study has uncovered a number of promising ideas for improving the quality and the uniformity of this important export product. Investigations aimed at improving the quality of beef, mutton, and pork are also being conducted.

Plant breeders in various institutions have added much to the wealth of Canada by developing new varieties. When the variety must meet specific environmental conditions, the tests may be made in the field or greenhouse, but tests of quality for certain market requirements demand laboratory facilities and accurate methods of measurement. The development of means of testing grain, such as wheat for its milling value and barley for malting, has received attention in the Council's laboratories, and the results have been of marked value to agricultural industry. This work has also received support from industry and from the Dominion Department of Agriculture, and has been stimulated by means of the close co-operation achieved through the medium of the Associate Committees on Field Crop Diseases and on Grain Research.

An inexpensive means of synthesizing certain plant hormones, and the discovery that these substances encourage root formation in some varieties of tree cuttings that normally root with difficulty are recent developments of interest to foresters. In addition, a program of tree breeding is being carried on in co-operation with the Dominion Forest Service, the requirements of commercial forestry, the farm woodlot, and the shelter belt being kept in view. In another field of plant breeding, work is proceeding, in co-operation with the Dominion Department of Agriculture, toward the development of a Western Canadian forage crop that possesses drought-resistance, soil-binding properties, and large seeds. For this purpose wheat has been crossed with the Agropyrons or wheat grasses. Interesting progress in this field has been achieved by doubling the chromosome numbers in hybrids by use of colchicine.

In the textile field extensive work has been done on industrial problems such as the damage done to wool by alkalis with which it is in contact during the scouring and milling operations. In co-operation with the University of Alberta and the Dominion Department of Agriculture, work is proceeding on the effect of environment and nutrition on the growth of wool, and a sheep-breeding program for fleece improvement is also being carried on. Studies of the means of testing such qualities of textiles as fastness of colour, water absorbency in towels, and the development of specifications for many types of textiles are other phases of the work. The cleaning of textiles is also being given attention, with the close co-operation of the laundering and dry cleaning industry. In this work the Council's laboratory provides periodic checks on the efficiency of 120 commercial and institutional laundries.

The work of the magnesian products laboratory has enabled the industry to develop to such an extent that the yearly payments to the Canadian railways for freight on products from the co-operating companies' plants in recent years have been almost as great as the total sum spent on these investigations in 13 years. Among the developments in this field are stable dolomitic materials and calcium silicates of high refractoriness. A type of brick that has extremely great resistance to fracture when subjected to rapid temperature changes was developed in the laboratory, and has been manufactured for several years in England, and will now be made in Canada also. A chemically bonded, unburned brick, developed in the laboratories is widely used in Canada, and is being exported to many foreign countries.