

to specific aims. Some discoveries bordering on fundamental research, however, are occasionally made, and it is also found necessary to extend to some degree into the basic field where certain information is lacking in applied science.

Agricultural research, particularly in plant science, must be decentralized to a great extent for most problems must be studied where they occur. Apart from the value to farmers of having a local source of information, the experimental farms and science laboratories are widely distributed because the work can be done in no other way. In addition to the headquarters of the Experimental Farms Service at Ottawa, work is carried on at 28 branch experimental farms and 20 substations. Experimental work of local application is done at 162 illustration stations, 54 district substations and 11 fox and mink illustration stations. The work of the Science Service, centralized at Ottawa, is also augmented by that of about 100 laboratories located throughout the country.

In the field of economic research, studies in farm management, land utilization, marketing and farm-family living are undertaken in all parts of the country. The scope of the scientific and experimental work of the Department is revealed when it is realized that there is no plant or animal in Canada that is not susceptible to damage by disease caused by bacteria, fungi or viruses, or subject to attacks by insects or, in the case of animals, by internal parasites.

### Subsection 3.—Protection and Grading

Unlike manufactured articles, even close scrutiny of most agricultural products is no clue to their purity as food, or to their value to the farmer for further production. Obviously, products that are eventually used as food must be pure and healthful and must come up to standards of quality established for them. On the other hand, if agriculture is to be conducted on a sound basis, the supplies farmers buy—seeds, feeds, fertilizers and pesticides—must also carry some guarantee that they will be as represented. Much of the research and experimental work would be of no avail if legislation were not provided to see that the end-product of such work was satisfactory. In addition, Canada's live stock, crops and trees must be protected from diseases that might be introduced with importations or that might originate in Canada.

These protective and grading services are a most important part of the work of the Department of Agriculture. They come under two sections, the Production Service and the Marketing Service, and the necessary authority is gained from about 20 Acts or their regulations. Generally, the protective features and the grading to standards or approval of analyses of farm supplies come under the Production Service. The grading of most food products is the responsibility of the Marketing Service.

**Health of Animals.**—The protection of the health of Canada's live stock is a most important service. To guard against the introduction of contagious diseases from foreign lands, stringent regulations are enforced by the Health of Animals Division covering the importation of live stock, live-stock products and even packing material and litter. Provision is also made for the control or eradication of animal diseases developing within Canada. Programs directed at the eventual eradication of such diseases as bovine tuberculosis and brucellosis are a continuing part of the work. The Division is responsible for the inspection of animals slaughtered for food, and post-mortem examination is made of all carcasses in the course of