

Manurial and Variety Tests, conducted by Thomas Lowery, Lovell's Flat.

The land selected for the experiment was a clayey loam, and was in turnips in 1906, in wheat 1907, in oats 1908, and in lea 1909-10. It was ploughed 8 in. deep on 12th July, 1911; grubbed on 6th November; tine-harrowed on 7th November; grubbed on 16th November; tine-harrowed on 28th November; and clod-crushed on 16th 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. Surprise Island guano per acre was applied. The seeds and fertilizers were sown in the manurial test on 19th December, and the variety test on 20th December, 1911, in raised 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. | | |
| | | £ s d. | Tons. | Tons. | | Tons. |
| 1 | Superphosphate, 1½ cwt. .. | 0 7 2 | 16.86 | 1.63 | Gain, | 7.07 |
| 2 | Superphosphate, 3 cwt. .. | 0 14 3 | 16.59 | 1.36 | „ | 6.80 |
| 3 | Superphosphate, 2 cwt.; bone-dust, ¾ cwt. .. | 0 14 0 | 16.05 | 2.17 | „ | 6.26 |
| 4 | No manure | .. | 9.79 | 1.36 | .. | .. |
| 5 | Same as No. 3 mixture; sulphate of potash, 28 lb. .. | 0 17 9 | 17.68 | 2.17 | Gain, | 7.89 |
| 6 | No. 5 mixture, 1½ cwt. .. | 0 8 11 | 17.95 | 1.90 | „ | 8.16 |
| 7 | Same as No. 6 mixture; salt, 14 lb. .. | 0 9 2 | 18.22 | 1.90 | „ | 8.43 |
| 8 | Albatross guano, 2 cwt. .. | 0 10 0 | 15.23 | 1.90 | „ | 5.44 |

VARIETY TEST.

| Plot. | Variety. | Crop per Acre. | |
|-------|----------------------------------------------|----------------|-------------|
| | | Roots. | Tops. |
| | Yellow-fleshed— | | |
| 1 | Garton's Green-top Scotch | Tons. 31.01 | Tons. 11.01 |
| 2 | „ Purple-top Scotch | 32.23 | 9.79 |
| 3 | „ Inche's Bronze-top | 25.43 | 9.52 |
| 4 | „ Old Meldrum | 23.94 | 8.29 |
| 5 | „ Stobo, Blue | 22.03 | 8.16 |
| 6 | Challenge—Waite's Eclipse | 28.70 | 9.79 |
| 7 | „ Dale's Hybrid | 25.98 | 7.88 |
| 8 | Sutton's All the Year Round | 26.52 | 4.76 |
| 9 | „ Centenary | 29.92 | 4.62 |
| 10 | „ Early Sheepfold | 31.55 | 3.80 |
| 11 | „ Favourite Purple-top | 25.43 | 5.44 |
| 12 | „ Perfection Green-top | 23.39 | 4.35 |
| 13 | „ Romney Marsh | 28.56 | 4.08 |
| 14 | Montgomery's Aberdeen Green-top Yellow | 15.23 | 3.26 |
| 15 | „ Aberdeen Purple-top Yellow | 17.13 | 3.26 |
| 16 | „ Fosterton Hybrid | 19.58 | 3.80 |
| 17 | „ Green-top Yellow Tankard | 20.54 | 4.62 |
| 18 | Nimmo and Blair's Challenger | 17.13 | 3.80 |
| | White-fleshed— | | |
| 19 | Garton's Hardy Green Globe | 28.02 | 4.08 |
| 20 | Sutton's Red Paragon | 22.03 | 2.72 |
| 21 | „ Early Six Weeks | 23.66 | 2.99 |
| 22 | „ Purple-top Mammoth | 36.45 | 3.94 |
| 23 | „ Pomeranian White Globe | 22.30 | 2.72 |
| 24 | „ Imperial Green Globe | 22.98 | 1.76 |
| 25 | Montgomery's White Stone | 24.89 | 4.08 |
| 26 | „ Devonshire Greystone | 20.94 | 2.99 |
| 27 | „ Lincolnshire Red Globe | 23.94 | 4.21 |