FBrF0075312

Department of Genetics
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From : Dr. R.A. Drysdale
Email : [redacted]

DOWNING STREET
CAMBRIDGE
CB2 3EH
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Telephone: [redacted]
Fax: [redacted]

June 8th, 1993.

Dear Prof. Pak,

I am working with Mike Ashburner as part of Flybase, the project building the database of the genetics and biology of *Drosophila*. In indexing Lindsley and Zimm's Red Book (The Genome of *Drosophila melanogaster*) we have come across several instances where we need clarification and we would be grateful if you could help us out with the question below.

On page 784, mutants x2, x3, x4, x5, x6 and x10 are described. Do you have any more recent data regarding their relationships to each other or to other defined loci, or their map positions?

Thank you very much for your help.

Yours sincerely,

Rachel Drysdale.

Rachel Drysdale.

PURDUE UNIVERSITY

DEPARTMENT OF BIOLOGICAL SCIENCES
FAX Number: [redacted]

FAX TRANSMITTAL SHEET

DATE: 6/18/93

TO: Dr. Rachel Drysdale, Dept. of Genetics
University of Cambridge
Downing Street, Cambridge CB2 3EH, England
FAX Number: [redacted]

FROM: Dr. W. L. Pak, Dept. of Biological Sciences
Purdue University
W. Lafayette, IN 47907
Telephone Number: [redacted]

Number of pages (including this transmittal sheet): 2

If there are problems with this FAX transmission, please call [redacted] as soon as possible. Thank you.

NOTES:

PURDUE UNIVERSITY

DEPARTMENT OF BIOLOGICAL SCIENCES

June 18, 1993

Dr. Rachel A. Drysdale
Department of Genetics
University of Cambridge
Downing Street
Cambridge CB2 3EH England

Dear Dr. Drysdale:

Please excuse the delay in answering your letter. I found your letter waiting on my return from a trip.

As for the mutants in question, very briefly, these are the mutants that we isolated but did not consider interesting for our purpose and decided not to pursue any further at the time. We briefly described them in our '69 and '70 Nature papers to distinguish them from the ones we were interested in, never dreaming that they would get into print some 23-24 years later.

At the time, we were interested in isolating X-chromosome mutants defective in the electroretinogram (ERG). In the hope of enriching the sample for such mutants, we first isolated mutants that were poorly phototactic and simply labeled them sequentially x1, x2, x3, etc., as they were being isolated. Of the 23 mutants, x1 to x23, reported in our '69 and '70 Nature papers, five, x7, 12, 13, 14, and 16, had ERG defects, and the genes corresponding to these mutants have all been defined. Of the remaining 18, three (x1, 8, and 10) had morphological defects. So, these are the mutants with normal or nearly normal ERGs, normal phototaxis, but with some obvious morphological defects. Because we considered these the least interesting, we did not do complementation tests with other known mutants. However, rereading the descriptions now, it is very likely that x1 and x8 are both alleles of fused (*fu*), and x10 is an allele of scute (*sc*). The remaining 15 (x2-6, x9, x11, x15, and x17-23) had normal ERG and morphology but poor phototaxis. It is quite possible that some of them have defects in important components of neural circuitry for phototaxis. However, because we considered it difficult to get a handle on them, we opted not go after these mutants. We still have these mutants in our collection. However, because they have not been behaviorally checked in a long time, I do not even know whether they still have the behavioral phenotype.

I hope the above information helps.

Sincerely yours,

William L. Pak

1392 LILLY HALL OF LIFE SCIENCES • WEST LAFAYETTE, IN 47907-1392 • FAX [redacted]

♦From rd120 Mon Jun 21 10:53:08 1993
From: Rachel Drysdale (Genetics) <[redacted]>
Date: Mon, 21 Jun 93 10:53:01 BST
To: [redacted], [redacted], [redacted]
Subject: L&Z corrections
Content-Length: 723
X-Lines: 21

Aubs,
I received the following from Bill Pak.

The question was
"on page 784, mutants x2, x3, x4, x5, x6 and x10 are described. Do you have any more recent data concerning their relationships to each other or to other defined loci, or their map positions?"

Pak said,
"no" Although he took more words to say it!

The only things he said that were not already in L&Z were
"it is very likely that x1 and x8 are both alleles of fused, and that x10 is an allele of scute" these statements are based on the descripitions, but not complementation tests. I would add these in as a pers comm but we cannot add any thing else to the entries for these nasty x things.

R

P.S. He does still have the stocks, so they are real.

♦From rd120 Mon Jun 28 09:31:23 1993
From: Rachel Drysdale (Genetics) <[redacted]>
Date: Mon, 28 Jun 93 09:31:16 BST
To: [redacted], [redacted], [redacted]
Subject: L&Z corrections
Content-Length: 746
X-Lines: 24

Aubs,
This is to do with those "x" loci, page 784

----- Begin Included Message -----

>From [redacted] Fri Jun 25 19:38:12 1993
Date: Fri, 25 Jun 1993 13:38:26 -0500 (EST)
From: [redacted]
To: [redacted].ac.uk
Subject: Correction in my letter
Content-Length: 412

Dear Dr. Drysdale:
I just noticed that there was an inadvertent, factual error in my letter of June 18. Line 9 of the third paragraph should have read, "with normal or nearly normal ERGs but poor phototaxis and some obvious ..." After all, all these mutants had poor phototaxis because that's how they were isolated. I am sorry for the confusion I may have caused you.

Sincerely,
William L. Pak

----- End Included Message -----