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Picloram in combination with growth regulators for control of leafy spurge

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Two experiments were conducted to evaluate the use of growth regulators in combination with picloram for control of leafy spurge. Both experiments were conducted on a pasture located southwest of Lincoln, Nebraska. The treatments were applied on May 14, and 15, 1981, when the leafy spurge was in the early bud stage. The experiment was set up as a randomized complete block design with four replications. Treatments were applied with a tractor mounted compressed air powered sprayer calibrated to deliver 20 gpa. Stand counts were taken prior to treatment in May of 1981 and again in May of 1982. Control is expressed as percent change from the original stand count. Chlorflurenol and picloram applied as a tank mixture enhanced leafy spurge control compared to picloram alone. Mefluidide increased leafy spurge control with picloram when applied as a tank mix or when applied one day after the picloram. When the rate of chlorflurenol was increased from 1/4 lb/A to 1/2 lb/A little difference was found in percent control of leafy spurge.

Table 1. Leafy spurge control with picloram in combination with growth regulators, Lincoln, Nebraska. (Regimbal and Martin).

Treatment	Rate (lb/A)	% Control
Picloram	1/4	34
Chlorflurenol	1/2	35
Picloram + Chlorflurenol (tank mix)	1/4 + 1/2	80
Picloram + Chlorflurenol (tank mix)	1/4 + 1/2	46
Chlorflurenol + Picloram (tank mix)	1/2 + 1/4	33
Mefluidide	1/4	14
Picloram + Mefluidide (tank mix)	1/4 + 1/4	62
Picloram + Mefluidide (one day later)	1/4 + 1/4	60
Mefluidide + Picloram (one day later)	1/4 + 1/4	30
Untreated check	0	0

Table 2. Leafy spurge control with picloram in combination with chlorflurenol, Lincoln, Nebraska. (Regimbal and Martin).

Treatment	Rate (lb/A)	% Control
Picloram	1	10
Picloram + Chlorflurenol	1 + 1/4	53
Picloram + Cblorflurenol	1 + 1/2	61
Picloram	1/4	3
Picloram + Chlorflurenol	1/4 + 1/4	6
Picloram + Chlorflurenol	1/4 + 1/2	16
Picloram	1/8	-28 ^a
Picloram + Chlorflurenol	1/8 + 1/4	- 5
Picloram + Chlorflurenol	1/8 + 1/2	- 6
Chlorflurenol	1/2	- 6
Chlorflurenol	1/4	-29
Untreated check	0	0

^aNegative numbers refer to increase in stand.