

Monday.

1941  
Aug. 25 -  
18th

Padra Myer,  
Coverack,  
Helston,  
Cornwall.

My dear Sister,

How nice to find your letter waiting for me on my arrival here. I am arranging to book for lunch, as you suggest.

Southern, one of the Oxford bird men, who has just ~~been~~ joined the Society is going to give us an exhibit of bridled guillemots and other clinics and polymorphisms in birds, and would like to talk for 1/4 hour. We have not heard much on bird material lately and, I think, nothing on bird polymorphism, so this would be worth having, don't you think? Someone from the Shampers Laboratory at Cambridge (Lea, the name) wants to talk about chromosome abnormalities in plants arising from X-ray treatment - for 3/4 hour! I think it considerably too long. He really must cut him down a bit, what do you say!

I thought it would be awfully nice

if you and I had a joint exhibit of dominants. We could show the larvae, just have the insects again for those who don't know them, and have the figures on the proportions of varieties, including this year's data, and the diagram of captures and releases. Perhaps you could say a few words on your analysis of this - it would be awfully nice if you would, and I will put up the exhibit. I would, in addition, rather like to have two small exhibits on the chemistry of pigments (and do an exhibition as part of it), and could ~~take~~ take for 10 minutes or so if time allowed. I don't know just what Matter has got in the way of lectures and exhibits.

Yesterday, I had an interesting ~~experience~~ experience with Clouded Yellow Butterflies. I found a lovely flowering slope, where perhaps 100 were flying. On careful examination, I managed to find 2 ♂'s among them, all the rest were ♀ and appeared in splendid condition, as if newly emerged. 6 of the ♀'s have the white from helice. (It is called a simple dominant, as are the other white Colias ♀'s. There is a suggestion that one fits an

approach  $10^{-2}$  2:1 ratio where a 3:1 is expected, but  
it is not significant).

It will be a real joy to see you  
all in the latter part of September. I will write  
about dates a little later on; but thank you so  
much. I am sorry to find from your letter that  
there does not seem much chance of your getting away.  
I wish you could, I am sure it would do you good.

With best wishes to Ruth,

Ever yours,

Henry

August 28, 1941

My dear Ford,

7 Thanks for your letter of Monday. It is very good that you have got Southern to put up a show, for I am naturally much in favour of increasing interest in the study of wild populations. I expect with you that the programme will be sufficiently full for us to have to limit the longer talks.

I really think Dominula is your animal, and I should rather be more free to see the other exhibits, and talk to people about the Society's future activities, more than I was at the Annual Meeting, so I should prefer if you took the demonstration yourself, of course freely quoting the results of examining this years data, which it was the greatest interest to me to do.

I have been lately examining the local population of Lotus corniculatus in view of Dawson's finding that the presence of hydrogen cyanide, or rather of the glucoside from which it is evolved, was unifactorial with tetrasomic inheritance. Apart from the parallel possibilities in Lythrum, this is the only case of tetrasomic inheritance in nature which has yet been found, and, though I do not doubt the genetic results, there is some difficulty in interpreting Dawson's population samples, as the number of

negatives is usually small, and a rather high proportion of them doubtful in that they seem to give weak reactions.

So far I have tested 44 plants growing wild round here, making separate tests of the inflorescence and the leaves. In all, and counting as negative only those which are obstinately so after long incubation, I have one plant negative in both parts, one negative in the leaves only, and one in the flowers only, the remaining 41 giving both positive.

There is quite striking variation in the rate of reaction and in which part reacts first, e.g., in my first sample of 12, 11 leaf samples reacted quickly, the 12 flower samples followed more slowly, and the last leaf sample showed no reaction at all. To-morrow I hope to do a lot, timing them at a fixed temperature so as to get a clearer picture of these differences. I am afraid, however, the material may not be sufficiently easy for me ever to check it up genetically, as needs to be done if these population surveys are to get any clear interpretation.

I have now arranged to be in Scotland, in George's neighbourhood, from the 1st to the 14th. Would it suit you to visit us on the 20th and again early in October? This would be very nice, if it fitted your plans, and keep you well in touch<sup>both</sup> with the mice and the Dominula broods.

Yours sincerely,