

effects of fertilizers on various crops demonstrated, also the best methods of preparing the soil to receive the seed, the most successful methods of sowing, the quantity of seed to be used and the depth in the soil to which it may be placed to the greatest advantage. Long courses of experiments have also been conducted to demonstrate the best time for sowing the more important crops in the different climates of the Dominion.

To accomplish the ends sought in the second line of work mentioned, suitable varieties of grain and other products have been sought for in every accessible country where climatic difficulties exist similar to our own. To add to the chances of success the art of cross-fertilizing has been practised with the object of combining the good qualities of existing varieties in the progeny thus produced. Although the time has been short a gratifying measure of success has attended the efforts which have been made, our farmers have been aroused to an intelligent interest in this work and new and more prolific strains of seed are fast taking the places of some of the less valuable sorts heretofore grown. A great impetus has been given to this special branch by the judicious and free distribution in sample lots of all the surplus grain of the best varieties produced at all the experimental farms.

The object lessons which have been given in the raising of fodder crops and the converting of these into ensilage, thus providing succulent food for cattle during the winter, have greatly stimulated the dairy industry, especially the manufacture of butter in winter, also the economical fattening of steers, thus affording more profitable employment for farm labour during the winter months. The experiments which have been conducted in reference to the economical production of butter of the highest quality and the best management of milk to secure the most complete separation of the butter fat have commanded much attention from those engaged in this special industry. The demonstrations which have been made by the feeding of swine with the coarser and inferior cereals and the otherwise waste products of the farm and converting these into pork has stimulated and enlarged the swine industry. The business in eggs and dressed fowls for the table has also been advanced by the publication of results obtained from experiments in the poultry branch of the experimental farm work.

The difficulties which settlers experience in the more remote portions of the Dominion where the climatic extremes are greater, have also been carefully considered and means devised for their benefit. Many experiments have been made in the treatment of the soil with the view of conserving moisture, also in the introduction of suitable fodder crops and grasses. To the experimental farms are due the credit of the introduction into the Canadian North-west of the Awnless Brome Grass (*Bromus inermis*) and of demonstrating its value both for hay and pasture, thus supplying a want which stood much in the way of successful cattle raising and dairying. The general cultivation of this useful grass which endures severe drought and intense cold with impunity, gives early and succulent green food and large crops of nutritious hay, is preparing the way for a vast extension of the cattle trade and also of the butter and cheese industries.

The instructive experiments which have been carried on in the testing of many varieties of large and small fruits have served to show where these can be grown to advantage and by skilful cross-fertilization on hardy wild forms new and improved sorts are being produced, some of which will, it is believed, prove useful as well as hardy enough to eventually furnish the settlers throughout the North-west country with some of those healthful and agreeable luxuries which nature has given with such a liberal hand to those who dwell in those portions of the country where the climate is more genial. The information which has been given on the cultivation of vegetables and the varieties best suited to the different climates of the country has proved of much value, while the encouragement given to the growing of trees for shelter and ornament, and the stimulus afforded by the example shown and by limited distributions of seeds and cuttings to those who desire to improve their surroundings by the planting of trees and shrubs has had the effect of making many a wilderness blossom and of converting bare and uninviting surroundings into attractive and sheltered homes.

The practical and much appreciated help which has been rendered by the officers who have special charge of the more scientific branches of the work has also been a