

conducted into diseases affecting forest trees, fruit trees, cereals, small fruits, potatoes, vegetables and tobaccos.

*Cereals.*—In the Cereal Division, the work comprises the production, by cross-breeding and selection, of new varieties of grains and the testing of these as to their suitability for various parts of Canada. All approved varieties are made available for propagation by farmers. Among the more important varieties produced in this Division and now widely grown in Canada are Marquis and Huron wheat, Banner Ottawa 49 oats, and Arthur peas. Two interesting varieties originated by this Division are the Garnet and Reward wheats, now being tested by farmers; they ripen not quite as early as Prelude but yield better. The Division also carries on extensive milling and baking tests. The expansion of breeding work especially for disease resistance, and the creation of an extensive plan of co-operative experiments with farmers, are two developments of recent years.

*Chemistry.*—The work of the Division of Chemistry comprises the analysis of fodders and feeding stuffs, fertilizers, soils, well waters, insecticides, fungicides, etc. It also assists other Divisions in chemical problems and does a large amount of investigational and analytical work for other Branches and Departments. Field tests with various kinds and quantities of fertilizers are carried on by this Division at a number of the branch farms and stations.

*Extension and Publicity.*—This Division acts as a connecting link between the Experimental Farms and the farmer, by making the work of the farms as widely known as possible. Two chief means used are exhibits at as many fairs as possible each year and extension of the departmental mailing lists.

*Economic Fibre Plants.*—The Division studies the areas in Canada suitable for fibre production, the best varieties and strains of seed of fibre plants (flax and hemp), cultural methods, harvesting, retting and scutching processes, etc. Chiefly for demonstrational purposes, the Division is conducting extensive co-operative trials at Forest, Ont., Ste. Anne de la Pocatière, Que., Kentville and Lunenburg, N.S.

*Field Husbandry.*—This Division applies, under field conditions, the results obtained by other Divisions directly engaged in scientific research. Some of the main lines of work under way are tests of fertilizers, moisture requirements of various crops, methods of drainage, rotations and cultural methods. Data of cost of production of field crops are gathered in connection with this work. Range land investigations are also under way.

*Forage Plants.*—The Division has for its work the originating and variety testing of grasses, leguminous forage plants, field roots and Indian corn; plant breeding with these; the collection of genera and species likely to be of value as forage plants; the study of the possibilities and methods of growing root seed, including sugar beets, in Canada, and the distribution for trial of seed of varieties newly obtained and not available commercially.

*Horticulture.*—The work of the Division of Horticulture falls under four main heads:—vegetable gardening, orcharding and small fruits, ornamental gardening and plant breeding. In the three first named, the testing of varieties is a main feature, with a view to ascertaining the hardiest, earliest, best-yielding and most disease-resistant sorts. In plant breeding, the aim is the improvement of existing sorts by cross-breeding. Greenhouse work is also given special attention at Ottawa. Can-