

## PRODUCTION

all the principal farm crops: oats, wheat, barley, peas, rye, corn, root crops, alfalfa, grasses and clovers. One improved variety of corn called "Quebec No. 28" has been distributed, and has given a good account of itself throughout Quebec and parts of Ontario. It is an exceedingly early, heavy yielding, yellow flint corn that usually ripens in about ninety days. Improved strains of both wheat and oats are being increased for general distribution. Root crop investigations have been carried on for eight years mainly at the College, but also at several points in the province. As a result of the breeding work, improved strains of both mangolds and swede turnips have been secured, and seed has been sold to a number of growers of root seed in Ontario and Quebec. Root seed growing has been given more than usual attention during the past two years, partly on account of the restricted supply of good seed available from Europe, and partly because home grown seed has been found to give such superior results. Much careful work has been done with alfalfa to get definite data as to its value for Quebec. Over two hundred varieties and strains have been thoroughly tested as to hardiness during the past nine years, and less than half a dozen have proved suitable for Quebec conditions. Grimm, Ontario variegated and Baltic are the only varieties that have proved hardy and that may be obtained commercially. The high price asked for the seed of these varieties is such a serious obstacle to their being purchased that for several years experiments in seed growing have been carried on in the department. The results have been gratifying, and indicate that profitable crops of seed of Grimm may be grown in Quebec in most years. It is necessary to sow the seed thinly in rows about thirty inches apart, cultivate to keep clean and to allow the second crop to ripen seed. Seed has also been grown successfully at several points in the province. A number of additional experiments have been started at points in the country and observations have been continued on plots already established. The results show clearly the necessity of using a hardy variety, of draining the land and of using either lime or ground limestone to correct soil acidity. Experiments with varieties of fodder corn are being continued, both on the experimental grounds and at several points in the country, to get accurate data on varieties and rates of planting. The breeding of improved strains of timothy, orchard grass and red clover has now been carried on for five years. Good progress has been made, but no strains are yet available for distribution.

*Other Departments.*—Numerous other investigations are being carried on in the departments of Poultry, Chemistry, Bacteriology, Horticulture, Biology and Physics.

**Oka Agricultural Institute.**—This, situated on the Lake of Two Mountains, about 20 miles from Montreal, is one of the oldest experimental farms in Canada. A large number of dairy cattle are kept, and experimental work is carried on with these and with swine, poultry and bees. Horticulture is practised largely; the growth of small fruits is a specialty and the vineyards are celebrated. The famous Oka cheese, made at this Institute, is sold widely in North America. The Institute was affiliated to Laval University, Montreal, March 25, 1908.