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Dicamba combinations for leafy spurge shoot control

M. A. FERRELL and T. D. WHITSON

Leafy spurge is a major broadleaf, perennial weed problem in rangeland. This research was conducted in Crook County, WY, to compare the efficacy of dicamba combinations, with picloram and 2,4-D LVE, on leafy spurge.

Plots were established May 14, 1986 to a dense stand of leafy spurge in a rangeland setting. The leafy spurge was in the prebud stage-of-growth. Perennial grasses 4 to 6 inches tall were present as an understory. Herbicides were applied with a 6-nozzle knapsack spray unit with a carrier volume of 40 gpa delivered at 40 psi pressure through 8004 flat fan nozzles. Weather conditions were as follows: air temp. 45° F, relative humidity 60%, wind SW at 5 mph, sky cloudy, and a soil temp. – 0 inch 60° F, 1 inch 54° F, 2 inch 50° F, 4 inch 50° F. Soil was silt loam (22% sand, 58% silt and 20% clay) with 1.8% organic matter and 6.3 pH. Plots were 9 by 30 feet and arranged in a randomized complete block design with four replications.

Visual evaluations were made May 14, 1987. Picloram at 2.0 lb ai/A was the only effective treatment. Combinations of dicamba with picloram and 2,4-D LVE were not effective in controlling leafy spurge. (Wyoming Agric. Exp. Sta., Laramie, WY 82071, SR 1517.)

Leafy spurge shoot control.

Treatment ¹	Rate lb ai/A	Percent control ²
dicamba	0.5	0
dicamba	1.0	0
dicamba	2.0	0
dicamba	4.0	53
dicamba + picloram	0.5 + 0.125	0
dicamba + picloram	1.0 + 0.25	18
picloram	0.5	42
picloram	1.0	65
picloram	2.0	96
dicamba + 2,4-D LVE	1.0 + 1.0	47
dicamba + 2,4-D LVE	1.0 + 3.0	45
LSD (0.05) =		19
CV =		36

¹Treatments applied May 14, 1986; surfactant, X-77, added to all treatments at 0.5 v/v.

²Visual evaluations July 7, 1987.