

BERMUDAGRASS AND JOHNSONGRASS CONTROL

WILBER KIRKLAND FARM -- CASA GRANDE, PINAL COUNTY

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Herbicides were applied full coverage June 3, 1981 over the top of weeds and cotton in 20 gpa of water using a K 2,5 flood jet nozzle. Cotton size varied from emerging to 6 in. tall, bermudagrass was heading, and Johnsongrass was 12 in. tall. The cotton was stunted severely by the direct competition from the dense stand of bermudagrass early in the season. Plot size was 4 beds wide by 30 ft. long replicated 3 times in a randomized complete block. The grower cultivated 1 or 2 times between irrigations until the 1st of July. The grower also used a rope wick in 1 direction to treat the Johnsongrass with Roundup on July 21.

% control of bermudagrass and Johnsongrass at 3 dates

Treatment	lb/A	adjuvant	% control					
			June 15		August 7		October 16	
			Bermuda-grass	Johnson-grass	Bermuda-grass	Johnson-grass	Bermuda-grass	Johnson-grass
Poast	1.0	1% crop oil	85	80	90	99	90	85
Poast	2.0	1% crop oil	90	85	99	92	99	95
RO 138895	2.0	½% X 77	83	80	83	87	72	85
RO 138895	2.0	½% X 77	88	80	87	82	93	80
Fusaride	1.0	1/10% X 77	77	75	90	97	87	92
Fusaride	2.0	1/10% X 77	88	88	93	97	99	99
CGA 82725	1.0	½% X 77	77	70	50	45	77	35
CGA 82725	2.0	½% X 77	87	85	73	90	70	70
Check			0	0	0	0	0	0

In this test:

1. All rates of Poast, RO 138895 and Fusaride gave excellent season long control of bermudagrass and Johnsongrass.
2. CGA 82725 was less effective than the other treatments in control of all weeds.
3. Due to severe stunting from bermudagrass competition the untreated checks were severely stunted all through the season. No estimates of any effect of herbicide to the crop could be made. At the last observation date, October 16, the field had been defoliated. In the untreated plots where bermudagrass had grown all season, cotton plants were only ½ the size of plants receiving herbicide treatment. All herbicide treatments appeared to free the cotton from weed competition.