

EXHIBIT 4.—LETTER FROM MR W TUCKER, CAMBRIDGE

DEAR SIR,—

Cambridge, 7th October, 1901

According to my promise I hereby give you a brief account of my cultivation of sugar-beet. My first experiment was to skim the land in May, and let it lie until the month of October, and then I ploughed it 6 in deep, and then worked it down fine, and drilled in the seed at the rate of 5 lb. per acre, with about 3 cwt. of artificial, or at the rate of 3 cwt. manure per acre of superphosphate and bone, about equal parts, all put in with the Planet Junior drill, known as the 'hilldropper', the seed put in 8 in. apart. The seed came through all right, but the small birds took it directly. Results very unsatisfactory—about 8 tons per acre, and very bad to harvest, owing to so much roots. At the second trial the land did not need skimming, being broken up the previous year. I added stockyard manure in this case, about 8 to 10 tons per acre, and about 2 cwt. artificial manure, with superphosphate and bone, and a little kainit, which I found afterwards was a mistake. Kainit or salt should not be included in the mixture. Results, roots much larger, very coarse, and rooty not suitable for factory purposes. Feeding quality I estimate from 20 to 25 per cent. better than the average mangold. The harvesting very troublesome, as in the first trial, and in all other trials. Results have been very unsatisfactory; whether the seeds or manure, or both, are responsible for the one part or not I cannot say, but the small birds are responsible for the other. In all cases the seed was drilled in with the Planet Junior "hilldropper".

Any information you can give me as to its better cultivation, and the kind of manure to be applied, and how much should be put in, will oblige,

Yours, &c.,

Mr. J. A. Young

W TUCKER.

P.S.—When you have got the seed ready for distribution, please do not forget my application. I think you promised me a pound of each variety.—W T

EXHIBIT 5.—LETTER FROM MR. J D P MORGAN, TAMAHERE.

DEAR SIR,—

Waikato Farmers' Club, Tamahere Branch, 25th September, 1901

The matter was brought before our last meeting, held on the 28th August, but beyond testimony to the effect that sugar-beet had been successfully grown in Waikato, there was no information of value forthcoming.

Yours, &c.,

J D P MORGAN, Chairman.

J A. Young, Esq., Hon. Sec. *pro tem.* Sugar-beet Association, Hamilton.

EXHIBIT 6.—LETTER FROM MR. LINDSAY JOHNSTON, TE HAROTO, OKETE

DEAR SIR,—

Te Haroto, Okete, 7th September, 1901

I see by the *Waikato Argus* that you would be glad for any hints regarding sugar-beet growing. I am sending you, by Monday's coach from Raglan, a sample of what I grew last summer. The seed was procured from Government, sown in drills 2 ft. apart, and the young plants thinned out to 1 ft. between each. The average weight per root must have been about 10 lb.

Yours, &c.,

Mr. J A. Young.

LINDSAY JOHNSTON

P.S.—These beets were not specially grown, and so far as I can see they are a heavier crop than turnips, and grown with very little more trouble or manure.—L.J

EXHIBIT 7.—LETTER FROM MR. T B. HILL, VALLEY HOME, RAGLAN

DEAR SIR,—

Valley Home, Raglan, 6th August, 1901

I wish your newly formed Sugar-beet Association every success, and, as I have almost all my lifetime been more or less an experimental cockatoo farmer, I will give you this season's experience of my quarter-acre section of sugar-beet.

The seed was given me by a neighbour, who raised it from seed he obtained from the Government. It is quite different from what I have previously grown at various times, as some of the roots are pink and some dark red throughout. The ground was originally tea-tree, and was broken up the previous year and I took a crop of turnips off it. It was ploughed in ridges, and the seed dibbled in in rows about 27 in. apart, and the seed 9 in., and a bag of K.P. and Co.'s sugar-beet manure sown over the ridges, and raked in. The seed was put in on the 2nd November last. The roots average about 2½ lb., and about 29 tons to the acre. Mr. Day is quite right in saying the roots have a tendency to grow too coarse and big, and especially when grown near the sea; and the larger the roots the less saccharine matter they contain, as the salt spray from the ocean has a tendency to destroy the saccharine principle. This I found very much so some years ago at Ruapuke. My neighbour, Mr. Lin. Johnston, of Te Uku, to whom I gave some of the seed, has them very much larger than mine. This I attribute to being nearer the harbour. The labour on them, no doubt, is a serious drawback, as very few can be pulled by hand.

The growing is no difficulty if the sugar percentage is right. My idea and experience is that at Raglan, Aotea, and Kawhia we are too near the sea. I made some treacle one year, but it was not sweet enough, but made very good blacking.

I may say the Red Top sugar-beet, grown from seed obtained from Messrs. Yates and Co., was by far the most uniform crop I have ever grown.