

TITLE:

Evaluation of Convoy - Abound fungicide programs on peanuts at AG-CARES, Lamesa, TX, 2009.

AUTHORS:

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MATERIALS AND METHODS:

Plot size: 2-rows by 50 feet, four replications
Soil type: Amarillo fine sandy loam
Planting date: 30-Apr
Cultivars: Flavorrunner 458 (Runner), and Gregory (Virginia)
Fungicides: Treatments were comprised of combinations of Abound (24.5 fl oz/A), Bravo WeatherStik (26 fl oz/A), and Convoy (26 fl oz/A). Detailed descriptions of the treatments evaluated are presented in Tables 1 and 2.
Application timing: 75, 105, and 120 days after planting
Digging date: 14-Oct (Gregory) and 23-Oct (Flavorrunner 458)
Harvest date: 2-Nov

RESULTS AND DISCUSSION:

Convoy 40SC is a new formulation of the fungicide flutolanil (formerly registered as Moncut, also one of the principle components of Artisen). Convoy is labeled in peanuts for control several soilborne diseases, such as Southern blight and *Rhizoctonia* limb rot; however, flutolanil lack activity against the foliar diseases, such as leaf spot, pepper spot, and web blotch. The objective of this study was to evaluate the performance of fungicides comprised of Convoy and Abound under moderate disease pressure. Dry and warm conditions were experienced early in the season; however, adequate rainfall and mild temperatures were experienced later in the season. *Rhizoctonia* pod rot and Southern blight were observed at low levels in this trial (data not shown). Early leaf spot was the primary disease observed in the field, with initial symptoms being observed in mid-July (data not shown). For Flavorrunner 458, leaf spot intensity in the untreated control plots approached 20% defoliation (Table 1). All fungicide programs resulted in improved leaf spot control. Yields, damaged kernels, and grades were similar among treatments averaging 3878 lb/A, 2.6%, and 62.7%, respectively. Grades for Flavorrunner 458 were atypical due to stringent grading factors. Overall, leaf spot levels were lower for Gregory when compared to Flavorrunner 458 (Table 2). No differences in leaf spot, yield, or grade parameters were observed for the treatments evaluated. Leaf spot intensity averaged a rating of 3.0, whereas, yields averaged 3673 lb/A. Grades averaged 74% with 35.4% extra large kernels.

These results indicate that fungicide applications can reduce damage caused by leaf spot; however, disease levels experienced were relatively low. Additional studies evaluating these products in fields with soilborne disease pressure are needed, so that we can better identify the proper use of these products on the Southern High Plains of Texas.

Table 11. Effect of fungicide programs containing Abound, Bravo, and/or Convoy on leaf spot, yield, and grade, Flavorrunner 458 peanuts at AG-CARES, 2009

Treatment	Description	Rates	Application timing (DAP) [†]	Leaf spot (1-10scale)	Pod yields (lb/A)	Damaged kernels (%)	Grade (%)
1	Convoy + Bravo	26 fl oz + 24 fl oz	75	4.0 b [‡]	4142 a [‡]	3.4 a [‡]	61.8 a [‡]
	Bravo	24 fl oz	105				
2	Convoy + Bravo	26 fl oz + 24 fl oz	75, 105	4.0 b	3934 a	2.8 a	62.8 a
	Bravo	24 fl oz	120				
3	Abound	24.5 fl oz	75, 105	3.5 bc	3660 a	1.8 a	63.3 a
	Bravo	24 fl oz	120				
4	Abound	24.5 fl oz	75, 105	3.6 bc	3775 a	2.8 a	65.5 a
	Bravo	24 fl oz	120				
5	Convoy + Bravo	26 fl oz + 24 fl oz	75	3.1 c	3878 a	2.4 a	62.4 a
	Abound	24.5 fl oz	105				
	Bravo	24 fl oz	120				
6	Abound	24.5 fl oz	75	3.1 c	4171 a	2.5 a	62.9 a
	Convoy + Bravo	26 fl oz + 24 fl oz	105				
	Bravo	24 fl oz	120				
7	Untreated control	-----	-----	5.3 a	3587 a	2.8 a	60.0 a
LSD (P<0.05) ^b				0.8	ns	ns	ns

[†] DAP = Days after planting. This timing reflects when fungicides would be applied in a pod rot program. [‡] Means within a column followed by the same letter are not different according to Fisher's protected LSD.

Table 12. Effect of fungicide programs containing Abound, Bravo, and/or Convoy on leaf spot, yield, and grade, Gregory peanuts at AG-CARES, 2009

Treatment	Description	Rates	Application timing (DAP) [†]	Leaf spot (1-10scale)	Pod yields (lb/A)	Damaged kernels (%)	Extra large kernels (%)	Grade (%)
1	Convoy + Bravo	26 fl oz + 24 fl oz	75	3.3 a [‡]	3858 a [‡]	3.9 a [‡]	34.6 a [‡]	76.4 a [‡]
	Bravo	24 fl oz	105					
2	Convoy + Bravo	26 fl oz + 24 fl oz	75, 105	3.0 a	3841 a	3.1 a	36.7 a	73.1 a
	Bravo	24 fl oz	120					
3	Abound	24.5 fl oz	75	2.8 a	3336 a	4.6 a	36.6 a	74.1 a
	Bravo	24 fl oz	105					
4	Abound	24.5 fl oz	75, 105	3.0 a	3767 a	6.7 a	37.5 a	74.3 a
	Bravo	24 fl oz	120					
5	Convoy + Bravo	26 fl oz + 24 fl oz	75	2.8 a	3759 a	7.2 a	33.9 a	72.0 a
	Abound	24.5 fl oz	105					
	Bravo	24 fl oz	120					
6	Abound	24.5 fl oz	75	3.3 a	3656 a	5.6 a	34.3 a	75.9 a
	Convoy + Bravo	26 fl oz + 24 fl oz	105					
	Bravo	24 fl oz	120					
7	Untreated control	----	----	3.0 a	3491 a	5.7 a	34.2 a	72.1 a
LSD (P<0.05)				ns	ns	ns	ns	ns

[†]DAP = Days after planting. This timing reflects when fungicides would be applied in a pod rot program. [‡]Means within a column followed by the same letter are not different according to Fisher's protected LSD.