

Bowman, J. T. Utah State University, Logan, Utah. Another "super-reversion" at the white locus of *D. melanogaster*.

Among the revertant progeny of homozygous attached-X females of the constitution  $w^1/w^1$  was a single female which on progeny testing proved to be of the genotype  $w^+/"w"$ . Attempts to map this

new white allele ( $w^{62k}$ ) have been largely unsuccessful since it shows the same type of recombinational abnormality as the ivory mutant from which it was derived (Lewis 1959; Bowman 1965). Only one exception was recovered from 67,000 offspring of heterozygous  $y w^{62k}/y^2 sc w^{bf} w^{ch} spl$  females; a single young  $y^2 sc w^+ spl$  male. Since no equivalent stock is maintained in the laboratory, it is extremely unlikely that this exception was a contaminant.

This event resembles, at least superficially, Lewis' recovery of a  $y^2 fa$  male from females of the constitution  $w^1/y^2 w^1 w^{ch} fa$  (Rasmuson 1962). Of particular interest is the fact that in both cases the chromosomes that did not contribute the outside markers recovered with the exceptions carried related, recombinationally aberrant mutants. A significant difference is that  $w^{62k}$  has not been observed to revert in homozygotes while  $w^1$  reverts frequently (Lewis 1959, Bowman 1965). Rasmuson (1962) has offered a recombinational explanation for the Lewis "reversion". An additional hypothesis based on a single event would be unwarranted. References: Bowman, J. T., 1965. Spontaneous reversion of the white-ivory mutant of *D. melanogaster*. *Genetics* 52:1069-1079. Lewis, E. B., 1959. Germinal and somatic reversion of the ivory mutant in *D. melanogaster*. *Genetics* 44:522. Rasmuson, B., 1962. Evidence for a compound nature of the mutant alleles  $w^a$  and  $w^1$  in *D. melanogaster*. *Hereditas* 48:612-618. (Supported by NSF Grant No. GB-4539.)

Paterson, H. E. and L. Tsakas. University College of Rhodesia, Salisbury. The identification of *Drosophila seguyi* Smart.

Paterson (DIS 34) drew attention to the fact that *Drosophila seguyi* is a member of a complex of sibling species. It was not then possible to decide which species represented the true *D. seguyi*: so, pro-

visionally, the form figured by Burla (1954a) (Rev. Suisse Zool. 61, Fasc. suppl., p. 158) was designated "Species A" and the form figured by Burla (1954b, Rev. Brasil Biol. 14(1) p.45 figs. 3 and 6) as "Species B".

This contribution is to report that the type of *D. seguyi* Smart has now been examined by one of us and found to be identical with males of species B as defined above. The examination included the genital arch and the sexcombs, and on both characters agreement with males of species B was complete. The form of the metatarsal sexcomb differs between species A and *D. seguyi* in that in the former species all the teeth are in line whereas in the latter species the last two teeth are displaced from the line on which the others lie. This character was brought to our attention by Professor Burla.

It is to be hoped that laboratories holding stocks of "*D. seguyi*" will now examine them and decide on their identity.

Ogaki, M., E. Nakashima-Tanaka and S. Murakami. University of Osaka Prefecture, Japan. Ether resistance in *D. melanogaster*.

In August 1961, one ether-resistant female fly appeared from Mino-H stock in our laboratory. After 13 generations of selection with ether, this stock was ready for experiments. The phenotype of

this ether-resistant strain showed yellow finally, so we named it  $y^{ER}$  (yellow from ether resistant). Adult flies of 24 hr. after emergence were treated with a definite quantity of ether for definite minutes, then the dosage-mortality curves after 24 hr. of etherization were constructed, and the median lethal time (in minutes) was estimated.

The  $LT_{50}$  of  $y^{ER}$  was 4.5 min. and 4.3 min. in females and males respectively; on the other hand, ether-sensitive stocks of Quick Sand and  $bw;st;sv^n$  showed the  $LT_{50}$  of 2.6 min. in females and 2.0 min. in males. Genetical analysis revealed that the ether-resistance is completely dominant and the major gene(s) is located on the right end of the 3rd chromosome. Furthermore, minor genes were found on the X-chromosome (otherwise Y-chromosome) and on the 4th chromosome. Thus the ether-resistance in *Drosophila* was recognized as polygenic.