

Probably the profit would have been much greater had 30 tons instead of 20 tons been used. An experiment was also made at the Moumahaki Farm by Mr. Gillanders on a crop of mangels, with the following results (see 1907 report, p. 309):—

	2½ cwt. Superphosphate, 28 cwt. Flax-waste.	56 cwt. Waste.
Cost per acre .. .. .	£1 6s. 6d.	£1 8s.
Yield per acre (roots) .. .. .	79 tons 4½ cwt.	15 tons 8½ cwt.
Yield per acre (tops) .. .. .	9 tons 7¼ cwt.	4 tons 10 cwt.
Increase over unmanured, per acre .. .. .	70 tons 11½ cwt.	7 tons 6 cwt.
Cost per ton of increase .. .. .	4½d.	3s. 10d.

As was to be expected, the flax-refuse by itself did not show up very favourably with this crop, but when combined with superphosphate, 2½ cwt. per acre, the treatment produced 70 tons of mangels at a cost of 4½d. per ton for fertilizer, and took second place in a trial with twenty-two different mixtures of artificial fertilizers, 5 cwt. of basic slag per acre taking first place and producing a crop at 4d. per ton. Comparing flax-refuse with stable manure, it may be said that while containing similar amounts of water and phosphoric acid, the refuse contains larger amounts of potash and nitrogen. It has, moreover, one very great advantage over stable manure inasmuch as it does not contain any weed-seeds, a fact which will appeal to the farmer.

2. *Mr. Buick.*] This flax-refuse is useful as a manure without any further treatment than its own fermentation?—That is to say, if it is allowed to ferment in heaps. I think there is scope for experiment in ascertaining whether it would be useful as a cattle-food as it comes direct from the mill and without allowing it to ferment. It might be possible to treat it in some way and make an artificial cattle-food of it.

3. Have you heard anything about the attempt that was made in the Manawatu?—No, I could not get any information about that.

4. *Mr. Sykes.*] You only view this flax-mill waste as a manure in its raw state, as it were?—Yes, where it can be got at the price of cartage, or a little more, perhaps. It may be profitably utilized where there is not much carting to be done.

5. It can only be utilized by those farmers who are adjacent to flax-mills?—Yes; treated in the same way as stable manure.

6. Has any information come to you that farmers are utilizing it?—No, although I have recommended it for some years. It is really too much trouble to the farmers to use it. It has only been tried at three different State farms.

7. *Mr. J. Bollard.*] Do you know anything about the science and practice of agriculture?—Yes, a little.

8. Do you believe that statement about the experiments on the State farms?—Yes; Mr. Gillanders is a particularly good man.

9. He put down the cost of getting this flax-waste at 2s. 6d. a ton?—That was at Ruakura.

10. How far is the flax-mill from Ruakura?—It would be comparatively near, I should think.

11. Do you know where it is?—No. The roads are good all over that district, and when the teams are not doing any work I suppose they can be profitably utilized in doing that.

12. *Mr. Field.*] You know nothing of the internal economy of a flax-mill—as to what would be the cost of saving this refuse?—No.

13. Have you had occasion to examine a drain or stream polluted with flax-refuse?—No.

14. *The Chairman.*] Do you know whether, in the case of the experiments that you have quoted to us, 2s. 6d. a ton included the cost of distribution on the land, by drill or some other method?—I am afraid I cannot answer that. I took the figures exactly as they stood in the report. I do not see how you could drill flax-waste.

15. You could drill it only if you had it sufficiently dry and fine enough?—But it must be applied in a moist state. It must be put in by hand.

16. Have you any idea of the distance between the flax-heap and the farm?—No. I took this statement from the annual report as correct.

17. Assuming that the flax-mill was close by the paddock to which the refuse was to be applied, at what would you estimate the cost of loading that stuff into the dray and carting it into the paddock and distributing it, by shovel out of the dray, or by any other practical means, at per acre?—I cannot make any other estimate than the cost that the Farm Manager states—2s. 6d. a ton.

18. Do you not think it practically impossible to have carted it for any distance, much less distributed? Do you not think the 2s. 6d. per ton stated is practically impossible, in view of the present cost of labour, horse-flesh, and what not?—I suppose that if the teams were doing nothing it would be cheaper to employ them than to let them stand in the stable.

19. Have you ever known, or have you been told, that stock with an ordinary supply of grass would touch green flax?—I have seen green flax eaten where there is plenty of grass growing alongside it.

20. When you saw the flax did you see the cattle feeding?—No.

21. Would not this be possible: that in the previous winter the cattle, hard up for feed, took to flax, and the evidence of the cattle having fed on flax would be plain in the summer when there was plenty of grass?—Yes, that is so.