13 June 1932.

Dr. M.A. Bailey,
Chyebassa,
Hayling Island,
Hants.

Dear Bailey:

To take your second point first. I think you can take out blocks and columns separately giving an analysis as under:

| | |
|---|---|
| Treatments | 7 |
| Blocks | 3 |
| Columns | 3 |
| Remainder | 18 |
| Total | 31 |

I have a rather unreasonable prejudice against the arrangement, which I think centres on the fact that I do not know how to specify the randomisation. Still that need not worry you as it only turns on the question whether, subject to the equilisation specified, the different treatments have had a fair chance of every possible arrangement.

On your main point I wish I had had a fuller opportunity of getting to understand your problem from the point of view of its primary agricultural aims. Also, I have only the vaguest possible notion of Crowther's alternative scheme. In so far as one can make a set of different treatments

follow each other so that each falls in turn on each plot there is a very real and obvious gain in precision, and I imagine this is Crowther's point, though it seems evidently incompatible with any plan to study prolonged and progressive deterioration. It is not incompatible with short-term deterioration such as we have managed to include in our six-course rotation at Rothamsted, which produces a partial exhaustion in runs of five years, in each of 3 nutrients, in a complete 15-year cycle. The analogue of this in your experiment would be to interchange the land, say every six years, between the 2 and 3 course rotations. But only a little if anything could, I imagine, be done in this way with the experiment as at present laid down.

Taking it as it stands the experiment should certainly show any long term differences in rates of deterioration if it is continued long enough, but it is somewhat of a gamble to assume the agricultural importance of the answers obtained 20 or 30 years from now.

I think your suggestion is excellent, to cut out 3 of the continuous plots, and get in an extra two and three course rotation.

Yours sincerely,