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## **Comparative treatments of fluroxypyr, dicamba and picloram for leafy spurge control**

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A comparative trial was set up near Enterprise, Oregon to compare the efficacy of fluroxypyr (Dowco 433) (Starane), to dicamba (Banvel) and picloram (Tordon 22K).

The experiment was applied July 27, 1984 on leafy spurge in full flower. The experimental design was a randomized complete block with four replications of each treatment. Soils consisted of 11.2% sand, 63.3% silt, and 26.5% clay with an organic matter of 2% and a pH of 7.0. Applications were made with a 10-foot, 6 nozzle, hand-held boom, using 40 gallons of water per acre. Plots were 10 feet by 27 feet in size.

Visual evaluations were made June 8, 1985 and percent control was estimated. Fluroxypyr was found to have four times the activity of picloram when each herbicide was applied at 0.25 lb ai/A (Table 1). Leafy spurge remained in the vegetative state without any flower or seed production one year following all fluroxypyr applications. Fluroxypyr applications of 0.25 and 0.5 lb ai/A gave 60 and 76.3% control, respectively. Increasing fluroxypyr rates to 1.0 and 2.0 lb ai/A did not increase leafy spurge control greatly above the 0.5 lb ai/A application rate. Application rates of fluroxypyr at 0.25 lb ai/A controlled a higher percentage of leafy spurge than did 4.0 lb ai/A of dicamba.

This initial study comparing fluroxypyr, dicamba and picloram indicates that fluroxypyr has considerable activity on leafy spurge. Treatment combinations with other herbicides as well as sequential and timing trials should be conducted to further determine the activity of fluroxypyr on leafy spurge.

**Table (1) Comparative treatments of fluroxypyr, dicamba, and picloram for leafy spurge control.**

Herbicide	lb ai/A	% Control				
		Rep 1	Rep 2	Rep 3	Rep 4	Ave.
		No flowering of leafy spurge -----				
Starane	0.25	60	60	60	60	60.0
		No flowering of leafy spurge -----				
Starane	0.5	60	75	85	85	76.3
		No flowering of leafy spurge -----				
Starane	1.0	80	70	85	85	80.0
		No flowering of leafy spurge -----				
Starane	2.0	70	70	80	70	72.5
Banvel 4L	4.0	40	50	50	50	47.5
Banvel 4L	8.0	85	95	95	99	93.5
Tordon	0.25	10	10	15	20	13.8
Tordon	1.0	98	80	98	95	92.8
Tordon	2.0	99	97	99	97	98.0
Check	—	0	0	0	0	0