

January 21st, 1936

My dear Ford,

I suppose Mendel attempted crosses with bees principally because he was, or had been, an enthusiast for bee-keeping, and I believe, though I forget on what evidence, that he was largely responsible for the development of the frame hive. I think Bateson mentions that he was president of a local bee-keepers society. The incident of trying to make bees mate by freeing them in a closed room would have been readily remembered, even if it had been almost a solitary attempt.

But your letter raises the interesting question about what the case would have looked like without knowledge of the chromosomes. I suppose, even without this, it might have crossed Mendel's mind that, if the male received its inheritance only from one parent, all its gametes must be alike, as it could not be heterozygous. I suppose also that he could not exclude the alternative that the son of a heterozygous mother received her diploid inheritance in full, ~~and~~, that the drones were formed

from unreduced eggs. It does not seem quite impossible that he had in view a test between these two possibilities, but his bee work seems to have totally disappeared.

Be sure to look me up here when you are in town, as there are several things I should like to show you: some new transparencies, and I forget whether you have seen a rather nice modifier of the dominant^{ce} of the agouti factor in mice which we are beginning to introduce into the whole series of agouti allelomorphs.

One very curious effect in our mouse cross is a case of 55% recombination, which, on internal evidence, seems to be quite established, since, apart from its formal significance on the numbers counted, the 5 different classes of males used (2 in coupling, I think, and 3 in repulsion) all independently show an excess of recombinations. Apart from putting the 2 factors, dilute colour and Crew's wavy into the same chromosome, this gives, I believe, the first decisive evidence of chromatid interference.

Yours sincerely,