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DEPARTMENT OF AGRONOMY

**RUSSIAN KNAPWEED: A NEW WEED IN KANSAS**  
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A new weed has made its appearance in the northeastern part of Kansas. It is known as Russian knapweed<sup>1</sup> (*Centaurea picris* Pall.) and was sent to the Seed Laboratory<sup>2</sup> of the Kansas Agricultural Experiment Station by Mr. J. W. Head of Clifton, Washington County, Kan., in July, 1921.

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1 This plant has been called the "star thistle" also, but this name is erroneous. The term "star thistle" is applied to *Centaurea calcitrapa* L., an annual with deeply indented leaves similar to those of the ordinary thistle and very much unlike the leaves of Russian knapweed.

2 The plant was recognized as belonging to the genus *Centaurea* but because of lack of proper taxonomic keys, a species name could not be assigned. The specimen was therefore sent to Mr. Wm. A. Dayton, Plant Ecologist of the United States Forest Service at Washington D. C., who finding it to be a rare specimen, forwarded it to Dr. S. F. Blake, expert in Compositae in the Bureau of Plant Industry, who determined it to be *Centaurea picris* Pall.



FIG. 1.—Portion of a stem of Russian knapweed showing flower

Russian knapweed is a native of the Caspian Sea region of southern Russia where it is a pest in alfalfa fields. It is believed that seed of this plant was brought into this country in shipments of Turkestan alfalfa. According to R. A. Oakley and H. L. Westover of the United States Department of Agriculture, "commercial Turkestan alfalfa seed can be identified in most cases by the seed of Russian knapweed which it almost invariably contains." For this reason farmers who have planted Turkestan alfalfa should examine their fields to see if any of these weeds are present. The sale of Turkestan seed has increased greatly in Kansas in the last year, and samples sent to the Seed Laboratory by farmers show that some of it contains knapweed seed. By way of information, it may be stated that Turkestan alfalfa seed looks like old seed of ordinary alfalfa. If there is any question about seed which farmers contemplate buying, samples should be sent to the Seed Laboratory for analysis.

Russian knapweed has spread rapidly in Utah, Nevada, and Idaho in the last few years and it is not at all improbable that it will spread rapidly in this state if steps are not taken to check it in its incipiency.

<sup>1</sup>Oakley, R. A., and Westover, H. L. Commercial varieties of alfalfa. U. S. Dept. of Agr. Farmers' Bul. 757: 1-24 Figs. 7. 1916.



FIG. 2.—An entire Russian knapweed plant showing general character of stem, root, and leaves

The weed seeds can be distinguished with little difficulty when found with alfalfa seed. They are considerably larger than alfalfa seed, are of oblong shape, and are of an ivory, whitish color which makes them stand out very prominently in contrast to the yellowish or reddish color of the alfalfa seeds.

Russian knapweed belongs to the same family of plants as the common garden "bachelor button" and the flowers bear a close resemblance to those of the bachelor button. Figure 1 gives a good idea of the appearance of the flower very shortly after full bloom.

The leaves are very much finer than those of the bachelor button and the weed in general has a shrub-like appearance. It is a perennial from one to two feet in height with a long, stout root. (Fig. 2.) Because of this long root the weed is likely to become a pest as this feature of its growth makes eradication difficult. Not much is known of the weed and for this reason but little can be said about its habits in general. It is probable that most of the specimens will be found in alfalfa fields or in nearby situations where seed might have blown from other areas.

At the present time the suggestions to farmers are that they examine their fields closely to find evidences of this weed. If any are found they should be dug up and burned, and if the field is badly infested, steps should be taken to prevent the plant from going to seed and the field should be put into some intertilled crop, such as corn or sorghum, as soon as practicable. If there is any doubt about the identity of the specimens found they should be sent to the Seed Laboratory of the Agricultural Experiment Station for examination, which will be made promptly and the sender apprised of the findings.

It is believed that through proper cooperation on the part of farmers and others interested, the spread of this weed may be materially lessened. Early, vigorous action may be the means of preventing the addition of one more weed pest to the already long list of weed pests in Kansas.