

TITLE:

Rotation crop response of Strongarm and Cadre applied to peanut in 1999.

AUTHORS:

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METHODS AND MATERIALS:

Plot size: 8 rows by 40 feet, 6 replications
Soil type: Amarillo fine sandy loam
O.M.: 0.7%
Sand: 73%
Silt : 10%
Clay : 17%
pH : 7.6
CEC: 10.1
Crop varieties: Cotton – PM 2326RR
Corn – Pioneer 3162
Sorghum – DK 41Y
Planting date: Sorghum – May 09
Corn – May 16
Cotton – May 16
Harvest date: Sorghum – September 8
Corn – September 20
Cotton – October 11
Irrigation: LEPA – season total 23.25 inches

RESULTS AND DISCUSSION:

Herbicide applications of Strongarm at 0.45 oz/A (1X) and 0.90 oz/A (2X), Cadre at 1.44 oz/A (1X) and 2.88 oz/A (2X), and numerous combinations of rates were made to peanut in 1999. In 2000, cotton, corn, and sorghum were planted to determine injury caused by carryover from the previous years' application. Strongarm carryover from the 1X or 2X rates did not affect cotton or sorghum growth throughout the season. Corn injury was observed following Strongarm at the 2X rate. Cadre at the 1X and 2X rates injured cotton and sorghum throughout the season. Corn was injured following Cadre at 2X. Cotton yields were not affected by Strongarm residues when compared to the untreated. Cotton yields were reduced by Cadre residues at both rates.

Treatment* Name	Rate oz/A	Application Method	Cotton Injury July 26	Corn Injury July 26	Sorghum Injury July 26	Cotton** Yield Oct. 11
-----%-----						----lb/A----
1 Strongarm	0.45	PE	5 e***	0 d	0 d	1040 a
2 Strongarm	0.90	PE	2 e	22 bc	7 d	900 ab
3 Cadre	1.44	PT				
COC	1.5% v/v	PT	32 cd	13 cd	30 b	760 bc
4 Cadre	2.88	PT				
COC	1.5% v/v	PT	60 a	30 ab	62 a	580 cd
5 Strongarm	0.45	PE				
Cadre	0.72	PT				
COC	1.5% v/v	PT	22 d	23 abc	10 cd	870 ab
6 Strongarm	0.45	PE				
Cadre	1.44	PT				
COC	1.5% v/v	PT	38 bc	23 abc	27 b	760 bc
7 Strongarm	0.90	PE				
Cadre	1.44	PT				
COC	1.5% v/v	PT	48 ab	38 a	25 bc	550 d
8 Untreated			0 e	0 d	0 d	980 a

* All treatments received a preplant incorporated application of Sonalan 1 qt/A in 1999.

** Roundup was applied for weed control.

*** Means followed by the same letter are not different at the 5% level of probability.