UNIVERSITY OF ILLINOIS, Agricultural Experiment Station.

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BULLETIN NO. 35.

THE RUSSIAN THISTLE IN ILLINOIS.

The Russian thistle is spreading rapidly in several of the north-western and western states. Introduced into the southern part of South Dakota in 1873, it is now abundant over large areas in both South and North Dakota, and is also growing in different parts of Nebraska, Kansas, Minnesota, Iowa, and Wisconsin. During the present season it has been found in at least nine different places in northern Illinois and is reported to have been found in northwestern Indiana. George P. Clinton, Assistant Botanist to this Station, seems to have been first to recognize the weed growing in this state, at Polo. It is quite probable that a few plants are growing in other places in the states last named, as railway transportation of live stock, grains, or other farm seeds, or hay from the infested regions affords a ready means for the distribution of the seeds of this and other weeds.

While there is reason to believe this weed might not become so serious a pest in Illinois as it is in the Dakotas, even if allowed to become common, it is exceedingly important that this result be prevented, and this can be done. There is little reason to believe that there is any great number of plants now growing in any part of the state. They are, usually, of such size and appearance that they can easily be seen. The plant is an annual. When pulled or cut at this season it dies soon.

This Station has received specimens of the weed found growing at nine different points in the northern part of Illinois: Chicago, St. Charles, Hampshire, Davis Junction, Polo, Savanna, Oregon, Nachusa, and Peotone. The specimen from Chicago was found on waste ground near the lake shore; that from St. Charles was from waste land near a foundry receiving material from the northwest; all the others from railway embankments or along their right of way. These facts suggest that in

RUSSIAN THISTLE—A BRANCH.

and about Chicago, Peoria, and other cities with large railroad traffic from the northwest, along railroad lines, especially in the northern part of the state, on the roadside and waste land near these railways, and about establishments handling material from the northwestern states are the places where this weed will most probably be found. But any farmer who has purchased grain, grass, flax, or other seeds may have the weed growing on his farm.

This bulletin is designed to urge the importance of farmers, road commissioners, and railway agents and section men looking for and destroying the weed wherever found, and to enable those not familiar with it to recognize it.

The U. S. Department of Agriculture has published a valuable bulletin (No. 15, Division of Botany) giving a full discussion of the history, distribution and means for eradicating the weed. This bulletin can be obtained by applying to the Department at Washington. It is illustrated with good pictures of the plant. Two of these have been reproduced for this bulletin; one a picture of an average plant at or near maturity. This picture was made from a photograph taken by the Wisconsin Station of a plant found growing on a railroad embankment not far from Madison. The other picture is of a branch of a plant showing form and size of leaves. Comparison of any suspected plant with these pictures will enable any one to identify this weed.

The plant is not a thistle, and does not look like one. Russian tumble weed would have been an appropriate name. The plant much resembles the common tumble weeds of the west. When mature the stems are more woody; the spines or little thorns are hard. Sometimes the plants are very compact, nearly round. Sometimes when growing close together they fail to have the rounded form. They may be one, two, or three feet high, and from eighteen inches to six feet across. The leaves are very small, as are the flowers and seeds. At this season and later the stems have a purple or rose color. After September 1st the seeds may be sufficiently mature to grow. If the seeds are formed, the plants should be burned as soon as dry. Left to themselves they do not usually break off and roll or tumble until after hard freezing. It has been estimated that an average sized plant may have 20,000 to 30,000 seeds, and it may carry these long distances.

It is suggested that where plants are found before the seeds have formed, one or more specimens, plainly labeled, be placed where they may readily be seen by parties interested, who may thus learn to recognize them. It is also suggested that it is always safe to destroy any weed, even though it be not recognized as an especially troublesome pest.

This Station will identify weed specimens sent to it, but it is urged that their destruction should not be delayed for such identification.

G. E. MORROW, *Agriculturist*.

RUSSIAN THISTLE—ORDINARY FORM.

PLATE 286, FIG. 14.

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