

EVALUATION OF LAYBY HERBICIDE APPLICATIONS ON SEED CORIANDER AND DILL, 1996

Marvin Butler and Brett Dunn

Abstract

Herbicides prometryn (Caparol, Ciba) and linuron (Lorox, Du Pont) were applied layby to seed coriander and dill near Madras, Oregon. Caparol at 4 pt/a provided 90 to 97 percent control for redroot pigweed, common purslane, and grass species. Total weed control for Caparol at 2 pt/a was 68 percent compared to 93 percent for Caparol at 4 pt/a. Caparol at 2 pt/a plus Lorox at 1 lb/a did not increase efficacy over Caparol alone at 4 pt/a. There was no reduction in either coriander or dill stands and no visible injury to either crop.

Introduction

Caparol received registration for postemergence broadleaf and grass control in seed carrots, parsley, dill, and parsnips in Washington during 1996. To receive registration in Oregon, data needed to be generated for the seed crops of interest in central Oregon, which are carrots, parsley, coriander, and dill. The objective of this project was to provide efficacy and phytotoxicity data by evaluating layby applications of Caparol alone and in combination with Lorox to coriander and dill grown commercially for seed near Madras and Culver, Oregon.

Methods and Materials

Caparol at 2 and 4 pt/a, and Caparol at 2 pt/a plus Lorox at 1 lb/a were applied July 11 to seed coriander and seed dill with a CO, pressurized, hand-held boom sprayer at 40 psi and 20 gal/a water. Crop oil concentrate at 1 percent of the spray volume was added to all treatments. Plots 10 ft x 20 ft were replicated

three times in a randomized complete block design. Treatments to seed coriander were evaluated July 30 for control of redroot pigweed, common purslane, and grass species. Reduction in stand and crop injury were rated visually at both the coriander and dill locations July 30.

Results and Discussion

Caparol at 4 pt/a provided 97 percent control of common purslane, 92 percent control of redroot pigweed, and 90 percent control of grass species. Caparol at 2 pt/a ranged from 88 percent control of common purslane, 77 percent control of redroot pigweed, to 40 percent control of grass species. Total weed control for Caparol at 2 pt/a was 68 percent compared to 93 percent for Caparol at 4 pt/a. At 87 percent total weed control, Caparol at 2 pt/a plus Lorox at 1 lb/a provided somewhat less control than Caparol alone at 4 pt/a. There was no reduction in either coriander or dill stands and no visible injury to either crop.

Table 1. Effect of herbicides applied July 11, 1996 to coriander grown for seed near Madras, Oregon.

Treatments'	Rate	Weed control'			
		Redroot pigweed	Common purslane	Grass species	Total weeds
	(product/a)	(percent)			
Caparol	2 pt	77 a ²	88 b	40 b	68 a
Caparol	4 pt	92 a	97 a	90 a	93 a
Caparol + Lorox	2 pt 1 lb	90 a	92 ab	80 a	87 a
Untreated		0 b	0 c	0 c	0 b

Visual evaluation was conducted July 30, 1996.

² Treatments applied July 11, 1996.

³ Mean separation with Honestly Significant Difference at P 5 0.05.