November 1st, 1935

Dear Østergaard,

Thank you for sending me Kristensen's papers and a translation of his abstract. Discussing the matter with Dr Rasch of Copenhagen, who is working here this year, I think Kristensen must be making the very wide-spread mistake of confusing a test of significance with a method of estimation, or at least with a method of obtaining a test of significance for deviations from a hypothesis of a special form which supposes the varietal yields to be a sample from a normal population with some definite, but unknown, variance.

In my book on the Design of Experiments, Sec. 64, I discuss such wider tests based on an analysis of variance, and give an approximate method of obtaining a lower or upper fiducial limit for such a hypothetical ~~valu~~ value, when it happens to be appropriate to suppose that such a value exists - which, in my opinion, is not always. However, the discussion in that chapter may serve to show that, because the $t$ test was developed

exclusively as a test of significance for the null-hypothesis that all varieties give the same yeild, there is no reason why the convenience of the arithmetical arrangement in an analysis of variance should not be used in the discussion of other questions.

I have not yet seen Dr Plum, but hope he will find me in a few days.

Yours sincerely,