

on 23rd November, 1911; drills 26 in. apart. The roots were pulled and weighed on 18th 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. .. | £ s. d. 0 7 2 | Tons. 26.25 | Tons. 3.26 | Tons. Gain, 10.47 |
| 2 | Superphosphate, 3 cwt. .. | 0 14 3 | 22.85 | 2.33 | „ 7.07 |
| 3 | Superphosphate, 2 cwt.; bone-dust, ¾ cwt. .. | 0 14 0 | 26.12 | 2.72 | „ 10.34 |
| 4 | No manure | .. | 15.78 | 1.76 | .. |
| 5 | Same as No. 3 mixture; sulphate of potash, 28 lb. .. | 0 17 9 | 25.71 | 2.17 | Gain, 9.93 |
| 6 | No. 5 mixture, 1½ cwt. . . | 0 8 11 | 22.72 | 2.04 | „ 6.94 |
| 7 | Same as No. 6 mixture; salt, 14 lb. .. | 0 9 2 | 19.45 | 1.90 | „ 3.67 |
| 8 | Albatross guano, 2 cwt. .. | 0 10 0 | 20.67 | 1.90 | „ 4.89 |

VARIETY TEST.

| Plot. | Variety. | Crop per Acre. | |
|-------|--|----------------|---------------|
| | | Roots. | Tops. |
| | Yellow-fleshed— | | |
| 1 | Garton's Green-top Scotch | Tons. 20.67 | Tons. 3.12 |
| 2 | „ Purple-top Scotch | 20.54 | 2.85 |
| 3 | „ Inche's Bronze-top | 20.94 | 2.85 |
| 4 | „ Old Meldrum | 17.68 | 1.36 |
| 5 | „ Stobo, Blue | 19.31 | 3.12 |
| 6 | Challenge—Waite's Eclipse | 18.09 | 2.58 |
| 7 | „ Dale's Hybrid | 23.73 | 2.44 |
| 8 | Sutton's All the Year Round | 21.35 | 3.06 |
| 9 | „ Centenary | 21.49 | 2.10 |
| 10 | „ Early Sheepfold | 20.40 | 1.97 |
| 11 | „ Favourite Purple-top | 23.46 | 2.44 |
| 12 | „ Perfection Green-top | 20.26 | 1.90 |
| 13 | „ Romney Marsh | 19.45 | 1.90 |
| 14 | Montgomery's Aberdeen Green-top Yellow | 12.92 | 2.24 |
| 15 | „ Aberdeen Purple-top Yellow | 22.24 | 3.33 |
| 16 | „ Fosterton Hybrid | 21.62 | 2.31 |
| 17 | „ Green-top Yellow Tankard | 20.54 | 3.26 |
| 18 | Nimmo and Blair's Challenger | 14.41 | 1.63 |
| | White-fleshed— | | |
| 19 | Garton's Hardy Green Globe | 27.47 | 2.58 |
| 20 | Sutton's Red Paragon | 21.22 | 1.90 |
| 21 | „ Early Six Weeks | 18.02 | 1.70 |
| 22 | „ Purple-top Mammoth | 31.83 | 2.72 |
| 23 | „ Pomeranian White Globe | 24.75 | 2.44 |
| 24 | „ Imperial Green Globe | 28.43 | 1.97 |
| 25 | Montgomery's White Stone | 21.22 | 2.10 |
| 26 | „ Devonshire Greystone | 21.76 | 2.17 |
| 27 | „ Lincolnshire Red Globe | 21.76 | 2.31 |

Manurial and Variety Tests, conducted by James Hyslop, Greenfield.

The land selected for the experiment was shingly, and was in oats in 1910, prior to which it had been in lea for six years. It was ploughed for this experiment on 20th June, 1911, 4 in. deep; tine-harrowed on 2nd November; disc-ploughed on 6th December; tine-harrowed and grubbed on 7th December, 1911. In the manurial