

and the cost of producing various farm crops is being studied. Comprehensive trials with various silage crops are being continued in order to secure the most reliable information on the proper time and method of ensiling corn, sunflowers, red clover, sweet clover, alfalfa, buckwheat, cereals and other farm crops. To determine the most economical means of using farm manure and commercial fertilizers for farm crops is the object of another group of field husbandry experiments.

*Forage Plants.*—This division has for its work the improvement of forage plants by breeding, the technique of seed production, principles of compounding seeds mixtures, response of different species to grazing, the introduction and testing of new species, and related problems. These studies cover a wide range of crop plants including herbage grasses and legumes, corn, sunflowers, field roots, sugar beets, soya beans, and cereals for forage. Research work with crops that are adapted to Eastern Canada is centered at Ottawa. In Western Canada the Dominion Forage Crops Laboratory has been established at Saskatoon, Sask., in co-operation with the University of Saskatchewan, for the purpose of developing early-maturing, hardy, and drought-resistant strains of herbage plants adapted to the Prairie Provinces. At the Dominion Range Experiment Station at Manyberries, Alberta, range investigations are in progress to study changes in the natural vegetation under different systems of grazing and other feed problems associated with range management.

*Horticulture.*—The Division of Horticulture deals with fruit growing, vegetable gardening and with ornamental plants. The breeding of new varieties has been an important feature of the work of this division. Some of the outstanding fruits originated there which are being planted in Canada are: apples—Melba, Joyce, Hume, Lobo, Linda and Sandow; raspberries—Brighton and Count; strawberries—Cassandra and Portia, and of vegetables: corn—Banting and Pickaninny; egg plant—Blackie; rhubarb—Ruby; tomato—Abel, Alacrity, Bestal and Herald.

Valuable research work in cider making is being done in this division and cold storage experiments with fruits are in progress. The division co-operates with farmers in orchard experiments and blueberry and cranberry investigations. Research in plant nutrition is also an important line of work.

*Illustration Stations.*—By comparative demonstration the Division of Illustration Stations is carrying forward a co-operative program of crop introduction and improvement on some 206 privately-owned farms. These stations are located in the different provinces, primarily in newly-settled agricultural communities, where the most suitable varieties and crops are not being grown, or in the older settled districts, which have developed acute problems in crop production, resulting from weed infestation, soil drifting, depletion of soil fertility, as well as many other varying factors, which limit crop growth. As centres for production of seed grain, seed potatoes, grasses and clover seeds from the most suitable and hardy varieties, the illustration stations have accomplished a great deal and have established leadership in the community in general farm improvement, including live stock, building and home beautification.

*Poultry.*—While past conditions called for work largely along practical demonstrational lines, the present demands more scientific investigation, particularly in the studies of nutrition, disease and breeding problems. To meet these requirements, trained men have been added to the staff and, through the co-operation of the Health of Animals Branch, additional assistance has been supplied for the study of disease, so that the division is equipped as never before to assist the industry as a