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Late summer applications of quinclorac or imazethapyr for control of leafy spurge

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This research was conducted near Devil's Tower, Wyoming to evaluate leafy spurge control with late summer applications of quinclorac and imazethapyr, alone or in combination. Plots were 10 by 13.5-ft. with four replications arranged in a randomized complete block. Late summer treatments were applied September 11, 1991 (air temp. 76º F, soil temp. 0 inch 85º F, 1 inch 90º F, 2 inch 90º F, 4 inch 85º F, relative humidity 40%, wind west at 5 mph, sky 30% cloudy). The soil was classified as a silt loam (22% sand, 58% silt, and 20% clay) with 1.8% organic matter and a 6.3 pH. Leafy spurge was past seed production and 14 to 20 inches in height. Infestations were heavy throughout the experimental area. Visual evaluations were made June 11, 1992.

Late summer applications of quinclorac and imazethapyr, alone or in combination, did not provide adequate control of leafy spurge nine months after treatment.

Leafy spurge control

Treatment[1]	Rate	Control[3]
	(lb ai/a)	(%)
quinclorac[2]	0.25	0
imazethapyr[2]	0.06	0
imazethapyr[2]	0.13	5
quinclorac + imazethapyr[2]	0.25+0.06	40
quinclorac + imazethapyr[2]	0.25+0.13	50
picloram	1.0	91
(LSD 0.05)		15
(CV)		26

[1]Treatments applied September 11, 1991.

[2]Crop oil concentrate (Sunit) added at 1 quart/acre.

[3]Visual evaluations June 11, 1992.