

LAWRENCE DISTRICT.

Manurial and Variety Tests, conducted by J. and W. Smith, Waitanuna West.

The land selected was a sandy loam on a free loamy subsoil, and had been in English grass for six years prior to being ploughed up 6 in. deep on 20th May, 1911, for this experiment. Disc-harrowed four times and tine-harrowed twice on 7th December, 1911, and thrown into ridges with double-mould plough on 11th December, 1911. 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 2 cwt. Perfection manure was applied per acre. The seeds and fertilizers were sown on 11th and 12th December, 1911, in drills 26 in. apart. The roots were pulled and weighed on 27th May, 1912. Results:—

MANURIAL TEST.

Plot.	Manures per Acre.	Cost per Acre.	Weight of Crop per Acre.		Effect of Manuring.	
			Roots.	Tops.	Roots.	Tops.
1	Superphosphate, 1½ cwt. ..	£ s. d. 0 7 2	Tons. 16.86	Tons. 3.94	Gain.	Tons. 7.89
2	Superphosphate, 3 cwt. ..	0 14 3	18.36	5.16	„	9.39
3	Superphosphate, 2 cwt.; bone-dust, ¾ cwt. ..	0 14 0	21.35	5.57	„	12.38
4	No manure	8.97	2.85
5	Same as No. 3 mixture; sulphate of potash, 28 lb. ..	0 17 9	24.89	5.30	Gain.	15.92
6	No. 5 mixture, 1½ cwt. ..	0 8 11	18.77	3.87	„	9.80
7	Same as No. 6 mixture; salt, 14 lb. ..	0 9 2	14.28	3.06	„	5.31
8	Albatross guano, 2 cwt. ..	0 10 0	14.89	2.51	„	5.92

VARIETY TEST.

Plot.	Variety.	Crop per Acre.	
		Roots.	Tops.
	Yellow-fleshed—		
1	Garton's Green-top Scotch	Tons. 15.50	Tons. 5.44
2	„ Purple-top Scotch	19.86	5.44
3	„ Inche's Bronze-top	18.50	5.71
4	„ Old Meldrum	19.86	6.25
5	„ Stobo, Blue	23.66	8.16
6	Challenge—Waite's Eclipse	20.13	5.44
7	„ Dale's Hybrid	22.84	8.43
8	Sutton's All the Year Round	16.05	2.72
9	„ Centenary	25.30	4.89
10	„ Early Sheepfold	23.39	2.72
11	„ Favourite Purple-top	22.30	3.53
12	„ Perfection Green-top	21.22	3.26
13	„ Romney Marsh	28.56	4.08
14	Montgomery's Aberdeen Green-top Yellow	18.22	4.08
15	„ Aberdeen Purple-top Yellow	20.40	4.62
16	„ Fosterton Hybrid	22.84	5.71
17	„ Green-top Yellow Tankard	19.04	5.71
18	Nimmo and Blair's Challenger	19.04	4.08
	White-fleshed—		
19	Garton's Hardy Green Globe	32.91	6.52
20	Sutton's Red Paragon	24.21	4.08
21	„ Early Six Weeks	23.66	2.17
22	„ Purple-top Mammoth	35.09	5.71
23	„ Pomeranian White Globe	26.66	4.35
24	„ Imperial Green Globe	26.38	3.53
25	Montgomery's White Stone	17.68	2.54
26	„ Devonshire Greystone	25.84	4.89
27	„ Lincolnshire Red Globe	29.11	6.25