<u>News Column</u> Stacy Campbell

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## Control bur ragweed with early fall treatments

With good moisture conditions in many parts of Kansas this year, this is a good time to treat fields for perennial broadleaf weeds such as bur ragweed, bindweed, and Canada thistle.

Bur ragweed (also called woollyleaf bursage) is a perennial broadleaf weed, and is classified as a noxious weed in Kansas. It is a significant problem on nearly 94,000 acres in the western half of the state. It is adapted to low areas where water runoff collects in cultivated fields or in noncropland areas. Its ability to extract water with its deep perennial root system, which can reach a depth of 15 feet, allows bur ragweed to survive extended periods of drought or harsh weather. These circumstances make it very difficult to control.



Figure 1. Bur ragweed. Photo by Curtis Thompson, K-State Research and Extension.

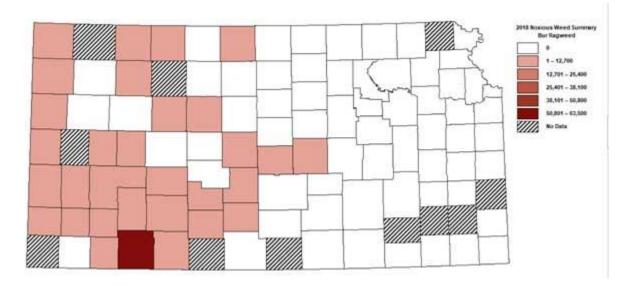


Figure 2. Distribution of bur ragweed in Kansas, in terms of acreage. Map from the <u>2018 Noxious</u> <u>Weed Summary</u>.

Bur ragweed is extremely competitive with crops, and can reduce grain yield by 100 percent in dry years. Even with irrigation, losses of 40 to 75 percent are common. Bur ragweed is more competitive with summer crops than with winter wheat because bur ragweed growth is minimal during much of the winter wheat life cycle. However, in dry years, bur ragweed will deplete soil moisture for fall-planted wheat and without adequate moisture will thereby reduce grain yield significantly.

Flower development begins in late July or early August. Seed contributes to the spread of bur ragweed and likely is a source of new infestations. New plants also arise from the vegetative buds, which develop on the root stocks, thus contributing to the spread of bur ragweed. Tillage also can redistribute vegetative buds, aiding the spread of bur ragweed.

Bur ragweed control is best when treated in late summer or fall, prior to a killing frost, with Tordon tank mixed with dicamba or 2,4-D ester. Control will not be as effective if the bur ragweed plants are under stress at the time of treatment. Bur ragweed is a difficult weed to control, and a single treatment application will usually not be sufficient. A fall treatment with the herbicides mentioned above followed by glyphosate treatments in glyphosate-tolerant crops during the growing season can help manage bur ragweed long-term. However, spring crops may be injured severely from fall applications of Tordon. Wheat has the most tolerance and can be planted 45 days following a <sup>1</sup>/<sub>2</sub> pint of Tordon 22K application. Grain sorghum can be planted 8 months after application of 1 pt Tordon 22K. Apply each herbicide or herbicide mixture according to directions, warnings, and precautions on the product label(s).

Treatment	Rate	% Control 11 months after treatment (2-year average)
Tordon + Banvel	1 pt +1 pt	82
Tordon + 2,4-D LV4	1 pt + 1 qt	74
Roundup Power Max + Banvel	44 oz + 1 pt	16
Roundup Power Max + 2,4-D LV4	44 oz + 1 qt	27

Table 1. Control of bur ragweed in western Kansas with mid-September trea	tments
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Source: Woollyleaf Bursage Biology and Control, MF 2239 http://www.ksre.ksu.edu/bookstore/pubs/MF2239.pdf

For more information, see <u>2019 Chemical Weed Control for Field Crops, Pastures, Rangeland, and</u> <u>Noncropland</u>, K-State publication SRP-1148, or <u>Woollyleaf Bursage Biology and Control</u>, K-State publication MF-22239.

Information provided by Dallas Peterson & Randall Currie, Weed Management Specialists.