

and was "Sutton's Improved." The return for that year was 20 tons to the acre, and the different roots gave an analysis of sugar contained of from 12.45 per cent. to 17.73 per cent. The fertilizers used were 2 cwt. blood and bone manure for this latter season, and 2 cwt. superphosphate and 1½ cwt. dissolved bones per acre. For the crop of the preceding year the manure used was 6 cwt. of blood and bone per acre, nothing else. The weight of roots averaged from 1 lb. 6 oz. to 7 lb. 11½ oz. In some instances there were places left blank, which accounted for the larger roots. Of course, it is not necessary—in fact, it would not be the general course of proper cultivation—to put in the sugar-beet after oats. I should prefer it to follow peas, &c. I think the matter of constant cultivation has been gone into, has it not? I estimate approximately £10 per acre for lifting and delivering the crop to a distance within two miles of the paddock. There was one slight error Mr. Young made—he put the cost of carting at 12s. per ton. I think Mr. Young must have been under a misapprehension, as I make it 12s. per acre on a 15- or 20-ton crop per acre. There is another item with regard to sugar-beet growing—I think it has been mentioned by Mr. Young: it is absolutely essential to get pure seed. It requires an expert to detect mangold-seed from sugar-beet seed; therefore you must get the seed from a reliable source—any one who intends to grow beet for sugar purposes.

1 *Mr Buchanan.*] You think that, treated upon a commercial basis, growing from 5 acres upwards by the ordinary farmer, £10 per acre would not be an excessive estimate for the cost of cultivating during the growth, &c., including delivery to the sugar-factory?—No, I am certain it would not. He must allow for the rent of his land, and I do not suppose he would attempt to grow sugar-beet on land leased at less than £1 per acre.

2 Would you expect to be able, in the Dominion, circumstances being as they are, to get woman and child labour for beet-cultivation?—No, decidedly not.

3. Have you given any close attention to the question of analysis of the percentage of sugar—as to the getting of the percentage by analysis?—No; that is a subject which I have not studied thoroughly.

4. Would the £10 per acre cover the cost of pulling the roots, topping them, and delivering them to the factory?—Yes, if the factory were not situated more than two miles away from the paddock.

5. I have an estimate here of £9 14s.: you name £10 as a safe cover?—Quite so.

6. With more reliable seeds you could get better results?—Yes, I dare say, if you had the seed reliable.

7 How much did you allow for rent when you estimated the £10?—I allowed £1 per acre.

8 *Mr Field.*] You are satisfied that better seed is obtainable than the seed you used?—I am not satisfied on that point, because the seed we used was imported from Sutton and Co. They are as reliable as any, I should say. We have now seed on the farm which has been imported from California, and that we shall look upon as absolutely pure.

9 Do you know Mr Craig?—No.

10. Would you judge that he has made an attempt to grow sugar-beet by the best possible methods?—His evidence was almost completed when I came in, and I cannot say.

11 What do you say as to the fitness of the large area of the Waikato land for sugar-beet growing?—I should say that it is quite suitable.

12. What would you say as to the merits of sugar-beet for stock, as compared with mangolds?—It is good sound-keeping roots, but we do not produce so much per acre.

13 In your experience of growing beet, have you produced always good sound roots?—We have always grown a very good class of root.

14. Do you know anything about the effect of sea-air upon beet?—I do not.

15 *Mr Okey.*] Do you think the percentage of saccharine in the beet will depend upon the previous crop?—That is rather a deep question, which I should not be prepared to answer.

16. What month do you put in?—October.

17 What distance do you plant them?—We make the rows about 26 in., and then thin out the plants to a distance of 9 in., not more.

18. You have not got the cost of growing, independent of the pulling, I suppose?—Yes, I have. I have estimated the whole cost of ploughing a paddock at £1 per acre: that was giving two ploughings and, if necessary, a subsoiling. It requires to be well disced at least twice, which would be 3s., at 1s. 6d. Then three good harrowings, at 1s. per acre. Probably rolling twice after the harrowing—that would be 2s. Cost of seed and drilling, 12s. I have allowed liberally for manure—7 cwt. at 7s. per cwt. Singling out, twice hand-hoeing and horse-hoeing at quite £2 10s. per acre. Of course, the cost of manuring, at £2 9s. per acre, seems high; but this manuring would not be necessary if your preceding crop had been one which left some residual manure in the land.

19. *Mr. Buchanan.*] Would £10 per acre, cost of cultivation, include cost of manure?—I have allowed for that. I have allowed up to 7 cwt. per acre.