

## WEEDS RESEARCH AND EXTENSION IN NEW ZEALAND

At the present time the Department of Agriculture is responsible for practically all matters of weed research and extension in New Zealand. Although one officer of the Grassland Division, D.S.I.R. has commenced some investigations into pasture weed problems, his work has not progressed very far and has not been included in this report.

The organisation of weeds research is the responsibility of the Extension Division. There are two main spheres of work :-

(a) At research stations, particularly Rukuhia Soil Research Station where a weeds research section has been set up under Mr. F.B. Thompson.

(b) by field officers.

Mr. L.J. Matthews, as Weeds Research Officer to the Division, acts as a co-ordinating officer on all aspects of weeds research.

Briefly the type of work being carried out is as follows :-

### (a) At research Stations

- (1) Rukuhia Soil Research Station: preliminary testing in glasshouse and plots of new chemicals for weed control; detailed studies on control of weeds on railway tracks and "soil sterilisation"; tolerance of pasture and crop species to weed killing chemicals; control of weeds in swedes and maize; rush control.
- (2) Invermay Research Station : control of weeds in cereal pulse and root crops; tolerance of clovers to weed killers; weed control in lucerne.
- (3) Marton Experimental Area : control of weeds in pasture; tolerance of pasture species to weed-killing chemicals applied under a range of different conditions; effect of weeds and weed control on pasture production.
- (4) Winchmore Irrigation Research Station : control of weeds in irrigated lucerne; weed control in irrigation ditches.

(b) Research by Field Officers.

Instructors in Agriculture at centres throughout New Zealand are responsible for testing the tolerance to weed killers of weeds of local and national importance by means of trials on farmers' properties. The usual procedure is for trials to be limited to those materials or procedures which preliminary work at research stations have shown to be promising. In certain cases, where the weed problem has a particular local application, more detailed work may be undertaken. Field officers are expected to take account of non-chemical means of weed control and to develop practices of weed control for their particular locality which may or may not include the use of chemicals.

Extension in Weed Control.

The primary task of Extension Division Field Officers is extension of research to the farmer and this research includes methods of weed control. This is done by personal contact, by demonstration, by lectures, show exhibits, Young Farmers' Club talks and the like.

The annual meeting of the New Zealand Weed Control Conference is considered to be an important extension activity and Departmental representatives attend in an official capacity to give lectures and enter into the discussions. The Department gives clerical assistance and its Officers usually hold responsible positions in the organisation. The conference is in some respects unique as it is a means not only of contact between farmers and Departmental Officers, but also between the Department and commercial firms. There is no doubt that it has done much to assist in ensuring that sound advice is available concerning methods of weed control.