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## Leafy spurge control with herbicide, growth regulator combinations; The pipe-wick applicator for leafy spurge control; A nursery study of leafy spurge plants from North America

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Herbicides evaluated for leafy spurge control include fosamine, dicamba, picloram and 2,4-D. Spring applications were generally more effective than fall. Leafy spurge control was greater on sandy soils than fine textured soils with picloram. Picloram at 1 lb/A provided 70-80% control 1 year after treatment on a sandy soil and 20-50% control on a silt loam soil. Dicamba, 2,4-D and combinations of 2,4-D + dicamba provided 20-40% control 1 year after treatment. Fosamine applied in the fall caused significant grass injury and provided fair leafy spurge control.

Chlorflurenol improved leafy spurge control with picloram applied in the spring but not the fall. Nitrogen applications, the fall preceding a spring herbicide application, were inconsistent in improving leafy spurge control.

Ropewick applicators were compared with a field sprayer as a method of applying picloram for leafy spurge control. The ropewick applicators provided leafy spurge control that was approximately proportional to the amount of picloram applied.

Research on leafy spurge biology and taxonomy is being conducted in a large field nursery at Lincoln, Nebraska by Dr. M. K. McCarty, USDA, SEA. This nursery contains 38 leafy spurge selections from across North America and Europe. According to Dr. McCarty the majority of the plants in North America are *Euphorbia pseudovirgata* rather than *Euphorbia esula*.