

off the respective plots, but owing to the absence of the writer from the district this was not done.

During the season 1922-23 the effect of the dressings was carefully watched, and it was noticed that the clover content of the pasture improved considerably on all plots with the exception of the control. This area had practically no bottom grasses or clovers, the bottom consisting mostly of catsear, plantain, &c. The section was cut for hay on 19th January, 1923. Prior to this, average areas were selected, and the green material off these carefully weighed. The weights per acre obtained from the respective plots were as follows: (1) Ephos phosphate, 7 tons 4 cwt.; (2) Nauru rock phosphate, 5 tons 2 cwt.; (3) basic slag, 7 tons 11 cwt.; (4) Walpole Island phosphate, 6 tons 15 cwt.; (5) bone char, 5 tons 12 cwt.; (6) lime and super, 5 tons 18 cwt.; (7) control plot, 4 tons 6 cwt.

It will be seen that all the top-dressings gave an increased yield for the second season over the control area, ranging from 18 per cent. to 75 per cent.

—C. H. Schwass, *Fields Division.*

TRIALS WITH BELL'S MERVUE SWEDE.

SOME seed of Bell's Mervue Bronze-top swede was sent to Auckland for trial in November, 1921. This variety is new to New Zealand, and two growers, Messrs. N. J. B. Dougherty and D. J. Bruce, who are dairy-farmers in the Ohura district, co-operated with the Department in carrying out a test. The soil on Mr. Dougherty's farm is a light clay loam, and the area set aside was on hilly land with a northerly aspect. On Mr. Bruce's farm the seed was sown on a heavy alluvial flat. The Ohura district is noted for its root crops, particularly swedes, the two growers mentioned being consistent winners in the root section at the Waikato Winter Show.

The trials were carried out during the past two seasons, and the average yields were as follows: Mr. Bruce's, 37 tons; Mr. Dougherty's, 32 tons per acre. The method of securing the acre yields was to weigh up three squares in different parts of the paddock, each square being an aliquot part of an acre. The squares were selected (in so far as an eye-inspection could be relied upon) to secure an average of the crop in each case. The fertilizer used was a proprietary mixture of the following composition: Insoluble nitrogen, 0.94 per cent.; phosphoric acid (P_2O_5), 16 per cent.; soluble potash (K_2O), 1.09 per cent.

The swedes were compared with three other varieties, including Superlative, and Mr. Dougherty's comment was as follows: "I grew three different kinds of swedes in areas side by side under the same conditions, and the Bell's Mervue, on the average, are equal in quality, though not quite so shapely, as the others." The combined considered opinion of Messrs. Bruce and Dougherty, after two seasons' trials, is that the new variety is not equal in their district, taking all points of view, to Superlative.

—T. H. Patterson, *Instructor in Agriculture, Auckland.*