

9th October, 1956.

Dear Dr. Burnaby,

Thank you for your long letter on fitting the negative binomial. I suppose from what you say that you have never happened to see the enclosed paper by Bliss, at the end of which I have a short note on getting the maximum likelihood values of the two parameters. In the cases which Bliss had in view a frequency of zeros was observable, and of course if the negative binomial had any objective reality, such a class must exist.

If you take the view that such a class does exist in reality, but is unobservable, then, since the method I give at the end of Bliss's paper is really rather simple, I believe I should proceed in this way treating the frequency of zeros observable as a missing observation, supplied initially by a guess, and later adjusted to agree with the expectation based on using that guess with the rest of the material observed.

You may be glad to have the offprint enclosed herewith, and I hope you will let me know if you find any difficulty in carrying out the method I propose.

Sincerely yours,

Enc.