Date: Jan. 12, 2008

Memo to: Industry Cooperators

From: Tim Brenneman

Subject: Field Trial Results

Attached are the results of our 2007 field trials on peanuts and pecans. This year was extremely dry, but we were able to compensate for the most part with adequate irrigation. We also had some very high temperatures. While not as conducive for some diseases as major rain events, the weather was excellent for white mold development, and enough leaf spot was present to get good data. However, due to the drought there was very little pecan scab, the one exception being the test on Wichita which is an ultra-susceptible cultivar. Overall we obtained some good data on both crops and it could have been a lot worse.

I want to acknowledge the hard work of our crew lead by Russ Griffin, Lewis Mullis, and Pat Hilton. Summer workers included Phillip Corbean, Amber Graham, Trevor Cook 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, Dr. Barry Tillman and Dr. Dan Gorbet is much appreciated.

Once again we are making this available primarily as an online document. , and it can be found at www.tifton.uga.edu/tswv/ by clicking on "Publications", and "2007 Field Trial Results on Diseases of Peanuts and Pecans". If you have any problems or any questions feel free to call. We have printed a few bound copies and can send you one upon request, but the entire book is available as a pdf file. Thanks again for your support, and we look forward to cooperating with you again in the future.

TABLE OF CONTENTS
2007 PEANUT TESTS

LANG/RIGDON FARM

BLACKSHANK FARM

ATTAPULGUS

PLAINS

2006 PECAN TESTS
PONDER FARM

EVALUATION OF PEANUT SEED TREATMENTS, TEST I

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with six replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: Georgia Green (78% 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.

2. All plots were traveled by tractor and cover sprayed with Chlorothalonil (1.5 pt/A) on 8 June, 19 June, 2 July, 27 July, 9 August, 22 August, and 28 August. Sprayed Moncut 70 DF (2lb/A) on 10 July and 16 Aug.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 6 May
4.	Soil Fertility:	pH -5.9 P - 63 K - 72 Ca - 409 Mg - 38
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May POST: Cadre (1.44 oz/A) and Surfactant (1qt/100 gal) on 5 July.
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 15 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 15 May
8.	Planting Info:	Georgia Green, 7 seed/ft on 15May (70F at 4" deep)
9.	Harvest Dates:	Dug - 20 Sept Picked - 24 Sept

E. SUMMARY: All treatments significantly increased plant stands dramatically, reduced TSWV incidence, and increased pod yield. Kodiak was less effective than the commercial standards and was weaker on Aspergillus crown rot which caused most of the plant death, but it had pretty good activity under heavy disease pressure. There was a high correlation between stand count and both yield and TSWV incidence (r=0.72, p<0.0001 and r=-0.65, p<0.0001) respectively.

SEED TREATMENT TEST I, 2007
LANG FARM, SOUTH FIELD

Treatments	Rate per 100 lb	Plants/ft[1]			Dead Plants[2]				TSWV[3]	Pod Color[4]	Yield
		25-May	1-Jun	29-Sep	25-May	1-Jun	15-Jun	25-Jun	20-Aug	19-Sep	(lb/A)
1. Nontreated		1.0	1.3	1.2	0.0	2.2	1.3	0.7	57.3	9.0	2860
2. Trilex Optimum	4.0 oz	4.1	4.0	4.1	0.0	0.0	0.0	0.0	24.0	11.3	4654
3. Trilex Star	4.0 oz	4.1	4.0	4.4	0.0	0.0	0.0	0.0	21.7	9.3	4835
4. Dynasty PD	4.0 oz	3.9	3.6	4.2	0.0	0.0	0.3	0.0	17.3	10.7	4939
5. Vitavax PC	4.0 oz	4.2	4.0	4.5	0.0	0.0	0.0	0.5	24.0	11.2	4760
6. Trilex Optimum + Kodiak HB	4.0 oz 3.1 oz	4.0	3.9	4.4	0.0	0.0	0.2	0.0	25.3	10.5	4545
7. Dynasty PD + Kodiak HB	4.0 oz 3.1 oz	3.8	3.6	4.6	0.0	0.0	0.0	0.0	17.3	9.2	4719
8. Kodiak HB	3.1 oz	3.3	3.4	3.5	0.0	1.2	1.8	1.2	32.0	9.3	4218
9. Dynasty PD +Myconate HB	4.0 oz 34.0 oz	3.6	3.6	4.5	0.0	0.0	0.2	0.0	25.7	8.8	4400
10. Dynasty PD +Myconate HB	4.0 oz 68.0 oz	3.9	3.7	4.4	0.0	0.0	0.0	0.0	24.7	9.3	4223
LSD(P<0.5)		0.5	0.5	0.5	n.s.	0.8	0.7	0.8	10.2	n.s.	533

NOTE: This test will be coversprayed with chlorothalonil every 2 weeks.

[1]Stand count is the number of emerged plants per foot of row on 25 May and 1 June and 29 Sep.
[2]The number of dead or dying plants per plot (50 row feet) on 25 May, 1 June, 15 June and 25 June.
[3]Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.
[4]Visual estimate of the percent pods after digging with discolored spots or blotches on the surface of the pods.

EVALUATION OF NIGHT SPRAYS FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. 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 (1 - 7) were applied on 15 Jun, 29 Jun, 13 Jul, 27 Jul, 10 Aug, 24 Aug, and 7 Sep. Night sprays (3 - 6) were applied before day light on 15 Jul, 27 Jul, 10 Aug, and 24 Aug. and day sprays were applied later those same days. This test was NOT cover sprayed with chlorothalonil.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 2 May
4.	Soil Fertility:	pH - 6.0 P - 96 K - 51 Ca - 488 Mg - 34
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May POST: Cadre 70 DG (1.44 oz/A) on 30 Jun
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 11 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 11 May
8.	Planting Info:	Georgia Green 7 seed/ft on 11 May
9.	Harvest Dates:	Dug - 15 Oct Picked - 19 Oct

E: SUMMARY: This test had heavy disease pressure from both leaf spot and stem rot. Night sprays had greatly improved control of stem rot and higher yield than the same sprays applied at day. Leaf spot control was similar between the two.

NIGHT SPRAY TEST II, 2007
LANG FARM, SOUTH FIELD

Treatments	App's	Rate/A	Leaf Spot Rating[1] 95 DAP	109 DAP	123 DAP	Stem Rot Rating[2] 102 DAP	109 DAP	116 DAP	123 DAP	Yield (lb/A)
1. Bravo w/stik	1, 2, 4, 6 & 7	1.5 pt	2.6	2.8	3.1	6.3	15.7	17.7	27.0	3437
Abound 2.08 F	3 & 5	18.3 fl oz								
2. Bravo w/stik	1, 2, 4, 6 & 7	1.5 pt	2.5	2.6	3.0	4.7	8.0	8.0	6.7	5168
Abound 2.08 F	3** & 5**	18.3 fl oz								
3. Bravo w/stik	1 - 7	1.5 pt	2.6	2.7	3.2	1.7	6.0	6.7	8.7	5156
Abound 2.08 F	3** & 5**	18.3 fl oz								
4. Bravo w/stik	1, 2 & 7	1.5 pt	2.8	2.9	3.3	13.0	20.7	21.0	35.3	3783
Folicur 3.6 F	3 - 6	7.2 fl oz								
5. Bravo w/stik	1, 2 & 7	1.5 pt	2.5	2.8	3.4	11.0	15.0	16.3	23.7	4570
Folicur 3.6 F	3**- 6**	7.2 fl oz								
6. Bravo w/stik	1 - 7	1.5 pt	2.5	2.6	2.9	7.7	10.7	12.0	15.3	4856
Folicur 3.6 F	3** - 6**	7.2 fl oz								
7. Bravo w/stik	1 - 7	1.5 pt	2.8	3.1	3.4	32.0	43.7	51.0	61.3	3313
LSD(P<0.05)			0.3	0.4	0.3	11.2	15.2	12.8	16.4	754

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

[2]Percent of stem rot based on the number of disease loci per plot, and DAP=DAYS After Planting..

**indicates that treatments were sprayed at night, or at least before the leaves opened in the morning.

Other treatments (without asterisks) were sprayed during the day as usual on the same day as the night sprays.

EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: 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 6 Jun, 21 Jun, 4 Jul, 17 Jul, 31 Jul, 14 Aug, and 28 Aug. The Headline treatment (1.5) was applied on 12 Jun.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 2 May
4.	Soil Fertility:	pH - 6.2 P - 81 K - 62 Ca - 542 Mg - 40
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May
		POST: Cadre 70 DG (1.44 oz/A) on 3 Jul
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 11 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 11 May
8.	Planting Info:	Ga Green, 7 seed/ft on 11 May
9.	Harvest Dates:	Dug - 20 Sep Picked - 24 Sep

E: SUMMARY: This trial had high disease pressure and high yield potential, thus giving good separation of treatments. All treatments give good leaf spot control (primarily early leaf spot), but some were clearly superior for white mold. Delaying harvest would have separated yields more distinctly, but yield was still highly correlated with white mold ($r=0.68$, $p<0.0001$).

MISCELLANEOUS FUNGICIDE TEST III, 2007

LANG FARM, SOUTH FIELD

Treatments	App's	Rate/A	Leaf Spot[1] 14-Aug	Leaf Spot[1] 14-Sep	White Mold[2] 15-Aug	White Mold[2] 19-Sep	TSWV[3] 20-Aug	Yield (lb/A)
1. Nontreated			3.0	6.8	23.2	48.0	19.2	3084
2. Bravo w'stik	1 - 7	1.5 pt	1.4	2.9	20.8	47.6	23.2	3423
3. Bravo w'stik	1, 2, & 7	1.5 pt	1.6	2.8	16.0	38.0	14.0	3845
Enable 2F	3 - 6	6.0 fl oz						
4. Bravo w'stik	1, 2, & 7	1.5 pt	1.6	2.5	13.6	38.4	16.0	3918
Enable 2F	3 - 6	8.0 fl oz						
5. Bravo w'stik	1, 2, & 7	1.5 pt	1.3	2.9	15.2	48.0	12.8	3618
Topquard 1.04SC	3 - 6	10.0 fl oz						
6. Bravo w'stik	1, 2, & 7	1.5 pt	1.5	2.7	20.0	47.2	22.0	3484
Topguard 1.04SC	3 - 6	14.0 fl oz						
7. Bravo w'stik	1 & 7	1.5 pt	1.4	1.9	16.0	40.4	22.4	3418
V-10116 50WG	2, 4, & 6	1.75 oz						
Headline	3 & 5	9.0 fl oz						
8. Bravo w'stik	1 & 7	1.5 pt	1.3	2.3	13.6	27.2	14.4	3911
V-10116 50WG	2, 4, & 6	2.50 oz						
Headline	3 & 5	9.0 fl oz						
9. Bravo w'stik	1 & 7	1.5 pt	1.3	1.6	10.0	28.0	12.8	3966
V-10116 50WG	2, 4, & 6	4.00 oz						
Headline	3 & 5	9.0 fl oz						
10. Bravo w'stik	1 & 7	1.5 pt	1.2	2.0	7.6	33.6	18.0	3598
Folicur 3.6	2, 4, & 6	7.2 fl oz						
Headline	3 & 5	9.0 fl oz						
11. Bravo w'stik	1 & 7	1.5 pt	1.3	2.1	16.4	40.4	16.8	3496
V-10116 2.0DC	2, 4, & 6	3.50 oz						
Headline	3 & 5	9.0 fl oz						
12. Bravo w'stik	1, 2, 7 7	1.5 pt	1.3	2.3	8.4	26.8	13.6	4051
Provost	3 - 6	8.0 fl oz						
13. Bravo w'stik	1, 2, & 7	1.5 pt	1.3	2.2	17.2	32.4	16.0	3749
Evito 4F	3 & 5	5.7 fl oz						
14. Bravo w'stik	1, 2, 4, 6, & 7	1.5 pt	1.3	2.3	4.0	22.4	18.0	4318
LEM17 200SC	3 & 5	16.8 fl oz						
15. Kphite	1 - 7	3.0 pt	1.3	2.5	16.8	32.4	10.8	3911
+ Bravo w'stik		1.5 pt						
16. Headline	1.5	9.0 fl oz	1.5	2.4	7.2	17.6	11.2	3940
Headline	4	12.0 fl oz						
Provost	3, 5, & 6	8.0 fl oz						
Echo 720	7	1.5 pt						
17. Echo 720	1, 2, 5, 6, & 7	1.5 pt	2.0	2.5	2.8	10.0	14.0	4437
Artisan	3 & 4	32.0 fl oz						
LSD(P<0.5)			0.4	0.7	9.7	17.1	7.9	637

[1]Florida 1 - 10 scale 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.

EVALUATION OF EXPERIMENTAL FUNGICIDES FOR FOLIAR AND SOILBORNE DISEASE CONTROL ON GEORGIA GREEN PEANUT

A. PURPOSE: To evaluate the comparative efficacy of experimental and registered products 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: Georgia Green

C. APPLICATION OF TREATMENTS:

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

2. Belt-pack spray treatments (1-7) were applied on 6 Jun, 21 Jun, 4 Jul, 17 Jul, 31 Jul, 14 Aug, and 28 Aug. This test was not coversprayed with chlorothalonil.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 6 May
4.	Soil Fertility:	pH - 6.0 P - 102 K - 81 Ca - 527 Mg - 34
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May
		POST:
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 15 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 15 May
8.	Planting Info:	Ga Green, 7 seed/ft on 15 May
9.	Harvest Dates:	Dug - 20 Sep Picked - 24 Sep

E: SUMMARY: All tebuconazole treatments reduced white mold and controlled leaf spot (primarily early leaf spot). Even full season tebuconazole sprays gave adequate leaf spot control, and the 20EW formulation was particularly effective.

MANA FUNGICIDE TEST, 2007
LANG FARM, SOUTH FIELD

Treatments	App's	Rate/A	Leaf Spot[1] 14-Aug	Leaf Spot[1] 14-Sep	White Mold[2] 15-Aug	White Mold[2] 18-Sep	TSWV[3] 20-Aug	Yield (lb/A)
1. Folicur 3.6F	**1 - 7**	**7.2 fl oz**	2.3	4.4	9.0	25.7	12.7	4017
2. MANA-TEB 3.6F	**1 - 7**	**7.2 fl oz**	1.8	3.6	5.7	24.0	12.0	4320
3. MANA-TEB 20EW	**1 - 7**	**15.0 fl oz**	1.8	2.9	10.7	26.3	11.0	3988
4. Equus 720	**1, 2 & 7**	**1.5 pt**	2.4	4.2	16.0	37.7	11.7	3841
Folicur 2.6F	**3 - 6**	**7.2 fl oz**						
5. Equus 720	**1, 2 & 7**	**1.5 pt**	2.3	4.3	10.3	36.0	11.3	3809
MANA-TEB 3.6F	**3 - 6**	**7.2 fl oz**						
6. Equus 720	**1, 2 & 7**	**1.5 pt**	2.0	3.2	10.7	26.7	13.7	3895
MANA-TEB 20EW	**3 - 6**	**15.0 fl oz**						
7. Bravo W'stik	**1, 2 & 7**	**1.5 pt**	2.2	4.0	12.7	30.0	9.3	4090
Folicur 3.6F	**3 - 6**	**7.2 fl oz**						
8. Nontreated			4.2	7.8	27.7	49.3	13.0	2662
LSD(P<0.5)			0.5	0.6	7.0	11.3	6.3	503

[1]Florida 1 - 10 scale 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.

EVALUATION OF VARIOUS FUNGICIDE PROGRAMS FOR LOW, MEDIUM OR HIGH RISK OF FUNGAL DISEASES.

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

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

2. Belt-pack spray treatments (1-7) were applied on 6 Jun, 21 Jun, 4 Jul, 17 Jul, 31 Jul, 14 Aug, and 28 Aug. Spray timings 1.5, 3.5, and 6.5 were applied on 12 Jun, 10 Jul, and 20 Aug, respectively.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, South Field, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 6 May
4.	Soil Fertility:	pH - 6.0 P - 102 K - 81 Ca - 527 Mg - 34
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May
		POST:
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 15 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 15 May
8.	Planting Info:	Ga - 03L, 7 seed/ft on 15 May
9.	Harvest Dates:	Dug - 15 Oct Picked - 19 Oct

E: SUMMARY: All programs at all 3 levels of fungicide input provided similar control of diseases and pod yield. The resistance of GA-03L no doubt helped obtain this result, which indicates that relative risk levels are conservative with regard to fungicide input and potential yield loss.

RISK INDEX TEST, 2007
LANG FARM, SOUTH FIELD

LOW RISK

Treatments	App's	Rate/A	Leaf Spot[1] 25-Jul	Leaf Spot[1] 14-Aug	Leaf Spot[1] 14-Sep	White Mold[2] 16-Aug	TSWV[3] 20-Aug	Yield (lb/A)
1. Tilt/Bravo	**2**	**2.25 pt**	2.8	2.1	2.4	4.8	6.0	4066
Bravo W'stik	**3.5 & 5**	**16 fl oz**						
+ Abound		**12 fl oz**						
Bravo W'stik	**6.5**	**1.5 pt**						
2. Bravo W'stik	**2 & 6.5**	**1.5 pt**	2.8	1.9	2.4	6.0	5.6	4141
Provost	**3.5 & 5**	**8.0 oz**						
3. Headline	**2**	**9.0 fl oz**	2.5	2.2	3.0	7.2	8.0	4376
Folicur	**3.5 & 5**	**7.2 fl oz**						
Bravo W'stik	**6.5**	**1.5 pt**						
LSD(P<0.5)			0.2	0.5	0.6	5.4	3.3	n.s.

MODERATE RISK

Treatments	App's	Rate/A	Leaf Spot[1] 25-Jul	Leaf Spot[1] 14-Aug	Leaf Spot[1] 14-Sep	White Mold[2] 16-Aug	TSWV[3] 20-Aug	Yield (lb/A)
1. Tilt/Bravo	**1.5 & 4**	**2.25 pt**	2.4	2.3	2.6	6.4	3.2	4127
Abound	**3 & 5**	**18 fl oz**						
Bravo W'stik	**6.5**	**1.5 pt**						
2. Bravo W'stik	**1.5 & 6.5**	**1.5 pt**	2.4	2.1	2.4	4.0	4.8	4161
Provost	**3, 4, 5**	**8.0 oz**						
3. Headline	**1.5**	**9.0 fl oz**	2.5	2.2	2.6	6.0	5.2	4042
Folicur	**3, 4**	**7.2 fl oz**						
Abound	**5**	**12 fl oz**						
Bravo W'stik	**6.5**	**1.5 pt**						
LSD(P<0.5)			0.2	0.5	1.0	5.9	3.3	n.s.

HIGH RISK

Treatments	App's	Rate/A	Leaf Spot[1] 25-Jul	Leaf Spot[1] 14-Aug	Leaf Spot[1] 14-Sep	White Mold[2] 16-Aug	TSWV[3] 20-Aug	Yield (lb/A)
1. Tilt/Bravo	**1, 2, 4**	**1.5 pt**	2.3	1.8	2.0	4.0	7.6	3918
Abound	**3 & 5**	**18 fl oz**						
Bravo W'stik	**6 & 7**	**1.5 pt**						
2. Bravo W'stik	**1, 2, & 7**	**1.5 pt**	2.0	1.8	2.2	4.8	8.8	4170
Provost	**3 - 6**	**8.0 oz**						
3. Headline	**1.5**	**9.0 fl oz**	2.2	2.0	2.6	6.0	4.0	4278
Folicur	**3, 5**	**7.2 fl oz**						
Abound	**4, 6**	**12 fl oz**						
Bravo W'stik	**7**	**1.5 pt**						
LSD(P<0.5)			0.3	0.4	0.5	5.7	7.2	n.s.

[1]Florida 1 - 10 scale 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, 2007
LANG FARM, SOUTH FIELD, Tifton, GA

Rainfall

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1				1.1		1.3	
2			2.2				0.5
3							0.2
4			0.2				
5			1.6				
6							0.3
7				0.3			
8			0.3				
11				0.1			
12			0.4				
14				1.2			
15	0.5						
18					0.3		0.8
19			0.1				
20							1.5
22						1.5	
23					0.8		
24				0.3			
25					0.3		
29			1.3				
30					0.3		
31		0.3			1.4		
TOTAL	0.5	0.3	6.1	3.0	3.1	2.8	3.3

Irrigation

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
7					0.7		
12				0.7			
14						0.9	
16					0.6		
20					1.1		
22		0.6					
23					0.8		
26			0.6				
TOTAL	0.0	0.6	0.6	0.7	3.2	0.9	0.0
Rain + Irr	0.5	0.9	6.7	3.7	6.3	3.7	3.3

EVALUATION OF EXP-3 FOR FOLIAR AND SOILBORNE DISEASE CONTROL ON TIFRUNNER PEANUT

A. PURPOSE: To evaluate the comparative efficacy of experimental fungicide EXP-3 for control of peanut diseases, mainly leaf spot and stem rot.

B. EXPERIMENTAL DESIGN:

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

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 18 Jun, 2 Jun, 16 Jul, 30 Jul, 13 Aug, 27 Aug, and 10 Sep. This test was not coversprayed with chlorothalonil.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, Cotton Field, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 6 May
4.	Soil Fertility:	pH - 6.0 P - 102 K - 81 Ca - 527 Mg - 34
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May POST: Cadre (1.44 oz/A) + Surfactant (1 qt/100 gal) on 5 Jul.
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 15 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 15 May
8.	Planting Info:	Tifrunner, 7 seed/ft on 15 May
9.	Harvest Dates:	Dug - 15 Oct Picked - 19 Oct

E: SUMMARY: White mold was not severe but damaging levels of early leaf spot developed. The 4 spray Folicur block did well on leaf spot, but did better when combined with EXP-3. The EXP-3 alone was weaker on leaf spot and showed no rate response from 10-15 fl oz. Artisan gave good control of white mold and leaf spot in combinations with Bravo or EXP-3. Yield was correlated with both white mold ($r=-0.77$, $p<0.0001$) and leaf spot ($r=-0.50$, $p<0.0001$).

EXP-3 FUNGICIDE TEST, 2007
LANG FARM, COTTON FIELD

Treatments	App's	Rate/A	Leaf Spot[1] 10-Sep	Leaf Spot[1] 4-Oct	White Mold[2] 5-Sep	White Mold[2] 8-Oct	Yield (lb/A)
1. Bravo W'stik	**1 - 7**	**1.5 pt**	1.1	3.9	4.4	9.8	3284
2. Bravo W'stik	**1, 2, & 7**	**1.5 pt**	1.1	3.8	3.2	8.0	3470
Folicur 3.6F	**3 - 6**	**7.2 fl oz**					
3. Bravo W'stik	**1 2, & 7**	**1.5 pt**	1.0	3.2	6.4	13.0	3215
Folicur 3.6F	**3 - 6**	**7.2 fl oz**					
+ EXP-3		**15 oz**					
4. Bravo W'stik	**1, 2, & 7**	**1.5 pt**	1.0	3.0	0.8	9.2	3441
Folicur 3.6F	**3 - 6**	**7.2 fl oz**					
+ EXP-3		**10 oz**					
5. Bravo W'stik	**1 - 7**	**1.0 pt**	1.1	4.0	10.0	11.8	3226
+ EXP-3		**15 oz**					
6. Bravo W'stik	**1 - 7**	**1.0 pt**	1.0	3.9	2.4	12.8	3042
+EXP-3		**10 oz**					
7. EXP-3	**1 - 7**	**10 fl oz**	1.1	5.6	6.0	10.2	3046
8. EXP-3	**1 - 7**	**15 fl oz**	1.1	5.7	4.8	11.4	2701
9. EXP-3	**1 - 7**	**20 fl oz**	1.0	4.8	4.0	12.8	2908
10. Bravo W'stik	**1, 2, & 7**	**1.5 pt**	1.1	3.6	1.6	8.2	3470
Artisan	**3 - 6**	**1.0 pt**					
+ Bravo W'stik		**1.0 pt**					
11. Bravo W'stik	**1, 2, & 7**	**1.5 pt**	1.0	3.9	1.6	7.2	3606
Artisan	**3 - 6**	**1.0 pt**					
+ EXP-3		**10 oz**					
12. Bravo W'stik	**1, 2, & 7**	**1.5 pt**	1.0	3.9	2.0	6.2	3758
Artisan	**3 - 6**	**1.0 pt**					
+ EXP-3		**15 oz**					
13. Nontreated			2.0	7.3	8.8	16.4	2590
LSD(P<0.5)			0.1	0.6	5.1	4.4	573

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

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

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

A. PURPOSE: To evaluate the comparative efficacy of 3 levels of 3 different fungicide programs on several medium and late maturity cultivars.

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: Various Cultivars

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 18 Jun, 2 Jul, 16 Jul, 30 Jul, 13 Aug, 27 Aug, and 13 Sep. Spray timings 1.5, 3.5, and 6.5 were applied on 25 Jun, 23 Jul, and 3 Sep. This test was not coversprayed with chlorothalonil.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, Cotton Field, CPES Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 6 May
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 (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May POST: Cadre (1.44 oz/A) + Surfactant (1 qt/100 gal) on 5 Jul.
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 15 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 15 May
8.	Planting Info:	Various Cultivars, 7 seed/ft on 15 May
9.	Harvest Dates:	Dug - 15 Oct Picked - 19 Oct

E: SUMMARY: There was no treatment x cultivar interactions, so results are presented accordingly. Reduced input programs primarily had more leaf spot, but yields were very similar across all 3 levels of fungicide inputs. Differences were found between cultivars in yield potential and disease susceptibility, but within maturity groupings they all responded similarly to fungicides.

REDUCED INPUT TEST, 2007
RIGDON FARM, COTTON FIELD

MEDIUM MATURITY

Fungicide Program	App's	Rate/A	Leaf Spot[1] 10-Sep	Leaf Spot[1] 27-Sep	White Mold[2] 5-Sep	White Mold[2] 4-Oct	TSWV[3] 21-Aug	Yield (lb/A)
1. Low Risk								
Tilt/Bravo	**2**	**2.25 pt**	1.1	2.5	1.8	10.3	21.0	3284
Bravo W'stik	**3.5 & 5**	**16 fl oz**						
+ Abound		**12 fl oz**						
Bravo W'stik	**6.5**	**1.5 pt**						
2. Moderate Risk								
Tilt/ Bravo	**1.5**	**2.25 pt**	1.0	2.3	0.4	10.3	23.4	3382
Abound	**3 & 5**	**18 fl oz**						
Tilt/ Bravo	**4**	**1.5 pt**						
Bravo W'stik	**6.5**	**1.5 pt**						
3. High Risk								
Tilt/Bravo	**1, 2 & 4**	**1.5 pt**	1.0	1.3	0.9	8.5	20.5	3375
Abound	**3 & 5**	**18 fl oz**						
Bravo W'stik	**6 & 7**	**1.5 pt**						
LSD(P<0.5)			n.s.	0.5	1.1	n.s.	3.9	n.s.
CULTIVARS								
1. AT-3085A			1.1	2.9	0.3	8.3	22.0	3064
2. AP-3			1.0	1.8	1.2	8.8	24.2	3389
3. GA-03L			1.0	1.4	0.2	11.7	29.3	2913
4. MCCLOUD			1.0	2.0	2.3	9.8	11.0	3990
LSD(P<0.5)			n.s.	0.5	1.3	n.s.	4.5	475

LATE MATURITY

Fungicide Program	App's	Rate/A	Leaf Spot[1] 10-Sep	Leaf Spot[1] 4-Oct	White Mold[2] 5-Sep	White Mold[2] 8-Oct	TSWV[3] 21-Aug	Yield (lb/A)
1. Low Risk								
Tilt/Bravo	**2**	**2.25 pt**	1.1	3.3	3.0	18.0	20.0	3126
Bravo W'stik	**3.5 & 5**	**16 fl oz**						
+ Abound		**12 fl oz**						
Bravo W'stik	**6.5**	**1.5 pt**						
2. Moderate Risk								
Tilt/ Bravo	**1.5**	**2.25 pt**	1.1	2.0	1.5	11.7	19.3	3125
Abound	**3 & 5**	**18 fl oz**						
Tilt/ Bravo	**4**	**1.5 pt**						
Bravo W'stik	**6.5**	**1.5 pt**						
3. High Risk								
Tilt/Bravo	**1, 2 & 4**	**1.5 pt**	1.0	1.7	1.0	10.5	21.7	3131
Abound	**3 & 5**	**18 fl oz**						
Bravo W'stik	**6 & 7**	**1.5 pt**						
LSD(P<0.5)			n.s.	0.4	1.8	5.0	5.8	n.s.
CULTIVARS								
1. YORK			1.0	1.4	0.7	10.2	26.2	2831
2. GA-02C			1.1	3.3	2.3	10.5	17.8	2976
3. FLORIDA 07			1.0	2.2	2.5	19.5	17.0	3574
LSD(P<0.5)			0.4	0.4	1.8	5.0	5.8	441

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

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

EVALUATION OF SEED TREATMENTS FOR PEANUT SEEDLING AND SOILBORNE DISEASE CONTROL, TEST 1I

A. PURPOSE: To evaluate the comparative efficacy of fungicide seed treatments For control of seedling and soil borne peanut diseases.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. One two- row bed (25 x 6 ft) per plot, 36 inch row spacing
3. Eight foot alleyways between blocks
4. Plots were established in an area with a history of continuous peanut production.
5. Variety: Georgia Green (78% 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.

2. All plots were traveled by tractor and cover sprayed with chlorothalonil (1.5 pt/A) on 8 Jun, 2 Jul, 16 Jul, 30 Jul, 9 Aug, 22 Aug, and 5 Sep. Sprayed Moncut 70 DF (2lb/A) on on 10 Jul and 16 Aug.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, Cotton Field, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 9 May
4.	Soil Fertility:	pH - 5.9 P - 63 K - 72 Ca - 409 Mg - 38
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May POST: Cadre 70DG(1.44 oz/A)+Surfactant (1 qt/100 gal) 5 Jul
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 15 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 15 May
8.	Planting Info:	Georgia Green, 7 seed/ft on 15 May (70 F at 4" soil depth)
9.	Harvest Dates:	Dug - 15 Oct Picked - 19 Oct

E. SUMMARY: All treatments increased plant stands, and plant vigor and generally reduced TSWV incidence. Pod yields were relatively low in all treatments due to reduced plant growth in the dry year and very sandy soil, and there were few differences among treatments.

SEED TREATMENT TEST II, 2007
LANG FARM, COTTON FIELD

	Rate per	Plants/ft[1]			Dead plants[2]				TSWV[3]	Vigor[4]	Yield
Treatments	**100 lb**	**29-May**	**4-Jun**	**3-Oct**	**29-May**	**4-Jun**	**15-Jun**	**25-Jun**	**21-Aug**	**25-Jun**	**(lb/A)**
1. Nontreated		1.6	1.8	1.7	0.0	0.0	2.5	0.7	38.0	4.0	2291
2. Trilex Optimum	4.0 oz	2.6	3.1	3.2	0.0	0.0	0.5	0.0	23.0	8.0	2719
3. Trilex Star	4.0 oz	2.8	3.2	3.6	0.0	0.0	2.2	0.0	21.5	7.2	2886
4. Dynasty PD	4.0 oz	2.2	3.1	3.0	0.0	0.0	1.0	0.0	22.0	8.0	2479
5. Vitavax PC	4.0 oz	2.4	3.1	3.0	0.0	0.2	1.5	0.5	23.5	7.8	2599
6. Trilex Optimum + Kodiak HB	4.0 oz 3.1 oz	2.7	3.2	3.2	0.0	0.0	2.2	0.0	24.5	8.0	2454
7. Dynasty PD + Kodiak HB	4.0 oz 3.1 oz	2.4	3.1	3.0	0.0	0.0	0.5	0.0	30.0	7.5	2508
8. Kodiak HB	4.0 oz	2.0	2.7	2.6	0.0	1.0	2.0	1.2	34.5	7.0	1913
9. Dynasty PD + Myconate HB	4.0 oz 34.0 g	2.1	2.8	3.1	0.0	0.0	0.8	0.0	33.5	6.8	2432
10. Dynasty PD + Myconate HB	4.0 oz 68.0 g	2.6	2.9	3.0	0.0	0.0	0.8	0.0	24.5	7.2	2530
LSD(P<0.05)		0.4	0.2	0.6	0.0	0.7	2.5	0.8	11.3	1.0	613

NOTE - This test will be coversprayed with chlorothalonil every 2 weekss and Moncut 70W at 60 DAP.

[1]Stand count is the number of emerged plants per foot of row on May 29 and June 4.
[2]The number of dead or dying plants per plot (50 row feet) on May 29, June 4, June 15 and June 25 with all of the dead plants being A. Niger.
[3]Percent of row feet infected based on number of disease loci (up to 12" linear row) per plot.
[4]Based on a scale of 1 - 10 with 10 being the most vigorous growth.

EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason spray treatments were applied with a CO_2 pressurized belt-pack sprayer using 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 nozzles per row at 40 PSI. The granular treatments were pre-weighed in the lab and applied by hand over the row.

2. Belt-pack spray treatments (2-6) were applied on 2 Jul, 16 Jul, 30 Jul, 13 Aug, and 27 Aug. This test was coversprayed with chlorothalonil (1.5 pt/A) by tractor on 8 Jun, 2 Jul, 16 Jul, 30 Jul, 9 Aug, 22 Aug, and 5 Sep.

D. ADDITIONAL INFORMATION:

1:	Location:	Lang Farm, Cotton Field, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 2 May
4.	Soil Fertility:	pH - 6.2 P - 81 K - 62 Ca - 542 Mg - 40
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May POST: Cadre 70 DG (1.44 oz/A) on 5 Jul
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 15 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 15 May
8.	Planting Info:	Ga Green, 7 seed/ft on 15 May
9.	Harvest Dates:	Dug - 15 Oct Picked - 19 Oct

E: SUMMARY: Although some white mold developed, disease pressure was not high and there were few differences among treatments. Yields were also not high, and only a couple treatments resulted in significant increases. Overall this was not a real definitive test for companion of treatments.

MISCELLANEOUS FUNGICIDE TEST II, 2007
LANG FARM, COTTON FIELD

Treatments	App's	Rate/A	White Mold[1] 4-Sep	White Mold[1] 8-Oct	Yield (lb/A)
1. Nontreated			3.0	17.0	3133
2. Nichino Granule	40 DAP	15 lb	3.0	19.5	3369
3. Nichino Granule	40 Dap	20 lb	2.0	21.0	3027
4. Chlorpyrifos	40 DAP	13 lb	7.0	29.5	2621
5. Moncut 70DF	3 & 5	1.07 lb	3.0	13.5	3390
6. Moncut 70DF	3 - 6	0.42 lb	1.0	10.5	3527
7. Folicur 3.6F	3 - 6	7.2 fl oz	0.0	14.5	3013
8. Artisan 3.6	3 - 6	13 fl oz	3.5	10.5	3383
9. Moncur 70DF	3, 4, & 5	0.36 lb	1.0	17.5	3035
10. Moncut 70DF	2, 3, 4, & 5	0.36 lb	3.5	19.5	2908
11. Moncut 70DF	3 & 5	0.50 lb	2.5	12.0	3420
12. Moncut 70DF	3 & 5	1.07 lb	2.5	11.5	3173
13. Abound 2.08SC Moncut 70DF	3 & 6 4 & 5	18.3 fl oz 0.36 lb	2.0	11.5	3695
14. Provost 433SC	3 - 6	8.0 fl oz	0.5	8.5	3536
LDS(P<0.5)			4.0	10.0	318

NOTE - This test **will** be coversprayed with chlorothalonil.

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

EVALUATION OF INOCULANTS FOR PEANUT SEEDLING HEALTH

A. PURPOSE: To evaluate the effect of peanut seed inoculants provided by Becker Underwood on seedling diseases and overall plant health.

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: Tifrunner

C. APPLICATION OF TREATMENTS:

1. Equipment: Granular inoculant treatments were pre-weighed and applied by hand into the open furrow. Liquid inoculants were applied with a planter-mounted CO_2 pressurized sprayer using one TX-8 nozzle per row delivering 5 GPA at 25 PSI.

2. Inoculant treatments were applied at planting on 15 May. All plots were traveled by tractor and cover sprayed with Bravo & Echo (1.5 pt/A) on 8 Jun, 2 Jul, 16 Jul, 30 Jul, 9 Aug, 22 Aug, and 5 Sep.

D. ADDITIONAL INFORMATION:

1.	Location:	Lang Farm, Cotton Field, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 9 May
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 (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May POST: Cadre 70 DG (1.44 oz/A) + Surfactamt (1 qt/100) 5 Jul.
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 15 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 15 May
8.	Planting Info:	Tifrunner, 7 seed/ft on 15 May
9.	Harvest Dates:	Dug - 15 Oct Picked - 19 Oct

E. SUMMARY: All treatments evaluated gave higher plant densities than the non-treated seed, but overall level of TSWV was low even with the spotty stands in the non-treated plots. Overall yield, were low due to a very sandy soil and dry weather, and no treatments yielded higher than the non-treated check.

BECKER UNDERWOOD INOCULANT TEST, 2007
LANG/RIGDON, COTTON FIELD

Treatments	App's	Rate/A	Plants/ft[1]		Dead Plants[2]			TSWV[3]	White Mold[4]		Yield
			29-May	4-Jun	29-May	4-Jun	18-Jun	21-Aug	5-Sep	8-Oct	(lb/A)
1. BUPN-1	In Furrow	110.9 g	2.7	3.0	0.0	0.0	1.0	14.5	4.5	22.5	2793
2. BUPN-2	In Furrow	23.2 g	2.2	3.0	0.0	0.0	0.5	11.5	4.0	16.5	2846
3. BUPN-1 + Vault	In Furrow	110.9 g 18.7 fl oz	2.1	3.0	0.0	0.0	0.0	14.0	7.0	19.5	2447
4. BUPN-2 + Vault	In Furrow	23.2 g 18.7 fl oz	2.5	3.1	0.0	0.0	0.3	12.0	4.0	23.0	3057
5. Vault	In Furrow	18.7 fl oz	2.6	2.9	0.0	0.0	0.5	12.0	7.0	24.5	2904
6. BUPN-6	In Furrow	18.7 fl oz	2.4	2.7	0.0	0.0	0.5	10.0	1.0	16.5	3035
7. Nontreated			1.9	2.2	0.0	0.0	0.3	14.0	4.5	14.5	2657
LSD(P<0.5)			0.5	0.3	n.s.	n.s.	1.0	n.s.	n.s.	n.s.	522

NOTE - This test **will** be coversprayed with chlorothalonil only.

[1]Stand count is the number of emerged plants per foot of row on 29 May and 4June.
[2]The number of dead or dying plants per plot (50 row feet) on 29 May, 4 June and 18 June.
[3]Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

DAILY RAINFALL AND IRRIGATION, 2007
LANG/RIGDON FARM, COTTON FIELD, Tifton, GA

Rainfall

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1				1.1		1.3	
2			2.2				0.5
3							0.2
4			0.2				
5			1.6				
6							0.3
7				0.3			
8			0.3				
11				0.1			
12			0.4				
14				1.2			
15	0.5						
18					0.3		0.8
19			0.1				
20							1.5
22						1.5	
23					0.8		
24				0.3			
25					0.3		
29			1.3				
30					0.3		
31		0.3			1.4		
TOTAL	0.5	0.3	6.1	3.0	3.1	2.8	3.3

Irrigation

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
7					0.4		
12				0.4			
14						0.9	
16					0.6		
20					1.1		
22		0.6					
23					0.8		
26			0.6				
TOTAL	0.0	0.6	0.6	0.4	2.9	0.9	
Rain + Irr	0.5	0.9	6.7	3.4	6.0	3.7	3.3

EVALUATION OF EXPERIMENTAL FUNGICIDES FROM DUPONT FOR FOLIAR AND SOILBORNE DISEASE CONTROL ON TIFRUNNER PEANUT

A. PURPOSE: To evaluate the comparative efficacy of LEM17 (penthiopyrad) for control of peanut diseases, mainly leaf spot and stem rot.

B. EXPERIMENTAL DESIGN:

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

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 26 Jun, 10 Jul, 12 Jul, 7 Aug, 21 Aug, 4 Sep and 18 Sept.

D. ADDITIONAL INFORMATION:

1: Location: Blackshank Farm, CPES, Tifton, GA 31794

2. Crop History: Peanut - 2006, Peanut - 2005, Peanut - 2004

3. Land Preparation: Moldboard plowed and marked rows on 2 May

4. Soil Fertility: pH - 5.8 P - 89 K - 48 Ca - 450 Mg - 30
Soil type: Tifton loamy sand, 2 - 5 % slope

5. Herbicides: PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May
POST: Cadre 70 DG (1.44 oz/A) on 6 Jul

6. Insecticides: Temik 15G, 4 lb/A in furrow on 16 May

7. Nematicides: Temik 15G, 10 lb/A (12" band) on 16 May

8. Planting Info: Tifrunner 7 seed/ft on 16 May

9. Additional Crop Practices:

A. Gypsum broadcast (1000 lb/A) on 23 Jun

10. Harvest Dates: Dug – 8 Oct Picked - 12 Oct

E: SUMMARY: This trial had heavy pressure for both leaf spot (early) and white mold and treatments separated clearly according to efficacy. However, yield data was confounded by nematode damage which lowered overall yields and added greatly to variability in the data.

DUPONT TEST, 2007
BLACKSHANK FARM, POND FIELD

Treatments	App's	Rate/A	Leaf Spot[1] 13-Aug	Leaf Spot[1] 5-Oct	White Mold[2] 4-Sep	White Mold[2] 8-Oct	Yield[3] (lb/A)
1. LEM 17 200SC	1 - 7	9.6 fl oz	2.3	5.7	1.2	10.0	2675
2. LEM 17 **200EC**	1 - 7	16.8 fl oz	2.1	4.9	1.2	10.4	2614
3. LEM 17 200SC	1 - 7	16.8 fl oz	2.1	3.4	1.6	4.4	3113
4. LEM 17 200SC	1 - 7	24.0 fl oz	2.2	2.9	0.4	3.6	3081
5. Tilt 3.6EC	1 & 2	2 fl oz	2.2	4.2	3.6	18.4	2919
+ Bravo W'stik		1.0 fl oz					
LEM 17 200SC	3 & 5	16.8 fl oz					
Bravo W'stik	4, 6, & 7	1.5 pt					
6. Punch 3.3EC	1 - 7	4.0 fl oz	1.7	2.3	2.4	3.2	3090
+ LEM 17 200SC		16.8 fl oz					
7. Punch 3.3EC	1 & 2	4.0 fl oz	1.9	3.6	2.8	14.8	3209
+ LEM 17 200SC		9.6 fl oz					
LEM 17 200SC	3 & 5	16.8 fl oz					
Bravo W'stik	4, 6, & 7	1.5 pt					
8. Tilt 3.6EC	1 & 2	2 fl oz	2.2	4.7	5.6	27.2	2892
+ Bravo W'stik		1.0 fl oz					
Abound	3 & 5	24.0 fl oz					
Bravo W'stik	4, 6, & 7	1.5 pt					
9. Tilt 3.6EC	1 & 2	2 fl oz	1.9	3.9	1.2	19.6	2852
+ Bravo W'stik		1.0 pt					
LEM 17 200Sc	3 & 5	24.0 fl oz					
Bravo W'stik	4, 6, & 7	1.5 pt					
10. Bravo W'stik	1 - 7	1.5 pt	2.3	4.5	8.0	32.0	2648
11. Nontreated			4.0	8.3	10.0	43.2	2132
LSD(P<0.5)			0.6	0.9	4.7	8.0	636

NOTE - This test will NOT be coversprayed.

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

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

EVALUATION OF CHLORPYRIFOS FOR THE CONTROL OF PEANUT SOILBORNE DISEASES AND INSECTS

A. PURPOSE: To evaluate the comparative efficacy of two formulations of chlorpyrifos for control of peanut soil borne diseases and any secondary effect on insects, plant health, etc.

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with seven replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. 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. Granular treatments were banded over the row with a bicycle-type pushcart applicator.

2. Belt-pack spray treatments (3 & 5) were applied on 18 Jul and 15 Aug. Granular treatments (40 DAP) were applied on 20 Jun. This test was coversprayed with chlorothalonil 8 Jun, 19 Jun, 2 Jul, 16 Jul, 27 Jul, 9 Aug, and 5 Sep.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 2 May
4.	Soil Fertility:	pH - 5.8 P - 89 K - 48 Ca - 450 Mg - 30
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May POST: Cadre 70 DG (1.44 oz/A) on 6 Jul
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 16 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 16 May
8.	Planting Info:	Georgia Green 7 seed/ft on 16 May

9. Additional Crop Practices:

A. Injected Telone II (10gal/A) Broadcast 24 Apr

10. Harvest Dates: Dug – 26 Sept Picked - 1 Oct

E: SUMMARY: Significant white mold developed and was suppressed by both Abound and the Lorsban 15G. The Chlorpyrifos 75WDG did not reduce white mold incidence. Both formulations of Chlorpyrifos reduced the incidence of three corner alfalfa hopper damage on stems. The only significant correlation was between TSWV and 3CAH damage (r=0.84, p<0.0001). Nematode damage contributed to lower and more variable yield data.

CHLORPYRIFOS TEST, 2007
BLACKSHANK FARM

Treatments	App's	Rate/A	White Mold[1] 13-Aug	White Mold[1] 24-Sep	TSWV[2] 21-Aug	3CAH[3] 13-Aug	Yield (lb/A)
1. Abound 2.08F	3 & 5	18.3 fl oz	10.3	19.7	12.3	15.6	2863
2, Abound 2.08F Lorsban 15G	3 & 5 40 DAP	18.3 fl oz 13 lb	7.1	12.9	10.0	7.4	3190
3. Abound 2.08F Chlorpyrifos 75WDG	3 & 5 40 DAP	18.3 fl oz 2.6 lb	9.4	16.6	10.9	8.4	2678
4. Lorsban 15G	40 DAP	13 lb	6.3	18.6	11.1	.	2574
5. Chlorpyrifos 75WDG	40 DAP	2.6 lb	13.4	24.9	8.6	.	2292
6. Nontreated			13.7	27.4	10.9	.	2404
LSD(P<0.5)			5.6	5.9	4.3	5.4	590

NOTE - This test WAS coversprayed with chlorothalonil.

[1 & 2]Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.
[3]Rating of number of feeding sites from 3-corner alfalfa hopper per 2 feet of row on 13 Aug.

EVALUATION OF NIGHT SPRAYS FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with seven replicates.
2. One two-row bed (25 x 6 ft) per plot, 36-inch row spacing.
3. Eight foot alleyways between blocks.
4. Plots were established in an area with a history of continuous peanut production.
5. 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 (1 - 7) were applied on 22 Jun, 6 Jul, 20 Jul, 3 Aug, 17 Aug, 31 Aug, and 14 Sep. Night sprays (3 - 6) were applied on 20 Jul, 3 Aug, 17 Aug, and 31 Aug. This test was NOT coversprayed with chlorothalonil.

D. ADDITIONAL INFORMATION:

1: Location: Blackshank Farm, CPES, Tifton, GA 31794

2. Crop History: Peanut - 2006, Peanut - 2005, Peanut - 2004

3. Land Preparation: Moldboard plowed and marked rows on 2 May

4. Soil Fertility: pH - 6.0 P - 96 K - 51 Ca - 488 Mg - 34
Soil type: Tifton loamy sand, 2 - 5 % slope

5. Herbicides: PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 8 May
POST: Cadre 70 DG (1.44 oz/A) on 16 Jul

6. Insecticides: Temik 15G, 4 lb/A in furrow on 16 May

7. Nematicides: Temik 15G, 10 lb/A (12" band) on 16 May

8. Planting Info: Georgia Green 7 seed/ft on 16 May

9. Additional Crop Practices:
A. Injected Telone II (10gal/A) Broadcast 24 Apr.

10. Harvest Dates: Dug - 26 Sep Picked - 1 Oct

E: SUMMARY: Night sprays of Abound and Folicur provided greatly improved control of white mold and increased yield verses sprays applied during the day. Control of leaf spot was similar with the two timings. This method could greatly help in improving control of white mold with no additional input cost, and needs to be further validated.

NIGHT SPRAY TEST, 2007
BLACKSHANK FARM

Treatments	App's	Rate/A	Leaf Spot Rating[1] 88 DAP	95 DAP	102 DAP	109 DAP	116 DAP	Stem Rot Rating[2] 102 DAP	109 DAP	116 DAP	Diging	Yield (lb/A)
1. Bravo W'stik	**1, 2, 4, 6, & 7**	**1.5 pt**	2.7	2.8	2.8	2.8	3.3	2.7	5.0	13.3	20.3	1058
Abound 2.08F	**3 & 5**	**18.3 fl oz**										
2. Bravo W'stik	**1, 2, 4, 6, & 7**	**1.5 pt**	2.6	2.8	2.8	2.8	3.9	4.3	5.7	4.3	8.0	2455
Abound 2.08F	****3 & 5****	**18.3 fl oz**										
3. Bravo W'stik	**1 - 7**	**1.5 pt**	2.5	2.6	2.6	2.8	3.5	1.0	3.0	4.3	6.3	2417
Abound 2.08F	****3 & 5****	**18.3 fl oz**										
4. Bravo W'stik	**1 2, & 7**	**1.5 pt**	2.7	2.8	2.8	2.9	4.8	2.0	5.0	14.3	18.7	1519
Folicur 3.6F	**3 - 6**	**7.2 fl oz**										
5. Bravo W'stik	**1, 2, & 7**	**1.5 pt**	2.6	2.8	2.9	2.9	5.3	0.3	0.7	1.3	5.3	2417
Folicur 3.6F	****3 - 6****	**7.2 fl oz**										
6. Bravo W'stik	**1 - 7**	**1.5 pt**	2.8	2.8	3.0	3.0	4.0	1.7	2.7	2.0	4.7	2657
Folicur 3.6F	****3 - 6****	**7.2 fl oz**										
7. Bravo W'stik	**1 - 7**	**1.5 pt**	2.9	3.0	3.0	3.0	4.9	24.7	39.7	50.7	57.7	1094
LSD(P<0.5)			0.3	0.3	0.3	0.3	1.0	8.4	10.0	12.1	12.8	478

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

[2]Percent of stem rot based on the number of disease loci per plot, and DAP=DAYS After Planting.

**indicates that treatments were sprayed at night, or at least before the leaves opened in the morning.

Other treatments (without asterisks) were sprayed during the day as usual on the same day as the night sprays.

EVALUATION OF VARIOUS FUNGICIDES FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

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

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 26 Jun, 10 Jul, 24 Jul, 7Aug, 21 Aug, 4 Sep, and 18 Sep. The Headline treatment (1.5) was applied on 26 Jun.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 2 May
4.	Soil Fertility:	pH - 6.2 P - 81 K - 62 Ca - 542 Mg - 40
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (2 pt/A)+Dual Magnum 1.5 pt/A)9 May POST: Cadre 70 DG (1.44 oz/A) on 6 Jul
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 16 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 16 May
8.	Planting Info:	Tifrunner, 7 seed/ft on 16 May
9.	Additional Crop Practices:	
	A.	Injected Telone II (10/A) Broadcast 24 Apr.
10.	Harvest Dates:	Dug -26 Sep Picked -1 Oct

E: SUMMARY: Moderate white mold and leaf spot (early) pressure occurred and there was good separation of treatments. Significant yield differences were found although they were a bit more variable due to non-uniform root knot nematode damage. Leaf spot and white mold were almost equally correlated with yield ($r=-0.33$, $p<0.0001$) and $r=-0.37$, $p<0.0001$, respectively).

MISCELLANEOUS FUNGICIDE TEST, 2007
BLACKSHANK FARM

Treatments	App's	Rate/A	White Mold[1] 30-Aug	White Mold[1] 8-Oct	Leaf Spot[2] 21-Aug	Leaf Spot[2] 5-Oct	Yield (lb/A)
1. Nontreated			7.0	36.7	3.8	7.9	2362
2. Echo 720	1 - 7	1.5 pt	6.0	34.7	2.2	5.5	2979
3. Headline	1.5	9.0 fl oz	0.7	7.0	1.4	3.4	3727
Artisan	3 - 6	13.0 fl oz					
+ Echo 720		1.0 pt					
Echo 720	7	1.5 pt					
4. Echo 720	1, 2, 5, 6, 7	1.5 pt	0.0	12.0	1.8	4.7	3248
Artisan	3 & 4	32.0 fl oz					
5. Echo 720	1, 2, 6, 7	1.5 pt	1.0	15.0	1.9	5.2	3228
Artisan	3, 4, 5	26.0 fl oz					
6. Echo 720	1 & 7	1.5 pt	0.0	6.3	1.7	3.4	3729
Abound	2	12 fl oz					
Artisan	3 - 6	13.0 fl oz					
+ Echo 720		1.0 pt					
7. Echo 720	1, 2, 7	1.5 pt	0.3	12.3	1.6	2.7	3695
Provost	3 - 6	8.0 fl oz					
8. Echo 720	1, 2, 4, 6, 7	1.5 pt	3.3	27.0	1.9	4.9	3383
Evito 4F	3 & 5	5.7 fl oz					
9. Echo 720	1, 2, 7	1.5 pt	1.3	9.3	1.8	4.6	3076
Evito 4F	3 & 5	3.8 fl oz					
Folicur 3.6	4 & 6	7.2 fl oz					
+ Echo 720		1.0 pt					
10. Echo 720	1, 2, 4, 6, 7	1.5 pt	2.0	19.3	1.8	5.2	3168
Evito 4F	3 & 5	3.8 fl oz					
+ Folicur		6.0 fl oz					
11. Echo 720	1, 2, 4, 6, 7	1.5 pt	1.7	17.0	1.8	4.5	3163
Abound 2.08SC	3 & 5	18.3 fl oz					
12. Echo 720	1, 2, 4, 6, 7	1.5 pt	0.7	23.3	1.4	4.6	3132
Abound 2.08SC	3 & 5	12.0 fl oz					
13. Headline	1.5	9.0 fl oz	2.3	13.3	1.8	2.3	3511
Headline	4	12.0 fl oz					
Provost	3, 5, 6	8.0 fl oz					
Echo 720	7	1.5 pt					
14. Echo 720	1, 2, 7	1.5 pt	0.0	14.7	20.8	5.0	3129
NAI-3402	3 - 6	8.5 fl oz					
+ Echo 720		1.5 pt					
LSD(P<0.5)			2.2	8.5	0.6	0.6	613

[1]Florida 1 - 10 scale 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.

EVALUATION OF FUNGICIDE TIMING SPRAYS IN CONJUNCTION WITH IRRIGATION FOR THE CONTROL OF PEANUT SOILBORNE DISEASES

A. PURPOSE: To evaluate the comparative efficacy of Abound and Headline, applied at various times prior to, or immediately following, irrigation for the control of southern stem rot on Tifrunner peanut.

B. EXPERIMENTAL DESIGN:

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

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

D. ADDITIONAL INFORMATION:

1: Location: Blackshank Farm, CPES, Tifton, GA 31794

2. Crop History: Peanut - 2006, Peanut - 2005, Peanut - 2004

3. Land Preparation: Moldboard plowed and marked rows on 2 May

4. Soil Fertility: pH - 6.1 P - 98 K - 55 Ca - 587 Mg - 35
Soil type: Tifton loamy sand, 2 - 5 % slope

5. Herbicides: PPI: Sonalan (2 pt/A) + Dual Magnum (1.5 pt/A) on 9 May
POST: Cadre 70 DG (1.44 oz/A) on 6 Jul

6. Insecticides: Temik 15G, 4 lb/A in furrow on 16 May

7. Nematicides: Temik 15G, 10 lb/A (12" band) on 16 May

8. Planting Info: Tifrunner, 7 seed/ft on 16 May

9. Additional Crop Practices:
A. Injected Telone II (10gal/A) Broadcase 24 Apr.

10. Harvest Dates: Dug - 8 Oct Picked - 12 Oct

E: SUMMARY: All Abound treatments reduced white mold and increased pod yield compared to the non-treated plots, whereas none of the Headline sprays affected disease incidence or yield. There were few effects of irrigation timing on white mold efficacy or yield with either fungicide.

IRRIGATION TIMING TEST, 2007
BLACKSHANK FARM

Treatments	App's	White Mold[1] 6-Sep	White Mold[1] 9-Oct	Yield (lb/A)
A=ABOUND, 18 fl oz	**70 & 100 DAP**			
B1. No Spray		10.0	23.4	2249
B2. 0 hours after irrigation		3.2	14.8	2866
B3. 0 hours before irrigation		2.6	13.4	2766
B4. 6 hours before irrigation		4.6	13.4	2525
B5. 24 hours before irrigation		4.4	14.0	2725
B6. 48 hours before irrigation		4.0	16.6	2645
B7. 72 hours before irrigation		5.2	14.0	2616
LSD(P<0.5)		3.3	3.8	246
H=HEADLINE, 15 fl oz	**70 & 100 DAP**			
B1. No Spray		12.4	25.2	2187
B2. 0 hours after irrigation		8.0	22.0	2346
B3. 0 hours before irrigation		9.2	24.6	2264
B4. 6 hours before irrigation		8.0	24.8	2323
B5. 24 hours before irrigation		10.8	24.4	2120
B6. 48 hours before irrigation		5.8	21.4	2194
B7. 72 hours before irrigation		8.6	24.4	2316
LSD(P<0.5)		n.s.	n.s.	n.s.
Means By Fungicide				
A=ABOUND, 18 fl oz		4.9	15.7	2628
H=HEADLINE, 15 fl oz		9.0	23.8	2250
LSD(P<0.5)		1.7	1.9	107

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

EVALUATION OF MUSCODOR FOR THE CONTROL OF SOILBORNE DISEASES

A. PURPOSE: To evaluate the efficacy of Muscodor for control of soil borne peanut diseases and/or nematodes when used with or without a seed treatment.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Vitavax PC seed treatments were applied to non-treated commercial seed and the Muscodor was applied in a narrow band and incorporated by hand with a hoe just prior to planting.

2. All plots were traveled by tractor and cover sprayed with Bravo (1.5 pt/A) on 19 Jun, 16 Jul, 27 Jul, 9 Aug, 22 Aug, and 5 Sep.

D. ADDITIONAL INFORMATION:

1:	Location:	Blackshank Farm, CPES, Tifton, GA 31794
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 2 May
4.	Soil Fertility:	pH - 6.1 P - 98 K - 55 Ca - 587 Mg - 35
	Soil type:	Tifton loamy sand, 2 - 5 % slope
5.	Herbicides:	PPI: Sonalan (4 pt/A) + Dual Magnum (3 pt/A) on 9 May POST: Cadre 70 DG (1.44 oz/A) on 6 Jul
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 16 May
7.	Nematicides:	Temik 15G, 10 lb/A (12" band) on 16 May
8.	Planting Info:	Ga Green, 7 seed/ft on 7 June
9.	Harvest Dates:	Dug – 26 Sept Picked - 1 Oct

E: SUMMARY: Vitavax PC seed treatment consistently improved plant stands dramatically and increased pod yield. QRD 300 (Muscodor) had no affects on plant stand, plant mortality, or yield.

MUSCODOR TEST, 2007
BLACKSHANK, IRRIGATED/NON FIELD

Treatments	In Furrow	Rate/A	Plants/ft[1]		Dead Plants/Plot[2]			TSWV[3]	Yield
			21-Jun	28-Jun	21-Jun	28-Jun	11-Sep	20-Aug	(lb/A)
1. Nontrt	**QRD 300**	**91 lb**	2.3	1.1	0.6	0.2	4.8	17.6	759
2. Nontrt	**QRD 300**	**45 lb**	1.8	1.0	0.4	0.4	3.4	16.4	461
3. Nontrt	**Nontrt**		1.8	1.1	0.6	0.4	5.0	15.2	439
4. Vitavax PC	**QRD 300**	**91 lb**	2.0	2.8	0.2	0.0	2.6	10.4	1393
5. Vitavax PC	**QRD 300**	**45 lb**	1.6	2.7	0.6	0.2	3.8	12.8	1332
6. Vitavax PC	**Nontrt**		2.2	2.7	0.0	0.2	3.8	12.4	1332
LSD(P<0.5)			1.5	0.3	0.9	0.6	2.2	3.9	532

[1]Stand count is the number of emerged plants per foot of row on 21 June and 28 June.
[2]The number of dead or dying plants per plot (50 row feet) on 21 June, 28 June, and 11 Sep.
[3]Percent of row feet infected based on number of disease loci (up to 12" of linear row) per plot.

DAILY RAINFALL AND IRRGATION, 2007
Blackshank Farm, Tifton, GA

Rainfall

DATE	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1	1.3				2.6			
2				1.8				
3							1.1	0.7
5				1.7				1.1
7								0.1
8				0.1	0.2	1.0		
11						0.5	0.3	
12				0.4	0.2			
14					1.1			
15		0.3						
16	0.2							
19								2.3
20								0.1
21							2.1	
23						0.8	0.7	
24					0.2	0.2		
25					0.1			
27							0.2	
30						1.3		
31			0.1					
TOTAL	1.5	0.3	0.1	4.0	4.4	3.8	4.4	4.3

Irrigation

DATE	MAR	APR	MAY	JUN	JUL	AUG	SEP	OCT
1			1.0					
2						1.0		
6					1.0		1.0	
8						2.0		
13							1.0	
14						2.0		
15						2.0		
16			1.0			1.0		
17							1.0	
20						1.0		
21				1.0			1.0	
23		1.0						
25				1.0				
26					1.0			
27							1.0	
28						1.0		
30			1.0					
TOTAL	0.0	1.0	3.0	2.0	2.0	10.0	5.0	0.0

Rain & Irr	1.5	1.3	3.1	6.0	6.4	13.8	9.4	4.3

EVALUATION OF PROLINE AND PROVOST ON AP-3 PEANUT FOR CONTROL OF CYLINDROCLADIUM BLACK ROT (ATTAPULGUS)

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks and nine 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 a high population of *Cylindrocladium parasiticum*.
5. Variety: AP-3

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow treatments (Proline) were applied with a planter-mounted CO_2 pressurized sprayer using a single TX-8 nozzle per row delivering 7 gallons per acre at 25 PSI. Midseason treatments were applied with a CO_2 pressurized belt-pack sprayer consisting of 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 hollow cone nozzles per row at 40 PSI.

2. In furrow Proline treatments were applied at planting on 30 May. Belt-pack sprays (3-6) were applied on 6 Jul, 20 Jul, 3 Aug, and 17 Aug. All plots were traveled by tractor and coversprayed with Bravo (1.5 pt/A) on 19 Jun, 29 Jun, 12 Jul, 25 Jul, 7 Aug, 20 Aug, 29 Aug, and 13 Sep. Moncut 70W (1.4 lb/A) was tank-mixed with the 12 Jul and 7 Aug. Bravo coverspray for leaf spot control.

D. ADDITIONAL INFORMATION:

1:	Location:	Attapulgus Research and Education Center, Attapulgus, GA 31715
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 10 May
4.	Soil Fertility:	pH - 6.1 P - 86 K - 61 Ca - 530 Mg - 54
	Soil type:	Norfolk loamy sand
5.	Herbicides:	PPI: Prowl (2 pt/A) on 17 May PRE: Dual (1.5 pt/A) + Valor (3 oz/A) on 17 May POST: Cadre (1.44 oz/A) on 13 Jul
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 17 May
7.	Nematicides:	none
8.	Planting Info:	7 seed/ft on 17 May

9. Harvest Dates:

Dug - 27 Sep Picked - 2 Oct

E: SUMMARY: Some CBR developed but it was late in the season and was not severe. There were no differences among treatments in CBR or TSWV incidence, but both were correlated with yield (r=-0.64, p<0.0001 and r=-0.72, p<0.0001, respectively). Some treatments increased yield over the non-treated plots, but disease pressure was not high enough to define differences in efficacy among treatments. In furrow sprays did not affect plant stands or TSWV.

BAYER IN FURROW CBR TEST, 2007

ATTAPULGUS

Treatments	App's	Rate/A	Plants/ft[1] 30-May	Plants/ft[1] 12-Jun	TSWV[2] 29-Aug	CBR Incidence 25-Sep	Yield (lb/A)	% CBR in Taproots
1. Proline 480SC	EE	5.7 fl oz	.	.	18.4	14.7	4847	.
Provost 433SC	3 - 6	8.0 fl oz						
2. Proline 480SC	2 wks aft EE	5.7 fl oz	.	.	22.8	19.8	4501	.
Provost 433SC	3 - 6	8.0 fl oz						
3. Proline 480SC	4 wks aft EE	5.7 fl oz	.	.	18.2	21.6	4345	.
Provost 433SC	3 - 6	8.0 fl oz						
4. Proline 480SC	In Furrow	5.7 fl oz	2.8	3.5	14.4	13.6	4676	.
Provost 433SC	3 - 6	8.0 fl oz						
5. Proline 480SC	In Furrow	3.8 fl oz	2.7	3.6	22.7	11.1	4514	.
Provost 433SC	3 - 6	8.0 fl oz						
6. Proline 480SC	In Furrow	1.9 fl oz	2.7	3.6	16.0	16.4	4808	16.7
Provost 433SC	3 - 6	8.0 fl oz						
7. Proline 480SC	In Furrow	5.7 fl oz	.	.	19.3	16.0	4730	.
Provost 433SC	3 - 6	10.3 fl oz						
8. Provost 433SC	3 - 6	10.3 fl oz	.	.	18.2	16.9	4769	.
9. Provost 433SC	3 - 6	8.0 fl oz			22.5	24.2	4605	25
10. Nontreated			2.8	3.6	23.4	20.8	4054	16.7
LSD(P<0.5)			8.7	8.7	n.s.	n.s.	604	n.s.

[1]Stand count is the number of emerged plants per foot of row on 30 May and 12 June.

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

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

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason treatments were applied with a CO_2 pressurized belt-pack sprayer consisting of 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 hollow cone nozzles per row at 40 PSI. The early emergence treatments were applied with a 40 GPA spray boom using a single 80-10 flat fan nozzle set at an angle to achieve a 4 inch band over the row.

2. Early emergence treatments were applied on 30 May. Belt-pack sprays (3-6) were applied on 13 Jun, 6 Jul, 17 Jul, 20 Jul, 3 Aug, and 17 Aug. All plots were traveled by tractor and coversprayed with Bravo (1.5 pt/A) on 19 Jun, 29 Jun, 12 Jul, 25 Jul, 7 Aug, 20 Aug, 29 Aug, and 13 Sep. Moncut 70W (1.4 lb/A) was tank-mixed with the 12 Jul and 7 Aug Bravo coverspray for leaf spot control.

D. ADDITIONAL INFORMATION:

1:	Location:	Attapulgus Research and Education Center, Attapulgus, GA 31715
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 2 May
4.	Soil Fertility:	pH - 6.1 P - 86 K - 61 Ca - 530 Mg - 54
	Soil type:	Norfolk loamy sand
5.	Herbicides:	PPI: Prowl (2 pt/A) on 22 May
		PRE: Dual (1.5 pt/A) + Valor (3 oz/A) on 17 May
		POST: Cadre (1.44 oz/A) on 13 Jul
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 17 May
7.	Nematicides:	none
8.	Planting Info:	AP-3, 7 seed/ft on 17 May
9.	Harvest Dates:	Dug - 27 Sep Picked - 2 Oct

E: SUMMARY: Some CBR developed late in the season but due to the hot, dry weather it was not severe and did not cause large yield losses. Some treatments reduced CBR incidence, and most treatments increased yield, but this was not a severe test with good separation of treatment efficacy. None of the in furrow treatments ultimately affected plant stands, although a high rate of INC201 did delay initial emergence. Evito (5.7 fl oz) was also evaluated in furrow in adjacent plots and stand counts were 2.7 and 3.4 plants/ft on 30 May and 12 June, respectively.

FUNGICIDE CBR TEST, 2007
ATTAPULGUS

Treatments	App's	Rate/A	Plants/ft[1]		Dead Plants[2]		TSWV[3]	CBR[4]	YIELD
			30-May	12-Jun	30-May	12-Jun	29-Aug	25-Sep	(lb/A)
1. LEM 17 200SC	In Furrow	16.8 fl oz	2.9	3.4	0.0	0.1	19.3	11.7	4758
LEM 17 200SC	3 & 6	16.8 fl oz							
2. LEM 17 200SC	In Furrow	24.0 fl oz	2.8	3.5	0.0	0.0	19.0	16.0	4709
LEM 17 200SC	3 & 6	24.0 fl oz							
3. INC201	In Furrow	7.0 fl oz	2.6	3.4	0.0	0.1	22.3	16.0	4506
INC201	3 & 6	14.0 fl oz							
4. INC201	In Furrow	10.0 fl oz	2.7	3.4	0.0	0.0	13.3	9.7	4642
INC201	3 & 6	14.0 fl oz							
5. INC201	In Furrow	14.0 fl oz	2.3	3.3	0.0	0.0	11.3	15.7	4419
INC201	3 & 6	14.0 fl oz							
6. INC201	3 - 6	14.0 fl oz	.	.	0.0	0.1	20.3	16.0	4826
7. Evito 4FL	3 & 5	5.7 fl oz	.	.	0.0	0.5	15.3	15.7	4482
8. Evito 4FL	Early Emergence**	5.7 fl oz	.	.	0.0	0.3	14.3	19.3	4496
Evito 4FL	3 & 5	5.7 fl oz							
9. Muscle 3.6F	Early Emergence**	7.2 fl oz	.	.	0.0	0.1	22.0	22.7	4138
Muscle 3.6F	3 - 5	7.2 fl oz							
+ Echo 720		1.0 pt							
10. Proline 480SC	Early Emergence**	5.7 fl oz	.	.	0.0	0.0	20.3	20.0	4414
Muscle 3.6F	3 - 5	7.2 fl oz							
+ Echo 720		1.0 pt							
11. Kyphite	Early Emergence	128 fl oz	.	.	0.0	0.1	19.0	13.3	4801
Kyphite	3 - 6	3.0 pt							
12. Headline	45 DAP	9 fl oz	.	.	0.0	0.0	19.3	16.7	4569
Provost 433SC	3, 5, & 6	8.0 fl oz							
Headline	4	12 fl oz							
13. Provost 433Sc	3 - 6	8.0 fl oz	.	.	0.0	0.1	21.7	20.7	4463
14. Proline 480SC	In Furrow	5.7 fl oz	2.4	3.3	0.0	0.0	17.7	13.3	4506
Provost 433Sc	3 & 6	8.0 fl oz							
15. Nontreated			2.7	3.3	0.0	0.3	18.7	22.3	3901
LSD(P<0.5)			n.s.	n.s.	n.s	n.s.	n.s.	7.7	574

[1]Stand count is the number of emerged plants per foot of row on 30 May and 12 June.

[2]The number of dead or dying plants per plot (50 row feet0 on 30 May and 12 June.

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

DAILY RAINFALL AND IRRIGATION, 2007

Attapulgus, GA

Rainfall

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1				0.0	1.5	0.4	
2			0.2	0.0		0.1	0.0
3				0.7	0.1		0.0
4			0.2				0.0
5							0.1
6			0.0				0.9
7					0.6		
8			0.7		0.0		
9			0.0				
11				0.1	0.2	0.0	
12				0.0	0.1		
13				0.7		0.8	
14				0.1		0.0	
16				0.1			
17					0.9		
18					0.0		1.3
19			0.2				2.8
20			0.0				
21				0.1		0.8	
22				0.0		0.2	0.0
23					0.2		0.0
24					0.2		0.0
25				0.0	0.0		
27					0.1	0.1	
28						0.0	
29			0.6	1.0			
30			0.3	0.2	0.9		
31				0.1	0.4		
TOTAL	0.0	0.0	2.2	3.1	5.2	2.4	5.1

Irrigation

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1							0.5
7			0.5		0.5		
10				0.5			
11			0.5				
12						0.5	
14			0.5				
15					0.5		
17		0.5	0.5				
19				0.5		0.5	
21		0.5	0.5				
23		0.5					
25				0.5			
28		0.5			0.5		
31		0.5					
TOTAL	0.0	2.5	2.5	1.5	1.5	1.0	0.5
Rain & Irr	0.0	2.5	4.7	4.6	6.7	3.4	5.6

EVALUATION OF PROLINE AND PROVOST ON MEDIUM AND LATE MATURING PEANUT CULTIVARS FOR CONTROL OF CYLINDROCLADIUM BLACK ROT (PLAINS)

A. PURPOSE: To evaluate the singular and combined effects of in furrow (Proline) and midseason applications of (Provost) on peanut cultivars varing in susceptibility to (Georgia Green, Carver, Georgia 03-L, Tifrunner, Georgia-02C, and (Georgia-01R).

B. EXPERIMENTAL DESIGN:

1. Two separate tests, one for mid maturity and one for late maturity cultivars each being a split plot design with randomized complete blocks and six replicates. Whole plots were fungicide treatments and subplots were cultivars.
2. One two- row bed (25 x 6 ft) per plot, 36 inch row spacing
3. Eight foot alleyways between blocks
4. Plots were established in an area with a history of a high population of *Cylindrocladium parasiticum*.
5. Varieties: Georgia Green, GA-01R, Carver, GA-02C, Georgia 03L, Tifrunner

C. APPLICATION OF TREATMENTS:

1. Equipment: In furrow treatments (Proline) were applied with a planter-mounted CO_2 pressurized sprayer using a single TX-8 nozzle per row delivering 7 gallons per acre at 25 PSI. Midseason treatments were applied with a CO_2 pressurized belt-pack sprayer consisting of 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 hollow cone nozzles per row at 40 PSI.

2. In furrow Proline treatments were applied at planting on 5 Jun. Belt-pack sprays (3-6) were applied on 11 Jul, 25 Jul, 8 Aug, and 22 Aug. All plots were traveled by tractor and coversprayed with Bravo (1.5 pt/A) on 19 Jun, 6 Jul, 23 Jul, 6 Aug, 20 Aug, and 4 Sep. Applied Lorsban (15G) 19 Jul; Lannate LV (1 pt/A) 27 Jul; Danitol (16oz/A) 21 Aug; Comite (2 pt/A) 5 Sep.

D. ADDITIONAL INFORMATION:

1:	Location:	Southwest Georgia Branch Station, Plains, GA 31780
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 9 Mar
4.	Soil Fertility:	pH - 6.1 P - 68 K - 171 Ca - 848 Mg - 112
	Soil type:	Greenville sandy clay
5.	Herbicides:	PPI: Sonolan (1 qt/A)+ Dual (1 pt/A) + Strongarm (0.45 oz/A) on 18 May POST: Select (8 oz/A) spot sprayed on 3 Jul
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 22 May
7.	Nematicides:	none
8.	Planting Info:	(See varieties) 7 seed/ft on 22 May

9. Harvest Dates:

Mid	Dug - 4 Oct	Picked - 9 Oct
Late	Dug - 25 Oct	Picked - 31 Oct

E: SUMMARY: Proline in furrow delayed initial plant emergence, but did not affect stands a week later or subsequent plant growth. Due to the hot, dry year, CBR levels were low, and observed loci had primarily black pods with little yield loss. Fungicide treatments gave some reduction in disease but did not affect yield. Discolored roots had low isolation frequency for CBR, but high incidence at TSWV. Foliar injury was also observed in the late maturity test, presumably from an application Comite, and GA-02 was observed to be much more susceptible than either GA-01R or Tifrunner. No phytotoxicity was observed with Provost.

IN FURROW FUNGICIDE CBR TEST, 2007

PLAINS, GA

Medium Maturity Cultivars

Cultivar	Plants/ft		CBR	Yield	TSWV	% roots	% roots	Phyto[2]
	5-Jun	13-Jun	Harvest	(lb/A)	14-Aug	w/CBR	TSWV[1]	
G. Green	2.1	3.3	17.3	3641	16.2	5.5	89.9	
Carver	2.0	3.5	15.9	4203	16.6	2.8	88.0	
GA-03L	1.6	3.2	14.5	3789	14.8	3.7	65.8	
LSD(P<0.5)	0.4	0.2	n.s.	394	n.s.	n.s.	12.7	

Treatment	Plants/ft		CBR (Harvest)	Yield	TSWV	% roots w/CBR	% roots TSWV[1]	Phyto[2]
Nontrt*	2.2	3.5	21.4	3916	12.8	5.5	83.4	
Provost, 8 oz (3 - 6)	.	.	16.0	3862	11.2	2.8	78.8	
Proline 5.7 oz IF +Provost 8 oz (3 - 6)	1.6	3.4	10.3	3855	10.3	3.7	81.5	
LSD(P<0.5)	0.4	n.s.	4.4	n.s.	n.s.	n.s.	n.s.	

Late Maturity Cultivars

Cultivar	Plants/ft		CBR	Yield	TSWV	% roots	% roots	Phyto[2]
	5-Jun	13-Jun	Harvest	(lb/A)	14-Aug	w/CBR	TSWV[1]	
GA-01R	1.5	3.2	17.6	5585	12.0	25.9	58.4	25.0
GA-02C	2.6	3.7	13.3	5079	6.9	25.9	66.8	80.0
Tiftrunner	1.3	3.6	16.4	5266	8.2	23.1	69.7	15.0
LSD(P<0.5)	0.3	0.2	3.0	n.s.	3.1	n.s.	9.6	5.0

Treatment	Plants/ft		CBR	Yield	TSWV	% roots	% roots	Phyto[2]
	5-Jun	13-Jun	Harvest	(lb/A)	14-Aug	w/CBR	TSWV[1]	
Nontrt*	2.1	3.5	19.2	5470	9.1	30.6	64.9	42.0
Provost, 8 oz (3 - 6)	.	.	15.1	5148	8.3	25.9	68.6	40.0
Proline 5.7 oz IF +Provost 8 oz (3 - 6)	1.5	3.4	13.0	5313	9.7	18.5	60.9	38.0
LSD(P<0.5)	0.3	n.s.	3.0	n.s.	n.s.	n.s.	n.s.	n.s.

[1]Based on 6 tap roots per plot with discoloration that were plated on PDA for CBR or tested via ELISA for TSWV.

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

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

1. Equipment: Midseason treatments were applied with a CO_2 pressurized belt-pack sprayer consisting of 2 liter bottles and a 20 GPA broadcast boom with three Conejet TX-SS6 hollow cone nozzles per row at 40 PSI. The early emergence treatments were applied with a 40 GPA spray boom using a single 80-10 flat fan nozzle set at an angle to achieve a 4 inch band over the row.

2. Early emergence treatments were applied on 5 Jun. Belt-pack sprays (3-6) were applied on 11 Jul, 25 Jul, 8 Aug, and 22 Aug. All plots were traveled by tractor and coversprayed with Bravo (1.5 pt/A) on 15 Jun, 3 Jul, 17 Jul, 31 Jul, 10 Aug, 25 Aug, and 5 Sep.

D. ADDITIONAL INFORMATION:

1:	Location:	Southwest Georgia Branch Station, Plains, GA 31780
2.	Crop History:	Peanut - 2006, Peanut - 2005, Peanut - 2004
3.	Land Preparation:	Moldboard plowed and marked rows on 2 May
4.	Soil Fertility: Soil type:	pH - 6.1 P - 86 K - 61 Ca - 530 Mg - 54 Greenville sandy clay
5.	Herbicides:	PPI: Prowl (2 pt/A) on 22 May PRE: Dual (1.5 pt/A) + Valor (3 oz/A) on 22 May POST: Cadre (1.44 oz/A) on 13 Jul
6.	Insecticides:	Temik 15G, 4 lb/A in furrow on 22 May
7.	Nematicides:	none
8.	Planting Info:	AP-3, 7 seed/ft on 22 May
9.	Harvest Dates:	Dug - 4 Oct Picked - 9 Oct

E: SUMMARY: Most treatments reduced CBR and increased yield compared to the control plots which were cover sprayed with Bravo and Moncut. Moderate levels of CBR developed and were correlated with yield (r=-0.36, p=0.03). Proline and LEM17 (14 oz) in furrow caused a slight delay in emergence, but stands a week later were similar to the control plots. Evito and LEM17 (24 oz) even increased plant density at the final count.

FUNGICIDE CBR TEST, 2007
PLAINS

Treatments	App's	Rate/A	Plants/ft[1] 5-Jun	Plants/ft[1] 13-Jun	Dead Plants[2] 5-Jun	TSWV[3] 10-Oct	CBR[4] 10-Oct	YIELD (lb/A)
1. LEM 17 200SC	In Furrow	24.0 fl oz	2.8	3.6	0.0	47.7	19.0	4267
LEM 17 200SC	3 & 6	24.0 fl oz						
2. LEM 17 200SC	In Furrow	14.0 fl oz	2.3	3.3	0.0	53.7	26.7	3747
LEM 17 200SC	3 - 6	14.0 fl oz						
3. Evito 4FL	In Furrow	5.7 fl oz	2.6	3.9	0.0	47.3	21.3	4352
Evito 4FL	3 & 6	5.7 fl oz						
4. Proline 480SC	In furrow	5.7 fl oz	2.1	3.3	0.0	54.7	14.3	4175
Provost 433SC	3 - 6	8.0 fl oz						
5. Proline 480SC	Early Emergence**	5.7 fl oz	.	.	0.0	52.7	14.7	4296
Provost 433SC	3 - 6	8.0 fl oz						
6. Nontreated			2.7	3.2	0.0	58.3	31.0	3596
LSD(P<0.5)			0.4	0.4	0.0	9.0	7.8	534

[1]Stand count is the number of emerged plants per foot of row on 5 June and 13 June.

[2]The number of dead or dying plants per plot (50 row feet) on 5 June).

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

DAILY RAINFALL AND IRRIGATION, 2007
PLAINS, GA

Rainfall

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1						0.1	
2	0.3			1.0			
3				0.1			
4			0.2				
5							
6							
7							
8			0.6				
9				0.6			
10				0.8			
11							
12			0.2	0.1			
13			0.6				
14			0.3			0.1	
15	1.9					0.1	
16				0.7			
17							
18					1.0		
19							0.4
20			1.3				0.4
21							
22							0.1
23							
24						1.9	0.4
25				0.3	1.2		
26			1.9		0.2		
27							
28					1.0	0.4	
29							
30				0.4	0.7		
31					0.3		
TOTAL	2.2	0.0	5.1	4.0	4.4	2.5	1.3

Irrigation

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1			1.0				
5			0.7				
8					1.0		
15					1.0		
16		0.7					
17						1.0	
23		0.7					
26				1.0			
29		0.7					
TOTAL	0.0	2.1	1.7	1.0	2.0	1.0	0.0
Rain & Irr	2.2	2.1	6.8	5.0	6.4	3.5	1.3

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

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

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

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

2. Calendar-based spray treatments (1 - 8) were applied on 5 Apr,19 Apr, 3 May, 24 May, 14 Jun, 5 Jul, 26 July, and 16 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 13 Nov. Nuts were weighed and sampled from individual trees on 16 Nov to determine yield and quality.

E: SUMMARY: Due to the extremely dry weather there was no leaf scab present, even on non-treated trees. Some nut scab developed late in the season and there was some separation of treatments based on scab incidence, although severity was only 4% on non-treated nuts. Treatments had a big impact on leaf retention despite the lack of foliar scab, but there were no effects on nut yield or quality.

PECAN FUNGICIDE TEST, 2007
PONDER FARM, DESIRABLE (NORTH BLOCK)

Treatments	Rate/A	Leaf Scab 10-Jul	Nut Scab Incidence 20-Jun	10-Jul	28-Aug	Nut Scab Severity 10-Jul	28-Aug	Leaf Ret[1] 4-Dec	Yield (lb/A)	Quality (Nuts/lb)
1. Super Tin 80WP	7.5 oz	0.0	0.0	0.0	6.3	0.0	1.1	47.5	581	62.5
2. EXP 1	15.4 fl oz	1.4	0.0	0.0	6.3	0.0	0.9	52.5	890	56.6
3. EXP 1	21.5 fl oz	0.0	1.6	0.0	0.0	0.0	0.0	42.5	882	62.7
4. EXP 2	11.5 fl oz	0.0	0.0	0.0	3.1	0.0	0.2	46.3	942	57.3
5. EXP 2	15.4 fl oz	0.0	0.6	0.8	3.1	0.0	0.1	45.0	793	57.1
6. Absolute 500SC	5.0 fl oz	0.0	1.6	0.0	0.0	0.0	0.0	56.3	733	57.2
7. Super Tin 4L	12.0 fl oz	0.0	0.0	0.0	0.0	0.0	0.0	48.8	830	57.2
8. Quilt	14.0 fl oz	0.0	0.0	0.0	0.0	0.0	0.0	38.8	693	27.5
9. Quilt + BmJ WP	14.0 fl oz 4.2 oz	0.0	0.0	0.0	0.0	0.0	0.0	36.3	781	63.8
10.BMJ WP + Super Tin 80WP	4.2 oz 3.75 oz	0.0	0.0	0.0	4.7	0.0	0.3	40.0	631	57.4
11.Super Tin 80WP + Elast 400F	3.75 oz 25.0 fl oz	0.0	0.0	0.0	3.1	0.0	0.2	36.3	847	61.7
12.BmJ WP	4.2 oz	0.0	0.8	0.0	12.5	0.0	1.0	28.8	742	57.6
13.BmJ WP + Elast 400F	4.2 oz 25.0 fl oz	0.0	0.8	0.0	0.0	0.0	0.0	17.5	583	60.4
14.Nontreated		0.0	0.0	0.0	34.4	0.0	4.1	15.0	691	59.0
LSD (P<0.5)		n.s.	n.s.	n.s.	10.1	n.s.	1.5	19.5	n.s.	n.s.

NOTE - Applications were made with an air-blast sprayer applying 95 GPA at 125 psi running 2 MPH.
Each treatment was applied starting at budbreak on a 14-day interval prepollination, and a 3-week interval postpollination for a total of 8 sprays.

[1]Indicates the present of leaves that were retained on the tree based on a visual estimate of the entire tree.
[2]All ratings were taken from 8 randomly selected terminals per tree.

EVALUATION OF VARIOUS FUNGICIDES FOR SCAB CONTROL ON WICHITA PECAN

A. PURPOSE: To evaluate the comparative efficacy of registered and experimental fungicides against pecan foliar and nut diseases, mainly scab, on a highly susceptible "worst case" cultivar.

B. EXPERIMENTAL DESIGN:

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

C. APPLICATION OF TREATMENTS:

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

2. Calendar-based spray treatments (1 - 10) were applied on 5 Apr, 19 Apr, 3 May, 17 May, 31 May, 14 Jun, 27 Jun, 12 Jul, 26 Jul, and 8 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:

Wichita trees were shaken with a Savage Model 2138 PTO-driven trunk shaker on 5 Nov. Nuts were weighed and sampled from individual trees on 9 Nov to determine yield and quality.

E: SUMMARY: Although very dry and a low disease year, significant scab occurred on this very susceptible cultivar. Nut scab incidence is the most sensitive indication of treatment differences, as nut scab severity was relatively low in all treatments. The experimental biological, *Bacillus Mycoides* (BmJ), reduced scab incidence, and 1/2 rates, of BmJ plus Super Tin had less scab than the full rate of Super Tin alone. Although no foliar scab occurred, leaf retention was affected by treatment, and was correlated with yield ($r=0.48$, $P<0.001$).

PECAN FUNGICIDE TEST, 2007
PONDER FARM, WICHITA (NORTH BLOCK)

Treatments	Rate/A	Leaf Scab[1] 10-Jul	Nut Scab Incidence 20-Jun	Nut Scab Incidence 10-Jul	Nut Scab Incidence 28-Aug	Nut Scab Severity 10-Jul	Nut Scab Severity 28-Aug	Nut Scab Severity 3-Oct
1. Super Tin 80WP	7.5 oz	0.0	0.0	0.0	62.5	0.0	4.2	4.3
2. EXP 1	15.4 fl oz	1.4	5.7	23.9	31.3	1.3	4.0	4.4
3. EXP 1	21.5 fl oz	0.0	2.9	2.9	9.4	0.2	0.4	0.5
4. EXP 2	11.5 fl oz	0.0	0.0	2.2	25.8	0.3	2.3	4.2
5. EXP 2	15.4 fl oz	0.0	0.6	0.0	9.4	0.0	0.7	1.9
6. Absolute 500SC	5.0 fl oz	0.0	0.0	3.3	3.1	0.2	0.3	1.5
7. Super Tin 4L	12.0 fl oz	0.0	1.4	21.4	68.8	1.3	10.1	4.2
8. Quilt	14.0 fl oz	0.0	1.0	4.4	27.3	0.3	1.0	1.5
9. Quilt + BmJ WP	14.0 fl oz 4.2 oz	0.0	5.7	5.5	16.4	0.4	1.6	2.2
10.BMJ WP + Super Tin 80WP	4.2 oz 3.75 oz	0.0	3.6	2.2	43.8	0.2	4.3	4.9
11.Super Tin 80WP + Elast 400F	3.75 oz 25.0 fl oz	0.0	0.0	0.0	3.3	0.0	0.3	0.0
12.BmJ WP	4.2 oz	0.0	3.2	26.9	75.0	2.2	13.7	10.8
13.BmJ WP + Elast 400F	4.2 oz 25.0 fl oz	0.0	0.0	0.0	3.1	0.0	0.0	0.6
14.Nontreated		1.2	14.5	64.8	100.0	3.7	24.9	**
LSD (P<0.5)		1.0	5.6	11.5	17.9	0.8	4.2	3.0

NOTE - Applications were made with an air-blast sprayer applying 95 GPA at 125 psi running 2 MPH. Each treatment was applied starting at budbreak on a 14-day interval for a total of 10 applications.

[1]All ratings were taken from 8 randomly selected terminals per tree.

**All Nut shucks were black on the nontreated trees at the October evaluation. While much of this was due to scab, there were other factors enhancing late season senescence and shuck degradation which made a final disease determination very difficult.

PECAN FUNGICIDE TEST, 2007
PONDER FARM, WICHITA (NORTH BLOCK)

Treatments	Rate/A	Shuck[1] Rot	Leaf Ret[2] 4-Dec	Yield (lb/A)	Quality (Nuts/lb)
1. Super Tin 80WP	7.5 oz	69.3	58	591	73.2
2. EXP 1	15.4 fl oz	65.0	68	508	74.9
3. EXP 1	21.5 fl oz	62.6	65	601	70.9
4. EXP 2	11.5 fl oz	59.7	73	652	70.7
5. EXP 2	15.4 fl oz	44.3	63	739	82.5
6. Absolute 500SC	5.0 fl oz	60.8	64	665	67.9
7. Super Tin 4L	12.0 fl oz	68.5	43	478	73.6
8. Quilt	14.0 fl oz	67.8	51	599	68.5
9. Quilt + BmJ WP	14.0 fl oz 4.2 oz	69.0	53	538	70.6
10. BMJ WP + Super Tin 80WP	4.2 oz 3.75 oz	68.6	49	560	69.4
11. Super Tin 80WP + Elast 400F	3.75 oz 25.0 fl oz	50.7	51	793	75.5
12. BmJ WP	4.2 oz	73.9	56	428	78.4
13. BmJ WP + Elast 400F	4.2 oz 25.0 fl oz	48.0	54	613	69.1
14. Nontreated		86.4	43	512	73.2
LSD (P<0.5)		13.1	n.s.	n.s.	n.s.

NOTE - Applications were made with an air-blast sprayer applying 95 GPA at 125 psi running 2 MPH. Each treatment was applied starting at budbreak on a 14-day interval for a total of 10 applications.

[1]Shuck necrosis was rated prior to harvest. Lesions were plated on Potato Dextrose Agar and the primary fungi isolated were *Glomerella* and *Lasiodiploida* .

[2]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 (SOUTH BLOCK)

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

B. EXPERIMENTAL DESIGN:

1. Randomized complete blocks with four replicates.
2. Each replication consisted of single-tree treatments.
3. The orchard was established in 1988 with Desirable trees planted on a 40 x 40 ft spacing with rows running north and south. Alternating rows of young Desirable trees (replanted in 1999) complete this block, but they were not used in this test.

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 29 March, 12 Apr, 26 Apr, 17 May, 7 Jun, 28 Jun, 19 Jul, and 9 Aug.

D. ADDITIONAL INFORMATION:

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

2. Soil Fertility: pH - 5.9 P - 61 K - 73 Ca - 755 Mg - 41
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 13 Nov. Nuts were weighed and sampled from individual trees on 23 Nov to determine yield and quality.

E: SUMMARY: Virtually no scab occurred in this test due to the extreme drought.

PECAN FUNGICIDE TEST II, 2007
PONDER FARM, DESIRABLE (SOUTH BLOCK)

Treatments	App's	Rate/A	LIN[1] 23-May	LIN[1] 11-Jul	NIN[2] 22-Jun	NIN[2] 11-Jul	NIN[2] 27-Aug	NSEV[3] 11-Jul	NSEV[3] 27-Aug	Leaf Ret[4] 4-Dec	Yield (lb/A)
1. SA-140201	1 - 8	16 fl oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5	2293
2. SA-140201	1 - 8	12 fl oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	1829
3. SA-140201	1, 3, 5, & 7	16 fl oz	0.0	0.0	0.0	1.0	0.0	0.2	0.0	16.3	2109
Elast 2F	2, 4, 6 & 8	50 fl oz									
4. Enable 2F	1 - 8	4 fl oz	0.0	0.0	0.0	1.6	0.0	0.2	0.0	11.3	1829
+ Elast 400F		25 fl oz									
5. Enable 2F	1 - 8	8 fl oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	2616
+ Elast 400F		25 fl oz									
6. Enable 2F	1 - 8	4 fl oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.5	2214
+ Elast 400F		50 fl oz									
7. Super Tin 80WP	1 - 8	7.5 oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	1785
+ Elast 400F		25 fl oz									
8. Super Tin 80WP	1 - 8	3.75 oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	1785
+ Elast 400F		25 fl oz									
9. Super Tin 80WP	1 - 8	3.75 oz	0.0	0.0	0.0	2.6	0.0	0.1	0.0	17.5	2415
+ Elast 400F		50 fl oz									
10. Enable 2F	1, 3, 5, & 7	8 fl oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.3	2450
Elast 400F	2, 4, 6, & 8	50 fl oz									
11. Super Tin 80WP	1, 3, 5, & 7	7.5 oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.0	2240
Elast 400F	2, 4, 6, & 8	50 fl oz									
12. Topsin M 4.5F	1 - 8	10 fl oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	17.5	1829
+ Elast		25 fl oz									
13. Topsin M 4.5F	1 - 8	16 fl oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.8	1476
+ Elast 400F		25 fl oz									
14. Nontreated			0.0	0.6	0.0	5.5	0.0	0.3	0.0	7.5	2503
15. Orbit 45WP	1 - 8	4.0 oz	0.0	0.0	0.0	0.0	0.0	0.0	0.0	13.8	2258
+ Super Tin 80WP		3.75 oz									
LSD (p<0.05)			0.0	0.4	0.0	3.1	0.0	0.2	0.0	9.3	1118

[1]LIN=leaf scab incidence, based on ratings of eight terminals per tree. Incidence is the percentage of middle leaflets with any scab.

[2]NIN=nut scab incidence, based on ratings of 8 nut clusters per tree. Incidence is the percentage of nuts with any scab.

[3]NSEV=nut scab severity, based on ratings of 8 nut clusters per tree. Severity is the percentage of shuck area covered with scab.

[4]This is based on a visual assessment of the percent retention (0-100) of foliage on whole trees.

OFFICIAL DAILY RAINFALL 2007

PONDER FARM

TY TY, GA

Rainfall

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
1				2.1		0.5	
2			1.9	0.2			0.5
3							0.2
4			0.2				0.1
5			1.0				0.2
6				0.1			0.1
7				0.3			
8			0.1				
9					0.8		
11				0.1	0.3		
12		0.1	0.5				
13				0.3		0.4	
14	0.2			0.6			
15	0.8						
16							0.1
17					0.2		
18							1.0
19			0.1				1.7
20							
21						1.3	
23					0.5	0.5	0.1
24				0.2			0.1
25					0.2		
26							
27						0.2	
28							
29				0.1	0.1		
30					0.8		
31					0.2		
TOTAL	1.0	0.1	3.8	4.0	3.1	2.4	4.1

Irrigation

DATE	APR	MAY	JUN	JUL	AUG	SEP	OCT
3							1.0
8					1.0		
12	1.0						
13						1.0	
18		1.0					
19			1.0				
20					1.0		
25		1.0					
Total	1.0	2.0	1.0	0.0	2.0	1.0	1.0

Rain & Irr	2.0	2.1	4.8	4.0	5.1	3.4	5.1