

Manurial and Variety Tests, conducted by Robert Kinaston, Roxburgh.

The land selected was a light clay loam on light clay subsoil, and was in grass in 1907, in oats 1908, in mangels and turnips 1909, part in oats and part in potatoes in 1910. It was ploughed for this experiment in December, and harrowed, grubbed, harrowed twice, and rolled in 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. Kempthorne, Prosser, and Co.'s turnip-manure was applied per acre. The seeds and fertilizers were sown in raised drills on 23rd December, 1911; drills 26 in. apart. The roots were pulled and weighed on 24th June, 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, 1½ cwt. ..	0 7 2	19·58	3·53	..
2	Superphosphate, 3 cwt. ..	0 14 3	20·40	3·26	Gain, 0·82
3	Superphosphate, 2 cwt.; bone-dust, ¾ cwt. ..	0 14 0	23·39	4·35	„ 3·81
4	No manure	19·58	4·08	..
5	Same as No. 3 mixture; sulphate of potash, 28 lb. ..	0 17 9	24·21	6·25	Gain, 4·63
6	No. 5 mixture, 1½ cwt. ...	0 8 11	23·94	6·80	„ 4·36
7	Same as No. 6 mixture; salt, 14 lb. ..	0 9 2	23·39	5·71	„ 3·81
8	Albatross guano, 2 cwt. ..	0 10 0	25·30	10·06	„ 5·72

VARIETY TEST.

Plot.	Variety.	Crop per Acre.	
		Roots.	Tops.
	Yellow-fleshed—	Tons.	Tons.
1	Garton's Green-top Scotch	16·59	4·08
2	„ Purple-top Scotch	13·05	2·72
3	„ Inche's Bronze-top	13·33	2·72
4	„ Old Meldrum	12·51	2·72
5	„ Stobo, Blue	14·96	3·80
6	Challenge—Waite's Eclipse	18·21	4·08
7	„ Dale's Hybrid	16·32	3·26
8	Sutton's All the Year Round	21·76	3·80
9	„ Centenary	19·58	2·72
10	„ Early Sheepfold	17·13	2·17
11	„ Favourite Purple-top	15·77	2·72
12	„ Perfection Green-top	16·32	2·72
13	„ Romney Marsh	15·77	2·99
14	Montgomery's Aberdeen Green-top Yellow	12·78	2·99
15	„ Aberdeen Purple-top Yellow	15·23	2·99
16	„ Fosterton Hybrid	14·14	2·99
17	„ Green-top Yellow Tankard	20·94	4·35
18	Nimmo and Blair's Challenger	12·78	2·44
	White-fleshed—		
19	Garton's Hardy Green Globe	26·65	3·80
20	Sutton's Red Paragon	26·93	3·26
21	„ Early Six Weeks	23·94	3·26
22	„ Purple-top Mammoth	25·57	3·53