

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. That the work of the agricultural scientist is never done is illustrated by the appearance of a new stem rust of wheat (Race 15B) which attacks varieties previously found to be rust-resistant. The only answer to this menace is the development of a new resistant strain necessitating an intensive breeding program. The answers to many such problems are found only after years of continuous study and investigation.

### Subsection 3.—Protection and Grading

Unlike manufactured articles, even close scrutiny of most agricultural products is no clue to their purity as food, or 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 go for naught 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 from other countries, 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. The Division is responsible for the inspection of animals slaughtered for food, and post-mortem examination is made on all carcasses in the course of slaughter and dressing before the meat is approved for human consumption. Sanitary conditions in packing plants and slaughter houses come under review and all canned meats must meet high standards of processing to qualify as food.

**Protection of Supplies.**—The Plant Products Division, in co-operation with the provinces and other agencies, is primarily concerned with the administration of Acts respecting feeding stuffs, fertilizers, pesticides, hay and straw, fibre flax and binder twine, and the production of seed. The inspection services of the Division have three main functions: (1) to enforce the Acts that regulate the sale of the agricultural supplies; (2) to provide, as required, such services as seed-crop inspection