

The plowing is desirable as a week of the farm ground can be got for sowing the wheat earlier than the case. But greater importance is placed on perennial weeds and exposing of action of the frost considerable check where they are. Where it is de- burn creeping more readily as ground has been and snow of winter.

In the case of are of two classes view of their requires a rotation seeds will germinate even if the con- moisture and temperature. These normally of the following shed, but in ma- tion can be de- if the seeds are depth in the soil species as wild. Each time the disturbed some will germinate ate allowed to meantime, the become clear of.

In another g- known as winter- minate immedia- tered and pass- of a small see- vives the winter- sumes growth i- Belonging to th- ing weeds: the flowering cate- herd's purse, f- wild radish, ha- bling mustard, mustard, corn, stickweed, and in the case of cultivation is they are turne- and covered a few of them v- their growth at

The Cabb

By A. V. Mitche-

ture, Manitot

A serious ag- Maggot (Phor- has occurred Winnipeg and toba. This in- Eastern Canad- Columbia, but of importance got usually in the season, but noticed and u- end of August fully 90 per ce- cabbages and gardens are be- cases will be

Injury was outer and lar- began to droop stage. Many no sign of dro- and will soon

Upon pulling ground, numer- may be seen u- which was b- are also found of the lower p- the stem beco- no longer abl- moisture from- quently wilts- attacked, but has been four nips and rad-

The adult which somew- fly, although seen flying a- on warm days. The adult fen- upon, or in th- plant. These white, ridged about 1-25 of

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Utilization of Straw

THAT there is a very great waste of valuable material in the burning of straw no one will deny, but that the straw may be profitably utilized only a comparatively few on the prairies apparently realized as is evidenced by the red sky on autumn evenings due to the large number of burning straw piles.

There are straw burners adapted for the use of straw as a fuel but those thus far put on the market have not been an unqualified success. There is also much being said from time to time of the value of straw in the manufacture of briquettes for fuel purposes, but this has not yet come to a very practical conclusion. There is left the old and time-honored use of returning it to the land for the enriching of the soil which has been proved satisfactory and profitable again and again in experiments carried on at the various Dominion experimental stations on the prairies.

In countries of much moisture the straw might be spread on the land and plowed under, but to plow under any appreciable quantity of straw in such a dry climate as is found in the West would mean the loss of the crop the following season and perhaps of two seasons, because there is not sufficient moisture in the soil to rot the straw in one year and the unrotted straw leaves the soil so open that the soil itself dries out more than it otherwise would. The straw must be rotted before it is applied to the land.

The most satisfactory means of rotting the straw quickly is livestock. If cattle and horses are allowed free access to straw piles during the day throughout the winter a few head will tramp down a large pile. In doing so they tramp with it large quantities of snow and their own manure and urine, thus serving the double purpose of saving their own waste products for the land, and putting the straw into shape to be more easily rotted.

In the spring, the edges should be gathered toward the centre till the trampled pile is not less than four feet deep, and if left in this condition all summer, is in splendid shape in the fall to spread on the land that is to be summerfallowed the following season. The shaping of the pile can be done in the spring before work can be begun on the land and the spreading on the land can be done in the fall after the land is too much frozen to allow of any cultivation, thus allowing low wages for the doing of the work.

In so treating the straw it gives out a considerable feeding value. Wheat straw alone possesses little feed value,

but the average wheat straw pile contains much that is not pure straw that has a fair feed value and stock, given plenty of water and shelter and one good meal at night, thrive well by having access to a straw pile during the day.

The foregoing applies to wheat straw but it applies to a much greater degree to oat and barley straw.

The value of well-rotted manure, such as may be formed in the method above outlined, has been determined by a series of experiments extending over a period of four years at the Rosthern Experimental Station. Wheat on Summerfallow without manure in a four-year average yielded 38 bushels per acre, and wheat on summerfallow with 12 tons per acre of rotted manure for the same period yielded 46 bushels per acre. Nor was this all. In every case the crop of wheat was followed by a crop of oats in which the oats following the wheat on summerfallow yielded 70 bushels per acre, whereas oats following wheat on summerfallow that had been manured yielded 85 bushels per acre.—Experimental Farm Notes.

Something About the Grasses

Speaking of the grass crops Mr. McKillop, of the Brandon Experimental Farm affirms that there is no use trying to grow grasses that will not stand the drought. "It is different," he says, "with grain crops, for, by means of summerfallowing and spring and fall cultivation, artificial conditions can be created which help them over a dry spell. On the other hand the grasses have practically to stand alone. Brome grass has been found to stand the drought very well and is especially recommended for light lands. Western rye grass is better than brome for fitting into a rotation as there is less trouble getting rid of it. It also is very drought resistant. For ordinary sowing a mixture of Western rye, five pounds; Timothy, three pounds; and red clover, six pounds, per acre, is recommended."

The experience of the Brandon farm has been that it is a mistake to leave grass down too long. The first two years are the most productive and profitable. After that it is seldom that enough grass is secured to pay for leaving it on the land. By leaving the grasses down only for a short period they can be worked into a rotation. By this method the beneficial effects of grass crops reach all parts of the farm in a shorter time.

In breaking up the sod of cultivated grasses or clover, it has been found to be the best practice to take a crop of hay off and then break, rather than



Vegetable Garden at Brandon Experimental Farm.