



Texas Agricultural Extension Service
The Texas A&M University System

Result Demonstration Report

Control of Pigweed Species in Grain Sorghum with Ally in 1999

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Summary

A study was conducted to evaluate Ally alone and in tank mixes for control of pigweed (Palmer amaranth) in grain sorghum. Control with Ally alone at 0.05 oz/Ac was 70%. Adding 8 oz 2,4-D amine to the Ally treatment increased control to 80%. Similar control was observed with an Ally plus Clarity treatment. The standard treatments of 2,4-D and Clarity alone provided approximately 80% control. Some slight stunting of the sorghum from the Ally treatments was observed 4 weeks after treatment.

Introduction and Objectives

Due to high herbicide and low crop prices, grain sorghum producers have to keep input costs down while maintaining a reasonable level of weed control. Ally herbicide can be applied for post-emergence control of broadleaf weeds as well as provide residual control, all for a very low cost. Therefore, this study was established to evaluate crop injury and weed control and to provide support data for an Ally label in grain sorghum.

Materials and Methods

In 1999 applications were made to Pioneer 84G62 at the 5 inch stage and to 1-12 inch pigweed (Palmer amaranth). All applications were made with a tractor mounted CO₂ sprayer at 3 mph and 10 GPA. Ratings for weed control and crop injury were taken at approximately 2, 4, and 8 weeks after treatment application. Ratings were based on a 0 to 100% scale with 0 = no control or injury and 100 = complete control and crop kill. Plot size was 15 by 25 feet and all treatments were replicated 4 times.

Results

See following table.

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Table 1. Pigweed control with Ally in grain sorghum in 1999.

Treatment	Rate Prod./Ac	Pigweed Control 2 WAT ¹⁾	Pigweed Control 4 WAT	Crop Injury 2 WAT	Crop Injury 4 WAT	Crop Injury 8 WAT
Ally	0.05 oz	71	71	19	14	0
Ally + NIS*	0.05 oz	70	70	20	15	0
Ally + 2,4-D + NIS	0.05 oz + 8 oz	84	88	13	3	0
Ally + 2,4-D	0.05 oz + 8 oz	76	80	10	5	0
Ally + Clarity + NIS	0.05 oz + 4 oz	83	80	15	6	0
2,4-D + NIS	8 oz	65	75	0	0	0
Clarity + NIS	4 oz	70	83	0	0	0

* All NIS applied at 0.25% v/v.

¹⁾ WAT = Weeks after treatment application.