

AGRICULTURE

Dairy Department.—Investigational work in this department relates to soft and fancy cheese, fermented milks, cheddar cheese, home-made-rennet, buttermaking in the creamery and the farm dairy, pasteurization and other experiments with dairy products.

Poultry Department.—Experiments are made in the feeding of laying hens and in fattening, the development of laying strains and the distribution of eggs from these strains throughout the province and with different types of poultry houses for town and farm use.

Department of Physics.—Much research work is being done in soil temperatures, lightning rods, insulating materials, the manufacture of drainage tile, etc. A staff of surveyors is maintained during the summer months to survey farm land for underdrainage, the farmer bearing only part of the surveyor's travelling expenses. The yearly average area surveyed is about 15,000 acres.

Department of Bacteriology.—Researches are made into the bacterial diseases of plants and animals; cultures of legume bacteria are distributed amongst farmers; lactic cultures are prepared for cheese factories and creameries; samples of water, food, etc., are tested for bacterial content.

Department of Entomology.—The insect pests of the province are investigated and means of control determined. Insect specimens and injures are identified. New spray mixtures are tested.

Department of Botany.—Weeds, weed seeds and fungous diseases are identified, and samples of seed grain, clover, alfalfa and grass seed are examined as to purity. Fungus diseases of Ontario are investigated and means of control determined. Co-operative experiments in weed eradication are carried on.

Department of Apiculture.—Various breeds of bees are kept for comparison. Experiments are conducted at the College and co-operatively throughout the province in apiary management. A staff of inspectors visits the apiaries of the province to destroy foul brood and other diseases.

MANITOBA.

College of Agriculture, Winnipeg.—The Field Husbandry experimental work was inaugurated in the spring of 1915. In organizing this branch of the College work it was divided into three divisions: Cereal Crops, Forage Crops and Soil and Crop Management. The work in the Cereal division consists of making variety tests and endeavouring to improve the better varieties by selection and hybridization. The object of the Forage Crop division is to secure and improve plants for the production of pasture and winter feed for the live stock. The improvement is being brought about by selection and hybridization. Among the crops that are thus the subject of experiment are alfalfa, red clover, sweet clover, timothy, western rye grass and brome grass. Some work is also under way in the improvement of fodder corn and field roots. The experiments in soil and crop management were outlined to answer the questions that farmers are asking in regard to the management of their soil and crops. It includes in all about 64 experiments and upwards of 1,000 plots. The departments of Botany, Horticulture, Engineering and Animal Husbandry are also doing considerable investigational work.