

Musk Thistle Control in the Fall

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Musk thistle is one of 12 state-wide noxious weeds in Kansas infesting over 700,000 acres. Musk thistle has been reported in nearly every county in Kansas and is found primarily in pastures, rangeland, hay meadows, alfalfa, fallow, roadsides, and waste areas.

Musk thistle is primarily a biennial or winter annual species. Biennials take two growing seasons to complete their life cycle. Thistles that germinate in the spring will spend the entire summer as a rosette, live through the winter, and bolt the next year in May and June. Winter annual plants will germinate with moisture and warm temperatures in the fall, live through the winter, and bolt the following year.

Most people recognize musk thistle during the early summer when the plants are actively blooming. However, musk thistle control is easiest as a rosette.

Fall is an excellent time to spray musk thistle as all are in the rosette stage of growth. Another advantage for treatment in the fall is reduced risk of off-target drift. Waiting until most deciduous trees have lost their leaves and most crops are harvested will greatly reduce the likelihood of damage from herbicide drift. A wider window of opportunity for treating musk thistle also exists in the fall. The spraying window in the fall probably extends until the ground is frozen and the musk thistle plants have shut down activity until warmer temperatures in the spring. Freezing temperatures will start to damage musk thistle plants, with some yellowing and curling of leaves. However, the plants are susceptible to herbicides as long as green tissue exists.

Dry conditions in the fall can reduce control of musk thistle with certain herbicides, but studies in Kansas indicated that a fall application of 2,4-D LVE at 2 lbs per acre was more effective (80% control) than a similar rate of 2,4-D amine (49% control). Dicamba + 2,4-D amine at 0.25 + 0.75 lbs per acre and picloram at 0.125 lbs per acre were also effective (>90% control) on musk thistle treated in the fall. Milestone, Tordon 22K, and Chaparral also provide effective treatment with near 100% control. These products are labelled for use on range and pasture.

If you need to treat musk thistle this fall, herbicides exist that will not only control the rosettes at the time of application, but will carryover and control new emerging rosettes next spring. If possible, select a warm, sunny day when spraying musk thistle this fall. For more information, please contact the local K-State Research and Extension Office.

Information provided by: Walt Fick, K-State Research and Extension Rangeland Management Specialist

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