 Mg - 59 Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (1 pt/A) + Dual Magnum (2 pt/A) on 30 April. POST: Cadre 70 DF (1.44 oz/A) + crop oil (1 qt/A) on 8 July.
6.	Insecticides:	Temik 15G, (5 lb/A) in furrow on 8 May
7.	Nematicides:	Temik 15 G (9.5 lb/A) in a 16" band on 16 July.
8.	Planting Info:	Georgia Green, 7 seed/ft on 8 May.
9.	Harvest Dates:	Dug – 18 Sept Picked – 23 Sept

E. SUMMARY: Severe leaf spot and stem rot developed and yields were low in all treatments. However, clear differences were evident in disease control with some fungicides comparing night and day application timings. Yields were either similar for the same fungicide between night and day timings, or the night spray was higher in some cases.

Effect of irrigation, spray timing and fungicide on TSWV, leaf spot, stem rot and peanut yield at Blackshank Farm, 2009.[a]

Irrigation[b]	Spray timing[c]	Fungicide[d]	TSWV (%)	Leaf spot[e]	Stem rot two weeks prior to digging (%)	Stem rot at digging (%)	Yield (kg/ha)
No	Day	Bravo	24.0	7.7	47.2	50.0	2,000
No	Night	Bravo	27.6	7.7	47.2	53.2	1,692
No	Day	Provost	24.0	4.5	24.8	28.8	2,408
No	Night	Provost	28.8	4.3	12.0	19.2	2,765
No	Day	Folicur	24.8	7.5	12.8	13.6	2,584
No	Night	Folicur	26.8	7.1	10.8	18.8	2,500
No	Day	Evito	30.4	6.3	28.4	34.4	2,108
No	Night	Evito	29.2	7.1	22.0	28.8	2,158
No	Day	Abound	26.0	6.1	22.4	24.6	2,667
No	Night	Abound	26.8	5.7	13.2	28.4	2,467
No	Day	Artisan	24.8	6.8	20.8	32.0	2,525
No	Night	Artisan	22.8	6.9	9.2	14.0	2,965
No	Day	Headline	21.6	3.6	46.0	47.6	1,643
No	Night	Headline	32.4	2.9	26.0	32.8	2,160
Yes	Day	Bravo	19.2	7.6	45.2	50.8	1,792
Yes	Night	Bravo	24.4	8.0	49.2	52.6	1,775
Yes	Day	Provost	26.8	4.8	18.8	28.0	2,412
Yes	Night	Provost	19.6	4.5	6.4	12.4	2,877
Yes	Day	Folicur	20.8	7.0	16.0	29.2	2,609

Yes	Night	Folicur	20.8	8.0	9.2	20.8	2,659
Yes	Day	Evito	26.8	7.2	26.4	30.4	2,225
Yes	Night	Evito	27.6	7.8	17.6	33.2	2,133
Yes	Day	Abound	29.2	6.4	18.0	25.6	2,375
Yes	Night	Abound	29.2	6.5	13.2	20.0	2,395
Yes	Day	Artisan	30.0	7.1	14.8	30.0	2,242
Yes	Night	Artisan	27.6	7.5	5.6	18.4	2,723
Yes	Day	Headline	19.2	4.2	39.2	41.2	1,825
Yes	Night	Headline	21.6	3.2	20.4	25.6	2,258
	LSD		9.9	1.2	10.7	12.0	395

a All plots were sprayed with Chlorothalonil (1.26 kg a.i./ha, Bravo W'Stik) by tractor on applications 1, 2 and 7. Applications 3 to 6 were fungicide treatments sprayed with a CO_2-pressurized beltpack sprayer using a 2-L bottle and a broadcast boom set up to apply 187 L/ha at 276 kPa traveling 4 km/h. The trial was harvested on 9/17/2009.
b Plots receiving irrigation were sprinkler irrigated to about 1 inch weekly and one day after fungicide applications.
c Fungicide were applied either at early morning (3 a.m. – 5 a.m., when peanut leaves were folded), or on the same day during daylight (10 a.m. – 12 p.m., when peanut leaves were unfolded).
d Plots were sprayed with chlorothalonil (1.26 kg a.i./ha, Bravo W'Stik, 4 applications), prothioconazole + tebuconazole (0.23 kg a.i./ha, Provost, 4 applications), tebuconazole (0.21 kg a.i./ha, Folicur 3.6F, 4 applications), fluoxastrobin (0.17 kg a.i./ha, Evito 4F, 2 applications), azoxystrobin (0.31 kg a.i./ha, Abound 2.08F, 2 applications), flutolanil + propiconazole (0.45 kg a.i./ha, Artisan, 4 applications) or pyraclostrobin (0.21 kg a.i./ha, Headline 2.09 EC, 4 applications).
e Leaf spots, primarily early leaf spot, were assessed one day before digging using Florida 1 – 10 intensity scale, where 1= no disease and 10= plant completely defoliated or dead.

DAILY RAINFALL AND IRRIGATION, 2009
Blackshank Farm, Tifton, Ga

Rainfall

DATE	MAY	JUN	JUL	AUG	SEP
1					0.4
2				2.5	
3				0.2	
4	0.2	0.4			
5	1.3	1.4		0.1	
7			1.5		
8			1.6		
9					0.1
12				0.4	
14			1.5		
15			0.4	2.2	
16	0.8				
17			1.1		0.2
20					0.6
21	0.8			3.2	
23		0.8			
24					0.1
25	1.7			0.2	
26	0.4				0.6
27	0.3				
28			0.2	0.3	
30				0.3	
31				0.5	
Total	0.8	0.9	1.0	1.0	0.3

Irrigation

DATE	MAY	JUN	JUL	AUG	SEP
1			1.0		
9					1.0
10		1.0		0.5	
11				0.5	
14	1.0				
15					1.0
17		1.0			
22			1.0		
25		1.0			
30			1.0		
Total	1.0	3.0	3.0	1.0	2.0
Rain & Irr	1.8	3.9	4.0	2.0	2.3

RESPONSE OF TIFGUARD AND SISTER LINE C74-19-25 TO CBR AND ROOT KNOT NEMATODES WHEN TREATED 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 with 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 populations of *C. parasiticum* and *M. arenaria.*
5. Variety: Tifguard and C74-19-25

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays were applied with an 80015E tip at 22 PSI for a total volume of 3.7 GPA.

2. Belt-pack spray treatments (3-6) were applied on 20 Jul, 3 Aug, 17 Aug, and 31 Aug. All plots were coversprayed with chlorothalonil on a 10-14 day schedule.

D. ADDITIONAL INFORMATION:

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

2. Crop History: Peanut - 2008, Peanut - 2007, Peanut - 2006

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
   POST:

6. Insecticides:

7. Nematicides: Temik 15 G (9.5 lb/A) in a 16" band on 16 July.

8. Planting Info: Tifguard and C74-19-25, 7 seed/ft on 19 May

9. Harvest Dates: Dug – 7 Oct Picked – 21 Oct

E. SUMMARY: Significant CBR and nematode injury both occurred on C724-19-25. Both Vapam and prothioconazole gave some reduction of CBR, but neither affected nematode injury. Tifguard had less damage to CBR and nematodes and yields were similar in treated and untreated plots.

TIFGUARD NEMATODE-CBR TEST, 2009
ATTAPULGUS

Cultivar C274-19-25			Plants/ft[1]		TSWV[2]	White Mold[3]	CBR[4]	% Roots w/CBR[5]	Gall Index[6]	Yield
Treatments	App's	Rate/A	1-Jun	9-Jun						lb/A
1. Proline 480SC Provost 433SC	In furrow 3 - 6	5.7 fl oz 10.3 fl oz	2.9	3.4	15.3	5.0	30.7	5.0	4.9	4012
2. Provost 433SC	3 - 6	10.3 fl oz	3.0	3.5	16.0	7.0	32.0	3.3	4.9	4187
3. Vapam	PP injected	15 GPA	3.3	3.5	13.0	10.3	28.3	0.0	4.3	4206
4. Proline 480SC Provost 433SC + Vapam	In furrow 3 - 6 PP injected	5.7 fl oz 10.3 fl oz 15 GPA	2.5	3.3	14.3	5.7	25.0	1.7	5.1	4206
5. Nontreated			3.3	3.4	16.0	12.0	42.7	6.7	4.5	3557
LSD (P<0.5)			0.5	0.2	3.6	7.6	14.4	5.0	1.8	832

Cultivar Tifguard			Plants/ft[1]		TSWV	White Mold[3]	CBR[4]	% Roots w/CBR[5]	Gall Index[6]	Yield
Treatments	App's	Rate/A	1-Jun	9-Jun						lb/A
1. Proline 480SC Provost 433SC	In furrow 3 - 6	5.7 fl oz 10.3 fl oz	1.9	2.4	19.0	3.0	10.0	0.0	0.6	4980
2. Provost 433SC	3 - 6	10.3 fl oz	2.3	2.8	21.0	6.0	16.7	0.0	0.1	4540
3. Vapam	PP injected	15 GPA	2.2	2.8	14.7	11.7	16.0	1.7	0.2	5034
4. Proline 480SC Provost 433SC + Vapam	In furrow 3 - 6 PP injected	5.7 fl oz 10.3 fl oz 15 GPA	1.7	2.5	18.7	3.3	10.0	0.0	0.1	5208
5. Nontreated			2.2	2.8	22.0	9.3	21.3	6.7	0.1	4932
LSD (P<0.5)			0.4	0.3	5.8	6.2	9.5	5.1	0.4	698

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

[2, 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 selected at random at harvest were plated on PDA for CBR.

[6]Root galling on a 0-10 scale where 0=no galling, 1=1-10%, 2=11-20%, etc.

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 13 Jul, 27 Jul, 13 Aug, and 24 Aug. Night sprays # 8 and # 9 treatments were applied on 14 Jul, 27 Jul, 10 Aug, and 24 Aug. This test will get Bravo every 10-14 days and Bravo + Moncut 70W (1.4 lb/A) at about 60 DAP.

2. In furrow treatments were applied with an 80015E tip at 22 PSI for a total volume of 3.7 GPA.

D. ADDITIONAL INFORMATION:

1.	Location:	Attapulgus Research and Education Center, Attapulgus, GA 31715
2.	Crop History:	Peanut - 2008, Peanut 2007, Peanut - 2006
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 POST:
6.	Insecticides:	
7.	Nematicides:	Temik 15 G (9.5 lb/A) in a 16” band on 16 July
8.	Planting Info:	Tifguard, 7 seed/ft on 19 May
9.	Harvest Dates:	Dug – 7 Oct Picked – 21 Oct

E. SUMMARY: Pressure from CBR was light, but trends in disease control and yield were evident.

FUNGICIDE CBR TEST, 2009
ATTAPULGLUS

Treatments	App's	Rate/A	Plants/ft[1] 1-Jun	Plants/ft[1] 9-Jun	TSWV[2]	White Mold[3]	CBR[4]	Yield lb/A
1. LEM 17 200SC	In Furrow	24.0 fl oz	2.3	2.9	16.5	9.0	6.0	5859
Lem 17 200SC	3 & 5	16.0 fl oz						
2. YT669 2.09SC	In Furrow	18.3 fl oz	2.1	2.8	18.0	3.5	6.5	5590
Lem 17 200SC	3 & 5	24.0 fl oz						
3. Topguard	In Furrow	7.0 fl oz	2.0	2.7	20.5	9.5	13.0	5072
Topguard	3 - 6	14.0 fl oz						
4. Topguard	In Furrow	10.0 fl oz	1.7	2.7	20.5	4.5	9.5	5409
Topguard	3 - 6	14.0 fl oz						
5. Topguard	In Furrow	14.0 fl oz	1.6	2.5	14.5	5.5	7.5	5634
Topguard	3 - 6	14.0 fl oz						
6. Topguard	3 - 6	14.0 fl oz	.	.	16.5	8.0	11.5	5460
7. Proline 480SC	In Furrow	5.7 fl oz	1.9	2.8	18.0	4.0	9.5	5365
Provost 433SC	3 - 6	10.7 fl oz						
8. Provost 480SC	In Furrow	5.7 fl oz	.	.	23.0	3.5	6.0	5605
Provost 433SC	3 - 6 (Night)	8.0 fl oz						
9. Proline 480SC	In Furrow	5.7 fl oz	.	.	17.0	4.5	8.5	5547
Provost 433SC	3 - 6 (Night)	10.7 fl oz						
10. Non-treated			2.5	2.9	18.5	8.5	11.0	4966
LSD (P<0.5)			0.6	0.3	5.8	4.2	7.3	776

[1]Stand Count is the number of emerged plants per foot of row on 1 June and 9 June.

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

ATTAPULGUS RAINFALL, 2009
ATTAPULGUS, GA

Rainfall

DATE	May	Jun	Jul	Aug	Sep	Oct
1				0.4		
2			0.2	0.1		
3		0.1		0.4		
4		0.6				
5		0.8	0.5	0.1		0.4
6		0.1	0.8			0.1
7			0.2			
8			0.3			
9			0.1	0.1		
10						0.2
12					0.4	0.7
13				0.1		
14		0.2			0.1	
15			0.1	0.6		
16					0.7	
17			0.7	0.1	0.2	
18				0.1	0.1	
19			0.1	0.2	0.2	
20	0.1					
21	0.6				0.6	
22	0.6					
23	0.2	0.2				
24	0.1		0.1			
25	0.2					
26	0.9				0.7	
27				0.5		
28	0.1	0.3	0.4	1.4		
29		0.4	1.0			
31			1.0	0.5		
TOTAL	2.8	2.5	5.4	4.4	3.0	1.3

Irrigation

DATE	May	Jun	Jul	Aug	Sep	Oct
1			0.5			
3		0.5				
8					0.5	
11		0.5		0.5		
16		0.5	0.5			
19		0.5				
22		0.5	0.5			
25		0.5				
29					0.5	
TOTAL	0.0	3.0	1.5	0.5	1.0	0.0
Rain & Irr	2.8	5.5	6.9	4.9	4.0	1.3

EVALUATION OF FUNGICIDES FOR CONTROL OF CBR ON AP-3 PEANUT

A. PURPOSE: To evaluate the comparative efficacy of several fungicides with and without Vapam for control of peanut diseases, mainly leaf spot and stem 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 continuous peanut production.
5. Variety: AP-3

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays were applied with an 80015E tip at 22 PSI for a total volume of 3.7 GPA except treatment # 10 which was applied with a #34 orifice at 22 PSI for a total volume of 3.7 GPA.

2. Belt-pack sprays (3-6) were applied on 20 Jul, 3 Aug, 17 Aug, and 31 Aug. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on 1 Jul, 16 Jul, 31 Jul, 14 Aug, and 9 Sep.

D. ADDITIONAL INFORMATION:

1:	Location:	Southwest Georgia Branch Station Plains, GA 31780
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 28 Apr
4.	Soil Fertility: Soil type:	pH - 6.0 P - 102 K - 81 Ca - 527 Mg - 34 Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (2 pt/A) + Dual Magnum (1.5 pt/A) and Strongarm (0.45 oz/A) on 12 May POST:
6.	Insecticides:	
7.	Nematicides:	
8.	Planting Info:	AP-3, 7 seed/ft on 2 June
9.	Harvest Dates:	Dug – 9 Nov Picked – 20 Nov

E. SUMMARY: Very little disease developed on this test, but some differences were seen in plant stands and yields. Due to lack of disease it was not a definitive test for CBR, the primary target.

PLAINS DUPONT CBR TEST, 2009
PLAINS, GA

FUNGICIDE PROGRAM			Plants/ft[1]		TSWV[2]	CBR[3]	Yield
Treatments	**App's**	**Rate/A**	**16-Jun**	**23-Jun**	**13-Oct**	**Harvest**	**lb/A**
1. LEM 17 200SC	In Furrow	24.0 fl oz	3.4	3.8	2.2	1.7	4507
LEM 17 200SC	3 & 5	16.0 fl oz					
2. YT669 2.08Sc	In Furrow	18.3 fl oz	3.5	3.6	3.2	0.6	4542
LEM 17 200SC	3 & 5	24.0 fl oz					
3. Proline 480SC	In Furrow	5.7 fl oz	2.7	3.3	3.3	1.4	4411
Provost 433SC	3 - 6	8.0 fl oz					
4. Non-treated			3.5	3.7	3.8	1.8	4179
LSD (P<0.05)			0.3	0.2	1.0	1.0	335

FUMIGANT PROGRAM

			Plants/ft[1]		TSWV[2]	CBR[3]	Yield
Treatments	**App's**	**Rate/A**	**16-Jun**	**23-Jun**	**13-Oct**	**Harvest**	**lb/A**
Vapam	Pre-plant	10 GPA	3.3	3.6	3.0	1.1	4570
No Vapam			3.3	3.6	3.3	1.6	4249
LSD (P<0.5)			n.s.	n.s.	n.s.	n.s.	237

[1]Stand count is the number of emerged plants per foot of row on 16 June and 23 June.
[2]Percent of row feet of infected based on number of disease loci (up to 12" of linear row) per plot.
[3]Percent of row feet of infected based on number of disease loci (up to 12" of linear row) per plot at digging.

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

A. PURPOSE: To evaluate the comparative effects 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 continuous peanut production.
5. Variety: AP-3

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays were applied with an 80015E tip at 22 PSI for a total volume of 3.7 GPA.

2. Early emergence treatments were applied on 30 June. Belt-pack sprays (3-6) were applied on 20 Jul, 3 Aug, 17 Aug, and 31 Aug. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on 1 Jul, 16 Jul, 31 Jul, 14 Aug, and 9 Sep.

D. ADDITIONAL INFORMATION:

1:	Location:	Southwest Georgia Branch Station, Plains, GA 31780
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 28 April
4.	Soil Fertility: Soil type:	pH -6.2 P - 61 K - 191 Ca - 882 Mg - 202 Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan EC (1 qt/A) + Dual Magnum (1 pt/A) and Strongarm (0.45 oz/A) on 12 May. POST:
6.	Insecticides:	
7.	Nematicides:	
8.	Planting Info:	AP-3, 7 seed/ft on 2 June (70F at 4" deep)
9.	Harvest Dates:	Dug - 9 Nov Picked – 20 Nov

E. SUMMARY: Very little disease developed on this test, but some differences were seen in plant stands and yields. Due to lack of disease it was not a definitive test for CBR, the primary target.

FUNGICIDE CBR TEST, 2009
PLAINS

Treatments	App's	Rate/A	Plants/ft[1] 16-Jun	Plants/ft[1] 23-Jun	TSWV[2] 13-Oct	CBR[3] Harvest	Yield lb/A
1. Topguard	In furrow	7.0 fl oz	3.2	3.7	5.4	1.7	4784
Topguard	3 - 5	14.0 fl oz					
2. Topguard	In furrow	10.0 fl oz	3.1	3.6	4.8	2.0	4554
Topguard	3 - 5	14.0 fl oz					
3. Topguard	In furrow	14.0 fl oz	2.7	3.4	4.3	1.4	4997
Topguard	3 - 6	14.0 fl oz					
4. Topguard	3 - 6	14.0 fl oz			5.4	1.4	4521
5. Proline 480Sc	In furrow	5.7 fl oz	2.7	3.4	4.8	2.0	4852
Provost 433SC	3 - 6	8.0 fl oz					
6. Kphyte	Emerge	128 fl oz			3.4	0.9	4800
Kphyte	3 - 6	4.0 pt					
7. Evito	In Furrow	5.7 fl oz	3.6	3.7	4.8	2.0	4513
Evito	3 & 5	5.7 fl oz					
8. Non-treated			3.6	3.6	5.1	2.0	4449
LSD (P<0.5)			0.4	0.3	n.s.	n.s.	501

[1]Stand count is the number of emerged plants per foot of row on 16 June and 23 June.
[2]Percent of row feet infected based on disease loci (up to 12" of linear row) per plot.
[3]Percent of row feet infected based on disease loci (up to 12" of linear row) per plot at digging.

EVALUATION OF PROLINE AND PROVOST FOR CONTROL OF CYLINDROCLADIUM BLACK ROT

A. PURPOSE: To evaluate the singular and combined effects of in furrow (Proline) and midseason applications of (Provost) for CBR on 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: AP-3

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow sprays were applied with an 80015E tip at 22 PSI for a total volume of 3.7 GPA except treatment # 10 which was applied in furrow with a # 34 orifice at 22 PSI for a total volume of 3.7 GPA.

2. All plots were traveled by tractor and cover sprayed with Bravo every 10 and 14 days and Bravo and Moncut at 60 DAP. Belt-pack sprays (3-6) were applied on 20 Jul, 3 Aug, 17 Aug, and 31 Aug. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on 1 Jul, 16 Jul, 31 Jul, 14 Aug, and 9 Sep.

D. ADDITIONAL INFORMATION:

1:	Location:	Southwest Georgia Branch Station, Plains, Ga 31780
2.	Crop History:	Peanut - 2008, Peanut - 2007, Peanut - 2006
3.	Land Preparation:	Moldboard plowed and marked rows on 28 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) and Strongarm (0.45 oz/A) on 12 May and Proline 480 SC on 2 Jun. POST:
6.	Insecticides:	
7.	Nematicides:	
8.	Planting Info:	AP-3, 7 seed/ft on 2 June (70F at 4" deep)
9.	Harvest Dates:	Dug - 9 Nov Picked - 20 Nov

E. SUMMARY: Very little disease developed on this test, but some differences were seen in plant stands. Due to lack of disease it was not a definitive test for CBR, the primary target.

BAYER IN FURROW CBR TEST, 2009
PLAINS

Treatments	App's	Rate/A	Plants/ft[1] 16-Jun	Plants/ft[1] 23-Jun	TSWV[2]	CBR[3] Harvest	YIELD lb/A
1. Proline 480SC	Early emergence (EE)**	5.7 fl oz	.	.	7.7	2.0	4755
Provost 433SC	3 – 6	8.0 fl oz					
2. Proline 480SC	2 weeks after (EE)**	5.7 fl oz	.	.	6.5	1.4	4659
Provost 433SC	3 – 6	8.0 fl oz					
3. Proline 480SC	4 weeks after (EE)**	5.7 fl oz	.	.	8.5	1.4	4437
Provost 433SC	3 – 6	8.0 fl oz					
4. Proline 480SC	In furrow	5.7 fl oz	3.1	3.7	5.1	2.0	5034
Provost 433SC	3 – 6	8.0 fl oz					
5. Proline 480SC	In furrow	3.8 fl oz	2.3	3.2	10.2	0.9	4691
Provost 433SC	3 – 6	8.0 fl oz					
6. Proline 480SC	In furrow	1.9 fl oz	2.9	3.6	8.2	1.0	5048
Provost 433SC	3 – 6	8.0 fl oz					
7. Proline 480SC	In furrow	5.7 fl oz	.	.	9.4	1.4	5050
Provost 433SC	3 – 6	10.7 fl oz					
8. Provost 433SC	3 – 6	10.7 fl oz	.	.	5.1	1.7	4776
9. Provost 433SC	3 – 6	8.0 fl oz	.	.	7.7	2.0	4610
10. Proline 480SC	In furrow	5.7 fl oz	3.1	3.4	5.1	0.9	4667
Provost 433SC	3 – 6	8.0 fl oz					
11. Non-treated			3.4	3.6	6.0	0.9	4909
LSD(P<0.5)			0.7	0.3	3.3	n.s.	n.s.

[1]Stand count is the number of emerged plants per foot of row on 16 June and 23 June.

[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, 2009
PLAINS, GA

Rainfall

DATE	MAY	JUN	JUL	AUG	SEP
3				0.5	
4		0.3		0.3	
5	0.2	0.5			
6	0.8		0.7	0.6	
7	0.3	1.5	0.0		
8	0.4				
9			0.1		
11				0.1	
12				0.2	
13				0.1	
15		0.1			0.2
16	1.6				
17	0.1			0.7	
18	1.6			1.4	
20	0.1				0.2
21				0.6	
22				0.2	1.0
24	1.2		0.8		
26	0.3				
27	0.9				0.3
28	0.2			2.4	
29		0.6		0.2	
30			0.9		
31				0.5	
Total	7.5	2.8	2.6	7.7	1.7

Irrigation

DATE	MAY	JUN	JUL	AUG	SEP
10					**0.7**
12				**1.0**	
15					**0.7**
23		**0.7**	**1.0**		
29			**1.0**		
Total	0.0	0.7	2.0	1.0	1.4
Rain & Irr	7.5	3.5	4.6	8.7	3.1

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 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 x 40 ft spacing running north and south. This test was applied to Wichita trees only, using every other tree.

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 13 Apr, 27 Apr, 11 May, 25 May, 8 Jun, 22 Jun, 6 Jul, 22 July, 3 Aug, and 17 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: The 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: Severe scab developed due to frequent rains and gave excellent separation of treatments for leaf and nut scab. Ratings of anthracnose were also taken on leaves based on foliar lesions, and a general leaf bronzing was observed that was also rated. The cause of the bronzing is not certain as it was worse in some treatments than others, and it was also present on non-treated trees. The number of nuts per lb is reported as a measure of yield rather than lb/tree which can be quite variable.

PECAN FUNGICIDE TEST, 2009
PONDER FARM, WICHITA (NORTH ORCHARD)

Treatments	App's	Rate/A	Leaf Inc[1] 16-Jul	Nut Inc[2] 16-Jul	Nut Severity[3] 16-Jul	Nut Severity[3] 2-Sep	Nut Severity[3] 30-Sep
1. Absolute 500SC + Induce	5.0 fl oz 0.06% v/v	1 - 10	5.1	50.3	8.4	48.1	40.4
2. Quadris Top 2.71	11 fl oz	1 - 10	0.0	8.3	1.0	12.1	17.9
3. Quadris Top 2.71	14 fl oz	1 - 10	0.0	3.6	1.0	6.5	4.5
4. Inspire Super 338SE	20 fl oz	1 - 10	0.3	2.4	0.4	15.8	12.4
5. A15909 (Brand Q)	21 fl oz	1 - 10	0.3	9.0	0.7	7.5	8.6
6. Vanguard 75WG	3.75 oz	1 - 10	44.4	100.0	33.1	78.5	95.8
7. Super Tin 80WP + Elast 400F	3.75 oz 25.0 fl oz	1 - 10	5.0	26.7	3.6	32.1	22.3
8. Sovran Super Tin 80WP	3.2 oz 7.5 oz	1 - 3 4 - 10	5.4	78.3	8.1	51.1	65.9
9. Sovran Enable	3.2 oz 8.0 oz	1 - 3 4 - 10	14.7	67.5	10.4	78.9	92.9
10. Sovran Elast 400F	3.2 oz 50 fl oz	1 - 3 4 - 10	4.5	23.3	2.9	26.5	30.4
11. Folicur 3.6F + Induce Folicur 3.6F + Induce	6.0 fl z 0.06% v/v 8.0 fl oz 0.06% v/v	1 - 3 4 - 10 	5.6	82.0	15.2	66.7	83.3
12. Topsin XTR Super Tin 80WP + Elast 400F	25 fl oz 3.75 oz 25.0 fl oz	1 - 3 4 - 10 	26.0	74.7	12.2	60.6	67.3
13. BMJ WP	4.2 oz	1 - 10	16.5	91.7	30.6	88.3	96.9
14. Nontreated			30.7	100.0	62.4	98.3	99.7
LSD (P<0.5)			9.7	18.0	6.6	10.3	12.6

(See footnotes on next page)

PECAN FUNGICIDE TEST, 2009
PONDER FARM, WICHITA (NORTH ORCHARD)

Treatments	App's	Rate/A	Leaf Inc. Anthrac.[4] 30-Sep	Leaf Bronze[5] 30-Sep	Nuts/lb	Leaf Retention[6] 18-Nov	% Kernels
1. Absolute 500SC	5.0 fl oz	1 - 10	20.1	57.8	64.2	80.0	54.2
+ Induce	0.06% v/v						
2. Quadris Top 2.71	11 fl oz	1 - 10	11.7	60.0	57**.6**	85.0	57.4
3. Quadris Top 2.71	14 fl oz	1 - 10	10.7	22.3	56.8	88.8	56.3
4. Inspire Super 338SE	20 fl oz	1 - 10	15.0	17.5	59.4	85.0	54.1
5. A15909 (Brand Q)	21 fl oz	1 - 10	8.3	23.8	55.2	88.8	56.8
6. Vanguard 75WG	3.75 oz	1 - 10	26.9	34.6	98.1	83.8	46.0
7. Super Tin 80WP	3.75 oz	1 - 10	12.2	45.2	60.9	88.8	55.3
+ Elast 400F	25.0 fl oz						
8. Sovran	3.2 oz	1 - 3	15.9	44.8	68.1	67.5	54.1
Super Tin 80WP	7.5 oz	4 - 10					
9. Sovran	3.2 oz	1 - 3	16.3	32.3	83.5	88.8	49.6
Enable	8.0 oz	4 - 10					
10. Sovran	3.2 oz	1 - 3	16.0	54.2	59.0	86.3	54.5
Elast 400F	50 fl oz	4 - 10					
11. Folicur 3.6F	6.0 fl z	1 - 3	20.9	63.3	81.0	88.8	50.9
+ Induce	0.06% v/v						
Folicur 3.6F	8.0 fl oz	4 - 10					
+ Induce	0.06% v/v						
12. Topsin XTR	25 fl oz	1 - 3	19.1	56.9	69.1	88.8	54.0
Super Tin 80WP	3.75 oz	4 - 10					
+ Elast 400F	25.0 fl oz						
13. BMJ WP	4.2 oz	1 - 10	14.8	44.0	91.1	76.3	55.2
14. Non-treated			18.8	34.4	88.7	67.5	53.0
LSD (P<0.5)			8.3	14.7	20.2	11.4	3.8

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

[1]Leaf Inc.=leaf scab incidence, based on 6 terminals per tree
(percentage of leaflets on middle leaf with any scab).

[2]Nut Inc=nut scab incidence, based on 6 nut clusters per tree (percentage of nuts with any scab).

[3]Nut Severity=nut scab severity, based on 6 nut clusters per tree
(percentage of shuck area covered with scab).

[4]Leaf Inc. Anthrac.=leaf anthracnose incidence, based on ratings of 6 terminals per tree
(percentage of leaflets on middle leaf with any anthracnose.

[5]Leaf Bronze=leaf bronzing (9/30), based on middle leaf of 6 terminals per tree using a scale of 0 - 100
with100=all leaflets with severe bronzing.

[6]Indicates the percent of leaves that were retained on the tree based on a visual estimate of the entire tree.

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 was applied to Desirable trees only using every other tree.

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 13 Apr, 27 Apr, 11 May, 25 May, 8 Jun, 22 Jun, 6 Jul, 22 July, 3 Aug, and 17 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: SUMMARY: Severe scab developed due to frequent rains and gave excellent separation of treatments for leaf and nut scab. Ratings of anthracnose were also taken on leaves based on foliar lesions, and a general leaf bronzing was observed that was also rated. The cause of the bronzing is not certain as it was worse in some treatments than others, but was also present on non-treated trees. The number of nuts per lb and % kernel are reported as a measure of yield rather than lb/tree which can be quite variable.

PECAN FUNGICIDE TEST, 2009
PONDER FARM, DESIRABLE (NORTH ORCHARD)

Treatments	App's	Rate/A	Leaf Inc[1] 16-Jul	Nut Inc[2] 16-Jul	Nut Inc[2] 2-Sep	Nut Severity[3] 16-Jul	Nut Severity[3] 2-Sep	Nut Severity[3] 30-Sep
1. Absolute 500SC	5.0 fl oz	1 - 10	0.0	0.0	4.2	0.0	0.4	1.3
+ Induce	0.06% v/v							
2. Quadris Top 2.71	11 fl oz	1 - 10	0.0	0.0	0.0	0.0	0.0	0.0
3. Quadris Top 2.71	14 fl oz	1 - 10	0.0	0.0	0.0	0.0	0.0	0.1
4. Inspire Super 338SE	20 fl oz	1 - 10	0.0	0.0	2.8	0.0	0.4	0.9
5. A15909 (Brand Q)	21 fl oz	1 - 10	0.0	0.0	0.0	0.0	0.0	0.3
6. Vanguard 75WG	3.75 oz	1 - 10	0.0	2.1	95.8	0.2	31.5	24.0
7. Super Tin 80WP	3.75 oz	1 - 10	0.0	0.0	38.9	0.0	5.1	2.9
+ Elast 400F	25.0 fl oz							
8. Sovran	3.2 oz	1 - 3	0.0	0.0	25.0	0.0	1.7	5.4
Super Tin 80WP	7.5 oz	4 - 10						
9. Sovran	3.2 oz	1 - 3	0.0	0.0	77.1	0.0	10.9	10.7
Enable	8.0 oz	4 - 10						
10. Sovran	3.2 oz	1 - 3	0.0	0.0	0.0	0.0	0.0	0.2
Elast 400F	50 fl oz	4 - 10						
11. Folicur 3.6F	6.0 fl z	1 - 3	0.0	2.1	80.9	0.2	10.6	12.3
+ Induce	0.06% v/v							
Folicur 3.6F	8.0 fl oz	4 - 10						
+ Induce	0.06% v/v							
12. Topsin XTR	25 fl oz	1 - 3	0.0	0.0	4.2	0.0	0.4	1.1
Super Tin 80WP	3.75 oz	4 - 10						
+ Elast 400F	25.0 fl oz							
13. BMJ WP	4.2 oz	1 - 10	1.0	0.0	100.0	0.0	36.0	23.7
14. Non-treated			0.6	17.7	100.0	2.3	44.2	62.5
LSD (P<0.5)			0.8	5.7	13.9	0.8	6.3	6.2

See footnotes at bottom of next Table

PECAN FUNGICIDE TEST, 2009
PONDER FARM, DESIRABLE (NORTH ORCHARD)

Treatments	App's	Rate/A	Nut Inc. Anthrac.[4] 30-Sep	Leaf Inc. Anthrac.[5] 30-Sep	Leaf Bronze[6] 30-Sep	Shuck Necrosis[7] 21-Oct	Leaf Ret[8] 18-Nov	Nuts/lb	% Kernel
1. Absolute 500SC	5.0 fl oz	1 - 10	0.0	26.1	35.6	6.3	83.8	44.1	52.4
+ Induce	0.06% v/v								
2. Quadris Top 2.71	11 fl oz	1 - 10	0.0	17.4	0.0	3.0	76.3	43.0	51.1
3. Quadris Top 2.71	14 fl oz	1 - 10	0.0	15.8	0.0	8.8	86.3	42.9	49.6
4. Inspire Super 338SE	20 fl oz	1 - 10	0.0	21.8	0.2	11.3	83.8	44.8	51.5
5. A15909 (Brand Q)	21 fl oz	1 - 10	0.0	16.4	0.2	6.3	88.8	43.6	51.8
6. Vanguard 75WG	3.75 oz	1 - 10	0.0	18.3	24.6	50.0	82.5	51.3	48.6
7. Super Tin 80WP	3.75 oz	1 - 10	0.0	17.7	46.3	13.8	90.0	49.7	49.6
+ Elast 400F	25.0 fl oz								
8. Sovran	3.2 oz	1 - 3	0.0	30.1	49.8	23.8	80.0	45.9	52.2
Super Tin 80WP	7.5 oz	4 - 10							
9. Sovran	3.2 oz	1 - 3	0.0	24.4	36.9	27.5	83.8	47.8	48.5
Enable	8.0 oz	4 - 10							
10. Sovran	3.2 oz	1 - 3	0.0	20.6	29.2	8.8	87.5	43.7	52.2
Elast 400F	50 fl oz	4 - 10							
11. Folicur 3.6F	6.0 fl z	1 - 3	0.0	32.4	55.0	21.3	88.8	50.3	49.9
+ Induce	0.06% v/v								
Folicur 3.6F	8.0 fl oz	4 - 10							
+ Induce	0.06% v/v								
12. Topsin XTR	25 fl oz	1 - 3	0.0	24.9	52.3	8.8	83.8	46.5	51.8
Super Tin 80WP	3.75 oz	4 - 10							
+ Elast 400F	25.0 fl oz								
13. BMJ WP	4.2 oz	1 - 10	0.0	29.0	48.3	50.0	82.5	53.0	48.8
14. Nontreated			0.0	35.3	14.6	71.3	60.0	57.1	47.9
LSD (P<0.5)			0.0	7.9	10.5	14.1	12.8	9.3	4.7

[1]Leaf Inc.=leaf scab incidence, based on 6 terminals per tree (percentage of leaflets on middle leaf with any scab).

[2]Nut Inc.=nut scab incidence, based on 6 nut clusters per tree (percentage of nuts with any scab).

[3]Nut Severity=nut scab severity, based on 6 nut clusters per tree (percentage of shuck area covered with scab).

[4]Nut Inc. Anthrac.=nut anthracnose incidence, based on ratings of 6 nut clusters per tree (percentage of nuts with any lesions).

[5]Leaf Inc. Anthrac.=leaf anthracnose incidence, based on ratings of 6 terminals per tree (percentage of leaflets on middle leaf with any anthracnose.

[6]Leaf Bronze=leaf bronzing (9/30), based on middle leaf of 6 terminals per tree using a scale of 0 - 100 with 100=all leaflets with severe bronzing.

[7]Shuck necrosis was rated prior to harvest. Lesions were plated on Potato Dextrose Agar and the primary fungi isolated were Glomerella and Nut Scab.

[8]Indicates the percent of leaves that were retained on the tree based on a visual estimate of the entire tree.

PECAN FUNGICIDE TEST II (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 six replicates.
2. Each replication consisted of single-tree treatments.
3. The orchard was established in 1988 planted on a 40 x 40 ft spacing running north and south. This test used Desirable trees only.

C. APPLICATION OF TREATMENTS:

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

2. Calendar-based spray treatments (1 - 8) were applied on 13 Apr, 27 Apr, 11 May, 1 Jun, 22 Jun, 13 Jul, 3 Aug, and 24 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: This trial received only 8 sprays total with all sprays applied on approximately a 3-week interval. With the wet weather in 2009 this was not adequate to provide good control with any of the treatments, but relative control among treatments gives a good comparison of activity on scab. The number of nuts per lb is reported as a measure of yield rather than lb/tree which can be quite variable.

PECAN FUNGICIDE TEST II, 2009

PONDER FARM, DESIRABLE, SOUTH ORCHARD

Treatments	App's	Rate/A	Leaf Inc.[1]		Leaf Severity[2]		Nut Inc.[3]	Nut Severity[4]		
			12-May	21-Jul	12-May	21-Jul	21-Jul	21-Jul	3-Sep	8-Oct
1. Sovran	1 - 3	15.4 g	2.1	0.0	0.3	0.0	4.9	0.6	21.0	53.3
Super Tin 80WP	4 - 8	18.0 g								
+ Elast 400F		125.0 ml								
2. Super Tin 80WP	1 - 8	18.0 g	4.9	0.2	0.7	0.1	0.0	0.0	23.5	35.7
+ Elast 400F		125.0 ml								
3. Topsin XTR	1 - 3	125.0 ml	2.8	4.3	0.3	2.2	24.5	3.4	22.6	51.7
Super Tin 80WP	4 - 8	18.0 g								
+ Elast 400F		125.0 ml								
4. Super Tin 80WP	1 - 3	18.0 g	2.0	0.0	0.2	0.0	6.9	1.0	29.0	37.6
+ Elast 400F		125.0 ml								
Topsin XTR	4 - 8	125.0 ml								
5. Super Tin 80WP	1 - 3, 5, 7	18.0 g	1.4	0.0	0.1	0.0	14.5	2.5	24.3	49.4
+ Elast 400F		125.0 ml								
Topsin XTR	4, 6, 8	125.0 ml								
6. Tebuzole 3.6F	1 - 3	30.0 ml	3.6	0.0	0.4	0.0	19.4	1.6	20.7	49.0
+ Induce		36.3 ml								
Super Tin 80WP	4 - 8	18.0 g								
+ Tebuzole 3.6F		125.0 ml								
7. Super Tin 80WP	1 - 3	18.0 g	12.1	0.6	1.5	0.3	19.4	1.9	25.8	46.8
+ Elast 400F		125.0 ml								
Super Tin 80WP	4 - 8	18.0 g								
+ Tebuzole 3.6F		125.0 ml								
8. Eminent 125SL	1 - 3	80.0 ml	7.3	0.9	1.6	0.3	38.2	4.9	41.4	63.3
SA-014031	4 - 8	36.0 g								
9. Eminent 125SL	1 - 3, 5	80.0 ml	7.4	1.3	1.5	0.3	27.1	2.8	28.2	52.8
SA-014031	4, 6 - 8	36.0 g								
10. Topguard 1.04	1 - 8	17.5 fl oz	22.8	6.3	3.1	1.9	90.7	13.7	77.8	93.2
11. Topguard 1.04	1 - 8	35.0 ml	6.3	2.8	0.7	1.3	60.4	11.3	61.0	75.3
12. Topguard 1.04	1 - 8	70.0 ml	5.3	1.0	0.7	0.4	66.7	10.8	56.5	73.8
13. Enable 2F	1 - 8	40.0 ml	5.9	0.6	0.8	0.1	68.5	6.2	55.1	66.8
14. Folicur 3.6F	1 - 3	30.0 ml	23.6	6.6	4.6	2.8	47.2	11.7	54.4	80.6
+ Induce		36.3 ml								
Folicur 3.6F	4 - 8	40.0 ml								
+ Induce		36.3 ml								

15. Sovran + Folicur 3.6F	1 - 8	15.4 g 20.0 ml	7.3	0.0	0.6	0.0	14.8	1.9	31.8	55.7
16. Non-treated			20.9	9.1	4.0	3.4	98.9	22.6	85.1	88.2
LSD (P<0.5)			8.9	3.2	1.6	1.3	15.5	3.5	8.3	10.7

See footnotes at bottom of next Table

PECAN FUNGICIDE TEST II, 2009
PONDER FARM, DESIRABLE, SOUTH ORCHARD

Treatments	App's	Rate/A	Nut Inc. Anthrac.[5] 8-Oct	Leaf Inc. Anthrac.[6] 8-Oct	Leaf Ret[7] 2-Nov	Nuts/lb
1. Sovran Super Tin 80WP + Elast 400F	1 - 3 4 - 8	15.4 g 18.0 g 125.0 ml	0.0	64.3	80.0	52.4
2. Super Tin 80WP + Elast 400F	1 - 8	18.0 g 125.0 ml	1.4	47.8	70.8	53.7
3. Topsin XTR Super Tin 80WP + Elast 400F	1 - 3 4 - 8	125.0 ml 18.0 g 125.0 ml	0.0	70.7	82.5	60.1
4. Super Tin 80WP + Elast 400F Topsin XTR	1 - 3 4 - 8	18.0 g 125.0 ml 125.0 ml	0.0	54.8	72.5	54.4
5. Super Tin 80WP + Elast 400F Topsin XTR	1 - 3, 5, 7 4, 6, 8	18.0 g 125.0 ml 125.0 ml	0.0	52.2	63.3	56.3
6. Tebuzole 3.6F + Induce Super Tin 80WP + Tebuzole 3.6F	1 - 3 4 - 8	30.0 ml 36.3 ml 18.0 g 125.0 ml	0.0	55.7	60.0	65.5
7. Super Tin 80WP + Elast 400F Super Tin 80WP + Tebuzole 3.6F	1 - 3 4 - 8	18.0 g 125.0 ml 18.0 g 125.0 ml	0.0	54.1	75.0	61.5
8. Eminent 125SL SA-014031	1 - 3 4 - 8	80.0 ml 36.0 g	0.0	54.5	69.2	58.3
9. Eminent 125SL SA-014031	1 - 3, 5 4, 6 - 8	80.0 ml 36.0 g	0.0	55.2	56.7	53.6
10. Topguard 1.04	1 - 8	17.5 fl oz	0.0	50.1	41.7	58.1

11. Topguard 1.04	1 - 8	35.0 ml	0.0	56.4	55.0	67.0
12. Topguard 1.04	1 - 8	70.0 ml	0.0	48.4	49.2	56.4
13. Enable 2F	1 - 8	40.0 ml	0.0	49.9	57.5	53.3
14. Folicur 3.6F	1 - 3	30.0 ml	0.0	53.2	55.8	61.2
+ Induce		36.3 ml				
Folicur 3.6F	4 - 8	40.0 ml				
+ Induce		36.3 ml				
15. Sovran	1 - 8	15.4 g	0.0	48.8	48.3	54.1
+ Folicur 3.6F		20.0 ml				
16. Non-treated			0.0	58.9	41.2	68.5
LSD (P<0.5)			1.0	10.6	18.6	14.5

[1]Leaf Inc.=leaf scab incidence, based on 6 terminals per tree (percentage of leaflets on middle leaf with any scab).

[2]Leaf Severity=leaf scab severity, based on 6 terminals per tree (percentage of leaflets covered with scab).

[3]Nut Inc.=nut scab incidence, based on 6 nut clusters per tree (percentage of nuts with any scab).

[4]Nut Severity=nut scab severity, based on 6 nut clusters per tree (percentage of shuck area covered with scab).

[5]Nut Inc. Anthrac.=nut anthracnose incidence, based on ratings of 6 nut clusters per tree (percentage of nuts with any lesions).

[6]Leaf Inc. Anthrac.=leaf anthracnose incidence, based on ratings of 6 terminals per tree (percentage of leaflets on middle leaf with any anthracnose.

[7]Indicates the percent of leaves that were retained on the tree based on a visual estimate of the entire tree.

TRIAZOLE COVER SPRAY TEST ON DESIRABLE PECAN TREES (SOUTH BLOCK)

A. PURPOSE: To evaluate the comparative efficacy of several triazole fungicides against pecan foliar and nut diseases, mainly scab, when applied as cover sprays.

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 and is a solid block of 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 (4 - 8) were applied on 1 Jun, 22 Jun, 13 Jul, 3 Aug and 24 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: Trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 17 Nov.

E. SUMMARY: This test was initiated late and the trees had received no fungicide during the pre-pollination period. With the wet weather disease was severe and no treatments gave strong control of scab, although efficacy differences were observed for both leaf and nut scab.

TRIAZOLE PECAN FUNGICIDE COVER SPRAY TEST, 2009
PONDER FARM, DESIRABLE (SOUTH ORCHARD)

Treatments	App's	Rate/A	Leaf Inc.[1] 21-Jul	Nut Inc.[2] 21-Jul	Nut Inc.[2] 3-Sep	Nut Sev[3] 21-Jul	Nut Sev[3] 3-Sep	Leaf Sev[4] 21-Jul	Leaf Ret[5] 2-Nov
1. Orius 20AQ + Super Tin 4F	4 - 8	12.9 fl oz 8.0 fl oz	2.6	65.6	100.0	11.3	33.8	1.3	31.3
2. Orius 3.6F + Super Tin 4F	4 - 8	6.0 fl oz 8.0 fl oz	0.8	78.1	100.0	11.9	46.0	0.2	27.5
3. Tebuzole 3.6F + Super Tin 4F	4 - 8	6.0 fl oz 8.0 fl oz	12.7	70.8	100.0	11.0	34.8	3.1	18.8
4. Quash 500WG + Super Tin 4F	4 - 8	2.5 oz 8.0 fl oz	4.8	80.2	100.0	9.3	31.7	1.5	30.5
5. Quash 500WG + Elast 400F	4 - 8	2.5 oz 25.0 fl oz	3.2	55.6	100.0	6.9	45.0	0.6	66.3
6. Nontreated			9.1	100.0	100.0	27.2	60.4	4.2	6.8
LSD (P<0.5)			7.2	18.6	n.s.	5.7	10.1	2.5	25.7

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

[1]Leaf Inc.=Leaf scab incidence, based on ratings of 6 terminals per tree.
Incidence is the percentage of middle leaflet area covered with scab.

[2]Nut Inc.=Nut scab incidence, based on ratings of 6 nut clusters per tree.
Incidence is the percentage of nuts with any scab.

[3]Nut Severity=Nut scab severity, based on ratings of 6 nut clusters per tree.
Severity is the percentage of shuck area covered with scab.

[4]Leaf Severity=Leaf severity, based on ratings of 6 terminals per tree.
Severity is the percentage of leaves covered with scab.

[5]Leaf Retention=Leaf retention is based on a visual assessment of the percent retention (0-100) of foliage on whole tree.

DAILY RAINFALL AND IRRIGATION, 2009
PONDER FARM, TY TY, GA

Rainfall

DATE	JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT	NOV	DEC
1				2.8					0.5			
2			1.1	1.6					0.3		0.7	
3				4.3				2.3				2.5
4						0.5						
5					0.3	0.4				0.5		
6				2.0	0.2		0.8	0.1		0.7		
7	0.3						0.8					
8						0.3	0.2					
9				2.7			1.1					
10							0.3		0.3		0.3	
11											1.3	
12	0.5										0.2	
13										0.2		
14										0.3		1.5
15								2.2		0.7		0.9
16		0.6	0.4				0.8			0.9		
17			0.3					0.6				
18					1.0			0.2	0.3			
19		0.4								0.6		
20	0.6						0.3					
21								1.0	1.5			1.8
22					0.8				0.4			
23						0.6					1.3	
24								1.4				
25												1.3
26					2.1							
27			0.5		0.4					0.3		
28					0.1				0.3	0.3		
29	0.4						0.3					
30			5.0				0.3					
31								2.1				
Total	1.8	1.0	7.3	13.3	4.8	1.8	4.7	9.8	3.5	4.3	3.7	8.0