

2015 Evaluation of In-Furrow and Foliar Fungicides for Disease Control in Peanut, Jay, FL

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This report includes a summary of the 2015 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 seventeen 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.

A very special thanks to Dr. Bob Kemeraite, University of Georgia, Extension Plant Pathologist. Bob provided the protocol for each of the 3 years of this test. He traveled twice in the 2015 season from Tifton to rate the plot late season and at digging. He also discussed disease management considerations with producers at the 2015 Extension Farm Field Day.

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

1. **Untreated Check**
2. **Monsoon/Provost:** Monsoon 7.2 fl oz (44 DAP); Provost 10.7 fl oz (58, 72, 86, 100 DAP); Bravo 1.5 pt (114 DAP)
3. **Bravo:** Bravo 1.5 pt (30, 44, 58, 72, 86, 100, 114 DAP)
4. **Proline In-Furrow + Provost:** Proline 5.7 fl oz (In-Furrow); Bravo 1.5 pt (30, 44, 114 DAP); Provost 10.7 fl oz (58, 72, 86, 100 DAP)
5. **Proline/Provost:** Proline 5.7 fl oz (at emergence banded); Provost 10.7 fl oz (58, 72, 86, 100 DAP); Bravo 1.5 pt (114 DAP)
6. **Monsoon:** Bravo 1.5 pt (30, 44, 114 DAP); Monsoon 7.2 fl oz + Bravo 1.5 pt (58, 72, 86, 100 DAP)
7. **Priaxor/Monsoon:** Priaxor 6 fl oz (44 DAP); Bravo 1.5 pt + Monsoon 7.2 fl oz (58, 86, 100 DAP); Priaxor 8 fl oz (72 DAP)
8. **Abound:** Bravo 1.5 pt (30, 44, 72, 100, 114 DAP); Abound 18.5 fl oz (58, 86 DAP)
9. **Bravo Weather Stik/Ultrex:** Bravo WS 1.5 pt (30, 44, 72, 100, 114 DAP); Bravo Ultrex 9 oz (58, 86 DAP)
10. **Fontelis/Monsoon:** Bravo 1.5 pt (30, 44, 114 DAP); Fontelis 16 fl oz (58, 72, 86 DAP); Bravo 1.5 pt + Monsoon 7.2 fl oz (100 DAP)
11. **Artisan:** Bravo 1.5 pt (30, 44, 114 DAP); Artisan 16 fl oz + Bravo 1 pt (58, 72, 86, 100 DAP)
12. **Convoy:** Bravo 1.5 pt (30, 44, 114 DAP); Convoy 13 fl oz + Bravo 1.5 pt (58, 72, 86, 100 DAP)

13. **Abound/Monsoon:** Bravo 1.5 pt (30, 44, 114 DAP); Abound 18.5 fl oz (58, 86 DAP); Bravo 1.5 pt + Monsoon 7.2 fl oz (72, 100 DAP)
14. **Headline/Monsoon:** Headline 9 fl oz (44, 72 DAP); Bravo 1 pt + Monsoon 7.2 fl oz (58, 86, 100 DAP); Bravo 1.5 pt (114 DAP)
15. **Abound/Alto:** Bravo 1.5 pt (30, 44, 72, 100, 114 DAP); Abound 18.5 fl oz + Alto 5.5 fl oz (58, 86 DAP)
16. **Priaxor/Convoy:** Priaxor 6 fl oz (44 DAP); Convoy 13 fl oz + Bravo 1.5 pt (58, 86, 100 DAP); Priaxor 8 fl oz (72 DAP); Bravo 1.5 pt (114 DAP)
17. **Priaxor/Monsoon:** Bravo 1.5 pt (30, 44, 58, 100, 114 DAP); Priaxor 9 fl oz (72 DAP); Bravo 1.5 pt + Monsoon 7.2 fl oz (86 DAP)

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

	Treatment	AT PLANT IN-FURROW 14 May	1 Emergence 29 May	2 30 DAP 12 June	3 44 DAP 26 June	4 58 DAP 10 July	5 72 DAP 24 July	6 86 DAP 7 August	7 100 DAP 21 August	8 114 DAP 4 September
1	Untreated									
2	Monsoon/ Provost				Monsoon 7.2 fl oz	Provost 10.7 fl oz	Provost 10.7 fl oz	Provost 10.7 fl oz	Provost 10.7 fl oz	Bravo 1.5 pt
3	Bravo			Bravo 1.5 pt	Bravo 1.5 pt	Bravo 1.5 pt	Bravo 1.5 pt	Bravo 1.5 pt	Bravo 1.5 pt	Bravo 1.5 pt
4	Proline (in-furrow)+Provost	Proline 5.7 fl oz (In-Furrow)		Bravo 1.5 pt	Bravo 1.5 pt	Provost 10.7 fl oz	Provost 10.7 fl oz	Provost 10.7 fl oz	Provost 10.7 fl oz	Bravo 1.5 pt
5	Proline/Provost		Proline 5.7 fl oz (banded)			Provost 10.7 fl oz	Provost 10.7 fl oz	Provost 10.7 fl oz	Provost 10.7 fl oz	Bravo 1.5 pt
6	Monsoon			Bravo 1.5 pt	Bravo 1.5 pt	Bravo 1.5 pt + Monsoon 7.2 fl oz	Bravo 1.5 pt + Monsoon 7.2 fl oz	Bravo 1.5 pt + Monsoon 7.2 fl oz	Bravo 1.5 pt + Monsoon 7.2 fl oz	Bravo 1.5 pt
7	Priaxor/ Monsoon				Priaxor 6 fl oz	Bravo 1.5 pt + Monsoon 7.2 fl oz	Priaxor 8 fl oz	Bravo 1.5 pt + Monsoon 7.2 fl oz	Bravo 1.5 pt + Monsoon 7.2 fl oz	Bravo 1.5 pt
8	Abound			Bravo 1.5 pt	Bravo 1.5 pt	Abound 18.5 fl oz	Bravo 1.5 pt	Abound 18.5 fl oz	Bravo 1.5 pt	Bravo 1.5 pt
9	Bravo WS/ Ultrex			Bravo WS 1.5 pt	Bravo WS 1.5 pt	Bravo U 9 oz	Bravo WS 1.5 pt	Bravo U 9 oz	Bravo WS 1.5 pt	Bravo WS 1.5 pt
10	Fontelis/ Monsoon			Bravo 1.5 pt	Bravo 1.5 pt	Fontelis 16 fl oz	Fontelis 16 fl oz	Fontelis 16 fl oz	Bravo 1.5 pt + Monsoon 7.2 fl oz	Bravo 1.5 pt
11	Artisan			Bravo 1.5 pt	Bravo 1.5 pt	Artisan 16 fl oz + Bravo 1 pt	Artisan 16 fl oz + Bravo 1 pt	Artisan 16 fl oz + Bravo 1 pt	Artisan 16 fl oz + Bravo 1 pt	Bravo 1.5 pt
12	Convoy			Bravo 1.5 pt	Bravo 1.5 pt	Convoy 13 fl oz + Bravo 1.5 pt	Convoy 13 fl oz + Bravo 1.5 pt	Convoy 13 fl oz + Bravo 1.5 pt	Convoy 13 fl oz + Bravo 1.5 pt	Bravo 1.5 pt
13	Abound/ Monsoon			Bravo 1.5 pt	Bravo 1.5 pt	Abound 18.5 fl oz	Bravo 1.5 pt + Monsoon 7.2 fl oz	Abound 18.5 fl oz	Bravo 1.5 pt + Monsoon 7.2 fl oz	Bravo 1.5 pt
14	Headline/ Monsoon				Headline 9 fl oz	Bravo 1.0 pt + Monsoon 7.2 fl oz	Headline 12 fl oz	Bravo 1.0 pt + Monsoon 7.2 fl oz	Bravo 1.0 pt + Monsoon 7.2 fl oz	Bravo 1.5 pt
15	Abound/Alto			Bravo 1.5 pt	Bravo 1.5 pt	Abound 18.5 fl oz + Alto 5.5 fl oz	Bravo 1.5 pt	Abound 18.5 fl oz + Alto 5.5 fl oz	Bravo 1.5 pt	Bravo 1.5 pt
16	Priaxor/Convoy				Priaxor 6 fl oz	Convoy 13 fl oz + Bravo 1.5 pt	Priaxor 8 fl oz	Convoy 13 fl oz + Bravo 1.5 pt	Convoy 13 fl oz + Bravo 1.5 pt	Bravo 1.5 pt
17	Priaxor/ Monsoon			Bravo 1.5 pt	Bravo 1.5 pt	Bravo 1.5 pt	Priaxor 9 fl oz	Bravo 1 pt + Monsoon 7.2 fl oz	Bravo 1.5 pt	Bravo 1.5 pt

2015 Growing Conditions and Experimental Design:

The soil type was a Red Bay sandy loam with about 2% organic matter. The field was planted corn in 2014. Georgia 06G was planted five to six seed/ft of row on 14 May. The in-furrow fungicide treatment was 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 CO₂ backpack sprayer with 11002 nozzles, operated at 3 mph and 20 psi was used for foliar fungicide applications. The foliar application were made according to each spray program (Table 1).

Standard practices for production of runner-type peanuts were followed throughout the growing season. Stealth herbicide (1 qt/A) was applied preemergence. Dual at 1.3 pt/A + Gramoxone 11 oz/A were applied early postemergence on 8 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 in-furrow at planting for insect control. Additional insecticide applications included Diamond applied at 6 oz/A on 8 July, 21 July, 3 August and 24 August.

Plots were four, 25-ft rows spaced 36 in. apart and treatments applied to the two center rows were replicated in four randomized complete blocks. Disease incidence and yield data were collected from two center rows in each plot. Peanuts were dug on 24 September and combined harvested four days later. Whole pods were dried to approximately 9% moisture 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 May, June, August and September was 1.85, 3.10, 2.16 and 2.02 in. below normal, respectively; rainfall in July was 1.11 in. above normal. Rainfall during the peanut growing season totaled 24.69 in., which was 8.02 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 55 years of records (Table 2).

Table 2. Weather conditions during 2015 peanut fungicide trial.

Month	Total Rainfall (in)	Average minimum air temperature (°F)	Average maximum air temperature (°F)
May	2.65 (1.85 below normal)	49.6	90.7
June	4.30 (3.10 below normal)	67.2	98.0
July	9.16 (1.11 above normal)	66.5	98.2
August	4.36 (2.16 below normal)	62.1	96.4
September	4.22 (2.02 below normal)	53.0	97.1

Summary

White mold (*Sclerotium rolfsii*) was first detected in the trial on 14 August (Table 3). Most fungicide programs significantly reduced white mold foliar ratings compared to the untreated from 14 August through 12 September and root ratings after digging on 24 September (Table 3). All programs that included alternative modes of action for white mold control reduced the incidence and root infection compared to Bravo programs during the duration of the study (Table 3). Monsoon + Provost + Bravo, Headline + Bravo + Monsoon and Priaxor + Convoy + Bravo were the only treatments that reduced white mold foliar hits to less than 2 per 50 ft of row when evaluated on 12 September. Bravo + Artisan, Bravo + Convoy, Headline + Bravo, and Priaxor + Convoy + Bravo were the only treatments that resulted in fewer than 3 infected roots per 50 ft of row when evaluated after digging on 24 September (Table 3).

There was a low level of Tomato Spotted Wilt Virus incidence in the study and it was difficult to differentiate between treatments (Table 3). As expected there were no significant differences among

treatments when evaluated 14 August or 1 September. While differences were observed at the 12 September evaluation, none of the treatments reduced TMSV incidence compared to the untreated (Table 3).

Leaf spot (*Cercospora sp.*) was detected in the trial but only at low levels. Most of the fungicide treatments improved leaf spot control compared to the untreated in September (Table 4). Five treatments resulted in a leaf spot FL scale of 1.3 or less when evaluated on 12 September: Treatment 2. Monsoon + Provost + Bravo; Treatment 7. Priaxor + Bravo + Monsoon + Bravo; Treatment 14. Headline + Bravo + Monsoon + Bravo; Treatment 15. Bravo + Abound + Alto and Treatment 16. Priaxor + Convoy + Bravo.

Aerial rhizoctonia was observed at the time of peanut digging (September 24). Several treatments reduced AR hits from the 18.2 observed in the untreated check to less than 5 (Table 4). These included Treatment 2. Monsoon + Provost + Bravo; Treatment 3. Bravo; Treatment 4. Proline in-furrow at planting + Bravo + Provost and Treatment 6. Bravo + Bravo + Monsoon.

Yield of peanut in the untreated plot was 3343 lb/A with a value and net return of \$710 (value based on \$425/ton of peanuts or \$0.2125/lb) (Table 5). The Bravo + Abound + Alto program had the highest yield (4915 lb/A) and highest net return (\$957.38). The Bravo + Bravo + Monsoon; Bravo + Abound and Headline + Bravo + Monsoon programs were the only other treatments that had a net return above \$900/A (Table 5).

Treatment and rate/A	Application Timing ^a	White Mold ^b				TMSV ^c		
		14 Aug	1 Sep	12 Sep	24 Sep	14 Aug	1 Sep	12 Sep
1 Untreated check		6.6 a	6.6 a	8.7 bc	18.8a	0.88	0.88	1.00 bc
2 Monsoon 7.2 fl oz	3							
Provost 10.7 fl oz	4,5,6,7							1.00
Bravo 1.5 pt	8	1.9 b	1.9 b	1.5 d	3.8 cd	0.13	0.50	bc
3 Bravo 1.5 pt	2,3,4,5,6,7,8	8.0 a	8.0 a	16.7 a	19.5 a	1.25	1.67	1.50 bc
4 Proline 5.7 fl oz (In-Furrow))	At planting							
Bravo 1.5 pt	2,3,8							
Provost 8 fl oz	4,5,6,7	1.9 b	1.9 b	3.8 cd	3.0 cd	0.13	0.50	0.75 c
5 Proline 5.7 fl oz	1							
Provost 8 fl oz	4,5,6,7							
Bravo 1.5 pt	8	2.5 b	2.5 b	2.3 d	5.5 bcd	1.25	1.67	3.50 a
6 Bravo 1.5 pt	2,3,8			4.8				1.50
Bravo 1.5 pt + Monsoon 7.2 fl oz	4,5,6,7	3.4 b	3.4 b	bcd	6.5 bc	1.13	0.88	bc
7 Priaxor 6 fl oz	3							
Bravo 1.5 pt + Monsoon 7.2 fl oz	4,6,7							
Priaxor 8 fl oz	5							
Bravo 1.5 pt	8	1.9 b	1.9 b	2.0 d	3.3 cd	0.63	0.83	0.50 c
8 Bravo 1.5 pt	2,3,5,7,8			4.7				
Abound 18.5 fl oz	4,6	3.3 b	3.3 b	bcd	5.3 bcd	0.50	0.67	0.75 c
9 Bravo WS1.5 pt	2,3,5,7,8							
Bravo Ultrex 9 oz	4,6	6.6 a	6.6 a	9.5 b	14.8 a	0.75	1.00	2.00 b
10 Bravo 1.5 pt	2,3,8							
Fontelis 16 fl oz	4,5,6							
Bravo 1.5 pt + Monsoon 7.2 fl oz	7	2.8 b	2.8 b	3.5 d	3.8 cd	0.63	0.83	0.67 c
11 Bravo 1.5 pt	2,3,8							
Artisan 16 fl oz + Bravo 1 pt	4,5,6,7	1.9 b	1.9 b	2.7 d	1.5 d	0.75	1.00	0.83 c
12 Bravo 1.5 pt	2,3,8							1.00
Convoy 13 fl oz + Bravo 1.5 pt	4,5,6,7	1.6 b	1.6 b	2.0 d	2.8 cd	0.75	1.00	bc
13 Bravo 1.5 pt	2,3,8							
Abound 18.5 fl oz	4,6							1.17
Bravo 1.5 pt + Monsoon 7.2 fl oz	5,7	3.4 b	3.4 b	3.5 d	6.3 bcd	0.25	0.50	bc
14 Headline 9 fl oz	3							
Bravo 1.0 pt + Monsoon 7.2 fl oz	4,6,7							
Headline 12 fl oz	5							
Bravo 1.5 pt	8	1.9 b	1.9 b	1.8 d	2.8 cd	0.00	0.00	0.50 c
15 Bravo 1.5 pt	2,3,5,7,8							
Abound 18.5 fl oz + Alto 5.5 fl oz	4,6	2.1 b	2.1 b	2.8 d	3.5 cd	0.63	0.83	0.75 c
16 Priaxor 6 fl oz	2,							
Convoy 13 fl oz + Bravo 1.5 pt	4,5,6							
Priaxor 8 fl oz	5							
Bravo 1.5 pt	8	1.8 b	1.8 b	1.8 d	1.8 cd	0.88	0.88	0.67 c
17 Bravo 1.5 pt	2,3,4,7,8							
Priaxor 9 fl oz	5			6.5				1.00
Bravo 1 pt + Monsoon 7.2 fl oz	6	3.9 b	3.9 b	bcd	9.5 b	0.38	0.75	bc
P>F		0.0001	0.0001	0.0001	0.0001	NS	NS	0.0005

Table 3. Effect of fungicide treatment on peanut white mold and tomato spotted wilt virus.

aApplication timings 1, 2, 3, 4, 5, 6, 7, 8 = 30, 44, 58, 72, 86, 100, 114 Days After Planting (DAP).

b Counts of infection centers or 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.

c Number of plants per plot with symptoms of Tomato spotted wilt virus.

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 fungicide treatment on peanut leaf spot and aerial rhizoctonia.

Treatment and rate/A	Application Timing ^a	Leaf Spot ^b			AR ^c
		14 Aug	27 Aug	12 Sep	24 Sep
1 Untreated check		2.8 a	2.8 a	3.3 a	18.2 a
2 Monsoon 7.2 fl oz	3				
Provost 10.7 fl oz	4,5,6,7				
Bravo 1.5 pt	8	1.1 cde	1.1 ef	1.3 fg	4.4 bcd
3 Bravo 1.5 pt	2,3,4,5,6,7,8	1.6 b	1.6 b	2.2 bcd	4.0 cd
4 Proline 5.7 fl oz (In-Furrow))	At planting				
Bravo 1.5 pt	2,3,8				
Provost 8 fl oz	4,5,6,7	1.1 e	1.1 ef	1.6 d-g	3.4 d
5 Proline 5.7 fl oz	1				
Provost 8 fl oz	4,5,6,7				
Bravo 1.5 pt	8	1.0 e	1.1 ef	1.5 efg	6.0 bcd
6 Bravo 1.5 pt	2,3,8				
Bravo 1.5 pt + Monsoon 7.2 fl oz	4,5,6,7	1.4 b-e	1.4 b-e	2.2 bcd	4.5 bcd
7 Priaxor 6 fl oz	3				
Bravo 1.5 pt + Monsoon 7.2 fl oz	4,6,7				
Priaxor 8 fl oz	5				
Bravo 1.5 pt	8	1.0 e	1.0 f	1.2 fg	13.8 ab
8 Bravo 1.5 pt	2,3,5,7,8				
Abound 18.5 fl oz	4,6	1.5 bc	1.5 b	2.0 cde	6.3 bcd
9 Bravo WS1.5 pt	2,3,5,7,8				
Bravo Ultrex 9 oz	4,6	1.6 b	1.4 bcd	2.0 cde	13.3 abc
10 Bravo 1.5 pt	2,3,8				
Fontelis 16 fl oz	4,5,6				
Bravo 1.5 pt + Monsoon 7.2 fl oz	7	1.5 bc	1.5 b	2.3 bc	17.5 a
11 Bravo 1.5 pt	2,3,8				
Artisan 16 fl oz + Bravo 1 pt	4,5,6,7	1.5 bc	1.5 b	1.8 c-f	6.3 bcd
12 Bravo 1.5 pt	2,3,8				
Convoy 13 fl oz + Bravo 1.5 pt	4,5,6,7	1.6 b	1.6 b	2.8 ab	16.8 a
13 Bravo 1.5 pt	2,3,8				
Abound 18.5 fl oz	4,6				
Bravo 1.5 pt + Monsoon 7.2 fl oz	5,7	1.3 b-e	1.3 b-f	1.8 c-g	10.5 a-d
14 Headline 9 fl oz	3				
Bravo 1.0 pt + Monsoon 7.2 fl oz	4,6,7				
Headline 12 fl oz	5				
Bravo 1.5 pt	8	1.1 e	1.1 ef	1.1 g	15.8 abc
15 Bravo 1.5 pt	2,3,5,7,8				
Abound 18.5 fl oz + Alto 5.5 fl oz	4,6	1.1 e	1.1 ef	1.2 fg	16.9 a
16 Priaxor 6 fl oz	2,				
Convoy 13 fl oz + Bravo 1.5 pt	4,5,6				
Priaxor 8 fl oz	5				
Bravo 1.5 pt	8	1.1 e	1.1 ef	1.2 fg	16.3 ab
17 Bravo 1.5 pt	2,3,4,7,8				
Priaxor 9 fl oz	5				
Bravo 1 pt + Monsoon 7.2 fl oz	6	1.1 e	1.1 ef	1.4 efg	14.3 bcd
<i>P>F</i>		0.0001	0.0001	0.0001	0.08

^aApplication timings 1, 2, 3, 4, 5, 6, 7, 8 = 30, 44, 58, 72, 86, 100, 114 Days After Planting (DAP).

^bEarly 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).

^cAerial Rhizoctonia was rated based upon estimated % of row affected. Symptoms, dark and greasy appearing leaves in lower canopy, were consistent with those caused by Rhizoctonia solani.

Table 5. Effect of fungicide treatment on peanut yield and value.

	Treatment and rate/A		Yield (lb/ A)	Value (\$/A)	Fungicide Cost (\$/A)	Net Return (\$/A)
1	Untreated check		3343 ef	710 ef	0	710 def
2	Monsoon 7.2 fl oz	3				
	Provost 10.7 fl oz	4,5,6,7				
	Bravo 1.5 pt	8	4414 abc	938 abc	95.68	842.32 a-d
3	Bravo 1.5 pt	2,3,4,5,6,7,8	3289 ef	699 ef	50.40	648.47 ef
4	Proline 5.7 fl oz (In-Furrow))	At planting				
	Bravo 1.5 pt	2,3,8				
	Provost 8 fl oz	4,5,6,7	4389 a-d	933 a-d	126.48	806.11 a-e
5	Proline 5.7 fl oz	1				
	Provost 8 fl oz	4,5,6,7				
	Bravo 1.5 pt	8	4236 bcd	900 bcd	112.08	788.11 b-e
6	Bravo 1.5 pt	2,3,8				
	Bravo 1.5 pt + Monsoon 7.2 fl oz	4,5,6,7	4672 ab	993 ab	61.60	931.16 ab
7	Priaxor 6 fl oz	3				
	Bravo 1.5 pt + Monsoon 7.2 fl oz	4,6,7				
	Priaxor 8 fl oz	5				
	Bravo 1.5 pt	8	3768 de	801 de	82.92	717.77 def
8	Bravo 1.5 pt	2,3,5,7,8				
	Abound 18.5 fl oz	4,6	4672 ab	993 ab	87.06	905.70 abc
9	Bravo WS1.5 pt	2,3,5,7,8				
	Bravo Ultrex 9 oz	4,6	3111 f	661 f	50.40	610.67 f
10	Bravo 1.5 pt	2,3,8				
	Fontelis 16 fl oz	4,5,6				
	Bravo 1.5 pt + Monsoon 7.2 fl oz	7	3931 cde	835 cde	85.84	749.56 c-f
11	Bravo 1.5 pt	2,3,8				
	Artisan 16 fl oz + Bravo 1 pt	4,5,6,7	4527 abc	962 abc	101.60	860.30 a-d
12	Bravo 1.5 pt	2,3,8				
	Convoy 13 fl oz + Bravo 1.5 pt	4,5,6,7	4138 bcd	879 bcd	93.56	785.81 b-e
13	Bravo 1.5 pt	2,3,8				
	Abound 18.5 fl oz	4,6				
	Bravo 1.5 pt + Monsoon 7.2 fl oz	5,7	4621 ab	982 ab	87.06	894.90 abc
14	Headline 9 fl oz	3				
	Bravo 1.0 pt + Monsoon 7.2 fl oz	4,6,7				
	Headline 12 fl oz	5				
	Bravo 1.5 pt	8	4574 abc	972 abc	69.48	902.45 abc
15	Bravo 1.5 pt	2,3,5,7,8				
	Abound 18.5 fl oz + Alto 5.5 fl oz	4,6	4915 a	1044 a	87.06	957.38 a
16	Priaxor 6 fl oz	2,				
	Convoy 13 fl oz + Bravo 1.5 pt	4,5,6				
	Priaxor 8 fl oz	5				
	Bravo 1.5 pt	8	4726 ab	1004 ab	114.09	890.24 abc
17	Bravo 1.5 pt	2,3,4,7,8				
	Priaxor 9 fl oz	5				
	Bravo 1 pt + Monsoon 7.2 fl oz	6	4138 bcd	879 bcd	77.62	801.45 a-e
	<i>P>F</i>		<i>0.0001</i>	<i>0.0001</i>		<i>0.0017</i>

Means followed by the same letter(s) in a column are not significantly different according to Fisher's Protected LSD (P=0.05).