the College consist of about 75 acres divided into upwards of 2,000 plots, on which experiments are being conducted with varieties of grain, root, tuber, grass, clover, fodder, silage and other crops, with artificial, green and barnyard manures, with methods of cultivation, selection of seed, dates of seeding, mixtures of grains, pasture grasses, etc. These experiments deal with the crops grown on fully nine-tenths of the cultivated land of Ontario. The greater part of the land has a four years' rotation, the rotation being: 1st, grain crops; 2nd, cultivated crops; 3rd, grain crops, and 4th, pasture. This is a special rotation, particularly well suited to the experimental work as carried on at the College. About one-quarter of the land is manured each year, with twenty tons of farmyard manure per acre once every four years. Many of the field crop varieties now most extensively grown in Ontario were introduced by the Agricultural College, through the medium of the Ontario Agricultural and Experimental Union, including the Siberian, O.A.C. No. 72, and O.A.C. No. 3 varieties of oats. Next to the American Banner variety the Siberian is now probably the most extensively grown oat in Ontario, besides being quite largely grown in other parts of Canada. The O.A.C. No. 72, which is a plant-selected strain of the Siberian, and which has surpassed it in yield in the experiments at Guelph and in the co-operative experiments over Ontario, is also very largely grown at the present time. The O.A.C. No. 3 oat, a plant-selected strain of the Daubeney variety, is a popular early oat. The Mandscheuri barley and the O.A.C. No. 21, both of which were introduced by Guelph, are to-day grown on most of the barley lands of Ontario. It is rarely that any other varieties are shown at the present day exhibitions. The O.A.C. No. 21 is a plant-selected strain of the Mandscheuri, and has surpassed it in yield per acre and in quality of grain both in the comparative tests at Guelph and the co-operative experiments over Ontario. Dawson's Golden Chaff winter wheat, Mammoth White winter rye, O.A.C. No. 61 spring rye, Rye buckwheat, Common Emmer, Early Britain and New Canadian peas, Pearce's Improved Tree beans, Salzer's North Dakota flint corn, Golden Bantam sweet corn, Yellow Leviathan mangolds, Early Amber sugar cane, Empire State, Davies' Warrior and Extra Early Eureka potatoes, and Ontario Variegated and Grimm alfalfas, after being tested at Guelph, were distributed over Ontario, and are well known and widely grown. A considerable section of the experimental field is being used in testing about two hundred varieties and strains of alfalfa, fifteen strains of sweet clover, and in growing mangolds, carrots and turnips for seed production.

The experimental work of the College and Farm is very comprehensive, and includes, in addition to the department of field husbandry described above, departments of animal husbandry, dairying, poultry, agriculture, horticulture, pomology, agricultural chemistry, bacteriology, zoology, entomology, botany and physics. The Ontario Agricultural and Experimental Union, organized by officers of the College, conducts annual co-operative experiments in field husbandry with farmers throughout the province. The Union has been in existence for 38 years, and the average number of annual experimenters is about 4,500.