

26th. November, 1929.

J.C.F. Fryer, Esq.,
Plant Pathological Laboratory,
Milton Road,
HARPENDEN.

Dear Fryer,

The differences between the different treatments are as you guessed very amply significant so as to leave no doubt as to the different degrees of infestation. The degree of agreement or disagreement between parallel samples do, however, show that the technique of counting or sampling leaves a great deal to be desired. There are some very puzzling discrepancies in these. The first point which struck me ^{and} ~~is~~ that the series of preliminary counts agree much too well. Samples from soils containing 30 cysts per sample should not all fall in the range 27 - 32. As this is quite different from the later results, I suppose some difference in technique is involved.

Of the later counts the two on dead cysts agree pretty well with random sampling. I find $\chi^2 = 51.7$ and 47.0 with an expectation of 40 in each case. The unsterilised soil omitting the exceptional pot gives 94.6 where 60 is expected, and this is a significant excess, though not absolutely a

large one. Finally the two to which cysts were added give 245 and 136 with expectations of 40, which is really a very large excess. I suppose mixing is the difficulty, but the contrast does suggest that the eel worms in the "added" pots, were in a different condition from those in the unsterilised soil.

This is all beside the point of your main problem, for I suppose the experiment is unanswerable in showing that "sickness" in this case is something else.

Yours sincerely,