November 3rd. 1934.

My dear Fisher,

Thank you for your very kind letter. There is at present no complete summary of all the Gammarus genes. Ford & Huxley (1929): "Genetic rate-factors in Gammarus", Arch. f. Ent.mech., 117, 67-79, refer to seven of them, and seven others are mentioned in E.W. Sexton, A.R. Clark, and G.M. Spooner (1932): "Some new eye-colour changes in Gammarus chevreuxi", J. Mar. Biol. Ass., 18, 307-36. Though some are referred to only in passing, it is made clear that these 14 are all complete recessives.

These two cover the bulk of them. The others are still in separate papers. I could send you the references for your own interest if you would care for them, but the point is probably too small to warrent the inclusion of many extra references in your present paper.

The point about hernia and crest interests me very much. Your present work is so important not only because it demonstrates that dominance has been arrived at by selection, but also as it is capable of distinguishing between selection operating on the total gene-complex or in picking out multiple allelomorphs (à la Haldane).

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It clearly cuts out the latter, and the difference between the two effects of the hernia-crest gene, the one recessive and the other semi-dominant in the wild, is corroborative in the same direction.

I am at present breeding Chaerocampa elpenor (the large pink and green British Hawk-moth). The larva is di-morphic, with a black and a green form. I am trying to collect evidence of the proportions in which these occur in different parts of the country, and to what extent they remain stable in each place. So far I am getting the impression that one or the other form may be rare in different districts, and that the two are about equally common in others. Also that these conditions seem to remain roughly the same in each place. Quite promising, dont you think?

I hope to go up to hear you at the Genetical Society on the 22nd, and to get a chance to discuss things.

Yours sincerely,

I. B. John