

that these results are confined to the sandy loams and do not occur on the alluvial soils. The rainfall in this district is exceptionally high.

*Taranaki.*—A large series of experiments laid down throughout Western Taranaki have indicated that potassic fertilizers give favourable responses generally. The latter do not seem to be correlated with any particular classes of the three main volcanic showers as demarked by Grange and Taylor(4). Those trials located in North Taranaki appeared to show responses very quickly, more particularly in the high-rainfall belt close to Mount Egmont. In South Taranaki the results from potash have not been so consistent, nor have they been so quickly apparent as in the more northerly trials, but in a few cases quite striking results have occurred in the second and third years of the experiments. Two grazing trials in which potash-treated fields were compared with those receiving no potash, both receiving phosphate, were laid down in Taranaki in 1934. So far, two applications of 30 per cent. potash have been made. In the first season increases in grazing-days of 10 per cent. and 23 per cent. respectively could be attributed to potash, while in 1935-36 the increases were in the order of 62 per cent. and 17 per cent. respectively. The improvement in the sward on the two potash areas has been consistent throughout the period over which the trials have been conducted.

*Southland.*—Some of the experiments in Southland have already been summarized by Tennent and Stuart(5), who reported that the number of trials indicating responses from potash was high in Eastern Southland, while a few very good results had been obtained in Western Southland. In the former district potash was most consistently effective in the Mataura Valley, where excellent results from its use as a top-dressing material have been recorded.

*Raetihi.*—Fairly definite results were secured in a few trials in the Raetihi district, the soil of which, according to Grange(6), is formed from a volcanic shower of andesite.

*Other Districts.*—Isolated instances where potash was effective occur in other districts, but either they are not substantiated by like results or sufficient trials have not been laid down to definitely refer to these areas in the same manner as the foregoing.

In the following districts only a small proportion of trials has given visible results from potash, and, when apparent, they have been slight or spasmodic: Bay of Plenty, Poverty Bay, Hawke's Bay, Manawatu, Marlborough, Westland, Canterbury, and Otago. Results of trials in many of these districts have been published(5), (7), (8), (9), and (10).

It must be emphasized that since potash alone applied to a grassland sward has generally failed to show appreciable results, the effects quoted above are those from potash plus phosphate as compared with phosphate alone, or those from potash plus phosphate plus lime as compared with phosphate plus lime. Therefore, if phosphate, with or without lime, gives marked results over no treatment, any extra impetus given to growth by the addition of potash may be difficult to see. On the other hand, if phosphate, with or without lime, produces little change over no treatment, there is more chance of any extra improvement caused by potash being observed. In the latter case, however, it is considered that potash may be a major limiting factor, and it is the major