



Texas Agricultural Extension Service
The Texas A&M University System

Result Demonstration Report

POST EMERGENCE PIGWEED CONTROL IN SORGHUM

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SUMMARY: Peak worked best when applied to pigweed less than 1 inch tall. In order to adequately control 2-4 inch pigweed Peak should be applied with atrazine. Peak at 0.5 oz/Ac + atrazine at 1.5 pt/Ac resulted in 95% or greater control of 2-4 inch pigweed at a cost for the herbicides of \$7.40/Ac.

INTRODUCTION & OBJECTIVE: Post emergence control of pigweed in sorghum has long been a problem on the Texas High Plains. Producers historically have long used 2,4-D, but this herbicide can often cause injury to the sorghum while not always giving satisfactory control of pigweed. Peak is the newest herbicide available for post emergence broadleaf weed control in grain sorghum. The purpose of this test was to compare Peak applied at different rates, times of application, and in combination with different herbicides for pigweed control in sorghum.

METHODS & MATERIALS: Sorghum variety SG 942 was planted on June 5, 1997 on 30 inch beds at Bushland, Texas. Each treatment was replicated four times on plots measuring 15 by 25 feet. All treatments were applied in 10 gallons of water per acre using standard flat fan nozzles. Applications were made at two different times. These were at the 2-leaf sorghum stage on June 17, 1997 when pigweed was less than 1 inch tall, and at the 4-leaf sorghum stage on June 23, 1997 when pigweed was 2-4 inches tall. Weed control was evaluated by visually observing the plots throughout the season.

RESULTS: See Table.

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Post Emergence Pigweed Control in Sorghum With Peak

Treatment	Rate Product/A	Herbicide Timing	Cost \$/A	% Pigweed Control			% Sorghum Injury	
				6/30	7/7	7/28	6/30	7/7
Peak ¹⁾	0.75 oz	2-leaf	7.50	81	91	95	1	0
Peak ¹⁾	0.75 oz	4-leaf	7.50	68	75	74	3	0
Peak ²⁾	0.75 oz	4-leaf	7.50	63	73	70	3	0
Peak ¹⁾	1 oz	4-leaf	10.00	69	76	81	9	0
Peak ²⁾	1 oz	4-leaf	10.00	75	80	80	2	0
Peak + Atrazine ²⁾	0.5 oz + 1.5 pt	4-leaf	7.40	91	96	99	5	0
Peak + Banvel ²⁾	0.5 oz + 2 oz	4-leaf	6.70	74	76	83	5	0
Buctril + Atrazine ²⁾	1 pt + 1 qt	4-leaf	9.70	100	98	100	13	0
Buctril + Atrazine ²⁾	0.5 pt + 0.75 qt	4-leaf	5.70	96	95	100	8	0
Peak + Buctril ²⁾	0.5 oz + 1 pt	4-leaf	11.50	80	74	78	8	0
Peak ³⁾	0.75 oz	2-leaf	7.50	78	88	93	4	0

¹⁾COC @ 1 pt/A, ²⁾COC @ 2 pt/A

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³⁾Methylated Vegetable Oil @ 1 pt/A

ANALYSIS & CONCLUSION: When Peak was applied at 0.75 oz/Ac to 2-leaf sorghum and pigweed less than 1 inch tall, control was greater than 90%. However, when applied to 4-leaf sorghum, with weeds 2 - 4 inches tall, control was 73% or less. Increasing the rate of Peak to 1.0 oz/Ac improved control 5 to 10 percent. When Peak was applied at a reduced rate of 0.5 oz/Ac with 2 oz of Banvel, control was equal to the 1 oz rate of Peak at a reduced cost. The best control was achieved with Peak when applied at 0.5 oz/Ac + 1.5 pt/Ac atrazine at a cost of \$7.40/Ac. This was equal to the control given by 0.5 pt Buctril + 0.75 qt atrazine at a cost of \$5.70/Ac. Cost/Ac does not include application or adjuvant cost. Very little injury to sorghum was noted with any of the treatments.