

# 2014 Evaluation of In-Furrow and Foliar Fungicides for Disease Control in Peanut, Jay, FL

Darcy Telenko, John Atkins, Nick Dufault and Barry Brecke

This report includes a summary of the 2014 in-furrow and foliar fungicide programs for control of early and late leaf spot and white mold (southern stem rot) in peanut at Jay, Florida. It shows the effectiveness of thirteen fungicide programs for disease control. This data represents only one year and one location, and readers are cautioned that test results should be considered over several locations and year before final conclusions are valid.

## Fungicide treatments, treatment rates, and application timing (see Table 1 for treatment schedule):

1. **Untreated check**
2. **Bravo:** BravoWS 1.5 pt (30, 45, 60, 75, 90, 105 DAP)
3. **Monsoon:** BravoWS 1.5 pt (30, 45 DAP); Monsoon 7.2 fl oz + BravoWS 1 pt (60, 75, 105 DAP); Convoy 13 oz + BravoWS 1.5 pt (90 DAP)
4. **Proline In-Furrow + Provost/Convoy:** Proline SC 5.7 fl oz (In-Furrow); Bravo WS 1.5 pt (30, 45 DAP); Provost 433SC 8 fl oz (60, 75, 105 DAP); Convoy 13 oz + BravoWS 1.5 pt (90 DAP)
5. **Proline 30 DAP banded:** Proline SC 5.7 fl oz (30 DAP Banded); Provost 433SC 8 fl oz (60, 75, 105 DAP); Convoy 13 oz + BravoWS 1.5 pt (90 DAP)
6. **Proline 40 DAP banded:** Proline SC 5.7 fl oz (40 DAP Banded); Provost 433SC 8 fl oz (60, 75, 105 DAP); Convoy 13 oz + BravoWS 1.5 pt (90 DAP)
7. **Abound In-Furrow + Provost:** Abound 2.08SC 10 fl oz (In-Furrow); BravoWS 1.5 pt (30, 45 DAP); Provost 433SC 8 fl oz (60, 75, 105 DAP); Convoy 13 oz + BravoWS 1.5 pt (90 DAP)
8. **Provost/Convoy:** BravoWS 1.5 pt (30, 45 DAP); Provost 433SC 8 fl oz (60, 75, 105 DAP); Convoy 13 oz + BravoWS 1.5 pt (90 DAP)
9. **Convoy/Headline:** BravoWS 1.5 pt (30, 45 DAP); Convoy 13 oz + BravoWS 1.5 pt (60, 75, 105 DAP); Convoy 13 oz + Headline 6 fl oz (90 DAP)
10. **TiltBravo/Artisan:** TiltBravo 1.5 pt (30, 45 DAP); Artisan 16 fl oz + BravoWS 1 pt (60, 75, 90, 105 DAP)
11. **TiltBravo/Fontelis:** TiltBravo 1.5 pt (30, 45 DAP); Fontelis 16 fl oz (60, 75, 105 DAP); BravoWS 1.5 pt (90 DAP)
12. **Abound 3 times:** BravoWS 1.5 pt (30, 45, 105 DAP); Abound 2.08SC 12 fl oz (60, 75, 90 DAP)
13. **Alto/Abound:** TiltBravo 1.5 pt (30, 45 DAP); Alto 5.5 fl oz + Abound 12 oz (60, 90 DAP); TiltBravo 1.5 pt (75, 105 DAP)

**Table 1. Fungicide programs, application date/number of days after planting (DAP) and rate of application per acre.**

Treatment name	AT PLANTING IN-FURROW 5 June Stem Rot	1 30 DAP 7 July Leaf Spot	2 40 DAP 15 July Stem Rot	3 45 DAP 21 July Leaf Spot	4 60 DAP 4 August Stem Rot	5 75 DAP 19 August Leaf Spot	6 90 DAP 3 September Stem Rot	7 105 DAP 18 September Leaf Spot	8 120 DAP 3 October Leaf Spot
<b>Untreated Control</b>									
<b>Bravo</b>		BravoWS 1.5 pt		BravoWS 1.5 pt	BravoWS 1.5 pt	BravoWS 1.5 pt	BravoWS 1.5 pt	BravoWS 1.5 pt	BravoWS 1.5 pt
<b>Monsoon</b>		BravoWS 1.5 pt		BravoWS 1.5 pt	Folicur 7.2 fl oz + BravoWS 1 pt	Folicur 7.2 fl oz + BravoWS 1 pt	Convoy 13 oz + BravoWS 1.5 pt	Folicur 7.2 fl oz + BravoWS 1 pt	BravoWS 1.5 pt
<b>Proline (In-Furrow) + Provost/Convoy</b>	Proline SC 5.7 fl oz (In-Furrow)	BravoWS 1.5 pt		BravoWS 1.5 pt	Provost 433 SC 8 fl oz	Provost 433 SC 8 fl oz	Convoy 13 oz + BravoWS 1.5 pt	Provost 433 SC 8 fl oz	BravoWS 1.5 pt
<b>Proline 30DAP (Banded)</b>		Proline SC 5.7 fl oz (Banded)			Provost 433 SC 8 fl oz	Provost 433 SC 8 fl oz	Convoy 13 oz + BravoWS 1.5 pt	Provost 433 SC 8 fl oz	BravoWS 1.5 pt
<b>Proline 40DAP (Banded)</b>			Proline SC 5.7 fl oz (Banded)		Provost 433 SC 8 fl oz	Provost 433 SC 8 fl oz	Convoy 13 oz + BravoWS 1.5 pt	Provost 433 SC 8 fl oz	BravoWS 1.5 pt
<b>ABOUND (In-Furrow) + Provost</b>	Abound 2.08SC 10 fl oz (In-Furrow)	BravoWS 1.5 pt		BravoWS 1.5 pt	Provost 433 SC 8 fl oz	Provost 433 SC 8 fl oz	Convoy 13 oz + BravoWS 1.5 pt	Provost 433 SC 8 fl oz	BravoWS 1.5 pt
<b>Provost/Convoy</b>		BravoWS 1.5 pt		BravoWS 1.5 pt	Provost 433 SC 8 fl oz	Provost 433 SC 8 fl oz	Convoy 13 oz + BravoWS 1.5 pt	Provost 433 SC 8 fl oz	BravoWS 1.5 pt
<b>Convoy/Headline</b>		BravoWS 1.5 pt		BravoWS 1.5 pt	Convoy 13 oz + BravoWS 1.5 pt	Convoy 13 oz + BravoWS 1.5 pt	Convoy 13 oz + Headline 6 fl oz	Convoy 13 oz + BravoWS 1.5 pt	BravoWS 1.5 pt
<b>TiltBravo/Artisan</b>		Tilt Bravo 1.5 pt		Tilt Bravo 1.5 pt	Artisan 16 fl oz+ BravoWS 1 pt	Artisan 16 fl oz+ BravoWS 1 pt	Artisan 16 fl oz+ BravoWS 1 pt	Artisan 16 fl oz+ BravoWS 1 pt	Bravo 1.5 pt
<b>TiltBravo/Fontelis</b>		Tilt Bravo 1.5 pt		Tilt Bravo 1.5 pt	Fontelis 16 fl oz	Fontelis 16 fl oz	Bravo 1.5 pt	Fontelis 16 fl oz	Bravo 1.5 pt
<b>Abound 3 times</b>		BravoWS 1.5 pt		BravoWS 1.5 pt	Abound 2.08 SC 12 fl oz	Abound 2.08 SC 12 fl oz	Abound 2.08 SC 12 fl oz	BravoWS 1.5 pt	BravoWS 1.5 pt
<b>Alto/Abound</b>		Tilt Bravo 1.5 pt		Tilt Bravo 1.5 pt	Alto 5.5 fl oz +Abound 2.08 SC18.5 fl oz	Tilt Bravo 1.5 pt	Alto 5.5 fl oz +Abound 2.08 SC18.5 fl oz	Tilt Bravo 1.5 pt	BravoWS 1.5 pt

Active ingredient (trade name – manufacturer):

Chlorothalonil (BravoWS – Syngenta); tebuconazole (Folicur 430SC- Bayer CropSciences); flutolanil (Convoy – Nichino America); prothioconazole (Proline 480SC – Bayer CropSciences); prothioconazole+tebuconazole (Provost 433SC – Bayer CropSciences); azoxystrobin (Abound 2.08SC – Syngenta); pyraclostrobin (Headline – BASF Crop Protection); propiconazole+chlorothalonil (Tilt Bravo – Syngenta); flutolanil+propiconazole (Artisan – Nichino America); penthiopyrad (Fontelis –DuPont); cyproconazole (Alto – Syngenta)

## 2014 Growing Conditions and Experimental Design:

The soil type was a Red Bay sandy loam that had a history of yield loss to white mold (southern stem rot). The field was planted in a rotation of cotton and peanut in 2012 and 2011, respectively. TUFRunner 511 was planted five to six seed/ft on 5 June. In-furrow fungicide treatments were applied with a modified plot sprayer attached to the planter at planting. Fungicide solution was metered into the seed furrow through a single nozzle attached to each of the seed furrow openers. The applicator was calibrated to deliver 10 gpa in the seed furrow. A CO<sub>2</sub> backpack sprayer with 11002 nozzles, operated at 3 mph and 20 psi was used for both banded sprays using a single nozzle per row, and broadcast treatments using nozzles spaced 12 inches apart on a six foot boom. The initial foliar application was made 30 days after planting (DAP) and thereafter according to each spray program (Table 1). BravoWS was applied 1.5 pt/A to all plots 120 DAP for resistance management, except untreated.

Standard practices for production of runner-type peanuts were followed throughout the growing season. Dual at 1.3 pt/A + Valor t 2 oz/A were applied preemergence on 6 June and Cadre at 4 oz/A + 2,4-DB at 1.5 pt/A were applied postemergence 2 July. Thimet 7.5 lb/A was applied at planting for insect control.

Plots were four, 25-ft rows spaced 36 in. apart and treatments were replicated in four randomized complete blocks. Disease incidence and yield data were collected from two center rows in each plot. Peanuts were harvested on 24 October. Whole pods were dried to approximately 9% moisture (w/w) and weighed for determining yield. Plot weights were converted to yield in lb/A and the gross value was calculated based on a price of \$0.2125/lb.

Rainfall in June, August and September was 2.13, 1.58, and 2.13 in. below normal, respectively; rainfall in July and October was 0.65 and 0.26 in. above normal, respectively. Rainfall during the period totaled 27.07 in., which was 4.93 in. below normal. Weather data was obtained from Florida Automated Weather Network (FAWN) station located on Jay research farm and normal represents the mean for the past 54 years of records (Table 2).

**Table 2. Weather conditions during 2014 peanut fungicide trial.**

Month	Total Rainfall (in)	Average minimum air temperature (°F)	Average maximum air temperature (°F)
June	5.27 (2.13 below normal)	66.6	94.4
July	8.70 (0.65 above normal)	62.1	94.9
August	4.94 (1.58 below normal)	66.9	96.0
September	4.11 (2.13 below normal)	57.4	92.5
October	4.05 (0.26 above normal)	42.6	87.9

## Summary

Stand counts were not significantly different between treatments on 26 June (Table 3). No significant differences for incidence of TSWV were detected between fungicide programs when evaluated on 16 July, 29 July or 12 August (Table 3).

Early leaf spot (*Cercospora arachidicola*) and late leaf spot (*Cercosporidium personatum*) were detected in the trial and are reported together a “leaf spot”. In the untreated plots greater than 85% of the leaves were infected resulting in 86% defoliation by 7 October (Table 4). All treatments improved leaf spot control and peanut defoliation compared to the untreated in September and October (Table 4). Three treatments resulted in a leaf spot FL scale of < 3.5, leaf spot rating of <25% and defoliation of <10% when

evaluated 7 October: Treatment 5. Proline banded + Provost + Convoy + Bravo WS; 11. TiltBravo + Fontelis + BravoWS; and 13. Alto + Abound + TiltBravo Table 4. Relatively low levels of leaf spot infection were observed through August and few differences in control were observed during this period (Table 3). Fungicide programs that included a Provost and Convoy, TiltBravo and Artisan, and Alto+Abound had 25% or less leaf spot incidence by 7 October. Programs that had 5% or less defoliation on 7 October included Proline 5.7 fl oz/A banded (30 or 40 DAP) followed by Provost 8 fl oz/A and Convoy 13 oz/A + BravoWS 1.5 pt/A; BravoWS 1.5 pt/A + Provost 8 fl oz/A + Convoy 13 oz/A + BravoWS 1.5 pt/A; and Alto 5.5 fl oz/A + Abound 12 fl oz/A + TiltBravo (Table 4).

White mold (*Sclerotium rolfsii*) was first detected in the trial on 16 July (Table 5). Most programs significantly reduced white mold compared to the untreated from 12 August through 7 October and root ratings after digging on 20 October (Table 5). All programs that included alternative modes of action for white mold control also reduced the incidence and root infection over the chlorothalonil (BravoWS 1.5 pt/A) program during the duration of the study (Table 5). Alto + Abound + TiltBravo and BravoWS + Convoy + BravoWS + Convoy + Headline were the only two treatments that reduced white mold foliar hits to less than 2 per 50 ft of row. Alto + Abound + TiltBravo and TiltBravo plus either Fontelis + BravoWS or Artisan + BravoWS were the only treatments that resulted in fewer than 5 infected roots per 50 ft of row (Table 5).

Yield of peanut in the untreated plot was 1568 lb/A with a value and net return of \$333 (value based on \$425/ton of peanuts or \$0.2125/lb) (Table 6). The TiltBravo + Artisan + BravoWS program was the highest yielding (5796 lb/A) and had the greatest value (\$1232) and net return (\$1131). Programs of Proline 5.7 fl oz/A banded 30 DAP and Abound 10 fl oz/A in-furrow followed by Provost 8 fl oz/A, and Convoy 13 oz/A+BravoWS 1.5 pt/A; BravoWS 1.5 pt/A, Monsoon 7.2 fl oz/A + BravoWS 1.5 pt/A, and Convoy 13 oz/A + BravoWS 1.5 pt/A; TiltBravo 1.5 pt/A, Fontelis 16 fl oz/A, Bravo 1.5 pt/A; and Alto 5.5 fl oz/A+Abound 12 fl oz/A and TiltBravo 1.5 pt/A were the only other treatment to yield more than 5000 lb/A and have a net return greater than \$1000 (Table 6).

**Table 3. Effect of treatment on peanut stand, tomato spotted wilt and early leaf spot.**

Treatment and rate/A	Applicatio n timing <sup>a</sup>	Plants/ ft <sup>b</sup> (26 June)	TSWV <sup>c</sup>			Early leaf spot (FL scale) <sup>d</sup>			Early leaf spot (%)		
			16 Jul	29 Jul	12 Aug	16 Jul	29 Jul	12 Aug	16 Jul	29 Jul	12 Aug
Untreated check.....		5.3	0.0	2.3	2.1	1.2	4.1 a	3.8	0.5	3.6	1.8 d
BravoWS 1.5 pt.....	1, 3-7	4.9	0.3	1.9	1.6	1.0	2.4 b	3.0	0.3	3.6	3.8 abc
BravoWS 1.5 pt	1,3										
Monsoon 7.2 fl oz + BravoWS 1 pt	4,5,7										
Convoy 13 oz + BravoWS 1.5 pt .....	6	5.2	0.3	2.0	2.4	1.2	2.3 bc	2.3	0.8	3.5	4.9 a
Proline SC 5.7 fl oz (In-Furrow))	at planting										
Bravo WS 1.5 pt	1,3										
Provost 433SC 8 fl oz	4,5,7										
Convoy 13 oz + BravoWS 1.5 pt .....	6	5.1	1.0	1.5	1.8	1.0	2.3 bc	2.8	0.3	3.5	4.0 abc
Proline SC 5.7 fl oz (Banded)	1										
Provost 433SC 8 fl oz	4,5,7										
Convoy 13 oz + BravoWS 1.5 pt .....	6	4.9	0.0	1.6	1.5	1.0	2.0 bcd	2.1	0.3	2.3	3.0 bcd
Proline SC 5.7 fl oz (Banded)	2										
Provost 433SC 8 fl oz	4,5,7										
Convoy 13 oz + BravoWS 1.5 pt.....	6	4.8	1.3	1.1	1.8	1.1	1.6 cd	2.5	0.3	2.3	3.0 bcd
Abound 2.08SC 10 fl oz (In-Furrow)	at planting										
BravoWS 1.5 pt	1,3										
Provost 433SC 8 fl oz	4,5,7										
Convoy 13 oz + BravoWS 1.5 pt.....	6	4.8	1.5	2.1	1.9	1.0	2.0 bcd	2.5	0.2	2.4	2.5 cd
BravoWS 1.5 pt	1,3										
Provost 433SC 8 fl oz	4,5,7										
Convoy 13 oz + BravoWS 1.5 pt.....	6	4.5	0.3	2.3	2.1	1.1	1.8 bcd	2.5	0.3	2.4	3.0 bcd
BravoWS 1.5 pt	1,3										
Convoy 13 oz + BravoWS 1.5 pt	4,5,7										
Convoy 13 oz + Headline 6 fl oz .....	6	4.8	0.3	1.9	2.3	1.0	2.0 bcd	2.4	0.2	2.9	3.5 a-d
TiltBravo 1.5 pt	1,3										
Artisan 16 fl oz + BravoWS 1 pt .....	4,5,6,7	4.6	1.3	3.1	2.6	1.1	1.7 bcd	2.7	0.5	2.8	2.8 cd
TiltBravo 1.5 pt	1,3										
Fontelis 16 fl oz	4,5,7										
BravoWS 1.5 pt.....	6	4.9	0.5	2.8	2.5	1.2	1.8 bcd	2.5	0.4	3.0	2.8 cd
BravoWS 1.5 pt	1,3,7										
Abound 2.08SC 12 fl oz.....	4,5,6	5.0	1.0	2.1	2.3	1.1	2.0 bcd	3.1	1.0	3.5	4.8 ab
Tilt/Bravo 1.5 pt	1,3										
Alto 5.5 fl oz + Abound 12 fl oz	4,6										
TiltBravo 1.5 pt.....	5,7	4.8	0.3	1.3	1.9	1.0	1.5 d	2.6	0.2	2.0	2.8 cd
	<i>P&gt;F</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>0.0001</i>	<i>NS</i>	<i>NS</i>	<i>NS</i>	<i>0.0487</i>

<sup>a</sup>Application timing 1,2,3,4,5,6,7 corresponds to 30, 40, 45, 60, 75, 90, 105 days after planting (DAP). <sup>b</sup>Determined from counts of two, 25-ft rows per plot. <sup>c</sup>Number of plants per plot with symptoms of Tomato spotted wilt virus. <sup>d</sup>Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease; 10 = completely dead plants). Means followed by the same letter(s) in a column are not significantly different according to Fisher's Protected LSD (P=0.05).

**Table 4. Effect of treatment on early and late leaf spot and defoliation.**

Treatment and rate/A	Application timing <sup>a</sup>	Leaf spot (FL scale) <sup>d</sup>		Leaf spot (%)		% defoliation
		10 September	7 October	10 September	7 October	7 October
Untreated check .....		3.1a	8.3 a	14.3 aa	87.5 a	86.3 a
BravoWS 1.5 pt.....	1, 3-7	1.4b	6.5 b	3.8b	42.5 b	31.3 b
BravoWS 1.5 pt	1,3					
Monsoon 7.2 fl oz + BravoWS 1 pt	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	1.3 b	4.2 bcd	3.8b	33.8 bcd	12.0 c
Proline SC 5.7 fl oz (In-Furrow)	at planting					
Bravo WS 1.5 pt	1,3					
Provost 433SC 8 fl oz	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	1.3 b	3.9 cd	3.6 b	26.3 c-f	9.5 c
Proline SC 5.7 fl oz (Banded)	1					
Provost 433SC 8 fl oz	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	1.2 b	3.3 d	2.8 b	21.0 ef	4.0 c
Proline SC 5.7 fl oz (Banded)	2					
Provost 433SC 8 fl oz	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	1.2 b	3.7 cd	2.5 b	27.5 c-f	5.0 c c-f
Abound 2.08SC 10 fl oz (In-Furrow)	at planting					
BravoWS 1.5 pt	1,3					
Provost 433SC 8 fl oz	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	1.3 b	3.7 cd	2.8 b	29.5 cde	5.8 c
BravoWS 1.5 pt	1,3					
Provost 433SC 8 fl oz	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	1.2 b	3.2 d	2.6 b	26.3 c-f	4.5 c
BravoWS 1.5 pt	1,3					
Convoy 13 oz + BravoWS 1.5 pt	4,5,7					
Convoy 13 oz + Headline 6 fl oz .....	6	1.3 b	4.4 bcd	3.4 b	25.0 def	11.3 c
TiltBravo 1.5 pt	1,3					
Artisan 16 fl oz + BravoWS 1 pt .....	4,5,6,7	1.3 b	3.9 cd	2.9 b	22.5 ef	9.4 c
TiltBravo 1.5 pt	1,3					
Fontelis 16 fl oz	4,5,7					
BravoWS 1.5 pt .....	6	1.2 b	3.4 cd	2.6 b	23.8 ef	6.0 c
BravoWS 1.5 pt	1,3,7					
Abound 2.08SC 12 fl oz .....	4,5,6	1.3 b	4.6 bc	3.5 b	35.0 bc	28.3 b
Tilt/Bravo 1.5 pt	1,3					
Alto 5.5 fl oz + Abound 12 fl oz	4,6					
TiltBravo 1.5 pt .....	5,7	1.2 b	3.3 d	2.1 b	18.0 f	5.0 c
<i>P&gt;F</i> .....		0.0001	0.0001	0.0149	0.0001	0.0001

<sup>a</sup> Application timing 1,2,3,4,5,6,7 corresponds to 30, 40, 45, 60, 75, 90, 105 days after planting (DAP). <sup>d</sup> Early and late leaf spot were assessed using the Florida leaf spot scoring system (1= no disease; 10 = completely dead plants). Means followed by the same letter(s) in a column are not significantly different according to Fisher's Protected LSD (P=0.05).

**Table 5. Effect of treatment on white mold (southern stem rot, *Sclerotium rolfsii*).**

Treatment and rate/A	Application timing <sup>a</sup>	White mold (Southern stem rot) <sup>e</sup>					White mold AUDPC	White mold root infection <sup>f</sup> 20 Oct	Yield (lb/A)
		16 Jul	29 Jul	12 Aug	10 Sep	7 Oct			
Untreated check .....		0.5	2.3	2.9 a	2.6 a	7.9 a	275 a	14.0 a	1568 f
BravoWS 1.5 pt.....	1, 3-7	0.0	1.1	1.8 bc	1.1 bc	5.6 a	160 bc	9.4 b	4677 b-e
BravoWS 1.5 pt	1,3								
Monsoon 7.2 fl oz + BravoWS 1 pt	4,5,7								
Convoy 13 oz + BravoWS 1.5 pt .....	6	1.5	2.1	2.3 ab	2.5 a	3.5 cd	199 b	6.3 cde	5047 a-e
Proline SC 5.7 fl oz (In-Furrow)	at planting								
Bravo WS 1.5 pt	1,3								
Provost 433SC 8 fl oz	4,5,7								
Convoy 13 oz + BravoWS 1.5 pt .....	6	0.3	1.1	1.4 bc	1.0 bc	2.6 c-f	110 cd	7.1 bcd	4474 cde
Proline SC 5.7 fl oz (Banded)	1								
Provost 433SC 8 fl oz	4,5,7								
Convoy 13 oz + BravoWS 1.5 pt .....	6	0.3	0.9	1.5 bc	1.1 bc	2.1 def	106 cd	7.6 bc	5117 a-e
Proline SC 5.7 fl oz (Banded)	2								
Provost 433SC 8 fl oz	4,5,7								
Convoy 13 oz + BravoWS 1.5 pt .....	6	0.0	1.1	1.6 bc	1.3 bc	2.6 c-f	121 cd	6.8 bcd	5381 abc
Abound 2.08SC 10 fl oz (In-Furrow)	at planting								
BravoWS 1.5 pt	1,3								
Provost 433SC 8 fl oz	4,5,7								
Convoy 13 oz + BravoWS 1.5 pt .....	6	0.0	1.6	2.0 abc	1.1 bc	2.6 c-f	129 cd	5.3 c-f	5241 a-d
BravoWS 1.5 pt	1,3								
Provost 433SC 8 fl oz	4,5,7								
Convoy 13 oz + BravoWS 1.5 pt .....	6	0.0	1.3	1.6 bc	1.9 abc	2.1 def	133 bcd	5.5 c-f	4818 a-e
BravoWS 1.5 pt	1,3								
Convoy 13 oz + BravoWS 1.5 pt	4,5,7								
Convoy 13 oz + Headline 6 fl oz .....	6	0.0	1.9	2.0 abc	2.0 ab	1.6 ef	146 bcd	5.9 c-f	4210 de
TiltBravo 1.5 pt	1,3								
Artisan 16 fl oz + BravoWS 1 pt .....	4,5,6,7	0.5	1.3	1.6 bc	1.1 bc	2.5 c-f	120 cd	3.4 ef	5796 a
TiltBravo 1.5 pt	1,3								
Fontelis 16 fl oz	4,5,7								
BravoWS 1.5 pt .....	6	0.0	1.0	1.3 bc	1.1 bc	3.0 cde	112 cd	4.3 def	5558 ab
BravoWS 1.5 pt	1,3,7								
Abound 2.08SC 12 fl oz .....	4,5,6	0.0	1.0	1.1 c	1.1 bc	4.0 c	123 cd	8.0 bc	4078 e
Tilt/Bravo 1.5 pt	1,3								
Alto 5.5 fl oz + Abound 12 fl oz	4,6								
TiltBravo 1.5 pt .....	5,7	0.0	0.9	1.3 bc	0.9 c	1.3 f	80 d	3.0 f	5522 abc
P>F .....		NS	NS	0.1533	0.0221	0.0001	0.0001	0.0001	0.0001

<sup>a</sup>Application timing 1,2,3,4,5,6,7 corresponds to 30, 40, 45, 60, 75, 90, 105 days after planting (DAP). <sup>e</sup>Counts of infection centers or <sup>f</sup>infected roots in the two center rows of each plot or a total of 50-ft row. An infection center was a point with symptoms and signs of a white mold (*Sclerotium rolfsii*) and included 6 in. on either side of that point. AUDPC = Area Under the Disease Progress Curve. Means followed by the same letter(s) in a column are not significantly different according to Fisher's Protected LSD (P=0.05).

**Table 6. Effect of treatment on peanut yield and value.**

Treatment and rate/A	Application timing <sup>a</sup>	Yield (lb/A)	Value (\$/A) <sup>g</sup>	Fungicide cost (\$/A)	Net return (\$/A) <sup>h</sup>	\$ return/\$ spent
Untreated check .....		1568 f	333 f	0.00	333 d	0
BravoWS 1.5 pt.....	1, 3-7	4677 b-e	994 b-e	43.20	951 abc	14.31
BravoWS 1.5 pt	1,3					
Monsoon 7.2 fl oz + BravoWS 1 pt	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	5047 a-e	1073 a-e	67.01	1006 abc	10.04
Proline SC 5.7 fl oz (In-Furrow)	at planting					
Bravo WS 1.5 pt	1,3					
Provost 433SC 8 fl oz	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	4474 cde	951 cde	102.06	849 bc	5.06
Proline SC 5.7 fl oz (Banded)	1					
Provost 433SC 8 fl oz	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	5117 a-e	1087 a-e	89.72	998 abc	7.41
Proline SC 5.7 fl oz (Banded)	2					
Provost 433SC 8 fl oz	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	5381 abc	1144 abc	89.72	1054 ab	8.04
Abound 2.08SC 10 fl oz (In-Furrow)	at planting					
BravoWS 1.5 pt	1,3					
Provost 433SC 8 fl oz	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	5241 a-d	1114 a-d	92.54	1021 ab	7.43
BravoWS 1.5 pt	1,3					
Provost 433SC 8 fl oz	4,5,7					
Convoy 13 oz + BravoWS 1.5 pt .....	6	4818 a-e	1024 a-e	78.02	946 abc	7.86
BravoWS 1.5 pt	1,3					
Convoy 13 oz + BravoWS 1.5 pt	4,5,7					
Convoy 13 oz + Headline 6 fl oz .....	6	4210 de	895 de	97.53	797 c	4.76
TiltBravo 1.5 pt	1,3					
Artisan 16 fl oz + BravoWS 1 pt .....	4,5,6,7	5796 a	1232 a	100.26	1131 a	7.96
TiltBravo 1.5 pt	1,3					
Fontelis 16 fl oz	4,5,7					
BravoWS 1.5 pt .....	6	5558 ab	1181 ab	105.66	1075 a	7.02
BravoWS 1.5 pt	1,3,7					
Abound 2.08SC 12 fl oz .....	4,5,6	4078 e	867 e	76.96	790 c	5.94
Tilt/Bravo 1.5 pt	1,3					
Alto 5.5 fl oz + Abound 12 fl oz	4,6					
TiltBravo 1.5 pt .....	5,7	5522 abc	1173 abc	60.90	1113 a	12.81
<i>P&gt;F</i> .....		<i>0.0001</i>	<i>0.0001</i>	-	<i>0.0001</i>	-

<sup>a</sup>Application timing 1,2,3,4,5,6,7 corresponds to 30, 40, 45, 60, 75, 90, 105 days after planting (DAP). <sup>g</sup>Value based on \$425/ton of peanuts (\$0.2125 per lb). <sup>h</sup>Net return = Value (\$/A) – Fungicide cost (\$/A). Means followed by the same letter(s) in a column are not significantly different according to Fisher’s Protected LSD (P=0.05).