

3rd October, 1952.

Dear Cyril,

I am returning your last batch of papers including two of the three from Birmingham. Hayman and Mather on "Progress of inbreeding when homozygotes are at a disadvantage". The second one, "Components of variation under sib mating" I am retaining until I can look at Nelder's paper with it. The third, "Mixed selfing and random mating" by Hayman I am returning herewith. This seems to me much the best of the three. Mather has had my criticisms of the first and if he likes to persist with it as it is, that is his affair. I think it quite grossly overestimates the effects of selective disadvantage through not separating the effects of such disadvantage within an inbred line from the effects which seem to be greatly exaggerated by their formula of the elimination of some inbred lines as compared with others. The trouble arises, I think, through taking as model, a patch of selfed cereals <sup>plants</sup> in which, of course, if homozygotes are at a disadvantage, the completely homozygous lines are constantly being replaced by lines still heterozygous. To apply this continuing process of elimination to sib mating lines without regard to their fertility seems very artificial. However, I have done with all of these except the one one for which I am awaiting proofs of Nelder's paper for comparison.

I will let you know later if either Henry Bennett or George Owen are driving me over for the Council Meeting on October 16th. In suggesting this to them, I shall be assuming that whichever of them it is can be put up for the following night.

Sincerely yours,