

Mather, Wharton B. University of Queensland, Australia. The genus *Drosophila* at Sandakan.

In August 1966 the genus *Drosophila* was for the first time sampled in Sabah at Kota Kinabalu (Jesselton), Sandakan and Tawau, using modern banana baiting methods (Mather 1968 a and b).

The Sandakan station in a rubber plantation five miles from the town has again been sampled, but this time in the other half of the year viz. February 1968 and the results compared with the August 1966 results. The primary sorting of the flies yielded the results shown in Table 1. The results in Table 2 were obtained from samples of melanogaster group females individually bred out and identified by their male progeny. It will be noted that in February the melanogaster group is even more dominant than in August. The immigrans group is again represented by *D. pararubida* and *D. setifemur* but the relative frequency of *D. setifemur* has fallen. Three species of the ananassae complex have now been distinguished and two races of *D. szentivanii* detected. The species described as pseudo takahashii - like from the August 1966 collection has been identified as *D. gracilis*. *D. dominicana* appears to be less prevalent in February than August.

Cytogenetical studies and an investigation of isolating mechanisms in most of the species tested are proceeding.

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References: Mather, W. B. 1968 (a) The Genus *Drosophila* in New Guinea and Sabah. Univ. Qld., Papers Dept. Zool. III (4); 47-50. Mather, W. B. 1968 (b) The Genus *Drosophila* in Sabah. D.I.S. 43:100.

SANDAKAN

	Aug. 1966		Feb. 1968	
	<u>Primary Sorting</u>			
<i>D. setifemur</i>	346	26%	83	6.8%
<i>D. pararubida</i>	10	1%	15	1.2%
melanogaster group	<u>966</u>	73%	<u>1121</u>	92.0%
	1322		1219	
	<u>Melanogaster Group Sample</u>			
<i>D. malerkotliana</i>)	24	43%	117	59.4%
<i>D. ananassae</i>)			35	11.7%
"Pseudoananassae")			16	5.4%
<i>D. szentivanii</i> Race A	12	21%	38	12.8%
" " " B			3	1.0%
<i>D. gracilis</i>	4	7%	25	8.4%
<i>D. dominicana</i>	15	27%	4	1.3%

Rayle, R. E. University of California, Davis, California. Interaction of the mutants *zeste* and white ocelli.

Mass mating of the F_1 from a cross of y^2z spl females and w^{gd} males resulted in a sizable number of white-eyed individuals among the genetically y^2z spl F_2 females. Subsequent crosses revealed that the

white eye color was due to an interaction between *zeste* and a third chromosome recessive character present in some individuals in the w^{gd} stock. In *z* males, the character produced a slight deviation from wild type eye color.

Since the mutant produced colorless ocelli in both *z* and z^+ individuals, it was suspected that it might be an allele of white ocelli (w_o : 3-76.2). This was confirmed by mapping the mutant to 3-76±, showing that it acts as an enhancer of w^e as does w_o , and by a positive allelism test with w_o . Finally, it was shown that w_o shows the same interaction with *z* as does the new mutant, consequently designated w_o^{67k} .

The mutant w_o^{67k} was found to have become fixed in a wild-type stock used by the author to establish the w^{gd} stock several years ago.