

at the present time requires the space and equipment of sixteen large buildings for dormitories, class rooms and laboratories. Courses offered include a four-year course for the degree of B.S.A. (Bachelor of Science in Agriculture), a two-year course for the Associate Diploma, winter courses for farmers and farmers' sons, summer courses for teachers of the province and domestic science courses at Macdonald Institute. The teaching and experimental staff consists of about seventy-five members. In 1874 the College opened with 28 students. The total enrolment in long and short courses in the academic year 1921-22 was 2,112. More complete information respecting the researches and experimental work undertaken at the college will be found on record in the Canada Year Book of 1916-17, pp. 243-245, and 1918, pp. 238-241. Also reference may be made to the Forty-seventh Annual Report of the College, covering the year 1921.

### Manitoba.

**Manitoba Agricultural College, Winnipeg.**—Field husbandry experiments are conducted in five divisions: (1) Forage Crop Improvement; (2) Cereal Crop Improvement; (3) Soil and Crop Management; (4) Co-operative Experiments; and (5) Studies in Quality of Farm Crops. The work of the Forage Crops Improvement Division has for its object the production and improvement of plants suitable under Manitoba conditions for pasture, hay and fodder. Varieties and strains of forage crops have been imported from the United States and European countries, and improvement is being obtained by selection and hybridization. The major investigations are being conducted with alfalfa and red clover, but work is also being done with sweet clover, timothy, western rye, brome, meadow fescue and meadow foxtail. Profitable results have been obtained in fodder corn, especially by securing early maturing strains. In the Cereal Crop division, the work consists of the testing and classification of cereal varieties with a view to standardization. The crops under study are wheat, oats, barley, flax, spring and fall rye, peas and buckwheat. Introductions of cereals have been made from various parts of the world, and selections have been made which promise to be of value. Hybridization for improvement is also followed, and some promising crosses are now under test. In the Soil and Crop Management division the projects include soil renovation and soil cultivation experiments, experiments in cereal crops, perennial and annual forage crops, hoed crops and cropping sequence. Work is also being done in silage and in ascertaining the carrying capacity of the grasses and clovers when used for pasture. Co-operative experiments are being conducted in order to determine the varieties and practices best suited to the different agricultural zones of the province. These experiments are being conducted with both government institutions and individual farmers. In this work experimental fields, on which complete variety tests, fertility tests and management tests are made, are operated at the Birtle Demonstration Farm, Killarney Demonstration Farm, Teulon High School Farm, Elkhorn Indian School Farm, and Pas Indian School Farm. Tests in which farmers are trying out three or more varieties or methods are in operation at about 100 places. In addition to this, considerable work is being done co-operatively on the reclamation of peat lands and drifting soils. Studies in quality of farm crops are being conducted with wheat and barley. In the former case milling and baking tests have been made of wheat from different points of the province with an idea of establishing the quality of wheat grown under different soil and climatic conditions.

The Departments of Botany and Horticulture, Animal Husbandry, Physics, Chemistry and Engineering are also carrying on numerous investigations.