

meadow hay, and 3 acres of Algerian oats for chaff; 3 acres sown in roots, mainly swedes and mangolds, were harvested. The oat crop yielded approximately 6 tons of excellent sheaves. The grain filled well, and the general quality of the material was good. The root crops, particularly the swedes and mangolds, suffered through a dry spell which commenced in the middle of January and continued till the middle of April. However, with the roots grown, together with the meadow hay and oaten chaff saved, the stock were adequately fed during the late winter, which proved long, cold, and wet.

Mangolds.

It has been shown at Puwera that an addition of 2 cwt. per acre of agricultural salt produced 9 per cent. increase in the yield of mangolds; an application of 4 cwt. per acre increased the yield 26 per cent. Nitrate of soda, at the rate of $1\frac{1}{2}$ cwt. per acre, gave no economical gain two seasons ago. Last season, however, the results favoured the addition of nitrate of soda. In addition to the general dressing of mixed fertilizer, consisting of phosphates and potash applied uniformly to the ten mangold plots, five were top-dressed at the rate of $1\frac{1}{2}$ cwt. per acre with nitrate of soda, with the following results:—

Without nitrate of soda (average of five plots): Yield 29.35 tons per acre. With nitrate of soda (average of five plots): Yield 35.07 tons per acre; gain 5.72 tons per acre, or 19.48 per cent.

It is intended to repeat these trials next season, when further data will be obtainable. The mangolds were sold at £1 7s. per ton; therefore the gain per acre of 5.7 tons represented a monetary return of £7 13s. 10d. The cost of the manure per acre was £1 7s. 6d., leaving a gain of £6 6s. 4d. per acre. This does not make allowance for labour and other costs necessarily associated with the production of the crop; but it is quite apparent that the use of nitrate of soda was decidedly profitable. Carrots and other root crops have also responded well to a dressing of nitrate of soda.

NURSERY NOTES.

A new grass known as carpet-grass (*Paspalum cupressum*), which is native to the southern United States of America, was sown in the spring of last year. In a plot side by side with *Paspalum dilatatum* the carpet-grass has so far not compared as well. Soya beans were tried, but the results were only fair. Compared with lupins, grass-pea, and other legumes referred to earlier they have not produced the same quantity of green material for ploughing-in. Kudzu has again failed at Puwera. Seed of white-fleshed swede, supplied by Mr. Langford, of Papakura, was sown in December, 1922. The crop produced was decidedly better than those of two other varieties, Masterpiece and Webb's Empire, also grown in the nursery. It withstood the dry spell which was experienced from late January until the middle of April.

Cotton was tried in the nursery at Albany. The seed was supplied by the Queensland Department of Agriculture, the variety being Durango Upland. The seed germinated well, and the plants grew to an average height of 6 in. to 9 in., while odd plants reached 3 ft. high and flowered. The flowers, however, were attacked by caterpillars,