Agricultural Soil Physics.—A study has been made of total soil porosity and the noncapillary porosity of pasture and cultivated soils from Canterbury, Wellington, and North Auckland districts. The samples were obtained *in situ* as cylindrical cores. It was found that the non-capillary porosity was of a low order in all the soils tested. The exceptions were a few intensively cultivated market-garden soils from the Hutt Valley area. The expectation of using this factor to characterize soils deteriorated due to excessive cultivation has not so far been realized. Plans have been made of an improved type of apparatus for measuring soil porosities.

The permanent wilting-point of a range of soil types has been measured by means of the freezing-point depression method. It has been found that the red-brown loams and yellow earths of the Auckland district when they are of similar texture to the alluvial Canterbury soils derived from greywacke have wilting-points of a much higher order. It is proposed to check these points by experiments with seedlings.

Soil Biotics

Te Kopuru Sand Podzol.—Last year it was reported that Te Kopuru sand responded in pots to molybdenum and boron. The plants used were subterranean clover and lettuce. The experiment was repeated this year and a similar response with subterranean clover obtained, but in the case of lettuce there was a depression of growth from these elements.

Uptake of Boron by Phormium Flax.—A pot experiment is being conducted to find the uptake of boron by phormium flax grown in Manawatu silt loam.

Deficiency in Brown Loam Soil.—An experiment has been laid down to find out whether a trace element is a limiting factor in plant or a mature yellow-brown loam.

Boron Deficiency.—The following soils—Waiwera silt loam, Wharekohe silt loam, and Manawatu silt loam—are being tested in pots with a range of plant indicators for boron deficiency.

Indicator Plants.—A paper has been prepared by the soil chemists on Virginia stock, as an indicator of available lime in the soil.

WILDLIFE SECTION

Dr. K. Wodzicki

During the year good progress has been made with the survey of the wild-life position in the Dominion. A great deal of data concerning the distribution densities and rates of spread of rabbits, wild pigs, opossums, goats, deer, and other species has been assembled, and some attention has been given to the causes leading to the present ascertained distribution of these species.

The data are being assembled into a report which will shortly be available to help in the consideration of research measures to be initiated in order to facilitate and improve methods of control.

IMPERIAL AGRICULTURAL BUREAUX

The Imperial Agricultural Bureaux have continued to provide a valuable link between scientific workers in various fields of agricultural science, particularly within the various countries of the British Commonwealth. The abstracting *Journals* of the various Bureaux and the *Technical Communications* published periodically provide excellent service.

In New Zealand, co-operation with the Bureaux is maintained through this Department, for which purpose there is a special liaison officer. In addition, contacts with Bureaux and the appropriate fields of research are maintained by official correspondents, who deal with specific inquiries. The Scientific Liaison Officer, London, also has useful contacts with all the Bureaux and is a member of the Council.

The Imperial Agricultural Bureaux Conference, held in London in July, 1946, was attended by Dr. E. Marsden and Sir Theodore Rigg as New Zealand delegates.

Reviews and notices of the Bureaux's publications have appeared from time to time in the *N.Z. Journal of Science and Technology*.