

of the Pigweeds. Owing to the use of this wrong name, little effort was put forth by the settlers to destroy the new enemy, because it was well known all through the west that the true Tumble Weed was a native plant which had never given much trouble. Similarly, the Hare's ear Mustard, a very noxious weed, was left undisturbed by some from having been wrongly spoken of by many as "Black Mustard." The Black Mustard, as a matter of fact, is of very rare occurrence in Canada, and as far as I am aware is not anywhere in the Dominion a troublesome weed in crops.

The present bulletin is issued in response to numerous inquiries as to the nature of the many weeds found on farm lands and the best way of getting rid of them. While it is true that the character of each kind has to be considered, there are certain principles which must be constantly borne in mind by those who wish to clear their land of noxious weeds. In the present age of extensive and easy communication with all parts of the country, and indeed with the whole world, there are frequent opportunities for seeds of weeds being introduced into previously uninfested districts. As an offset against the great benefits we derive from railways, it has been found that many new weeds have been introduced into new localities through their agency, the seeds being either shaken from cars or cleaned out of them at stopping places. It is important, therefore, to keep watch on all railway banks, and station yards.

There are many ways by which weeds are spread:—

1. By natural agencies. The wind carries seeds long distances, not only in summer, but with dust and over the surface of the snow in the winter. Streams distribute them far and wide along their courses. They are also distributed by seed eating birds and herbivorous animals, through the stomachs of which the seeds have passed undigested, or by being attached to some part of their bodies by special contrivances, with which nature has provided some seeds for this very purpose, such as hooked and barbed hairs, spines and gummy excretions, &c.

2. By human agency. The seeds of weeds are frequently introduced as "foul seed" mixed with other seeds; they are also imported in hay used for packing or as fodder. In addition to this, weeds are frequently distributed over farms by waggons, harrows, seeders, threshing machines or other agricultural implements. Perhaps the most fertile source of weeds upon a previously clean farm, is manure brought from elsewhere. But, notwithstanding all efforts to the contrary, weeds will certainly be introduced from time to time on to the farms of the most careful, and the wisdom is therefore apparent of farmers becoming acquainted with the different kinds which are likely to cause them loss, and the best way to treat them.

In the following pages will be found short accounts of some of the worst weeds of the country, arranged according to their natural orders, so as to bring together those which are most nearly related.

Weeds, like all other plants, may be simply classified under the three following heads:—Annuals, or one year plants; Biennials, or two year plants; and Perennials, or many year plants. In eradicating weeds, it is of the greatest importance to consider under which of these heads they come, because in most instances the treatment is simple and will be upon the general principles of preventing annuals and biennials from seeding; and perennials from forming new leaves, roots and underground stems.

ANNUALS—Are those plants which complete their whole growth in a year. As a rule, they have small fibrous roots and produce a large quantity of seed. Examples of this class are found in Wild Mustard, Penny Cress (called in Manitoba "Stink-weed"), Lamb's quarters, Wild Buckwheat, Purslane, Ragweed, Wild Oats. There are also some annuals called "Winter Annuals," which are biennial in habit, that is, of which seeds ripened in the summer produce a certain growth before winter sets in and