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1982 leafy spurge control studies at Chadron, Nebraska

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A field study was initiated at Chadron, Nebraska to compare the effectiveness of individual herbicides and herbicide combinations for leafy spurge control. The experimental design was a randomized complete block with four replications. Plots were 11 feet wide by 50 feet long and were located on a silt loam with 1.5% O.M. content and pH of 7.5. Herbicides were applied with a tractor mounted sprayer calibrated to deliver 20 gallons of water per acre with Spraying Systems 11002 nozzles at 36 psi pressure. Herbicides were also applied with a pipe wick applicator driven at 2 mph and kept 6 inches above the soil surface. Herbicides were applied on May 22, 1981 when leafy spurge was in the bud to flowering stage of growth. Weather conditions were as follows: air temperature 64º F, soil temperature at a 3 inch depth 63º F, wind was out of the west at 8-10 mph, and relative humidity of 42%.

Leafy spurge plots were visually evaluated on June 5 and August 29 during the 1981 growing season. Leafy spurge shoot counts were made on June 4, 1982 by counting a 3 sq. ft. area in each plot. The most consistent leafy spurge control was obtained from post emergence applications of Tordon 22K at 1.0 lb/A and Banvel at 8.0 lb/A.

Table 1. Leafy spurge control with various herbicide treatments at Chadron, Nebraska.

		% Control Visual evaluations			Stem counts
Herbicide treatments	Rate lb/A	6/5/81	9/29/81	6/4/82	6/4/82
	Tractor Mounted Sprayer				
Weedy check	---	0	0	0	0
Tordon 22K	1.0	76	66	82	57
Tordon 22K	0.25	32	15	30	26
Tordon 22K + Maintain	0.25 + 0.5	56	57	58	50
Banvel	8.0	77	78	85	65
Banvel	2.0	40	5	3	30
Banvel + 2,4-D	0.5 + 1.0	81	32	24	33
Banvel + 2,4-D	1.0 + 1.0	73	40	8	0
2,4-D	2.0	83	30	5	7
Weedy check	---	0	0	0	0
	Ropewick Applications				
10% Tordon 22K	1 pass	75	0	20	
10% Tordon 22K	2 passes	87	35	30	
10% Tordon + 10% Maintain	1 pass	62	50	25	
10% Tordon + 10% Maintain	2 passes	92	50	60	

Treatments applied May 22, 1981