

Inspector Scott reports: Owing to the excessive rains of December of last year, the turnips in these tests were not sown as early as had been intended. Even at date of sowing the soil was scarcely in a free enough state. In a measure this somewhat adverse condition of soil operated against the crop right throughout the season. In some of the varieties the germination was very poor, in others very fair. In the yellow-fleshed varieties it was early apparent that Sutton's Favourite Purple-top would be the heaviest yielder. Montgomery's Fosterton Hybrid and Green-top Yellow Tankard were the next best. The latter variety grows well out of the ground, and ought to prove a suitable one to use when grass is to be sown with the turnips. Garton's Hardy Green Globe, which stood out conspicuously as the best of the white-fleshed varieties, is a firm-fleshed turnip. The two next best were Montgomery's White Stone and Lincolnshire Red Globe. Of these two the latter is the firmer turnip. Sutton's Pomeranian White Globe and Purple-top Mammoth both yielded fairly well, but both proved to be spongy in the centre.

FAIRLIE DISTRICT.

Manurial and Variety Tests, conducted by W. J. Geddings, Fairlie.

The land selected was a sandy loam on a shingly subsoil, and had been in grass prior to being ploughed up for this experiment on 1st August, 1911. It was disc-harrowed and grubbed in August, and tine-harrowed and Cambridge-rolled in 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 2 cwt. superphosphate per acre was applied. The seeds and fertilizers were sown in raised drills on 20th November, 1911; drills 26 in. apart. The roots were pulled and weighed on 30th 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 | 15.42 | 1.42 | Gain, 3.77 |
| 2 | Superphosphate, 3 cwt. .. | 0 14 3 | 16.77 | 2.23 | .. 5.12 |
| 3 | Superphosphate, 2 cwt.; bone-dust, ¾ cwt. .. | 0 14 0 | 21.18 | 2.64 | .. 9.53 |
| 4 | No manure | .. | 11.65 | 0.81 | .. |
| 5 | Same as No. 3 mixture; sulphate of potash, 28 lb. .. | 0 17 9 | 23.29 | 2.85 | Gain, 11.64 |
| 6 | No. 5 mixture, 1½ cwt. .. | 0 8 11 | 15.70 | 2.44 | .. 4.05 |
| 7 | Same as No. 6 mixture; salt, 14 lb. .. | 0 9 2 | 19.33 | 1.78 | .. 7.68 |
| 8 | Albatross guano, 2 cwt. .. | 0 10 0 | 19.58 | 1.62 | .. 7.93 |

VARIETY TEST.

| Plot. | Variety. | Crop per Acre. | |
|-------|-----------------------------------|----------------|-------|
| | | Roots. | Tops. |
| | Yellow-fleshed— | | |
| 1 | Garton's Green-top Scotch | 18.77 | 1.30 |
| 2 | .. Purple-top Scotch | 20.81 | 1.85 |
| 3 | .. Inche's Bronze-top | 15.91 | 1.63 |
| 4 | .. Old Meldrum | 12.65 | 2.45 |
| 5 | .. Stobo, Blue | 11.01 | 1.63 |
| 6 | Challenge—Waite's Eclipse | 13.87 | 0.81 |
| 7 | .. Dale's Hybrid | 12.24 | 0.40 |
| 8 | Sutton's All the Year Round | 17.09 | 2.04 |
| 9 | .. Centenary | 17.54 | 0.81 |
| 10 | .. Early Sheepfold | 24.89 | 1.63 |
| 11 | .. Favourite Purple-top | 21.22 | 0.40 |
| 12 | .. Perfection Green-top | 20.44 | 0.40 |
| 13 | .. Romney Marsh | 27.29 | 1.21 |