

are also dealt with by this Section, which has, however, left the D.S.I.R., and is now with the Department of Agriculture.

The Wheat Research Institute is officially controlled by the D.S.I.R. with the assistance of a management committee comprising three wheat-growers, three millers, three bakers, and four other persons representing Government Departments and other special interests. The Institute is financed by voluntary levies from the three branches of the industry, subsidized by the Government.

There are also sections dealing with Fruit Research, Soil Survey, and Tobacco Research. What would be the best manure for fruit trees? The Fruit Research Section has tried them all, singly and in combination, and has evolved a "complete" manure containing phosphates, potash, and nitrogen which under good conditions has given a 77 per cent. increase of crops. Spots, scabs, internal cork, and similar problems are still exercising this section. Problems of storage are dealt with mainly by the Fruit Cold Storage Section. One of recent interest is that of determining what effect fertilizers have on the keeping qualities of apples.



The Soil Survey Section is engaged in surveying the whole of New Zealand from the point of view of type, level, water, and general fertility of soil. The work of the Tobacco Research Section has been touched on above. Briefly it studies the problems of the tobacco grower in exactly the same way as the Fruit Research Section does those of the orchardist.

There are two Research Associations, organized on a plan similar to that of the Wheat Research Institute. The Leather, Pelt, and Shoe Research Association has done valuable work in improving the standard of New Zealand leather and in solving the various technical problems associated with tanning and the footwear trades. The

Wool Manufacturers' Research Association has done similar work in connection with such problems as "hairiness" in wool and difficulties in textile manufacture.

Not Only the Primary Producer

The Department, however, does not confine itself entirely to the problems of the primary producer. A Building Research Committee has been set up and is investigating such problems as timber decay and the ravages of termites and borer. Much valuable and interesting work which it might have taken up has been postponed until after the war, and in the meantime the Committee is concentrating on problems of timber preservation.

In the study of borer, for example, some eight thousand five hundred beetles of the *Anobium punctatum* (house borer) were collected and confined in breeding cages for study. The growth of mould in houses presented another problem to the Government, and the answer was quickly found by the D.S.I.R.—application of a 2 per cent. solution of sodium pentachlorophenate to the finishing materials. This will inhibit the growth of mould. This Committee, incidentally, co-ordinates the work of various branches of the D.S.I.R. and co-operates with other Government Departments. In fact, this is the rule throughout the D.S.I.R.: although the work of the sections is highly specialized, a problem may be under consideration by a number of sections at a time each dealing with it from its own particular angle.

A comparatively new section of the D.S.I.R. is the Industrial Psychology Division. Why do accidents occur in factories? Why is there a problem of absenteeism? Why is the sickness rate higher in one factory than another? With more and more factories springing up all over New Zealand, problems such as these are assuming greater importance, and once again it is to the scientist that we look for an answer.

The Core of the Department

In addition to these sections, which are set up to deal with specific problems, the D.S.I.R. maintains a number of