

CANADA THISTLE—*Arsium Arvense*, L. Scop.

OTHER ENGLISH NAMES.—Creeping thistle, field thistle.

A deep rooted perennial. Introduced from Europe; has creeping rootstocks which are capable of sending up a great number of shoots. Its rootstock has been found running along in the ground 15 inches below the surface and sending up new shoots every 5 or 6 inches. Commonly grows to a height of 2 to 4 feet. Leaves rather narrow, crinkled, prickly, slightly clasping the stem at the base, upper surface smooth, dull green, under surface slightly downy and grayish in colour. Some plants bear male flowers only and produce no seeds; others female flowers only, which produce many seeds. The flower heads of the male plant are nearly globe shaped about 1 inch across, lilac and violet in colour, while those of the female are oblong and only half the size, apparently not coming fully into flower. The flower heads on the male plant are more conspicuous and more numerous than on the female plant. Large patches may be found bearing male flowers only, showing that all the plants originated from a single seed and that the patch was formed from the underground rootstocks. An average female plant is capable of producing about 2,500 seeds.

Seeds are about one-eighth of an inch long, light brown to gray, oblong, smooth and somewhat flattened and curved; the top end of the seed is nearly round, flat, and has a narrow rim with a small cone shaped projection in the centre. Attached to the top is a conspicuous tuft of hair or down, which makes it possible for the wind to carry the seed long distances. The tuft of hair of course will be absent in seed grain, having been broken off by threshing and handling. Canada thistle is spreading very rapidly and small patches may be found in most sections of the province. The worst sections at present are along the main line of the Canadian Pacific Railway from Moose Jaw district to Wolseley.

Canada thistle is quite commonly mistaken for prairie bull thistle by those unfamiliar with the two weeds. The latter is white and woolly throughout; the root system is shallow, and the flowers are from 1½ to 2½ inches across. However the department would advise any one in doubt as to either plant to send a specimen to Professor Willing, College of Agriculture, Saskatoon, or to The Weeds Commissioner, Department of Agriculture, Regina.

SUGGESTIONS FOR CONTROL.—Several methods are recommended, the merit of each depending on the extent of area infested and the kind of soil.

1. Where patches are very small, probably the most economical way is to cover with manure and leave covered the entire summer. The covering must extend 4 or 5 feet beyond the boundary of the patch and be at least 3 feet deep.

2. When there is a large quantity of thistle and no other weeds are present, it sometimes is advisable to leave them alone until in blossom, then mow and remove. Plough 6 or 8 inches deep and surface cultivate the remainder of the season.

3. The safest plan is generally a good summerfallow kept black all summer with a duckfoot cultivator, cutting off all leaves as soon as they appear and thereby starving out the roots.