H.—34.

Available Iron in Sedimentary Soils.—A considerable number of samples taken from soil types derived from sedimentary formations have been analysed for available iron. The results have shown that the majority of these sedimentary soils contain relatively large percentages of iron soluble in N/10 oxalic acid. Two exceptions, however, have been noted in which the percentage of available iron is as low or lower than that found in soils subject to bush sickness. At the present time no explanation is available concerning the reasons for the apparent non-occurrence of bush sickness on these soil types. It is possible that plants grown on these soil types are able to acquire more iron than is the case on typical bush-sick soils. The whole question requires further investigation.

> T. Rigg, Director of the North Island Soil Survey.

PUBLICATIONS.

During the year six new bulletins were published as follows:—

No. 30: "Wool Research," by D. J. Sidey. No. 31: "Pasture Investigations," Parts I, II, and III, by A. W. Hudson. No. 32: "Bush Sickness," by T. Rigg.

No. 33: "Butterfat Losses in Buttermilk," by W. H. Udy.

No. 34: "The Nutritive Value and Vitamin Efficiency of New Zealand Dairy-produce," by Misses M. Herrick and M. G. Frengley.

No. 35: Wheat Research Institute—Second Annual Report.

RESEARCH SCHOLARSHIPS.

Two National Research Scholarships, with an annual value of £100, have been awarded during the year. The holders of these scholarships, and the researches upon which they are respectively engaged, are as follows:—

I. R. Sherwood, Auckland University: Synthesis of Diterpenes. (Extension for one year.) E. R. Cooper, Canterbury College: X-ray Crystal Analysis.

"NEW ZEALAND JOURNAL OF SCIENCE AND TECHNOLOGY."

The New Zealand Journal of Science and Technology has been used for the publication of the results of various research activities which have been completed during the year. Reprints of articles from the Journal have been extensively used in the dissemination of results of researches to the industries concerned.

IMPERIAL AGRICULTURAL RESEARCH BUREAUX.

The Department acts as the co-ordinating link between the Directors of the eight Imperial Agricultural Research Bureaux, whose headquarters are all centred in Great Britain, and local correspondents in New Zealand. The various Bureaux have regularly issued valuable publications giving details of researches in progress in all parts of the world, and thereby facilitating contact between New Zealand workers and overseas activities. Numerous inquiries, seeking the assistance of the different Bureaux, have been transmitted through the Department.

It is evident that the inauguration of this research organization has been the means of facilitating and co-ordinating research activities in an essentially practical manner throughout the Empire.