CANADA THISTLE






DESCRIPTION

Canada thistle (Cirsium arvense (L.) Scop.) is a perennial forb native to Europe. It reproduces by seeds and whitish, creeping roots that send up new shoots every eight to twelve inches. Stems are two to four feet tall and usually branched above the middle. Leaves are alternate, oblong or lanceolate, irregularly lobed or toothed, spiny-margined, and hairless or white-haired. Flowers are pink to purple (rarely white) and borne in one-half to one-inch diameter heads clustered near the ends of branches. Male and female flowers are on different plants and can be difficult to tell apart without careful examination. For viable seed to be produced, plants bearing male flowers and plants bearing female flowers need to be in close proximity. The seed-like fruits are about one-eighth inch long, smooth, light to dark brown, oblong, slightly flattened and slightly curved, and bear a terminal cluster of numerous white, one-half to one-inch capillary bristles that aid in wind dispersal. Flowering occurs from June until August, and fruiting occurs from July until frost.

Sources: Kansas Department of Agriculture K.A.R. 4-8-33 Revised May 20, 2020
Photos: CWDAK, Robert Videki, Doronicum Kft.,Jan Samanek, Phytosanitary Administration, Bugwood.org

PREVENTION OF SPREAD

The Kansas Noxious Weed Law (K.S.A. 2-1313a et. seq.) requires all landowners to control the spread of and to eradicate Canada thistle on all lands owned or supervised by them. Methods used for control must both prevent the production of viable seed and destroy the plant's ability to reproduce by vegetative means. Infestation sites must be monitored after control methods have been implemented to ensure that dormant seeds in the seedbank do not germinate and establish new infestations.

CANADA THISTLE CONTROL PRACTICES

Canada thistle control means that both the roots and the flowers must be destroyed. Because Canada thistle is a perennial, two or more of the control methods discussed herein must be used together to control Canada thistle, with the exception that herbicide applications may be used alone as a control.

Cultural Control

Cultural weed control involves land and vegetation management techniques used to prevent the establishment or control the spread of noxious weeds.

Grazing by sheep, goats, or cattle when rosettes are green and begin to sprout can be utilized as a control for Canada thistle. Remove animals when grazing shifts to desirable species and then re-graze new sprouts often enough during the season to prevent flowering. Grazing will need to be repeated annually to deplete the seedbank and provide control.

Frequent surveys of fence lines, roadways, ditches, and other susceptible areas for new infestations and the timely removal of any new plants will prevent Canada thistle from becoming established.

Mechanical Control

Mechanical weed control involves the physical removal of weeds or the reproductive parts of weeds.

As a perennial species, Canada thistle is difficult to control mechanically. Repeated mowing of Canada thistle over a three-year period, timed for bud to early-bloom stage, should suppress infestations in forages. This mowing should be as low to the ground as practical. Care must be taken to mow before any of the target plants sets seed; mowing after seed set will help disperse the seed.

Chemical Control

The herbicides listed below may be used for cost-share with landowners to control Canada thistle. Other products labeled and registered for use on this noxious weed in Kansas may be used in accordance with label directions but are not available for cost-share. Be sure to follow all label directions and precautions. For additional information, consult the most recent edition of the Kansas State University publication of “Chemical Weed Control for Field Crops, Pastures, Rangeland, and Noncropland.”

Any two or more of the herbicides listed below may be available for cost-share as a pre-mix or a tank mix if allowed on the respective labels. Contact your county weed program for availability.

Switching often between herbicides with different modes of action is highly recommended.

Herbicide	Mode of Action
2,4-D *(Platoon, Weedestroy)*	4
aminopyralid *(Milestone)*	4
chlorsulfuron *(Telar, Glean)*	2
clopyralid *(Transline, Stinger, Confront)*	4
dicamba *(Banvel, Vanquish, Diablo)*	4
diflufenzopyr *(Overdrive)*	19
glyphosate *(Imitator Plus, Buccaneer Plus)*	9
imazapyr *(Arsenal, Ecomazapyr)*	2
metsulfuron-methyl *(Escort, MSM 60)*	2
picloram *(Tordon 22K, Grazon)*	4

Biological Control

Biological control refers to the deliberate application of a living organism to control the spread of weeds. These agents will not eradicate their host plant; therefore, other control methods must be used in addition to the use of biological control agents as part of an integrated pest management strategy. The importation of biological control agents is regulated by USDA-APHIS and is allowed by permit only. The biological control agents listed below are permitted for use on Canada thistle. Other agents may be available for use if the appropriate permit is obtained.

Ceutorhynchus litura	stem weevil
Urophora cardui	stem gall fly