

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  $1\frac{1}{2}$  cwt. Challenge and  $\frac{1}{2}$  cwt. turnip-starter was applied per acre. The seeds and fertilizers were sown in raised drills on 27th December, 1911; drills 26 in. apart. The roots were pulled and weighed on 28th May, 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, $1\frac{1}{2}$ cwt. ..	0 7 2	10.61	2.99	Gain, 3.54
2	Superphosphate, 3 cwt. ..	0 14 3	16.32	2.72	„ 9.25
3	Superphosphate, 2 cwt.; bone-dust, $\frac{3}{4}$ cwt. ..	0 14 0	18.50	2.99	„ 11.43
4	No manure .. .. .	..	7.07	1.36	..
5	Same as No. 3 mixture; sulphate of potash, 28 lb. ..	0 17 9	13.33	2.72	Gain, 6.26
6	No. 5 mixture, $1\frac{1}{2}$ cwt. ..	0 8 11	14.96	3.26	„ 7.89
7	Same as No. 6 mixture; salt, 14 lb. ..	0 9 2	14.69	2.99	„ 7.52
8	Albatross guano, 2 cwt. ..	0 10 0	15.50	1.90	„ 8.43

## VARIETY TEST.

Plot.	Variety.	Crop per Acre.	
		Roots.	Tops.
	Yellow-fleshed—	Tons.	Tons.
1	Garton's Green-top Scotch .. .. .	10.33	2.99
2	„ Purple-top Scotch .. .. .	16.05	4.08
3	„ Inche's Bronze-top .. .. .	12.51	3.26
4	„ Old Meldrum .. .. .	14.41	3.53
5	„ Stobo, Blue .. .. .	14.14	4.62
6	Challenge—Waite's Eclipse .. .. .	13.05	3.80
7	„ Dale's Hybrid .. .. .	13.05	5.16
8	Sutton's All the Year Round .. .. .	11.69	2.44
9	„ Centenary .. .. .	15.23	3.53
10	„ Early Sheepfold .. .. .	17.68	3.53
11	„ Favourite Purple-top .. .. .	17.95	4.62
12	„ Perfection Green-top .. .. .	19.86	3.53
13	„ Romney Marsh .. .. .	25.02	5.44
14	Montgomery's Aberdeen Green-top Yellow .. .. .	17.13	4.62
15	„ Aberdeen Purple-top Yellow .. .. .	7.88	2.99
16	„ Fosterton Hybrid .. .. .	15.23	3.80
17	„ Green-top Yellow Tankard .. .. .	17.13	6.25
18	Nimmo and Blair's Challenger .. .. .	16.86	4.89
	White-fleshed—		
19	Garton's Hardy Green Globe .. .. .	25.84	5.98
20	Sutton's Red Paragon .. .. .	19.86	2.06
21	„ Early Six Weeks .. .. .	22.58	3.53
22	„ Purple-top Mammoth .. .. .	36.45	7.07
23	„ Pomeranian White Globe .. .. .	13.60	3.53
24	„ Imperial Green Globe .. .. .	21.22	3.53
25	Montgomery's White Stone .. .. .	27.20	5.16
26	„ Devonshire Greystone .. .. .	19.86	4.89
27	„ Lincolnshire Red Globe .. .. .	28.56	8.43

*Manurial and Variety Tests, conducted by Jasper Clark, Lovell's Flat.*

The land selected for the experiment was a clayey loam, and was in lea 1906–8 in wheat 1909, in oats 1910. It was ploughed for this experiment 7 in. deep on 4th