

April, 1911; double-disked and double-grubbed in October; tine-harrowed and Cambridge-rolled on 18th November, 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 1½ cwt. Kempthorne Prosser's special turnip-manure and 1½ cwt. basic slag per acre was applied. The seeds and fertilizers were sown in raised drills on 20th December, 1911; drills 26 in. apart. The roots were pulled and weighed on 30th May, 1912. Results:—

MANURIAL TEST.

| Plot. | Manures per Acre. | Cost per Acre. | Weight of Crop per Acre. | | Effect of Manuring. |
|-------|--|----------------|--------------------------|------------|---------------------|
| | | | Roots. | Tops. | |
| 1 | Superphosphate, 1½ cwt. .. | £ 0 7 2 | Tons. 32.10 | Tons. 3.80 | Gain, 23.40 |
| 2 | Superphosphate, 3 cwt. .. | 0 14 3 | 32.37 | 2.85 | „ 23.67 |
| 3 | Superphosphate, 2 cwt.; bone-dust, ¾ cwt. .. | 0 14 0 | 30.74 | 2.85 | „ 22.04 |
| 4 | No manure | | 8.70 | 1.36 | |
| 5 | Same as No. 3 mixture; sulphate of potash, 28 lb. .. | 0 17 9 | 30.74 | 2.99 | Gain, 22.04 |
| 6 | No. 5 mixture, 1½ cwt. .. | 0 8 11 | 22.31 | 2.44 | „ 13.61 |
| 7 | Same as No. 6 mixture; salt, 14 lb. .. | 0 9 2 | 22.31 | 2.44 | „ 13.61 |
| 8 | Albatross guano, 2 cwt. .. | 0 10 0 | 27.20 | 2.85 | „ 18.50 |

VARIETY TEST.

| Plot. | Variety. | Crop per Acre. | |
|-------|--|----------------|------------|
| | | Roots. | Tops. |
| | Yellow-fleshed— | | |
| 1 | Garton's Green-top Scotch | Tons. 25.57 | Tons. 8.16 |
| 2 | „ Purple-top Scotch | 23.66 | 6.52 |
| 3 | „ Inche's Bronze-top | 23.12 | 7.61 |
| 4 | „ Old Meldrum | 24.48 | 5.71 |
| 5 | „ Stobo, Blue | 30.74 | 8.16 |
| 6 | Challenge—Waite's Eclipse | 25.02 | 4.62 |
| 7 | „ Dale's Hybrid | 25.02 | 8.16 |
| 8 | Sutton's All the Year Round | 26.38 | 6.80 |
| 9 | „ Centenary | 30.74 | 6.25 |
| 10 | „ Early Sheepfold | 21.49 | 2.99 |
| 11 | „ Favourite Purple-top | 31.83 | 5.16 |
| 12 | „ Perfection Green-top | 20.94 | 2.99 |
| 13 | „ Romney Marsh | 31.28 | 4.08 |
| 14 | Montgomery's Aberdeen Green-top Yellow | 19.58 | 4.21 |
| 15 | „ „ Aberdeen Purple-top Yellow | 19.86 | 5.16 |
| 16 | „ „ Fosterton Hybrid | 22.03 | 5.30 |
| 17 | „ „ Green-top Yellow Tankard | 25.30 | 8.70 |
| 18 | Nimmo and Blair's Challenger | 18.22 | 5.71 |
| | White-fleshed— | | |
| 19 | Garton's Hardy Green Globe | 39.99 | 7.61 |
| 20 | Sutton's Red Paragon | 32.10 | 4.62 |
| 21 | „ Early Six Weeks | 28.56 | 4.89 |
| 22 | „ Purple-top Mammoth | 42.16 | 6.39 |
| 23 | „ Pomeranian White Globe | 36.72 | 6.39 |
| 24 | „ Imperial Green Globe | 26.66 | 2.99 |
| 25 | Montgomery's White Stone | 37.00 | 6.39 |
| 26 | „ Devonshire Greystone | 41.35 | 8.02 |
| 27 | „ Lincolnshire Red Globe | 38.90 | 10.88 |