The parasites received from Australia were studied in the laboratory, while others were liberated in the field. Three species at least were found to attack the New Zealand grub in the laboratory, and so far one species has developed through to the adult insect. Under natural field conditions also, at Ashburton, this species has successfully developed; as it has been liberated under a wide range of habitats, later observations on its development will be of very great value. Though the work is yet in its initial stages, the progress has been very satisfactory.

GRASS-CATERPILLAR

In a search for substitutes for bran for use in poison baits, experiments are being carried out with vegetable oils, vitamin-rich substances, &c. Toxic agents were paris green, D.D.T., and benzene hexachloride. The results are not yet finalized.

Another series of experiments giving promising results was with the use of superphosphate with which D.D.T. and benzene hexachloride were incorporated.

WIRE-WORMS

Owing to damage to wheat, oats, lupins, and turnips by wire-worms, experiments with various insecticides were carried out, but no clear evidence of control resulted. The species of wire-worms involved is being studied.

CRUCIFEROUS CROPS

As time allowed, injuries to cruciferous crops by aphids, diamond-back moth, and white butterfly were investigated.

STORED-PRODUCT INSECTS

Toward undertaking an authentic knowledge and control of stored-product insects in New Zealand, a survey of the position has been undertaken: so far 96 collections from various products have been made and over 30 species of insects recorded.

CODLIN-MOTH

Studies of the flight period during the season show that the moth is on the wing from the beginning of November until mid-March, and that two peaks of activity occur, one in December and the other at the end of January. Observations were also made on the habits of the moth and larvæ and duration of the stages. There were no indications of there being more than one generation during the season.

MANUKA BLIGHT

Detailed attention has been given to this problem, and study has been made of the insects involved, including their distribution, periods of activity, and influence upon the vigour of the manuka. It is yet too early to evaluate the experiments to determine the part played by insects in the death of scrub.

SAND-FLIES

An investigation of the sand-fly problem in New Zealand has been undertaken to ascertain the most active species, their places of breeding, range of flight, and possible methods of control.

TIMBER INSECTS

Observations commenced some six years ago have been continued on the influence of preservatives upon timber borers. Valuable data have been secured on the reaction of larvæ and beetles to the different preservatives at higher and lower concentrations.