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1	2
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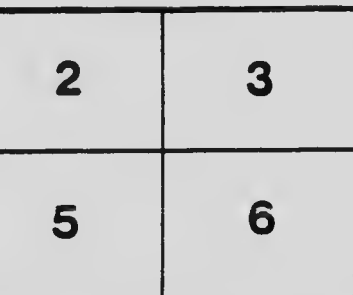
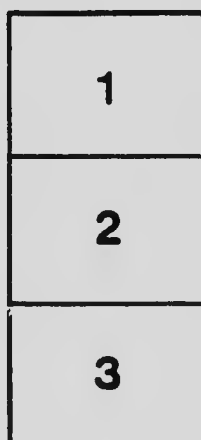
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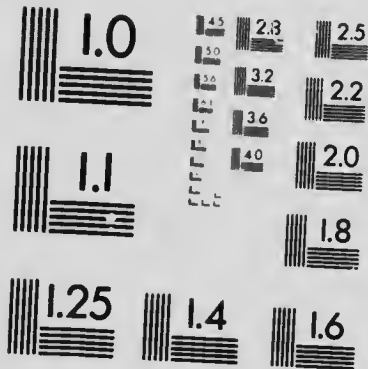
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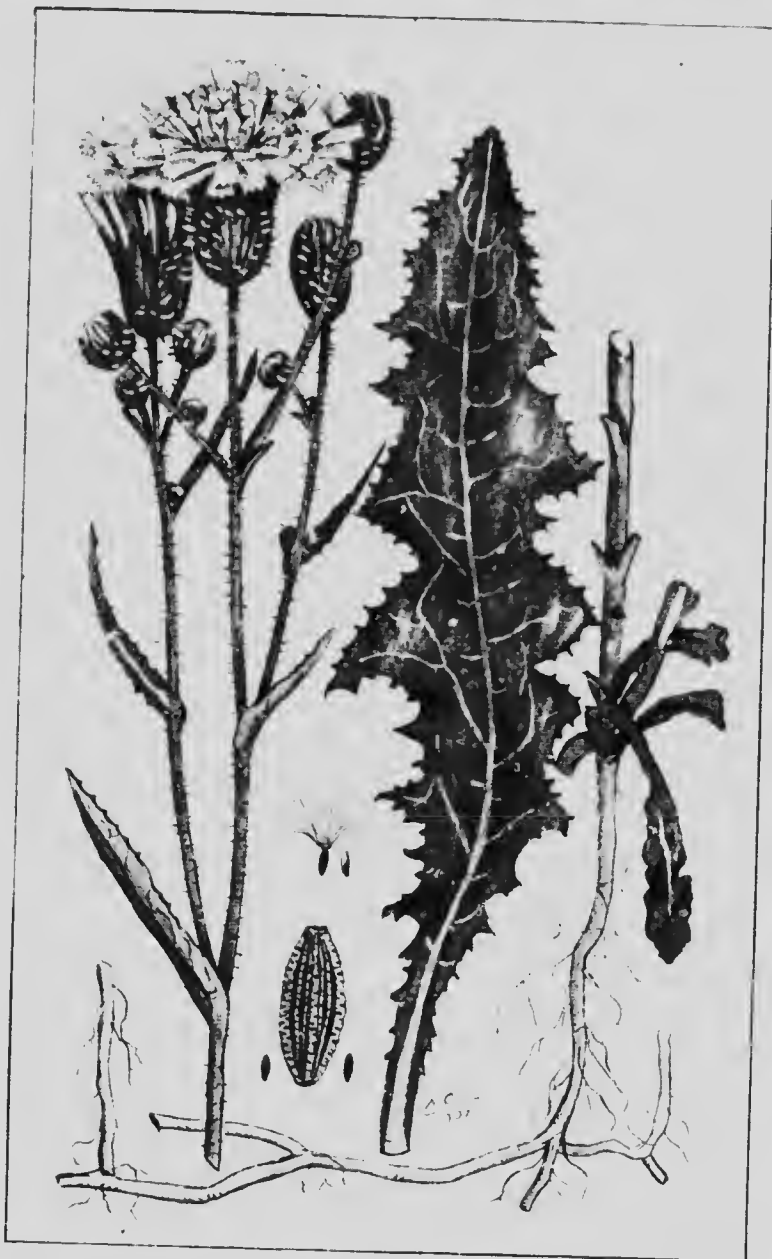


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RYE AS A WEED ERADICATOR

By Hon. VALENTINE WINKLER, Minister of Agriculture.



Perennial Sow Thistle (*Sonchus arvensis*).

Published by authority of Hon. Valentine Winkler, Minister of Agriculture

Rye as a Weed Eradicator

This circular gives the tentative results of the experience of farmers in the Morden-Rhineland District in keeping down noxious weeds by growing Fall Rye and Spring Rye. These grains have been grown in that District for over five years. Their cultivation was undertaken in the first instance for the money value of the rye crop, but owing to the additional value of these grains as a means of eradicating weeds their cultivation has been extended till a substantial area is now sown.

FALL RYE.

This should be sown from August 15th to September 15th, as soon as the previous crop is harvested. The ground should be plowed and harrowed and the rye seeded at the rate of about $1\frac{1}{2}$ bushels to the acre. It ripens about the last week in July and is cut with the binder, stooked, and threshed in the same way as wheat. The yield runs from 15 to 25 bushels per acre. On good clean ground it yields more, but it is ordinarily sown on the weediest ground the farmer has.

It makes a strong stand in the fall, which helps to hold the snow. Thus far it has not winter-killed. When sown early the weeds grow up with it and the tender varieties of weeds are killed by the frost. The rye grows rapidly, leafs freely and ordinarily outstrips the weeds and tends to crowd them out and weakens the growth of perennial weeds. When the frost comes the rye forms a carpet on the ground, which further tends to smother the weeds. It starts early in the spring, grows rapidly, and shades any weeds that grow up—such, for example, as Wild Oats, Sow Thistles and Canadian Thistles—and thus tends to prevent them blossoming. Few of the weeds that do blossom are far enough advanced when the rye is cut to mature their seeds.

While the above is the normal mode of culture there are several variations —

- (a) The rye may be pastured in the fall when it has a fair growth, say after it has been sown six weeks.
- (b) It may be pastured in the spring till about May 20th.
- (c) Or it may be cut for hay early in July, after the head is well formed.

Light pasturing does not appear to affect greatly the yield of either grain or hay; but heavy pasturing lessens the yield of both and affects the quality of the grain, the kernel not being so plump.

Fall rye is sometimes sown on very weedy summer-fallow as an additional measure for cleaning up the ground.

SPRING R

This is sown as early in the spring as possible. It ripens in August, early enough to prevent a good many weeds from seeding. Instead of the grain being allowed to ripen, it may be cut for hay in June and then either pastured or a second crop of hay cut about the end of August. When two crops of hay are cut very few noxious weeds go to seed.

From the above resume it will be readily seen that the cultivation of fall rye or spring rye would appear to lend itself admirably to the eradication of noxious weeds. The experience of the five years during which it has been cultivated is such that an increased acreage is sown each year. Some farmers are still growing it for its money value as a crop while others are growing it both for its money value and for destroying noxious weeds.

The results are such that the Department is warranted in recommending its cultivation in an experimental way on weedy ground. A ten-acre plot, seeded with 15 bushels, is well worth trying as a constructive method of eradicating noxious weeds and at the same time growing a crop of either grain or fodder.

Rye will grow on any ordinary soil except where water lies. It thrives on high ground or ridges and as fall rye gets almost the whole of the year's precipitation it does well in dry seasons.

Apart from its cultural value and its selling value, rye mixed with barley, oats or corn and chopped, makes an admirable ration for horses, cattle or pigs. It is said there is a tendency in rye to develop ergot and that it should not be fed to brood females near the end of the period of gestation. This tendency has not been indicated in this Province, but care should be exercised in this regard till the matter is beyond doubt. Rye also makes wholesome flour, though darker than wheat flour. It is an ideal food for fowls.

THE MARKET FOR RYE.

The opening price offered at Morden for the 1915 crop is 87 cents per bushel of 56 pounds and there is a ready market for it wherever a carload is grown tributary to an elevator.

Rye hay is of fair quality and the yield is satisfactory. Rye straw is comparatively hard and is said not to be as valuable as wheat straw for fodder. It is, however, eaten freely by stock; but as it has not been fed apart from other straw to any great extent there is not sufficient data of its value as a fodder.

The names of three pioneers in rye growing, among others, may be mentioned — John McKay (5-2-5), Gerhard Braun (19-3-4) and John Oddy (21-1-5), all of Morden Post Office. Messrs. McKay and Braun have grown rye extensively for some years and Mr. Oddy has a handsome crop of both fall rye and spring rye this season. The acreage in rye this season in the district is estimated to be 1,000 acres.

Fall rye for seed can be obtained in the Morden-Rhineland District; also spring rye in limited quantities. A fair price for clean seed is \$1.00 per bushel, including sacks. That is to say, \$15.00 for six sacks of $2\frac{1}{2}$ bushels each, which would seed 10 acres.

Those wishing to buy or sell Fall Rye for seed should write the Department at once and lists of names of sellers or buyers will be sent them.

The results set out in this circular are tentative and subject to change, being based on limited data. Reports to the Department as to results by growers will be gladly received. In all correspondence it should be clearly indicated whether it is Fall rye or Spring rye that is referred to.

HON. VALENTINE WINKLER,

Minister of Agriculture.





