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PEANUT DISEASE CONTROL FIELD TRIALS, 2002

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The information contained herein is available to all persons regardless of race, color, sex, or national origin.

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Peanut Disease Control Field Trials, 2002

A. K. Hagan, K. L. Bowen, H. L. Campbell, and M. E. Rivas-Davila¹

Introduction

Fungicides, cultural practices, and resistant cultivars are available for the control of damaging diseases and nematode pests that can limit peanut yield. A management program that incorporates these practices can enhance the control of diseases and nematode pests and can increase crop yield and profit potential.

In order to provide timely information concerning disease management practices, Alabama Agricultural Experimental Station personnel conducted foliar and soil-borne disease, as well as nematode control trials at the Wiregrass Research and Extension Center (WGREC) in Headland, Alabama, and at the Gulf Coast Research Center (GCREC) in Fairhope, Alabama. This report summarizes the results of those trials.

During the 2002 production season, temperatures were near normal at the WGREC and GCREC (see Figure 1). At the WGREC, monthly rainfall totals for June, July, August, and September were below historical average, and yields on the dryland peanut trials were depressed by the below-average rainfall totals, particularly by

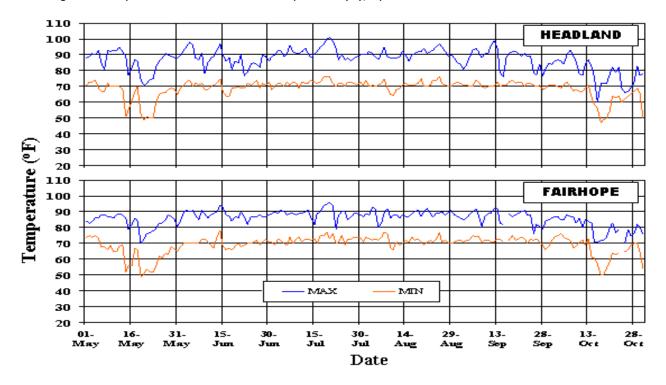


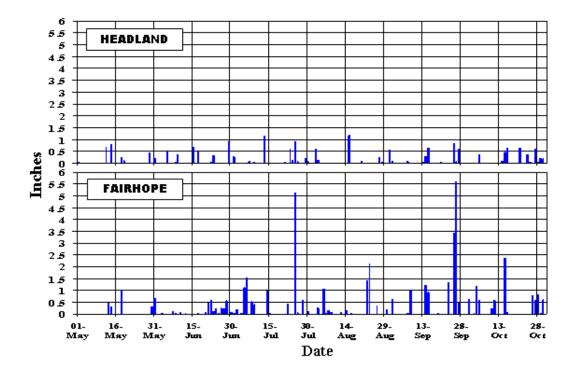
Figure 1. Daily minimum and maximum temperature (°F), April to October 2002.

¹Hagan and Bowen are Professors and Campbell and Rivas-Davila are Research Associates in the Auburn University Department of Entomology and Plant Pathology.

the dry weather in late August and early September (see Figure 2). The reduced rainfall also suppressed the development of leaf spot diseases in the dryland and to some extend in the irrigated peanuts trials.

In contrast, at the GCREC rainfall totals during much of the growing season were well above the historical average for that location. As a result, late leaf spot and peanut rust pressure was exceptionally high. The heavy rains did not reduce yield of the early harvested studies but some of the later planted studies, which could not be dug or harvested on time, were lost.

Figure 2. Daily precipitation (inches) April to October 2002.



Comparison of Moncut 70DF with Abound 2SC and Folicur 3.6F for the Control of Foliar and Soil-Borne Diseases

Objective: To assess the efficacy of candidate and registered fungicides applied under a 14-day spray schedule for the control of foliar and soil-borne diseases in peanut.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: Georgia Green

Planting:

Date: May 20, 2002

Experimental Design: Randomized complete block with six replications. Plot size was six 30-foot rows

spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton rotation.

Cultural Practices:

Herbicides: Sonalan 1 quart + Strongarm 0.45 ounce per acre (April 25).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: 1 inch applied on August 7, August 19, and September 7.

Application of Treatments: Fungicide treatments were applied with a tractor-mounted boom sprayer with TX8 hollow cone nozzles calibrated to deliver 15 gallons per acre. Applications were made as follows: 1= June 20, 2= July 3, 3= July 17, 4= July 31, 5= August 14, 6= August 28, and 7= September 1.

Disease Assessment: Early and late leaf spot were visually rated on September 18 using the Florida leaf spot scoring system. Southern stem rot incidence was assessed as the number of disease loci on October 1 immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row). Rhizoctonia limb rot was assessed on October 1 using a 1-5 scale.

Harvest: Peanut were dug on October 1 and yields were reported at 10.7% moisture.

EFFECT OF APPLICATION OF MONCUT 70DF WITH ABOUND 2SC AND FOLICUR 3.6F FOR THE CONTROL OF FOLIAR AND SOIL-BORNE DISEASES, WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, AL, 2002

			-Disease rating		
Treatment and rate per acre	Application timing	Leaf spot¹	Southern stem rot ²	Rhizoctonia limb rot ³	Yield lbs/ac
Untreated control	_	8.7 a	29.8 a	_	1121 f
Bravo Ultrex 1.4 lb	1-7	3.5 cd	14.3 b	1.7 ab	4029 e
Bravo Ultrex 1.4 lb Bravo Ultrex 1.4 lb + Moncut 70DF 1.1 lb	1,3,5,6,7 2,4	4.0 c	10.7 bc	1.7 ab	4735 cd
Bravo Ultrex 1.4 lb Folicur 3.6F 7.2 fl oz	1,2,7 3,4,5,6	3.7 c	9.8 bc	1.8 a	4344 de
Bravo Ultrex 1.4 lb Abound 2SC 18.5 fl oz	1,2,4,6,7 3,5	3.8 c	14.5 b	1.8 a	4312 de
Bravo Ultrex 1.4 lb Folicur 3.6F 7.2 fl oz Bravo Ultrex 1.4 lb + Moncut 70DF 0.54 lb	1,2,7 3,5 4,6	5.0 b	14.5 b	1.8 a	4211 e
Bravo Ultrex 1.4 lb Abound 2SC 18.5 fl oz Bravo Ultrex 1.4 lb + Moncut 70DF 1.1 lb	1,2,4,6,7 3 5	3.7 c	13.8 b	1.8 a	4360 de
Bravo Ultrex 1.4 lb Bravo Ultrex 1.4 lb + Moncut 70DF 0.54 lb	1,2,7 3,4,5,6	3.5 cd	4.3 de	1.7 ab	5203 bc
Bravo Ultrex 1.4 lb Bravo Ultrex 1.4 lb + Moncut 70DF 0.89 lb	1,2,4,6,7 3,5	4.0 c	9.0 cd	1.8 a	4921 bc
Bravo Ultrex 1.4 lb Bravo Ultrex 1.4 lb + Moncut 70DF 1.1 lb	1,2,4,6,7 3,5	3.7 c	4.7 de	1.7 ab	5288 b
Bravo Ultrex 1.4 lb Headline 2.09EC 0.4 pt Bravo Ultrex 1.4 lb + Moncut 70DF 1.1 lb	1,7 2,4,6 3,5	2.7 e	4.5 de	1.2 bc	5957 a
Bravo Ultrex 1.4 lb Headline 2.09EC 0.4 pt Headline 2.09EC 0.89 lb + Moncut 70DF 0.4 p	1,6,7 2,3,4,5 t 3,5	3.0 de	4.2 e	1.0 c	5397 b
LSD (P = 0.05)		0.7	4.7	0.5	521

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead).

²Southern stem rot lesions taken at plot inversion are expressed as the number of disease loci per 60 feet of row.

 3 Rhizoctonia limb rot was assessed on a 1-5 scale (1= 0-10% damage of a given row length, 2= 11-25%, 3= 26-50%, 4= 51-75%, and 5= >75%).

Impact of In-Furrow and Foliar Applications of Selected Fungicides on the Occurrence of Leaf Spot Diseases and White Mold in Peanut

Objective: To assess the efficacy of candidate and registered fungicides in furrow and under 14-day schedule for the control of foliar and soil-borne diseases in peanut.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: Georgia Green

Planting:

Date: May 20, 2002

Experimental Design: Randomized complete block with six replications. Plot size was four 30-foot rows

spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton rotation.

Cultural Practices:

Herbicides: Sonalan 1 quart + Strongarm 0.45 ounce per acre (April 25).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: 1 inch applied on August 7, August 19, and September 7.

Application of Treatments: In-furrow applications were made at planting at 5 gallons per acre using a tractor-mounted CO₂ sprayer with 8001 nozzles. Foliar fungicide were applied as a full canopy spray at a calibrated volume of 15 gallons per acre using a four-row tractor-mounted boom sprayer with TX8 nozzles. Applications were made at two-week intervals: 1= June 20, 2= July 3, 3= July 17, 4= July 31, 5= August 14, 6= August 28, and 7= September 11.

Disease Assessment: Early and late leaf spot were visually rated on September 18 using the Florida leaf spot scoring system. Counts of southern stem rot loci were made on October 1 immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Plots were harvested on October 7 and yields were reported at 10.7% moisture.

EFFECT OF IN-FURROW AND FOLIAR APPLICATIONS OF SELECTED FUNGICIDES ON THE OCCURRENCE OF LEAF SPOT DISEASES AND SOUTHERN STEM ROT MOLD IN PEANUT, WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, AL, 2002

Treatment and	Application	——Disease ı Leaf	ratings—— Southern	Yield
rate per acre	timing	spot ¹	stem rot ²	lbs/ac
Untreated control	_	8.7 a	29.3 a	1383 g
Bravo 720 1.5 pt	1-7	4.5 bc	17.3 bc	3037 f
Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Bravo 720 1.5 pt	1,2,4 3,5,6,7	3.2 d	18.0 b	3138 ef
Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 18.5 fl oz Bravo 720 1.5 pt	1,2,4 3,5 6,7	3.3 d	11.5 de	3610 cd
Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 12.3 fl oz Bravo 720 1.5 pt	1,2,4 3,5 6,7	3.3 d	12.3 c-e	3791 bc
Abound 2SC 6 fl oz Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 18.5 fl oz Bravo 720 1.5 pt	in-furrow 1,2,4 3,5 6,7	3.0 d	11.8 de	3759 b-d
Abound 2SC 6 fl oz + Ridomil Gold 4EC 2 fl oz Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 18.5 fl oz Bravo 720 1.5 pt	in-furrow 1,2,4 3,5 6,7	3.2 d	11.3 de	4066 ab
Abound 2SC 6 fl oz Tilt 3.6EC 2.0 fl oz+ Bravo 720 1.0 pt Abound 2SC 12.3 fl oz Bravo 720 1.5 pt	in-furrow 1,2,4 3,5 6,7	3.5 d	12.0 de	3578 c-e
Abound 2SC 6.0 fl oz + Ridomil Gold 4EC 2.0 fl oz Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 12.3 fl oz Bravo 720 1.5 pt	in-furrow 1,2,4 3,5 6,7	3.5 d	8.7 ef	3771 b-d
Bravo 720 1.5 pt Folicur 3.6F 7.2 fl oz	1,6,7 2,3,4,5	5.0 b	15.5 b-d	3336 d-f
Bravo 720 1.5 pt Bravo 720 1.5 pt + Moncut 70DF 1.1 lb	1,2,4,6,7 3,5	4.2 c	5.2 fg	4106 ab
Moncut 70DF 7.1 oz Bravo 720 1.5 pt Bravo 720 1.5 pt + Moncut 70DF 1.1 lb	in-furrow 1,2,4,6,7 3,5	4.5 bc	3.3 g	4122 ab
Botran 75W 12 oz Bravo 720 1.5 pt Bravo 720 1.5 pt + Moncut 70DF 1.1 lb	in-furrow 1,2,4,6,7 3,5	4.5 bc	4.0 fg	4255 a
LSD (P = 0.05)		0.6	5.1	445

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead).

²Southern stem rot lesions taken at plot inversion are expressed as the number of disease loci per 60 feet of row. ³Rhizoctonia limb rot was assessed on a 1-5 scale (1 = 0-10% damage of a given row length, 2 = 11-25%, 3 = 26-50%, 4 = 51-75%, and 5 = >75%).

Comparison of the Efficacy of Experimental and Registered Fungicides for the Control of Leaf Spot Diseases and Southern Stem Rot

Objective: To assess the efficacy of candidate and registered fungicides applied under a 14-day spray schedule for the control of foliar and soil-borne diseases in peanut.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: Georgia Green

Planting:

Date: May 23, 2002

Experimental Design: Randomized complete block with six replications. Plot size was six 30-foot rows

spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton rotation.

Cultural Practices:

Herbicides: Prowl 3 pints + Strongarm 0.45 ounce per acre (May 7).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: 1 inch applied on August 10, August 24, and September 12.

Application of Treatments: Foliar fungicide applications were made at two-week intervals: 1= June 24, 2= July 8, 3= July 22, 4= August 5, 5= August 19, 6= September 3, and 7= September 17 and were applied as a full canopy spray at a calibrated volume of 15 gallons per acre using a four-row tractor-mounted boom sprayer with TX8 nozzles.

Disease Assessment: Early and late leaf spot were visually rated on September 11 using the Florida leaf spot scoring system. Counts of southern stem rot loci were made on October 4 immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Peanut were dug on October 4 and yields were reported at 10.4% moisture.

Effect of Candidate and Registered Fungicides for the Control of Leaf Spot Diseases and Southern Stem Rot, Wiregrass Research and Extension Center, Headland, AL, 2002

		Disease	ratings——	
Treatment and rate per acre	Application timing	Leaf spot ¹	Southern stem rot ²	Yield lbs/ac
Untreated control	_	7.0 a	32.2 a	1303 c
Bravo 720 1.5 pt	1-7	3.2 e-g	13.2 bc	3997 ab
Bravo 720 1.5 pt AMS21619A 480SC 5.0 fl oz	1,2,7 3,4,5,6	3.0 f-h	12.2 bc	4050 ab
Bravo 720 1.5 pt AMS21619A 480SC 5.7 fl oz	1,2,7 3,4,5,6	2.7 gh	9.5 b-d	4106 ab
Bravo 720 1.5 pt Folicur 3.6F 7.2 fl oz	1,2,7 3,4,5,6	5.0 b	12.2 bc	3904 ab
USF2010 3.5 fl oz	1-7	3.8 cd	15.5 b	3804 ab
USF2010 3.5 fl oz Folicur 3.6F 7.2 fl oz Bravo 720 1.5 pt	1,2 3,4,5,6 7	3.3 d-f	13.0 bc	4061 ab
Stratego 7.0 fl oz	1-7	3.3 d-f	12.0 bc	3930 ab
Bravo 720 1.5 pt Abound 2SC 18.5 fl oz	1,2,4,6,7 3,5	3.5 c-f	10.3 bc	4384 a
Bravo 720 1.5 pt Bravo 720 1.5 pt + Moncut 70DF 1.1 lb	1,2,4,6,7 3,5	4.0 c	4.2 d	4525 a
Bravo 720 1.5 pt Folicur 3.6F 7.2 fl oz Headline 2.09EC 12.0 fl oz	1,7 2,4,6 3,5	2.5 h	9.3 cd	4375 a
Bravo 720 1.5 pt Stratego 7.0 fl oz	1,2,7 3,4,5,6	3.0 f-h	9.7 b-d	3533 b
Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Bravo 720 1.5 pt	1,2,4 3,5,6,7	3.7 c-e	12.5 bc	3876 ab
LSD $(P = 0.05)$		0.5	6.1	750

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (≤25%), 6= lesions numerous with significant defoliation (≤50%), 7= lesions numerous with heavy defoliation (≤75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead). 2 Southern stem rot lesions taken at plot inversion are expressed as the number of disease loci per 60 feet of row.

Determination of the Impact of In-Furrow Applications of Selected Fungicides on Disease Control and Peanut Yield

Objective: To assess the efficacy of candidate and registered fungicides in-furrow and under 14-day schedule for the control of foliar and soil-borne diseases in peanut.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: Georgia Green

Planting:

Date: May 16, 2002

Experimental Design: Randomized complete block with six replications. Plot size was four 30-foot rows

spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton rotation.

Cultural Practices:

Herbicides: Sonalan 1 quart per acre (May 16).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: 1 inch applied on July 11, August 12, and August 25.

Application of Treatments: In-furrow applications were made at planting at 5 gallons per acre using a tractor-mounted CO₂ sprayer with 8001 nozzles. Foliar fungicide were applied as a full canopy spray at a calibrated volume of 15 gallons per acre using a four-row tractor-mounted boom sprayer with TX8 nozzles. Applications were made at two-week intervals: 1= June 20, 2= July 3, 3= July 17, 4= July 31, 5= August 14, 6= August 28, and 7= September 11.

Disease Assessment: Early and late leaf spot were visually rated on September 11 using the Florida leaf spot scoring system. Counts of southern stem rot loci were made on October 7 immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Plots were harvested on October 7 and yields were reported at 10.7% moisture.

EFFECT OF IN-FURROW APPLICATIONS OF SELECTED FUNGICIDES ON DISEASE CONTROL AND PEANUT YIELD, WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, AL, 2002

		——Disease	ratings——	
Treatment and rate per acre	Application timing	Leaf spot ¹	Southern stem rot ²	Yield lbs/ac
Untreated control		6.5 a	10.5 a	1533 e
Bravo Ultrex 1.4 lb	1-7	3.7 bc	7.0 a-c	1686 de
Bravo Ultrex 1.4 lb Folicur 3.6F 7.2 fl oz	1,2,7 3,4,5,6	3.7 bc	6.8 a-c	2053 b-e
Bravo Ultrex 1.4 lb AMS21619A 480SC 5.7 fl oz	1,2,7 3,4,5,6	2.5 ef	6.7 a-c	2444 ab
AMS21619A 480SC 5.7 fl oz Bravo Ultrex 1.4 lb	in-furrow 1-7	3.2 cd	4.2 bc	2678 a
AMS21619A 480SC 5.7 fl oz Bravo Ultrex 1.4 lb AMS21619A 480SC 5.7 fl oz	in-furrow 1,2,7 3,4,5,6	2.0 f	3.7 c	2481 ab
Terraclor 2E 48 fl oz Bravo Ultrex 1.4 lb Abound 2SC 18.5 fl oz	in-furrow 1,2,4,6,7 3,5	3.0 de	6.5 a-c	2202 a-d
Terraclor 2E 48 fl oz Bravo Ultrex 1.4 lb Folicur 3.6F 7.2 fl oz	in-furrow 1,2,7 3,4,5,6	3.5 b-d	6.7 a-c	2037 b-e
Terraclor 2E 96 fl oz Bravo Ultrex 1.4 lb	in-furrow 1-7	3.5 b-d	6.0 bc	2267 a-c
Terraclor 4F 48 fl oz Bravo Ultrex 1.4 lb	in-furrow 1-7	3.8 b	8.2 ab	1807 c-e
Procure 4 oz Bravo Ultrex 1.4 lb Procure 4 oz	in-furrow 1,2,4,6,7 3,5	3.5 b-d	7.0 a-c	2005 b-e
Abound 2SC 6 fl oz Bravo Ultrex 1.4 lb Abound 2SC 18.5 fl oz	in-furrow 1,2,4,6,7 3,5	3.7 bc	4.5 bc	2497 ab
LSD $(P = 0.05)$		0.6	4.1	523

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead). ²Southern stem rot lesions taken at plot inversion are expressed as the number of disease loci per 60 feet of row.

Evaluation of Echo 720 and Headline 2.09EC for the Control of Foliar and Soil-Borne Diseases of Peanut

Objective: To assess the efficacy of candidate and registered fungicides under 14-day schedule for the control of foliar and soil-borne diseases in peanut.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: Georgia Green

Planting:

Date: May 23, 2002

Experimental Design: Randomized complete block with six replications. Plot size was six 30-foot rows

spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton rotation.

Cultural Practices:

Herbicides: Prowl 3 pints per acre + Strongarm 0.45 ounce per acre (May 7).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: 1 inch applied on August 10, August 24, and September 12.

Application of Treatments: Fungicides were applied as a full canopy spray at a calibrated volume of 15 gallons per acre using a six-row tractor-mounted boom sprayer with TX8 nozzles. Applications were made at two-week intervals: 1= June 24, 2= July 1, 3= July 22, 4= August 5, 5= August 19, 6= September 3, and 7=September 17.

Disease Assessment: Early and late leaf spot were visually rated on September 23 using the Florida leaf spot scoring system. Southern stem rot loci incidence was assessed as the number of disease loci per 60 feet of row on October 4 immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Plots were harvested on October 9 and yields were reported at 10% moisture.

EFFECT OF ECHO 720 AND HEADLINE 2.09EC FOR THE CONTROL OF FOLIAR AND SOIL-BORNE DISEASES OF PEANUT, WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, AL, 2002

Treatment and rate per acre	Application timing	Leaf spot¹	Southern stem rot ²	Yield lbs/ac
Untreated control		8.5 a	34.4 a	1297 d
Echo 720 1.5 pts	1-7	5.2 b	14.0 b-d	3872 c
Echo 720 1.0 pt + PropiMax EC 2 fl o	z 1-7	4.2 d-f	16.7 b	3908 с
Echo 720 1.0 pt + Propimax EC 2 fl c	oz AU Pnut advisory	4.2 d-f	11.0 c-f	4239 a-c
Echo 720 1.0 pt + PropiMax EC 2 fl o Abound 2SC 18.5 fl oz Echo 720 1.5 pt	z 1,2,4 3,5 6,7	3.7 fg	13.0 b-e	4392 a-c
Echo 720 1.5 pt Folicur 3.6F 7.2 fl oz	1,2,7 3,4,5,6	4.5 d-f	13.8 b-d	4191 bc
Echo 720 1.5 pt Echo 720 1.5 pt + Moncut 70DF	1,2,4,6,7 1.1 lb 3,5	4.8 bc	6.5 f	4574 ab
Headline 6 fl oz Folicur 3.6F 7.2 fl oz Echo 720 1.5 pt	1,2 3,4,5,6 7	3.3 g	14.5 bc	4146 bc
Headline 9 fl oz Folicur 3.6F 7.2 fl oz Headline 12 fl oz Echo 720 1.5 pt	Week betw.1st two sprays 3,5,6 4 7	4.5 cd	8.5 ef	4521 a-c
Headline 9 fl oz Headline 12 fl oz Folicur 3.6F 7.2 fl oz Echo 720 1.5 pt	Week betw.1st two sprays 3 4,5,6 7	3.3 g	7.5 f	4880 a
Headline 9 fl oz Folicur 3.6F 7.2 fl oz Headline 12 fl oz	Week betw.1st two sprays 3,4,5 6	5.3 b	9.3 d-f	4191 bc
Echo 720 1.5 pt Headline 6 fl oz	1,2,4,6,7 3,5	3.8 e-g	9.8 c-f	4179 bc
Echo 720 1.5 pt Abound 2SC 18.5 fl oz	1,2,4,6,7 3,5	4.3 c-e	11.3 c-f	4638 ab
LSD $(P = 0.05)$		0.6	5.2	653

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= few remaining leaves covered with lesions, and 10= plants dead).

²Southern stem rot lesions taken at plot inversion are expressed as the number of disease loci per 60 feet of row.

Comparison of New Fungicides for the Control of Foliar and Soil-Borne Diseases of Peanut

Objective: To assess the efficacy of candidate and registered fungicides applied under a 14-day spray schedule for the control of foliar and soil-borne diseases in peanut.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: Georgia Green

Planting:

Date: May 23, 2002

Experimental Design: Randomized complete block with six replications. Plot size was six 30-foot rows

spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton rotation.

Cultural Practices:

Herbicides: Prowl 3 pints + Strongarm 0.45 ounce per acre (May 7).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: 1 inch applied on August 10, August 24, and September 12.

Application of Treatments: Foliar fungicide were applied as a full canopy spray at a calibrated volume of 15 gallons per acre using a four-row tractor-mounted boom sprayer with TX8 nozzles. Applications were made at two-week intervals: 1= June 24, 2=July 8, 3= July 22, 4= August 5, 5= August 19, 6= September 3, and 7= September 17.

Disease Assessment: Early and late leaf spot were rated simultaneously on September 23 using the Florida leaf spot scoring system. Counts of southern stem rot loci were made on October 4 immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Plots were harvested on October 9 and yields were reported at 10.4% moisture.

EFFECT OF NEW FUNGICIDES FOR THE CONTROL OF FOLIAR AND SOIL-BORNE DISEASES OF PEANUT, WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, AL, 2002

		Disease	ratings——	
Treatment and	Application	Leaf	Southern	Yield
rate per acre	timing	spot1	stem rot ²	lbs/ac
Untreated control	_	8.7 a	26.5 a	1457 f
Serenade 4 lb	1-7	6.7 b	17.8 bc	2073 e
Serenade 8 lb	1-7	6.8 b	23.5 ab	1751 ef
Serenade 2 lb + Kocide 2000 2 lb	1-7	5.2 c	16.3 cd	2759 d
Serenade 2 lb + Kocide DF 2 lb Folicur 3.6F 0.45 pt	1,3,5,7 2,4,6	4.2 de	11.0 d-f	3332 c
Equus 720 1.5 pt Artisan 3.6SE 32 fl oz	1,3,5,6,7 2,4	3.5 ef	3.3 g	4441 a
Equus 720 1.5 pt NAI-301 45 fl oz	1,5,6,7 2,3,4	4.2 de	4.7 g	3985 ab
Equus 720 1.5 pt NAI-008 32 fl oz	1,3,5,6,7 2,4	3.2 f	6.3 fg	4166 a
Equus 720 1.5 pt Folicur 3.6F 7.2 fl oz	1,2,7 3,4,5,6	4.2 de	13.0 с-е	3537 bc
Equus 720 1.5 pt Abound 2SC 18.5 fl oz	1,2,4,6,7 3,5	4.0 de	9.2 e-g	4316 a
Equus 720 1.5 pt Equus 720 1.5 pt + Moncut 70DF 1.1 lb	1,2,4,6,7 3,5	4.3 d	5.2 fg	3969 ab
Equus 720 1.5 pt	1-7	4.3 d	9.2 e-g	4199 a
LSD $(P = 0.05)$		0.7	6.0	513

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead). ²Southern stem rot lesions taken at plot inversion are expressed as the number of disease loci per 60 feet of row.

Evaluation of Moncut 70DF for Control of Foliar and Soil-Borne Diseases of Peanut

Objective: To assess the efficacy of candidate and registered fungicides applied under a 14-day spray schedule for the control of foliar and soil-borne diseases in peanut.

Location: Gulf Coast Research and Extension Center, Fairhope, AL

Soil Type: Malbis fine sandy loam (OM <1%)

Cultivar: Georgia Green

Planting:

Date: May 6, 2002

Experimental Design: Randomized complete block with six replications. Plot size was four 30-foot rows

spaced 38 inches apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton-cotton rotation.

Cultural Practices:

Herbicides: Prowl 2 pints per acre (May 6), Gramoxone Max 6 ounces + Storm 1 pint per acre + Activate 1 pint per 50 gallons (May 23), Select 13 ounces + Prime Oil 1 pint per acre (June 7), Storm 1.5 pt + Butyrac175 1 pint per acre + Activate 1 pint per 50 gallons (June 12), and Cadre 1 ounce + Butyrac 175 12 ounces per acre + Windcheck 2 quarts per 100 gallons (July 1).

Fungicides: See table.

Insecticides: Temik 5-6 pounds per acre (May 6).

Nematicides: None. **Irrigation:** None.

Application of Treatments: Fungicides were applied as a full canopy spray at a calibrated volume of 20 gallons per acre using a four-row tractor-mounted boom sprayer with TX8 nozzles. Applications were made as follows: 1= June 19, 2= July 1, 3= July 15, 4= July 29, 5= August 12, 6= August 27, and 7= September 11.

Disease Assessment: Early and leaf spot and rust were visually rated on September 20 using the Florida leaf spot scoring system and the ICRISAT rust rating scale, respectively. Counts of southern stem rot loci were made on September 20 immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Peanut were dug September 20 and harvested until October 8 due environmental conditions. Yields were reported at 10% moisture.

EFFECT OF MONCUT 70DF FOR THE CONTROL OF FOLIAR AND SOIL-BORNE DISEASES OF PEANUT, GULF COAST RESEARCH AND EXTENSION CENTER, FAIRHOPE, AL, 2002

		Dis	sease ratings-		
Treatment and rate per acre	Application timing	Leaf spot¹	Rust ²	Southern stem rot ³	Yield lbs/ac
Untreated control	_	4.2 a	6.7 a	12.3 a	2111 d
Bravo Ultrex 1.4 lb	1-7	2.8 bc	4.3 b	10.0 ab	3464 a-c
Bravo Ultrex 1.4 lb Bravo Ultrex 1.4 lb + Moncut 70DF 1.1 lb	1-7 2,4	3.0 b	3.5 b-d	4.2 d	3020 c
Bravo Ultrex 1.4 lb Folicur 3.6F 7.2 fl oz	1,2,7 3,4,5,6	3.0 b	2.8 d	9.0 bc	3686 a-c
Bravo Ultrex 1.4 lb Abound 2SC 18.5 fl oz	1,2,4,6,7 3,5	2.8 bc	4.3 b	6.8 b-d	3173 bc
Bravo Ultrex 1.4 lb Folicur 3.6F 7.2 fl oz Bravo Ultrex 1.4 lb + Moncut 70DF 0.54 lb	1,2,7 3,5 4,6	2.8 bc	3.0 cd	4.5 d	4347 a
Bravo Ultrex 1.4 lb Abound 2SC 18.5 fl oz Bravo Ultrex 1.4 lb + Moncut 70DF 1.1 lb	1,2,4,6,7 3 5	2.7 bc	3.8 b-d	7.2 b-d	3732 a-c
Bravo Ultrex 1.4 lb Bravo Ultrex 1.4 lb + Moncut 70DF 0.54 lb	1,2,7 3,4,5,6	2.5 bc	3.8 b-d	4.2 d	3751 a-c
Bravo Ultrex 1.4 lb Bravo Ultrex 1.4 lb + Moncut 70DF 0.89 lb	1,2,4,6,7 3,5	2.3 c	3.0 cd	5.7 d	3804 a-c
Bravo Ultrex 1.4 lb Bravo Ultrex 1.4 lb + Moncut 70DF 1.1 lb	1,2,4,6,7 3,5	2.5 bc	3.0 cd	4.8 d	3778 a-c
Bravo Ultrex 1.4 lb Headline 2.09EC 0.4 pt Bravo Ultrex 1.4 lb + Moncut 70DF 1.1 lb	1,7 2,4,6 3,5	3.0 b	3.3 b-d	5.8 cd	4011 ab
Bravo Ultrex 1.4 lb Headline 2.09EC 0.4 pt Headline 2.09EC 0.89 lb + Moncut 70DF 0.4 p	1,6,7 2,4 ot 3,5	2.7 bc	4.0 bc	6.7 cd	3449 bc
LSD $(P = 0.05)$		0.6	1.1	3.3	898

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead). ²Rust rated using the ICRISAT 1-9 rating scale (1= no disease,... 9 = 80 100% of leaves diseased or wilted). ³Southern stem rot lesions taken at plot inversion are expressed as the number of disease loci per 60 feet of row.

Evaluation of In-Furrow and Foliar Applications of Abound 2.08SC for the Control of Foliar and Soil-Borne Diseases of Peanuts

Objective: To assess the efficacy of candidate and registered fungicides in-furrow and under 14-day schedule for the control of foliar and soil-borne diseases in peanut.

Location: Gulf Coast Research and Extension Center, Fairhope, AL

Soil Type: Malbis fine sandy loam (OM <1%)

Cultivar: Georgia Green

Planting:

Date: April 25, 2002

Experimental Design: Randomized complete block with six replications. Plot size was four 30-foot rows

spaced 38 inches apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton-cotton rotation.

Cultural Practices:

Herbicides: Prowl 3 pints per acre (April 25), Gramoxone Max 6 ounces + Storm 1 pint per acre + Activate 1 pint per 50 gallons (May 6 and May 23), Select 13 ounces + Prime Oil 1 pint per acre (June 7), Storm 1.5 pint + Butyrac 175 1 pint per acre + Activate 1 pint per 50 gallons (June 12), and Cadre 1 ounce + Butyrac 175 12 ounces per acre + Windcheck 2 quarts per 100 gallons (July 1).

Fungicides: See table.

Insecticides: Temik 5-6 pounds per acre (April 25).

Nematicides: None. **Irrigation:** None.

Application of Treatments: In furrow applications were made at planting using a tractor-mounted CO₂ sprayer with 8001 nozzles. Foliar fungicides were applied as a full canopy spray at a calibrated volume of 20 gallons per acre using a four-row tractor-mounted boom sprayer with TX8 nozzles. Applications were made as follows: 1= June 12, 2= Ju1 1, 3= July 9, 4= July 22, 5= August 8, 6= August 19, and 7= September 3.

Disease Assessment: Early and late leaf spot and rust were visually rated on September 11 using the Florida leaf spot scoring system and the ICRISAT rust rating scale, respectively. Counts of southern stem rot loci were made on September 12 immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Plots were harvested on September 19. Yields were reported at 10% moisture.

EFFECT OF IN-FURROW AND FOLIAR APPLICATIONS OF ABOUND 2.08SC ON FOLIAR AND SOIL-BORNE DISEASES OF PEANUT, GULF COAST RESEARCH AND EXTENSION CENTER, FAIRHOPE, AL, 2002

		Disease ra	itinas———		
Treatment and rate per acre	Application timing	Leaf spot ¹	Rust ²	Soouthern stem rot ³	Yield lbs/ac
Untreated control		4.8 a	6.7 a	9.2 a	4161 b
Bravo 720 1.5 pt	1-7	2.5 d	3.2 b	4.8 bc	5036 a
Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Bravo 720 1.5 pt	1,2,4 3,5,6,7	2.8 bcd	3.2 b	7.2 ab	5013 a
Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 18.5 fl oz Bravo 720 1.5 pt	1,2,4 3,5 6,7	2.8 bcd	2.8 b	4.5 bc	5111 a
Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 12.3 fl oz Bravo 720 1.5 pt	1,2,4 3,5 6,7	2.7 cd	3.2 b	7.7 ab	4848 a
Abound 2SC 6 fl oz Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 18.5 fl oz Bravo 720 1.5 pt	in-furrow 1,2,4 3,5 6,7	3.2 b	3.0 b	5.8 abc	5298 a
Abound 2SC 6 fl oz + Ridomil Gold 4EC 2 fl oz Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 18.5 fl oz Bravo 720 1.5 pt	in-furrow 1,2,4 3,5 6,7	3.0 bc	2.5 b	6.3 abc	5138 a
Abound 2SC 6 fl oz Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 12.3 fl oz Bravo 720 1.5 pt	in-furrow 1,2,4 3,5 6,7	3.0 bc	2.7 b	4.7 bc	4973 a
Abound 2SC 6.0 fl oz + Ridomil Gold 4EC 2.0 fl oz Tilt 3.6EC 2.0 fl oz + Bravo 720 1.0 pt Abound 2SC 12.3 fl oz Bravo 720 1.5 pt	in-furrow 1,2,4 3,5 6,7	2.8 bcd	2.8 b	5.5 abc	5159 a
Bravo 720 1.5 pt Folicur 3.6F 7.2 fl oz	1,6,7 2,3,4,5	3.0 bc	2.8 b	6.0 abc	4720 ab
Bravo 720 1.5 pt Bravo 720 1.5 pt + Moncut 70DF 1.1 lb	1,2,4,6,7 3,5	2.7 cd	2.8 b	3.0 c	5181 a
LSD $(P = 0.05)$		0.5	0.8	3.8	801.6

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (≤25%), 6= lesions numerous with significant defoliation (≤50%), 7= lesions numerous with heavy defoliation (≤75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead).

²Rust rated using the ICRISAT 1-9 rating scale (1= no disease,... 9 = 80 100% of leaves diseased or wilted).

³Southern stem rot lesions taken at plot inversion are expressed as the number of disease loci per 60 feet of row.

Control of Leaf Spot Diseases and White Mold of Peanut Using Headline 2.09EC

Objective: To assess the efficacy of Headline 2.09EC applied under different spray schedules and rates for the control of foliar and soil-borne diseases in peanut.

Location: Gulf Coast Research and Extension Center, Fairhope, AL

Soil Type: Malbis fine sandy loam (OM <1%)

Cultivar: Georgia Green

Planting:

Date: May 6, 2002

Experimental Design: Randomized complete block with six replications. Plot size was four 30-foot rows

spaced 38 inches apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton-cotton rotation.

Cultural Practices:

Herbicides: Prowl 2 pints per acre (May 6), Gramoxone Max 6 ounces + Storm 1 pint per acre + Activate 1 pint per 50 gallons (May 23 and June 7), and Cadre 1 oz + Butyrac 175 12 ounces per acre + Windcheck 2 quarts per 100 gallons (July 1).

Fungicides: See table.

Insecticides: Temik 5-6 pounds per acre (May 6).

Nematicides: None. **Irrigation:** None.

Application of Treatments: Foliar fungicides were applied as a full canopy spray at a calibrated volume of 20 gallons per acre using a four-row tractor-mounted boom sprayer with TX8 nozzles. Applications were made at two-week intervals: 1= June 19, 2= July 1, 3= July 15, 4= July 31, 5= August 12, 6= August 27, and 7= September 11.

Disease Assessment: Early and late leaf spot were rated simultaneously using the Florida leaf spot scoring system. Peanut rust was assessed using the ICRISAT rust rating scale. Evaluation of leaf spot and rust were made on September 12. Counts of southern stem rot loci were made on September 20 immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Peanuts were dug on September 20 and harvested until on October 8 due environmental conditions. Yields were reported at 10% moisture.

EFFECT OF HEADLINE 2.09EC ON THE CONTROL OF LEAF SPOT DISEASES AND WHITE MOLD OF PEANUT, GULF COAST RESEARCH AND EXTENSION CENTER, FAIRHOPE, AL, 2002

		—Disease	e ratings———	_	
Treatment and rate per acre	Application timing	Leaf spot ¹	Rust ²	Southern stem rot ³	Yield lbs/ac
Untreated control	_	4.7 a	6.5 a	11.8 a	2710 d
Bravo Ultrex 1.4 lb	1-7	2.3 b	3.2 bc	5.7 bc	3781 a-c
Bravo Ultrex 1.4 lb Folicur 3.6F 7.2 fl oz	1,2,7 3,4,5,6	2.7 b	2.8 c	4.0 bc	4542 a
Headline 2.09EC 6 fl oz Folicur 3.6F 7.2 fl oz Bravo Ultrex 1.4 lb	1,2 3,4,5,6 7	2.8 b	3.3 bc	3.5 c	3579 bc
Headline 2.09EC 9 fl oz Folicur 3.6F 7.2 fl oz Headline 2.09EC 12 fl oz Bravo Ultrex 1.4 lb	Week betw.1st two sprays 3,5,6 4 7	2.7 b	3.2 bc	5.2 c	4137 ab
Headline 2.09EC 9 fl oz Headline 2.09EC 12 fl oz Folicur 3.6F 7.2 fl oz Bravo Ultrex 1.4 lb	Week betw. 1st two sprays 3 4,5,6 7	2.7 b	3.0 bc	3.8 c	3881 a-c
Headline 2.09EC 9 fl oz Folicur 3.6F 7.2 fl oz Headline 2.09EC 12 fl oz	Week betw. 1st two sprays 3,4,5 6	2.7 b	2.8 c	4.0 c	4416 ab
Bravo Ultrex 1.4 lb Headline 2.09EC 6 fl oz	1,2,4,6,7 3,5	2.5 b	3.0 bc	8.0 b	4003 a-c
Bravo Ultrex 1.4 lb Abound 2SC 18.5 fl oz	1,2,4,6,7 3,5	2.7 b	2.8 bc	4.2 c	3728 a-c
Bravo Ultrex 1.4 lb Bravo Ultrex 1.4 lb + Moncut 7	1,2,4,6,7 DDF 1.1 lb 3,5	2.8 b	3.8 b	4.7 c	4003 a-c
Bravo Ultrex 1.4 lb Stratego 14.0 fl oz	1,2,5,6,7 3,4	3.0 b	3.3 bc	6.2 bc	3269 cd
LSD $(P = 0.05)$		0.7	0.9	2.7	849

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (≤25%), 6= lesions numerous with significant defoliation (≤50%), 7= lesions numerous with heavy defoliation (≤75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead). ²Rust rated using the ICRISAT 1-9 rating scale (1= no disease,... 9 = 80 100% of leaves diseased or wilted). ³Southern stem rot lesions taken at plot inversion are expressed as the number of disease loci per 60 feet of row.

Recommended Fungicide Programs for the Control of Diseases on Dryland Peanut

Objective: To compare the effectiveness of recommended fungicides programs for the control of leaf spot diseases and southern stem rot on selected cultivars of peanut in a dryland production system.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%) **Cultivar:** C-99R, Georgia Green, and Virugard

Planting:

Date: May 22, 2002

Experimental Design: Split plot on a randomized complete block design with four replications. Peanuts line were whole plots and fungicide programs were subplots. Subplots consisted of four 30-foot rows

spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Six seed per foot of row.

Crop History: Site was cropped to switch grass for the previous three years.

Cultural Practices:

Herbicides: Sonalan 1 quart + Strongarm 0.45 ounce per acre (May 7).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: None.

Application of Treatments: Fungicides were applied with a tractor-mounted boom sprayer with three TX-8 hollow cone nozzles per row calibrated to deliver approximately 15 gallons per acre of spray volume. Applications were made as follows: 1= June 25, 2= July 9, 3= July 23, 4= August 6, 5= August 21, 6= September 3, and 7= September 17

Disease Assessment: Early and late leaf spot were rated together using the Florida peanut leaf spot scoring system on September 18 on Virugard, September 30 on Georgia Green, and October 17 on C-99R. Counts of southern stem rot loci were made on September 24 on Virugard, October 4 on Georgia Green, and October 17 on C-99R immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Plots planted with Virugard were dug on September 24; Georgia Green, October 4; and C-99R, October 17. Plots were harvested on September 30, October 8, and October 23, respectively. Yields were reported at 10.2% moisture.

Table 1. Effect of Recommended Fungicide Programs for the Control of Diseases on Dryland Peanut, Wiregrass Research and Extension Center, Headland, AL, 2002

Cultivar	Treatment and rate per acre A	pplication timing	Leaf spot rating ¹
Virugard	Bravo Ultrex 1.5 pt Folicur 3.6F 0.45pt	1,2,7 3-6	1 d
	Bravo Ultrex 1.5 pt Bravo Ultrex 1.5 pt + Moncut 70DF 1.4	1,2,4-7 b 3	1.5 b-d
	Bravo Ultrex 1.5 pt Bravo Ultrex 1.5 pt + Moncut 70DF 0.4	1,2,7 b 3-6	1.25 cd
	Bravo Ultrex 1.4 pt	1-7	1.25 cd
	Bravo Ultrex 1.4 pt Abound 2SC 1.2 pt	1,2,4,6,7 3,5	1.75 bc
	Bravo Ultrex 1.5 pt Abound 2SC 0.75 pt Folicur 3.6F 0.45 pt	1,2,6,7 3,4 5	1.25 cd
	Bravo Ultrex 1.5 pt Headline 6.4 fl oz	1,2,6,7 3,4,5	1.25 cd
C-99R	Bravo Ultrex 1.5 pt Folicur 3.6F 0.45pt	1,2,7 3-6	1.75 bc
	Bravo Ultrex 1.5 pt Bravo Ultrex 1.5 pt + Moncut 70DF 1.4	1,2,4-7 b 3	2.75 a
	Bravo Ultrex 1.5 pt Bravo Ultrex 1.5 pt + Moncut 70DF 0.4 ll	1,2,7 b 3-6	2.75 a
	Bravo Ultrex 1.4 pt	1-7	2.75 a
	Bravo Ultrex 1.4 pt Abound 2SC 1.2 pt	1,2,4,6,7 3,5	1.75 bc
	Bravo Ultrex 1.5 pt Abound 2SC 0.75 pt Folicur 3.6F 0.45 pt	1,2,6,7 3,4 5	2 b
	Bravo Ultrex 1.5 pt Headline 6.4 fl oz	1,2,6,7 3,4,5	1.25 cd
Georgia Green	Bravo Ultrex 1.5 pt Folicur 3.6F 0.45p	1,2,7 3-6	2.75 a
	Bravo Ultrex 1.5 pt Bravo Ultrex 1.5 pt + Moncut 70DF 1.4	1,2,4-7 b 3	2 b
	Bravo Ultrex 1.5 pt Bravo Ultrex 1.5 pt + Moncut 70DF 0.4	1,2,7 b 3-6	2.75 a

continued

Table 1, continued. Effect of Recommended Fungicide Programs for the Control of Diseases on Dryland Peanut,
Wiregrass Research and Extension Center, Headland, AL, 2002

Cultivar	Treatment and rate per acre	Application timing	Leaf spot rating ¹
	Bravo Ultrex 1.4 pt	1-7	2 b
	Bravo Ultrex 1.4 pt Abound 2SC 1.2 pt	1,2,4,6,7 3,5	2 b
	Bravo Ultrex 1.5 pt Abound 2SC 0.75 pt Folicur 3.6F 0.45 pt	1,2,6,7 3,4 5	2 b
	Bravo Ultrex 1.5 pt Headline 6.4 fl oz	1,2,6,7 3,4,5	2 b
LSD $(P = 0.05)$			0.73

 $^{^1}$ Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead).

Table 2. Effect of Recommended Fungicide Programs Across Cultivars for the Control of Diseases on Dryland Peanut, Wiregrass Research and Extension Center, Headland, AL, 2002

Treatment and rate per acre	Application timing	Southern stem rot ¹	Yield (lb/ac)	
Bravo Ultrex 1.5 pt Folicur 3.6F 0.45pt	1,2,7 3-6	2.3 ab	3086 a	
Bravo Ultrex 1.5 pt Bravo Ultrex 1.5 pt + Moncut 70DF	1,2,4-7 1.4 lb 3	2 b	2928 a	
Bravo Ultrex 1.5 pt Bravo Ultrex 1.5 pt + Moncut 70DF	1,2,7 0.4 lb 3-6	1.7 b	3088 a	
Bravo Ultrex 1.4 pt	1-7	3.6 a	2892 a	
Bravo Ultrex 1.4 pt Abound 2SC 1.2 pt	1,2,4,6,7 3,5	2.4 ab	3035 a	
Bravo Ultrex 1.5 pt Abound 2SC 0.75 pt Folicur 3.6F 0.45 pt	1,2,6,7 3,4 5	2.3 ab	3035 a	
Bravo Ultrex 1.5 pt Headline 6.4 fl oz	1,2,6,7 3,4,5	2 b	2950 a	
LSD $(P = 0.05)$		1.4	280	

¹Southern stem rot was assessed at inversion as the number of disease loci per 60 feet of row.

Recommended Fungicide Programs for the Control of Diseases on Irrigated Peanut

Objective: To compare the effectiveness of recommended fungicides programs for the control of leaf spot diseases and southern stem rot on selected cultivars of peanut under irrigation.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%) **Cultivar:** C-99R, Georgia Green, and Virugard

Planting:

Date: May 22, 2003

Experimental Design: Split plot on a randomized complete block design with four replications. Peanuts line were whole plots and fungicide programs were subplots. Subplots consisted of four 30-foot rows spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Six seed per foot of row.

Crop History: Field with history of peanut-cotton rotation.

Cultural Practices:

Herbicides: Prowl 3 pints + Strongarm 0.45 ounce per acre (May 7)

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: 1 inch applied on August 10, August 24, and September 12.

Application of Treatments: Fungicides were applied with a tractor-mounted boom sprayer with three TX-8 hollow cone nozzles per row calibrated to deliver approximately 15 gallons per acre of spray volume. Applications were made as follows: 1= June 25, 2= July 9, 3= July 23, 4= August 6, 5= August 21, 6= September 3, and 7= September 17.

Disease Assessment: Early and late leaf spot were rated together using the Florida peanut leaf spot scoring system on September 13 on Virugard, September 30 on Georgia Green, and October 17 on C-99R. Counts of southern stem rot loci were made on September 24 on Virugard, October 4 on Georgia Green, and October 17 on C-99R immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Plots planted with Virugard were dug on September 24; Georgia Green, October 4; and C-99R, October 17. Plots were harvested on September 30, October 8, and October 23, respectively. Yields were reported at 10.2% moisture.

Overall Cultivars Mean For Leaf Spot, Southern Stem Rot Diseases Rating and Peanut Yield of the Cultivars C-99R, Georgia Green, and Virugard, Wiregrass Research and Extension Center, Headland, AL, 2002

	Disease ratings				
Treatment and rate per acre	Application timing	Leaf spot¹	Southern stem rot ²	Yield lbs/ac	
Bravo Ultrex 1.5 pt Folicur 3.6F 0.45pt	1,2,7 3-6	4.6 a	13.3 b	3630 cd	
Bravo Ultrex 1.5 pt Bravo Ultrex 1.5 pt + Moncut 70DF 1.4 lb	1,2,4-7 3	3.4 b	4.5 e	4616 a	
Bravo Ultrex 1.5 pt Bravo Ultrex 1.5 pt + Moncut 70DF 0.4 lb	1,2,7 3-6	2.7 c	4.5 e	4586 a	
Bravo Ultrex 1.4 pt	1-7	3.6 b	17 a	3057 e	
Bravo Ultrex 1.4 pt Abound 2SC 1.2 pt	1,2,4,6,7 3,5	3.6 b	10 c	3894 bc	
Bravo Ultrex 1.5 pt Abound 2SC 0.75 pt Folicur 3.6F 0.45 pt	1,2,6,7 3,4 5	3.6 b	7 d	4086 b	
Bravo Ultrex 1.5 pt Headline 6.4 fl oz	1,2,6,7 3,4,5	2.6 c	17 a	3273 de	
LSD $(P = 0.05)$		0.5	2.4	360	

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead). ²Southern stem rot was assessed at inversion as the number of disease loci per 60 feet of row.

Calendar Schedule and AU-Pnut Advisory Compared in an Irrigated Peanut Production System

Objective: To compare the effectiveness of recommended fungicides applied on a standard calendar program and using the AU-Pnut leaf spot advisory for the control of leaf spot diseases and southern stem rot as well as on peanut yield.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: Georgia Green

Planting:

Date: May 20, 2002

Experimental Design: Randomized complete block with four replications. Plot size was four 30-foot

rows spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Six seed per foot of row.

Crop History: Field with peanut-cotton-peanut rotation. Site has a history of southern stem rot and peanut

root-knot nematode on peanut.

Cultural Practices:

Herbicides: Sonalan 1 quart + Strongarm 0.45 ounce per acre (April 25).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: 1 inch applied on August 7, August 19, and September 7.

Application of Treatments: Fungicide were applied on a 14-day calendar schedule and according to the standard AU-Pnut leaf spot advisory rules. A tractor-mounted boom sprayer with three TX-8 hollow cone nozzles per row calibrated to deliver approximately 15 gallons per acre of spray volume was used to apply all fungicides.

Disease Assessment: Early and late leaf spot were rated together on September 19 using the Florida leaf spot scoring system. Counts of southern stem rot loci were made on October 1 immediately after plot inversion (one locus is defined as ≤ 1 consecutive foot of diseased plant[s] per row).

Harvest: Peanut were dug on October 1 and harvested until October 7. Yields were reported at 10.7% moisture.

EFFECT OF THE CALENDAR SCHEDULE AND AU-PNUT ADVISORY IN AN IRRIGATED PEANUT PRODUCTION SYSTEM, WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, AL, 2002

				· · · · · · · · · · · · · · · · · · ·	
Treatment and		-Application	——Dise	ase rating——	Yield
rate per acre	Schedule	Days after planting	Leaf spot1	Southern stem rot	² lb/ac
Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	14 day	35, 63, 94, 103, 121 49, 79	3.7 d	17.0 a	3594 a
Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	AU-Pnut ³	28, 79, 121 49, 94	5.5 ab	15.5 a	3186 ab
Bravo Ultrex 1.4 lb Folicur 3.6F 0.45 pt	14 day	35, 49, 121 63, 79, 94, 103	4.5 c	12.7 a	3360 a
Bravo Ultrex 1.4 lb Folicur 3.6F 0.45 pt	AU-Pnut	28, 121 49, 79, 94	5.7 a	13.2 a	3110 a-c
Bravo Ultrex 1.4 lb	14 day	35, 49, 63, 79, 94, 103, 121	3.7 d	12.7 a	3223 a
Bravo Ultrex 1.4 lb	AU-Pnut	28, 49, 79, 94, 121	6.2 a	17.7 a	2436 d
Bravo Ultrex 1.4 lb Headline 6.4 fl oz	14 day	35, 49, 103, 121 63, 79, 94	3.2 d	17.2 a	2694 cd
Bravo Ultrex 1.4 lb Headline 6.4 fl oz	AU-Pnut	28, 121 49, 79, 94	4.8 bc	16.3 a	2710 b-d
LSD $(P = 0.05)$			0.8	5.0	486.9

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead). ²Southern stem rot was assessed at inversion as the number of disease loci per 60 feet of row.

³AU-Pnut leaf spot advisory rules specify that the first application be made immediately after six or more rain events and the second and subsequent applications immediately after three rain events.

Evaluation of Abound 2SC in Calendar and AU-Pnut Leaf Spot Advisory Programs

Objective: To determine if modifying the rules for the AU-Pnut leaf spot advisory system can reduce fungicide use on peanut cultivars that have partial resistance to leaf spot diseases without jeopardizing peanut yield or crop quality.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: C-99R

Planting:

Date: May 20, 2002

Experimental Design: Randomized complete block with four replications. Plot size was four 30-foot

rows spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Six seed per foot of row.

Crop History: Field with peanut-cotton-peanut rotation. Site has a history of southern stem rot and peanut

root-knot nematode on peanut.

Cultural Practices:

Herbicides: Sonalan 1 quart + Strongarm 0.45 ounce per acre (April 25).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: 1 inch applied on August 7, August 19, and September 7.

Application of Treatments: Fungicide were applied on a 14-, 21-, and 28-day calendar schedule, as well as according to the standard June 3 and modified August 4 and October 5 AU-Pnut leaf spot advisory rules. In all calendar programs, two applications of Abound 2SC at 18.2 fluid ounces per acre were made approximately 60 and 90 days after planting. A tractor-mounted boom sprayer with three TX-8 hollow cone nozzles per row calibrated to deliver approximately 15 gallons per acre of spray volume was used to apply all fungicides.

Disease Assessment: Early and late leaf spot were rated together on September 19 using the Florida leaf spot scoring system. Counts of southern stem rot loci were made on October 18 immediately after plot inversion (one locus is defined as ≤ 1 consecutive foot of diseased plant[s] per row).

Harvest: Peanuts were dug on October 18. Yields were reported at 10.6% moisture.

EFFECT OF ABOUND 2SC IN CALENDAR AND AU-PNUT LEAF SPOT ADVISORY PROGRAMS, WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, AL, 2002

Treatment and rate per acre	————A Schedule	pplication——— Days after planting	———Dise Leaf spot¹	ease rating——— Southern stem rot	Yield ² lb/ac
Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	14-d calendar	35, 49, 77, 100, 119 64, 92	3.0 c	10.3 b	3287 a
Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	21-d calendar	35, 77, 119 56, 100	5.3 a	14.2 a	2565 a
Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	28-d calendar	35, 119 64, 92	3.7 b	11.3 ab	3416 a
Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	6/3 ³	28, 64, 119 49, 92	3.7 b	8.5 b	3489 a
Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	8/4	34, 119 64, 92	4.0 b	9.7 b	3440 a
Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	10/5	43, 119 77, 92	3.8 b	9.0 b	3069 a
LSD $(P = 0.05)$			0.5	3.4	501

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead). ²Southern stem rot was assessed at inversion as the number of disease loci per 60 feet of row.

³Number of rain events required to trigger first fungicide application/number of rain events to trigger second and all subsequent fungicide applications according to standard and modified AU-Pnut leaf spot advisory.

Impact of Temik 15G Application Rate On The Control Of Peanut Root-Knot Nematode And The Yield Of Selected Commercial Peanut Cultivars

Objective: To determined the susceptibility of selected commercial peanut cultivars to the peanut root-knot nematode and their response to insecticidal and nematicidal rates of Temik 15G.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: Agra-Tech 1-1, Agra-Tech 201, C-99R, DP-1, Georgia Green, Georgia Hi Oil, Southern Runner, and

Virugard.

Planting:

Date: May 30, 2002

Experimental Design: Split plot on a randomized complete block design with four replications. Peanut lines were whole plots and fungicide programs were subplots. Subplots consisted of six 30-foot rows spaced 3 feet apart.

Land Preparation: Conventional tillage practices. **Seeding Rate:** Five to six seed per foot of row.

Crop History: Field with history of peanut-cotton rotation.

Cultural Practices:

Herbicides: Sonalan 1 quart + Strongarm 0.45 ounce per acre (April 25)

Fungicides: Bravo Ultrex 1.4 pounds per acre (July 1), Folicur 3.6 0.45 pint per acre (July 15, August 12,

September 9, and September 23), and Abound 2SC 1.6 pints per acre (July 29 and August 26).

Insecticides: See table. **Nematicides:** See table.

Irrigation: 1 inch applied on July 11, August 8, and August 14.

Application of Treatments: Temik 15 G treatments were applied at planting time.

Disease Assessment: Severity of early and late leaf spot was simultaneously assessed using the Florida peanut leaf spot scoring system on September 24 for early maturity, September 30 for intermediate maturity, and October 8 for late maturity peanut lines. Counts of southern stem rot loci were made immediately after inversion on September 24 (early maturity), October 3 (intermediate maturity), and October 8 (late maturity).

Harvest: Early maturity peanuts were dug on September 24, intermediate maturity on October 3, and late maturity on October 8. Yields were reported at 10.4% moisture.

Table 1. Disease Rating on Selected Commercial Peanut Cultivars, Wiregrass Research and Extension Center, Headland, AL, 2002

Treatment and rate per acre	Agra-Tech 1-1	Agra-Tech 201	C-99R	DP-1	Georgia Green	Southern Runner	Virugard	Mean		
			Lea	f spot rating¹						
Not treated Temik 7 lb Temik 13.3 lb	7.25 7.5 7.5	7.5 7.5 7.25	5.25 5.5 5	4.25 4.25 4.5	6 6 6.5	6 5.67 6	6.25 6 6	6.07 a 6.07 a 6.11 a		
LSD ($P = 0.05$) Mean	7.4	7.4	5.3	4.3	6.2	5.9	6.1	0.25		
			Pean	ut rust rating²						
Not treated Temik 7 lb Temik 13.3 lb	1 1 1	3.75 2.5 2.75	2 1.75 1.75	2.25 2.25 2.5	2.75 2.25 2	2 2.33 2	1.25 1.25 1.25	2.15 a 1.89 b 1.89 b		
LSD(P = 0.05) Mean	1	3	1.8	2.3	2.3	2.1	1.3	0.25		
		Sc	outhern	stem rot incid	ence³					
Not treated Temik 7 lb Temik 13.3 lb	0.5 0.5 0.75	4.5 5.75 5.75	2.75 2.5 1.25	1.25 0.75 1.25	3 3 4.25	5 3.75 3.5	0 0.5 0.25	2.43 a 2.39 a 2.43 a		
LSD ($P = 0.05$) Mean	0.6	5.3	2.2	1.1	3.4	4.1	0.3	0.85		
Root-knot damage rating										
Not treated Temik 7 lb Temik 13.3 lb	8.25 7.63 7.13	8.88 8.38 8.25	8.13 8 7	7.63 7.25 6.75	8 7.88 7	8.63 8.25 8	7.5 6.63 6	8.14 a 7.71 b 7.16 c		
LSD ($P = 0.05$) Mean	7.7	8.5	7.7	7.2	7.6	8.3	6.7	0.18		

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead). ²Rust ratings made using the ICRISAT 1-9 scale (1= no disease, ... 9= 80 100% of leaves diseased or withered). ³Southern stem rot was assessed at inversion as the number of disease loci per 60 feet of row.

TABLE 2. YIELD¹ OF SELECTED COMMERCIAL PEANUT CULTIVARS, WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, AL, 2002

Treatment and rate per acre	Agra-Tech 1-1	Agra-Tech 201	C-99R	DP-1	Georgia Green	Georgia Oil	Southern Runner	Virugard	Mean
Not treated Temik 7 lb Temik 13.3 lb	2317 2257 2311	1452 1652 1452	2378 2033 1954	2850 2638 2710	1773 1500 1615	659 647 653	2299 2620 2801	2674 2747 2729	2050 a 2012 a 2028 a
LSD ($P = 0.05$) Mean	2295	1519	2122	2733	1630	653	2573	2717	140

¹Yield is in pounds per acre.

Impact of Selected Fungicide Programs on Disease Control on Commercial Peanut Lines

Objective: To determine the impact of fungicides inputs on reaction of selected standard, mid-oleic, and high oleic cultivars to TSWV, leaf spot diseases, and southern stem rot as well as yield response.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: Norden, Hull, DP-1, C-99R, Georgia Hi Oil, Georgia Green, and Virugard

Planting:

Date: May 28, 2002

Experimental Design: Split plot on a randomized complete block design with four replications. Peanut lines were whole plots and fungicide programs were subplots. Subplots consisted of four 30-foot rows

spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton rotation.

Cultural Practices:

Herbicides: Sonalan 1 quart + Strongarm 0.45 ounce per acre (April 25).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15G 14 pounds per acre.

Irrigation: 1 inch applied on July 11, August 8, and August 14.

Application of Treatments: Broadcast application of all fungicides were at two-week intervals with a tractor-mounted sprayer with three TX-8 hollow cone nozzles per row that were calibrated to deliver 15 gallons per acre of spray volume. Fungicide treatments were applied on July 1, July 15, July 29, August 12, August 26, September 9, and September 23.

Disease Assessment: Early and late leaf spot were rated together using the Florida peanut leaf spot scoring system. Peanut rust was assessed using the ICRISAT rust rating scale. Leaf spot and peanut rust were rated on September 30 for early maturing (Virugard), October 8 for intermediate maturing (Georgia Green, Norton, and Georgia Hi Oil), and October 17 for late maturing peanut cultivars (DP-1, C-99R, and Hull). Southern stem rot hits counts was recorded immediately after digging on October 3 for early maturing, October 8 for intermediate, and October 17 for late maturing cultivar.

Harvest: Early maturing peanut cultivars were dug on October 3, intermediate maturing on October 8, and late maturing on October 17. Yields were reported at 10.4% moisture.

Effect of Selected Fungicide Programs on Disease Control on Commercial Peanut Lines, Wiregrass Research and Extension Center, Headland, AL, 2002

Cultivar	Treatment	Application		Disease rating-		Yield
out. Tu	and rate per acre	timing	Leaf spot ¹	Rust ²	SSR ³	lb/ac
Norden	Bravo Ultrex 1.4 lb	1-7	1 d	5.5 b-c	14.3 ab	2202 b-f
	Bravo Ultrex 1.4 lb	1,2,7	3 a	5.8 a-c	12.3 ab	2263 b-f
	Folicur 3.6F 0.45 pt	3-6		_	44 1	2202 6
	Bravo Ultrex 1.5 pt	1,7	1 d	5 c-e	14 ab	2293 b-f
	Folicur 3.6F 0.45 pt Headline 0.75 pt	2,4,6				
Hull	Bravo Ultrex 1.4 lb	3,5 1-7	1 d	4 e-h	_	1446 fg
riali	Bravo Ultrex 1.4 lb	1,2,7	1 d	4.8 c-f	_	2390 a-f
	Folicur 3.6F 0.45 pt	3-6				
	Bravo Ultrex 1.5 pt	1,7	1 d	4.3 e-h	_	2045 d-g
	Folicur 3.6F 0.45 pt	2,4,6				_
	Headline 0.75 pt	3,5				
DP-1	Bravo Ultrex 1.4 lb	1-7	1.3 cd	3.3 h	16.8 ab	2922 a-d
	Bravo Ultrex 1.4 lb	1,2,7	1.5 b-d	4.5 d-g	14.5 ab	2825 a-d
	Folicur 3.6F 0.45 pt Bravo Ultrex 1.5 pt	3-6 1,7	1.3 cd	3.5 gh	16 ab	3170 ab
	Folicur 3.6F 0.45 pt	2,4,6	1.5 Cu	3.3 gii	10 ab	3170 ab
	Headline 0.75 pt	3,5				
C 99R	Bravo Ultrex 1.4 lb	1-7	1 d	4 e-h	18.3 ab	3104 a-c
	Bravo Ultrex 1.4 lb	1,2,7	2 b	4.8 c-f	15.5 ab	3346 a
	Folicur 3.6F 0.45 pt	3-6				
	Bravo Ultrex 1.5 pt	1,7	1 d	4.5 d-g	18.8 ab	2608 a-d
	Folicur 3.6F 0.45 pt	2,4,6				
Georgia Hi Oil	Headline 0.75 pt Bravo Ultrex 1.4 lb	3,5 1-7	_	_	_	1948 d-g
Georgia i ii Oii	Bravo Ultrex 1.4 lb	1,2,7	_	_	_	1946 u-g 1071 g
	Folicur 3.6F 0.45 pt	3-6				10/1 g
	Bravo Ultrex 1.5 pt	1,7	_	_	_	1458 fg
	Folicur 3.6F 0.45 pt	2,4,6				3
	Headline 0.75 pt	3,5				
Georgia Green	Bravo Ultrex 1.4 lb	1-7	1.3 cd	6.5 ab	23.3 a	2105 d-f
	Bravo Ultrex 1.4 lb	1,2,7	1.8 bc	6.8 a	14.8 ab	2172 c-f
	Folicur 3.6F 0.45 pt Bravo Ultrex 1.5 pt	3-6 1,7	1.5 b-d	4.8 c-f	14.8 ab	2269 b-f
	Folicur 3.6F 0.45 pt	2,4,6	1.5 D-u	4.0 C-1	14.0 dD	2209 D-I
	Headline 0.75 pt	3,5				
Virugard	Bravo Ultrex 1.4 lb	1-7	1 d	3.8 f-h	19 ab	1531 e-g
	Bravo Ultrex 1.4 lb	1,2,7	1 d	5 с-е	8.5 b	1954 d-q
	Folicur 3.6F 0.45 pt	3-6				_
	Bravo Ultrex 1.5 pt	1,7	1 d	3.5 gh	9 b	2456 a-e
	Folicur 3.6F 0.45 pt	2,4,6				
ICD (D = 0.05)	Headline 0.75 pt	3,5	0.4	0.2	4.2	004
LSD $(P = 0.05)$			0.4	0.3	4.2	994

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead). ²Rust ratings made using the ICRISAT 1-9 scale (1= no disease, ... 9= 80 100% of leaves diseased or withered). ³SSR=Southern stem rot. SSR was assessed at inversion as the number of disease loci per 60 feet of row.

Comparison of Calendar Schedule and AU-Pnut Advisory for Disease Control in a Dryland Peanut Production System

Objective: To compare the effectiveness of recommended fungicides that are applied on a standard calendar program and using the AU-Pnut leaf spot advisory for the control of leaf spot diseases and southern stem rot as well as the effecton peanut yield and quality factors.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%) **Cultivar:** Georgia Green, Virugard, and C-99R

Planting:

Date: May 22, 2002

Experimental Design: Split plot on a randomized complete block design with four replications. Peanuts line were whole plots and fungicide programs were subplots. Subplots consisted of four 30-foot rows spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Six seed per foot of row.

Crop History: Field with history of peanut-cotton rotation.

Cultural Practices:

Herbicides: Sonalan 1 quart per acre (May 16).

Fungicides: See table.

Insecticides: See nematicides.

Nematicides: Temik 15 pounds per acre.

Irrigation: None.

Application of Treatments: Fungicides were applied on a 14-day calendar schedule or according to the standard AU-Pnut leaf spot advisory leaf spot advisory rules. Applications dates for the recommended 14-day calendar program were June 26, July 9, July 23, August 8, August 23, September 5, and September 20 compared to June 18, July 9, July 23, August 23, and September 20 for the AU-Pnut leaf spot advisory. A tractor-mounted boom sprayer with three TX-8 hollow cone nozzles per row calibrated to deliver approximately 15 gallons per acre of spray volume was used to apply all fungicides treatments.

Disease Assessment: Early and late leaf spot were rated together using the Florida peanut leaf spot scoring system on September 19. Counts of southern stem rot loci were made on September 23 on Virugard, October 4 on Georgia Green, and October 18 on C-99R immediately after plot inversion (one locus is defined as < 1 consecutive foot of diseased plant[s] per row).

Harvest: Plots planted with the cultivar Virugard were dug on September 30; Georgia Green, October 8; and C-99R, October 23. Yields were reported at 10.4 % moisture for Georgia Green and 10.1% for Virugard and C-99R.

Table 1. Effect of Calendar Schedule and AU-Pnut Advisory on Leaf Spot Diseases in Dryland Peanut Production System,
Wiregrass Research and Extension Center, Headland, AL, 2002

	IREGRASS RESEARCH AND E	ATENSION CENT	ER, HEADLAND, AL, 2002	
C III			-Application	
Cultivar	Treatment and rate per acre	Schedule	Timing (DAP) Leaf	spot rating ¹
C-99R	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 78, 106, 122	3
	Abound 2SC 1.15 pt		32, 93	_
	Bravo Ultrex 1.4 lb	AU-Pnut	28, 48, 122	3
	Abound 2SC 1.15 pt	1.4	62, 93	2
	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 122	3
	Folicur 3.6F 0.45 pt Bravo Ultrex 1.4 lb	AU-Pnut	62, 78, 93, 106 28, 48	3.25
	Folicur 3.6F 0.45 pt	AOFIIII	62, 93, 122	3.23
	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 62, 78, 93, 106, 122	3
	Bravo Ultrex 1.4 lb	AU-Pnut	28, 48, 62, 93, 122	3.5
	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 106, 122	3
	Headline 6.4 fl oz	,	62, 78, 93	
	Bravo Ultrex 1.4 lb	AU-Pnut	35, 48	3.25
	Headline 6.4 fl oz		62, 93, 122	
Georgia Green	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 78, 106, 122	3
	Abound 2SC 1.15 pt		32, 93	
	Bravo Ultrex 1.4 lb	AU-Pnut	28, 48, 122	4
	Abound 2SC 1.15 pt	1.4	62, 93	2.5
	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 122	3.5
	Folicur 3.6F 0.45 pt Bravo Ultrex 1.4 lb	AU-Pnut	62, 78, 93, 106 28, 48	5.25
	Folicur 3.6F 0.45 pt	AOFIIII	62, 93, 122	3.23
	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 62, 78, 93, 106, 122	3.25
	Bravo Ultrex 1.4 lb	AU-Pnut	28, 48, 62, 93, 122	5
	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 106, 122	3.25
	Headline 6.4 fl oz	·	62, 78, 93	
	Bravo Ultrex 1.4 lb	AU-Pnut	35, 48	3.75
	Headline 6.4 fl oz		62, 93, 122	
Virugard	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 78, 106, 122	2.75
	Abound 2SC 1.15 pt	ALL Doub	32, 93	2 25
	Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	AU-Pnut	28, 48, 122 62, 93	3.25
	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 122	3.25
	Folicur 3.6F 0.45 pt	i i day calcildal	62, 78, 93, 106	5.25
	Bravo Ultrex 1.4 lb	AU-Pnut	28, 48	4.5
	Folicur 3.6F 0.45 pt		62, 93, 122	
	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 62, 78, 93, 106, 122	3
	Bravo Ultrex 1.4 lb	AÚ-Pnut	28, 48, 62, 93, 122	4
	Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 106, 122	2.75
	Headline 6.4 fl oz		62, 78, 93	0.5
	Bravo Ultrex 1.4 lb	AU-Pnut	35, 48	3.5
ICD (D-0.0E)	Headline 6.4 fl oz		62, 93, 122	0.6
LSD (<i>P</i> =0.05)				0.6

¹Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (≤25%), 6= lesions numerous with significant defoliation (≤50%), 7= lesions numerous with heavy defoliation (≤75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead).

Table 2. Southern Stem Rot Incidence and Yield Mean of Cultivars C-99R, Georgia Green, and Virugard in Dryland Peanut Production System, Wiregrass Research and Extension Center, Headland, AL, 2002

Treatment and rate per acre	Schedule	Application———— Timing (DAP)	Southern stem rot count ¹	Yield lb/ac
Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	14-day calendar	35, 48, 78, 106, 122 32, 93	3.7 ab	4112 b
Bravo Ultrex 1.4 lb Abound 2SC 1.15 pt	AU-Pnut	28, 48, 122 62, 93	3.2 ab	4102 b
Bravo Ultrex 1.4 lb Folicur 3.6F 0.45 pt	14-day calendar	35, 48, 122 62, 78, 93, 106	3.1 b	3985 bc
Bravo Ultrex 1.4 lb Folicur 3.6F 0.45 pt	AU-Pnut	28, 48 62, 93, 122	3.2 ab	4427 a
Bravo Ultrex 1.4 lb	14-day calendar	35, 48, 62, 78, 93, 106, 122	3.3 ab	4025 bc
Bravo Ultrex 1.4 lb	AU-Pnut	28, 48, 62, 93, 122	3.3 ab	3749 c
Bravo Ultrex 1.4 lb Headline 6.4 fl oz	14-day calendar	35, 48, 106, 122 62, 78, 93	4.3 a	3769 c
Bravo Ultrex 1.4 lb Headline 6.4 fl oz	AU-Pnut	35, 48 62, 93, 122	4.2 ab	4152 ab
LSD $(P = 0.05)$			1.2	296

¹Southern stem rot was assessed at inversion as the number of disease loci per 60 feet of row.

Reaction of Commercial Peanut Lines to Diseases and Yield Response, 2002 PVT Test

Objective: To evaluate the sensibility of commercial peanut lines to TSWV, leaf spot diseases, and southern stem rot.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivars: Agra-Tech 201, Andru II, C 34-24, C-99R, C156-47, Carver, DP-1, Florunner, Ga 01 R, Ga 02 C, Georgia Green, Ga Hi-Oil, GP-1, Gregory, Hull, NC-V11, Norden, Southern Runner, VA 98R, VA-C92R, Virugard, and Wilson

Planting:

Date: May 6, 2002

Experimental Design: Randomized complete block with four replications. Plot size was four 20-foot rows spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Five seed per foot of row.

Crop History: Field with history of peanut-cotton-cotton rotation.

Cultural Practices:

Herbicides: Sonalan 1.1 quarts + Strongarm 0.45 ounce per acre, and Select 8 ounces + Crop Oil 1 quart per acre.

Fungicides: Bravo Ultrex 1.4 pounds per acre (June 3, June 18, September 26), Folicur 3.6F 0.45 pint per acre (July 1, July 15, July 29, August 12).

Insecticides: Temik 15G 6.7 pounds per acre (May 6), Orthene 97 0.5 ounce per acre (May 22), Karate Z 1.6 ounces per acre (August 9).

Nematicides: None.

Irrigation: 0.5 inch applied on July 27; 0.7 inch on August 6; 0.8 inch on May 8, July 8, August 19, August 28; and 1 inch July 16.

Disease Assessment: Early and late leaf spot were rated together using the Florida peanut leaf spot scoring system on September 11 for early maturity, September 18 for intermediate maturity, and October 4 for the late maturity peanut lines. TSWV loci counts was recorded on August 29 for early maturity, September 11 for the intermediate, and October 4 for the late maturity peanut lines (one locus is defined as < 1 consecutive foot of diseased plant[s] per row). Counts of southern stem rot loci were made on September 13 for early maturity, September 20 for intermediate maturity, and October 8 for the late maturity peanut lines.

Harvest: Peanuts were dug on September 13 (early maturity), September 20 (intermediate maturity), and October 8 (late maturity) and harvested 3 to 5 days later. Yields were reported at 7% moisture.

REACTION OF COMMERCIAL PEANUT LINES TO DISEASES AND YIELD RESPONSE, 2002 PVT TEST, WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, AL, 2002

Treatment	Peanut type¹	Maturity ²	TSWV (# loci/40 ft)	Leaf spot rating ³	Southern stem rot (#loci/40 ft)	Yield lb/ac
Agra-Tech 201	R	(2)	7 e-h	5.25 b-e	1.25 d-f	6089 ab
Andru II	R	(1)	5.3 gh	4.5 d-g	0.25 f	5899 a-c
C 34-24	R	(3)	4.3 h	4.75 c-g	2 d-f	5073 c-f
C-99R	R	(3)	7 e-h	4.75 c-g	3.5 cd	5590 b-e
C156-47	R	(2)	5 gh	5.5 b-d	0.75 ef	4946 d-f
Carver	R	(2)	7 e-h	5 b-f	1.75 d-f	6207 ab
DP-1	R	(3)	4.3 h	4 fg	1.25 d-f	4910 d-f
Florunner	R	(2)	17 ab	5.75 a-c	5 bc	3675 g
Ga 01 R	R	(3)	4.3 h	4 fg	1 d-f	6561 a
Ga 02 C	R	(2)	7.5 e-h	3.75 g	0.75 ef	5708 a-d
Ga Green	R	(2)	13 b-d	4.75 c-g	1 d-f	4737 ef
Ga Hi-Oil	R	(2)	5.8 f-h	4.75 c-g	0.5 ef	5590 b-e
GP-1	R	(1)	11 c-g	5.75 a-c	2 d-f	5454 b-f
Gregory	V	(2)	3.8 h	6.75 a	2 d-f	5291 b-f
Hull	R	(3)	9.3 c-h	5.25 b-e	1.5 d-f	5436 b-f
NC-V11	V	(2)	14 a-c	5.5 b-d	7.5 ab	5091 c-f
Norden	R	(2)	8 d-h	4 fg	1.75 d-f	5137 c-f
Southern Runner	R	(3)	11 c-f	4.25 e-g	3 с-е	5363 b-f
VA 98R	V	(2)	10 c-g	5 b-f	5.25 a-c	5382 b-f
VA-C92R	V	(1)	19 a	4.5 d-g	3 с-е	5127 c-f
Virugard	R	(1)	6 f-h	4.5 d-g	1.25 d-f	5654 a-e
Wilson	V	(2)	13 b-e	6 ab	7.75 a	4510 fg
LSD $(P = 0.05)$			5.7	1	2.6	949

¹Peanut type: R= Runner and V= Virginia.

²Maturity of peanut line 1= early maturity, 2= intermediate maturity, and 3= late maturity.

 $^{^3}$ Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead).

Severity of Leaf Spot Diseases, Southern Stem Rot, and Tomato Spotted Wilt on Experimental Peanut Lines, UPPT 2002

Objective: To assess the yield response and disease susceptibility of experimental peanut lines.

Location: Wiregrass Research and Extension Center, Headland, AL

Soil Type: Dothan sandy loam (OM <1%)

Cultivar: NC7, Florunner, UF 98326, UF 00620, UF 98511, GA 942516, GA 962533, A 962569, TX 977006, TX

977053, VT 9506102-6, C156-47, C11-2-39, and Georgia Green

Planting:

Date: May 6, 2002

Experimental Design: Randomized complete block with four replications. Plot size was four 20-foot

rows spaced 3 feet apart.

Land Preparation: Conventional tillage practices.

Seeding Rate: Six seed per foot of row.

Crop History: Field with cotton-cotton-peanut rotation.

Cultural Practices:

Herbicides: Sonalan 1.14 quarts + Strongarm 0.45 ounce per acre, and Select 8 ounces + Crop Oil 1 quart per acre.

Fungicides: Bravo Ultrex 1.4 pounds per acre (June 3, June 18, September 26), Folicur 3.6F 0.45 pint per acre (July 1, July 15, July 29, August 12), and Echo 720 1.5 pints per acre (September 9).

Insecticides: Temik 15G 6.7 pounds per acre (May 6), Orthene 97 0.5 ounce per acre (May 22), Karate Z 1.6 ounces per acre (August 9).

Nematicides: None.

Irrigation: 0.5 inch applied on July 27; 0.7 inch on August 6; 0.8 inch on May 8, July 8, August 19, August 28; and 1 inch July 16.

Disease Assessment: Counts of tomato spotted wilt (TSWV) loci (one locus is defined as < 1 consecutive foot of diseased plant[s] per row) were made on August 29 for early maturity, September 11 for the intermediate maturity, and October 4 for the late maturity peanut lines. Severity of early and late leaf spot was simultaneously assessed using the Florida peanut leaf spot scoring system on September 11 for early maturity, September 18 for intermediate maturity, and October 4 for late maturity peanut lines. Counts of southern stem rot loci were made immediately after digging on September 13 (early maturity), September 20 (intermediate maturity), and October 8 (late maturity).

Harvest: Peanuts were dug on September 13 (early maturity), September 20 (intermediate maturity), and October 8 (late maturity) and harvested 3 to 5 days later. Yields were reported at 7% moisture.

SEVERITY OF LEAF SPOT DISEASES, SOUTHERN STEM ROT, AND TOMATO SPOTTED WILT ON EXPERIMENTAL PEANUT LINES, WIREGRASS RESEARCH AND EXTENSION CENTER, HEADLAND, AL,

Treatment	Peanut type¹	Maturity ²	Leaf spot rating³	Southern stem rot (#loci/40 ft)	TSWV (#loci/40 ft)	Yield lb/ac
NC7 (ck)	V	(1)	5.5 c-e	3.75 ab	15.3 a-c	6144 b-d
Florunner (ck)	R	(2)	5.75 cd	5 a	16.8 ab	3911 f
UF 98326 (Hull)	R	(3)	4.25 f	1.75 b-e	5.75 de	5999 b-d
UF 00620	R	(1)	6.25 a-c	0 e	8.75 с-е	6289 a-c
UF 98511 (Norden)	R	(2)	4.75 ef	2.75 a-d	11.5 b-d	5000 e
GA 942516	V	(3)	6 bc	1 c-e	5.25 de	6171 b-d
GA 962533	R	(2)	4.25 f	0.5 de	5 de	6407 ab
GA 962569	V	(1)	4.25 f	0.75 de	8 de	7060 a
TX 977006	R	(2)	7 a	3.25 a-c	18.8 a	5980 b-d
TX 977053	R	(2)	6.75 ab	2.5 b-d	18.8 a	5554 c-e
VT 9506102-6	V	(1)	5 d-f	1.25 c-e	9.25 c-e	6461 ab
C156-47	R	(2)	5.75 cd	1 c-e	6.5 de	5418 de
C11-2-39	R	(3)	5 d-f	0.5 de	3 e	5663 b-e
Georgia Green (ck)	R	(2)	5 d-f	1.5 b-e	7.25 de	6389 a-c
LSD $(P = 0.05)$			0.8	2.4	6.5	841

¹Peanut type: R= runner-type and V= Virginia-type peanut line.

²Maturity of peanut line 1= early maturity, 2= intermediate maturity, and 3= late maturity.

³Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease, 2= very few lesions in lower canopy, 3= few lesions in lower and upper canopy, 4= some lesions with slight defoliation, 5= lesions noticeable in upper canopy with some defoliation (\leq 25%), 6= lesions numerous with significant defoliation (\leq 50%), 7= lesions numerous with heavy defoliation (\leq 75%), 8= very numerous lesions on few remaining leaves with heavy defoliation, 9= very few remaining leaves covered with lesions, and 10= plants dead).