

TITLE:

Peanut Tolerance to Outlook and Dual Magnum applied PPI, PRE, AT-CRACK, and POST at AG-CARES, Lamesa, TX in 2002.

AUTHORS:

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MATERIALS AND METHODS:

Plot Size:	4 rows by 50', 3 replications
Soil Type:	Amarillo fine sandy loam
Planting Date:	May 2, 2002
Variety:	Flavor Runner 458
Application Dates:	PPI - April 11 and incorporated with spring tooth harrow PRE - May 2 At-Crack - May 13 Post - May 30
Rainfall in-season;	4.9 inches
Irrigation in-season:	15.5 inches
Digging Date:	October 10
Harvest Date:	October 16

RESULTS AND DISCUSSION:

Weed control is critical to peanut production on the Texas High Plains. Chloroacetamide herbicides, such as Dual Magnum, Lasso, and Outlook, have good activity on annual grasses, small-seeded broadleaf weeds, and yellow nutsedge. Growers, however, have expressed concern regarding the injury potential of these soil applied herbicides. In light of the recent injury observed from Strongarm applied to the soil, this study was designed to examine peanut tolerance to the newest chloroacetamide herbicide, Outlook, when applied preplant incorporated (PPI), preemergence (PRE), at ground cracking (AT-CRACK), and postemergence (POST). At each application timing, Dual Magnum was applied for comparison purposes. All plots were kept weed-free.

At all rating dates in May through July, Outlook PRE at 0.75 and 0.84 lb/A injured peanut. Peanut injury was 20% in May, but decreased to 3% in July. Slight injury (2 to 5%) from PPI applications were observed in June and July. No injury was observed following any AT-CRACK or POST application. By September, no visual injury was observed following any treatment. A decrease in peanut yield was observed following Outlook PRE at 0.75 and 0.84 lb/A.

Table 1. Peanut injury and yield as affected by Outlook and Dual Magnum applied PPI, PRE, AT-CRACK, and POST.

Treatment Name	Rate (lb/A)	Applic. Method	Peanut Injury (%)						Yield (lb/A)
			May 17	May 30	June 13	June 27	July 11	Sept 24	
Non-treated	---	---	0	0	0	0	0	0	2680
Outlook	0.5	PPI	0	0	0	0	0	0	2855
Outlook	0.75	PPI	0	0	1.7	4.0*	2.7*	0	2765
Outlook	0.84	PPI	0	0	3.3*	4.7*	1.7	0	2835
Dual Magnum	1.27	PPI	0	0	0	6.7*	0	0	2874
Non-treated	---	---	0	0	0	0	0	0	2883
Outlook	0.5	PRE	0	0	5	1	0	0	2860
Outlook	0.75	PRE	20*	7.3*	10*	5.3*	4.3*	0	2478*
Outlook	0.84	PRE	19*	7.3*	9*	6.3*	3.3*	0	2551*
Dual Magnum	1.27	PRE	6.7	0	0	4.3*	0	0	2718
Non-treated	---	---	0	0	0	0	0	0	2880
Outlook	0.5	At-Crack	0	0	0	0	0	0	2579
Outlook	0.75	At-Crack	0	0	0	0	0	0	2633
Outlook	0.84	At-Crack	0	0	0.7	0	0	0	2698
Dual Magnum	1.27	At-Crack	0	0	0	0	0	0	2771
Non-treated	---	---	0	0	0	0	0	0	2855
Outlook	0.5	POST	0	0	0	0	0	0	2813
Outlook	0.75	POST	0	0	0	0	0	0	2720
Outlook	0.84	POST	0	0	0	0	0	0	2799
Dual Magnum	1.27	POST	0	0	0	0	0	0	2945
LSD _(0.05)			2.64	1.29	1.73	1.99	1.84	NS	313

Means within a column followed by an “*” are different from the control plots at the 5% probability level.