

## LINCOLN DISTRICT.

*Manurial and Variety Tests, conducted by D. Gillanders, Darfield.*

The land selected was uniform in character, and was a rich loam on a clayey sub-soil. It had been in English grass from 1906 to 1909, in wheat 1910, and manured with 1 cwt. superphosphate to the acre. For the present experiment it was ploughed in July, 1911; grubbed and tine-harrowed several times in October; ploughed in December, 1911; and tine-harrowed and rolled twice in January, 1912. In the manurial test the area was divided into seven manurial plots and one unmanured as a test plot. Plots one-tenth acre each. The fertilizers applied were according to a scheme designed by the Chief Agricultural Chemist. The variety of seed sown was Fosterton Hybrid. In the variety test 74 lb. Japanese superphosphate and 37 lb. bone manure per acre was applied. The seeds and fertilizers were sown on the flat in drills on 12th January, 1912; drills 14 in. apart. The roots were pulled and weighed on the following dates: Manurial test, 10th July, 1912; variety test, 6th August, 1912. Results:—

## MANURIAL TEST.

Plot.	Manures per Acre.	Cost per Acre.	Weight of Crop per Acre.		Effect of Manuring.
			Roots.	Tops.	
		£ s. d.	Tons.	Tons.	Tons.
1	Superphosphate, $\frac{3}{4}$ cwt. ..	0 3 7	9.15	0.96	Gain, 2.57
2	Superphosphate, $1\frac{1}{2}$ cwt. ..	0 7 2	12.85	1.70	„ 6.27
3	Superphosphate, 1 cwt.; bone-dust, 42 lb. ..	0 7 0	18.00	3.05	„ 11.42
4	No manure .. ..	..	6.58	1.44	..
5	Same as No. 3 mixture; sulphate of potash, 14 lb. ..	0 8 10	14.62	1.21	Gain, 8.04
6	No. 5 mixture, $\frac{3}{4}$ cwt. ..	0 4 6	14.78	2.25	„ 8.20
7	Same as No. 6 mixture; salt, 7 lb. ..	0 4 7	14.78	1.21	„ 8.20
8	Albatross guano, 1 cwt. ..	0 5 0	14.46	1.70	„ 7.88

## VARIETY TEST.

Plot.	Variety.	Crop per Acre.	
		Roots.	Tops.
		Tons.	Tons.
Yellow-fleshed—			
1	Garton's Green-top Scotch .. ..	16.66	2.27
2	„ Purple-top Scotch .. ..	11.36	1.51
3	„ Inche's Bronze-top .. ..	9.09	2.27
4	„ Old Meldrum .. ..	9.84	1.51
5	„ Stobo, Blue .. ..	9.84	1.51
6	Challenge—Waite's Eclipse .. ..	10.60	1.51
7	„ Dale's Hybrid .. ..	13.63	1.51
8	Sutton's All the Year Round .. ..	9.09	0.75
9	„ Centenary .. ..	12.88	0.75
10	„ Early Sheepfold .. ..	16.66	0.75
11	„ Favourite Purple-top .. ..	28.79	1.51
12	„ Perfection Green-top .. ..	18.18	0.75
13	„ Romney Marsh .. ..	16.66	0.75
14	Montgomery's Aberdeen Green-top .. ..	18.18	0.75
15	„ Fosterton Hybrid .. ..	25.76	1.51
16	„ Green-top Yellow Tankard .. ..	25.76	1.51
17	Nimmo and Blair's Challenger .. ..	9.84	0.75
White-fleshed—			
18	Garton's Hardy Green Globe .. ..	42.42	2.27
19	Sutton's Red Paragon .. ..	10.60	1.51
20	„ Purple-top Mammoth .. ..	37.88	2.27
21	„ Pomeranian White Globe .. ..	38.64	1.51
22	„ Imperial Green Globe .. ..	21.21	1.51
23	Montgomery's White Stone .. ..	39.30	1.51
24	„ Devonshire Greystone .. ..	21.98	1.51
25	„ Lincolnshire Red Globe .. ..	39.30	2.27