

IMPERIAL AGRICULTURAL BUREAUX.

The Imperial Agricultural Bureaux were established to act as clearing-houses for the interchange of information between research workers in eight branches of agricultural science throughout the various parts of the British Commonwealth. In New Zealand co-operation with the Bureaux is maintained through the Department of Scientific and Industrial Research, and liaison with the individual Bureaux is effected through official correspondents appointed to deal with specific inquiries. Mr. Nevill Wright, Scientific Liaison Officer of the Department in London, is Chairman of the Executive Council of the Imperial Agricultural Bureaux.

The Bureaux have continued to be of very great assistance to agricultural research workers in New Zealand through their regular publications and special reports, as well as by supplying information in response to specific inquiries.

During the year the free distribution list of Imperial Agricultural Bureaux publications in New Zealand was carefully revised by the Department, in order to ensure that the publications would reach all the research institutions and individual research workers who would obtain the maximum benefit from them. In revising the lists, the principle that the publications should go to institutions rather than to individuals was closely adhered to. Attention is also being given by the Department to the recommendation of the British Commonwealth Scientific Conference and the Executive Council of the Imperial Agricultural Bureaux that steps be taken to secure wider publicity for the Bureaux publications. The following is a list of the official correspondents of the Bureaux in New Zealand:—

Bureau.	Official Correspondent.
1. Soil Science	Sir Theodore Rigg, Director, Cawthron Institute, Nelson.
2. Animal Health	Dr. C. S. M. Hopkirk, Officer in Charge, Veterinary Laboratory, Department of Agriculture, Wallaceville.
3. Animal Nutrition	Dr. I. J. Cunningham, Veterinary Laboratory, Department of Agriculture, Wallaceville.
4. Plant Breeding and Genetics	Dr. F. W. Hilgendorf, Director, Wheat Research Institute, Christchurch.
5. Pastures and Forage Crops	Mr. E. B. Levy, Director, Grasslands Division, Plant Research Bureau, Palmerston North.
6. Horticulture and Plantation Crops	Mr. J. A. Campbell, Director, Horticulture Division, Department of Agriculture, Wellington.
7. Animal Breeding and Genetics	Dr. F. W. Dry, Massey Agricultural College, Palmerston North.
8. Agricultural Parasitology	Dr. C. S. M. Hopkirk, Officer in Charge, Veterinary Laboratory, Department of Agriculture, Wallaceville, and Dr. D. Miller, Cawthron Institute Nelson (joint correspondents).

MISCELLANEOUS GEOPHYSICAL SURVEYS.

ASBESTOS DEPOSITS, D'URVILLE ISLAND.

By W. M. JONES.

Some geological and magnetic observations were made by the writer (8th to 13th May) in the vicinity of Black Beach, where the Asbestos Mining Co. has recently been prospecting.

Geological.—An extensive mass of ultrabasic rock, now largely serpentized, has here been intruded into the Palaeozoic sedimentaries—argillites and sandstones. The contact has been partially exposed by erosion, and many large blocks of argillite, altered near the contact into a hard close-grained rock formerly quarried by the Maoris for implements, appear at the surface in direct contact with serpentine: asbestos has been developed, as cross-fibre up to $\frac{1}{2}$ in. long, in more or less parallel veins in a zone of the serpentine, up to a few feet in thickness, adjoining the surface of separation. This has not happened in every case, especially where there has been shattering of the serpentine, and as many of the contacts have been obscured by rubble or drift material, a reliable estimate of the consistency with which the fibre-bearing zone has been formed requires surface prospecting in the form of removing the obscuring material at as many points as possible. As the serpentine body extends continuously from Black Beach across to the south-eastern inlet of Port Hardy—nearly a mile—with the sedimentaries on either side and residual blocks also on top, there is evidently a large area of the surface of contact, much of it not difficult of access. No intrusions into the serpentine itself were observed.

Magnetic Observations.—Very large variations of vertical intensity were found over the serpentine, with a total range of about 10,000 gammas, such as had previously been found over the asbestos-bearing serpentines of the Upper Takaka Valley, and the general boundaries of the serpentine body could no doubt be located by magnetic survey if they should be required in the future.

Disturbances of both declination and dip were also apparent from the behaviour of the compass-needle. In the one case measured, a differential variation of declination of 2° was found between the two ends of a line 4 chains long. The actual anomalies of declination were not measured, but may be considerable. It is interesting that disturbance of the compass has been suspected by airmen flying over this neighbourhood.

While the presence of such large anomalies of vertical intensity, both here and at Upper Takaka, does not necessarily indicate workable deposits of magnetite ore, it is always possible that such may exist in association with the numerous igneous intrusives of the Nelson Province, either as magmatic segregation or as impregnations, and that magnetic survey may call attention to them.