

Research on stored-products insects embraces such pests as the rust-red grain beetle, the Indian meal moth, mites, and spider beetles. Practical controls have been developed utilizing fumigants, abrasives, mechanical methods, proper storage construction, and plant management.

Special consideration is given at the Dominion Parasite Laboratory, Belleville, Ont., to the importation and production of insect parasites of injurious species for distribution in forests, fields, gardens, orchards, and greenhouses. At present, parasites are employed in Canada against thirty important insect pests.

A National Collection of insects is maintained. The specialists engaged in this enterprise provide an identification service in addition to performing formal studies in taxonomy and biology of insects.

Activities designed to prevent the introduction into Canada of foreign insects and plant diseases are centred in the Division of Plant Protection. In addition, this Division is responsible for the examination of plants and plant products being exported to countries requiring such material be free of plant pests and diseases. The supervision of the production of seed potatoes throughout Canada in accordance with the regulations in effect; the supervision of surveys and control of newly introduced destructive plant pests and diseases; and the supervision of fumigation experiments to destroy insect life in plants and plant products at varying temperatures, with various lethal fumigants are all functions of the Division. The effects of fumigants on suitability of products for human consumption or for seed are also under study.

The Dominion Experimental Farms

Organization.—The Dominion Experimental Farms were established by an act of Parliament passed in 1886. This Act described the main lines of investigational work to be undertaken. These included live-stock breeding, nutrition, dairying, the development of cereals, grasses, legumes, forage plants, fruits and vegetables; the study of seeds, fertilizers, plant diseases and insect pests; and “any other experiments and researches bearing upon the agricultural industry of Canada which are approved by the Minister”. In later years some of these activities have been transferred to other branches of the Department.

In order to accomplish these important objectives, an organization has been developed consisting of a Central Experimental Farm at Ottawa, branch stations located in the more important agricultural regions of Canada and sub-stations placed in localities where special problems are to be studied. These branch stations are located in every province and extend from the most highly developed types of agriculture to pioneer regions, including Yukon and the Northwest Territories. In 1915, a system of Illustration Stations was organized to provide a connecting link between the Experimental Farms and farmers located in outlying districts. These Stations are on private farms and are operated on the basis of a co-operative agreement with the owner. They are really sub-stations conducting a wide field of experimental work to help solve some of the many agricultural problems which arise throughout Canada. At the present time there are 211 of these Illustration Stations.

The Central Experimental Farm at Ottawa is the headquarters of the organization. The Director and the staff of ten Divisions engaged in special fields of agricultural research are located at Ottawa. These Divisions include: Animal Husbandry, Bees, Cereals, Economic Fibre Production, Field Husbandry, Forage