

less heat than the southern corn requires and reaches maturity in a much shorter season. To do this it has been necessary to sacrifice size, so that the northern varieties do not produce the bulk of corn that is obtained in the south. It is advisable for Manitoban farmers to use varieties of this specialized northern type. Sometimes a greater bulk of fodder can be obtained by the use of larger varieties, but the quality is quite inferior on account of the necessity of cutting the crop in a very immature condition. The following are some of the varieties that may be used successfully in Manitoba for fodder or ensilage growing: Northwestern Dent, Quebec Yellow, North Dakota White, Longfellow, Early Eight-Rowed Canada, Compton's Early. For grain production, Squaw corn is about the only variety that can be depended on to ripen, but the yield from it is very small. In good seasons or specially favoured locations, the variety known as Free Press will ripen; it is probably the best suited for grain production of any we have at present.

SEED TESTING.

As the production of the seed corn which the Manitoban farmer uses is quite beyond his control, it is very important that the seed should be tested for germination before being used. Seed corn is very often badly lacking in vitality owing to bad weather, bad storage, immaturity or other causes. It is always advisable, then, to procure a small sample before purchasing and have it tested. The Laboratories of the Dominion Seed Branch at Ottawa and Calgary and of the Manitoba Agricultural College at Winnipeg are always available for the free testing of any seeds sent to them, or it is an easy matter to test for oneself. Count out 100 or 200 seeds of average appearance, roll them up in a wet cloth, or put them between blotting papers, and then keep moist and at a uniformly warm temperature for about ten days.

PREPARATION OF LAND.

Corn is a crop that requires a large amount of available plant food in the form of rotting vegetable matter. This can best be obtained by ploughing under sod and by applying liberal quantities of barnyard manure. In soils that are deficient in humus it is necessary to do one or both of these. In most Manitoban soils, where there is abundance of humus, good crops of corn can be obtained without either sod or manure. However, manure is always a great benefit, and will produce not only a heavier, but also an earlier, crop. There is not only the fertilizing effect of the manure, but the fermentation which takes place develops heat which is very helpful to the heat-loving corn.

When sod is ploughed under for corn, the ploughing should be done the year before, and the earlier in the fall it can be done the better. This provides a better opportunity for killing the grass and commencing the rotting of the sod before the corn is planted. With sod of cultivated grasses and clovers, the best results will be obtained with moderately deep ploughing. The furrow slice should not be thicker than can be properly packed so that there will be no air spaces left under it. It should be thick enough to bury the turf and give enough soil to form a seed bed. With native prairie sod or brome grass, best results will be obtained by breaking shallow early in the preceding summer and backsetting deeper in the fall.

The best time to plough stubble land for corn will depend on the soil, some soils being more suited to spring ploughing and some to fall ploughing. In most Manitoban soils, fall ploughing will give the better results. In ploughing under manure, the ploughing should be deep enough to cover the manure properly, but not enough to bury it out of reach of the corn.

Land for corn should always be thoroughly worked before planting, as corn requires a finely-worked, firm seed bed and it is almost impossible to work a corn field too much. Cultivation can be performed in a more wholesale and inexpensive way before the corn is planted than after it is up. It therefore pays to kill as many weeds