Why I didn't get rid of leafy spurge in Montana in 1952

JIM KRALL

Montana Agricultural Experiment Station

There are several factors that are important when analyzing the history of the leafy spurge infestation in Montana.

In 1952 a bulletin was published by the Montana Agricultural Experiment Station on the Control of Leafy Spurge. It was the world's worst seller. There was very little interest by ranchers and farmers to control the weed. They did not know that it would become so widespread and felt that there would be a chemical to control it some time in the future.

Methods to control leafy spurge like frequent tillage, applications of 2,4-D (every 4 weeks), and sterilization of the ground were all effective but were rarely followed up with replanting of competitive species. Introduction of competitive species that could eventually replace leafy spurge was viewed as an important element for control. Experiments were conducted where winter wheat as a competitor was planted in late spring, then applications of different rates of 2,4-D surpressed the spurge.

The success of biocontrol depends on synchronizing the populations of both the pest and the biocontrol agent. Keeping the pest that controls weeds in place is a problem. Different genotypes may make the pest ineffective, i.e., late flowering musk thistle.