

fruits under test now number 278 varieties, and the ornamental trees and shrubs include 280 species and varieties. These are being increased from year to year, and the results obtained are awakening much interest in horticulture in that part of the Dominion.

583. The experimental farm for Manitoba at Brandon, Man., contains about 670 acres. Part of this land lies in the valley of the Assiniboine and a part is on the bluffs. Here much has been done in testing the best methods of treatment of land to prepare it for crop. The results obtained show the great advantage of summer fallowed land, and that better crops are obtained from land ploughed in the spring than in the autumn. Different methods of sowing seed grain have also been tested, and the advantages of the drill over the broadcast machine demonstrated. Grain has also been sown at different depths to determine the best practice in that climate. Experiments have been conducted for the prevention of smut in wheat, a disease which has been very prevalent in many sections, and which depreciates the value of the grain wherever it occurs. The results of these tests, which have been continued for several years, show that, when the seed is properly treated, smut may be almost entirely prevented.

Experiments have been conducted in the cultivation of flax, also with Indian corn, roots, millets and other fodder crops. In view of the large increase in stock in Manitoba, and the scarcity of native hay in some districts, crops of mixed grain have been grown and cured green for hay with much success. Instructive experiments have also been carried on in cultivating native grasses, and their usefulness in the production of hay has been demonstrated. Good bulls are kept at this farm for the improvement of stock in that district. The breeds thus represented are Durham, Ayrshire, Holstein and Polled Angus. Tests have been made in the feeding of milch cows and steers, for the purpose of ascertaining the most economical methods of producing milk and beef from those fodder materials which are most generally available in that province. Since this farm was established, a large number of the hardiest varieties of fruits have been tested there. While small fruits succeed well, very little success has been had as yet with large fruits. Further experiments are being conducted all along this line. A large measure of success has attended the planting of forest trees for shelter, and of ornamental trees and shrubs. Of these about 100 species and varieties have proven hardy, and additions are every year made to this list, showing that there is an abundance of material sufficiently hardy to make successful plantations both for the ornamentation of homes in towns and cities as well as those on the prairie farms in Manitoba.

584. The experimental farm for the North-west Territories, which has been located at Indian Head, in eastern Assiniboia, contains 680 acres. At the time of its selection this was all bare prairie land. The soil is very fertile and produces excellent crops of grain, but there is great need of shelter from prevailing winds. Tree planting on a fairly large scale was begun as soon as practicable after the farm was occupied, and although at first it was but partially successful, the trees first put out formed more or less shelter for each other and for those subsequently planted, and now they