Mather, Wharton B. University of Queensland, Australia. The genus Drosophila in Sabah.

In August 1966 the genus Drosophila was sampled from fermenting banana baits at Jesselton, Sandakan and two stations at Tawau (Fig. 1). At Jesselton the baits were placed in patches of lush vegetation near the town, at Sandakan in a rubber plantation five miles from the town and at Tawau in a rubber plantation 10 miles from town (Tawau I) and in a cocoa plantation at the Agricultural Station 2 miles from town (Tawau II).

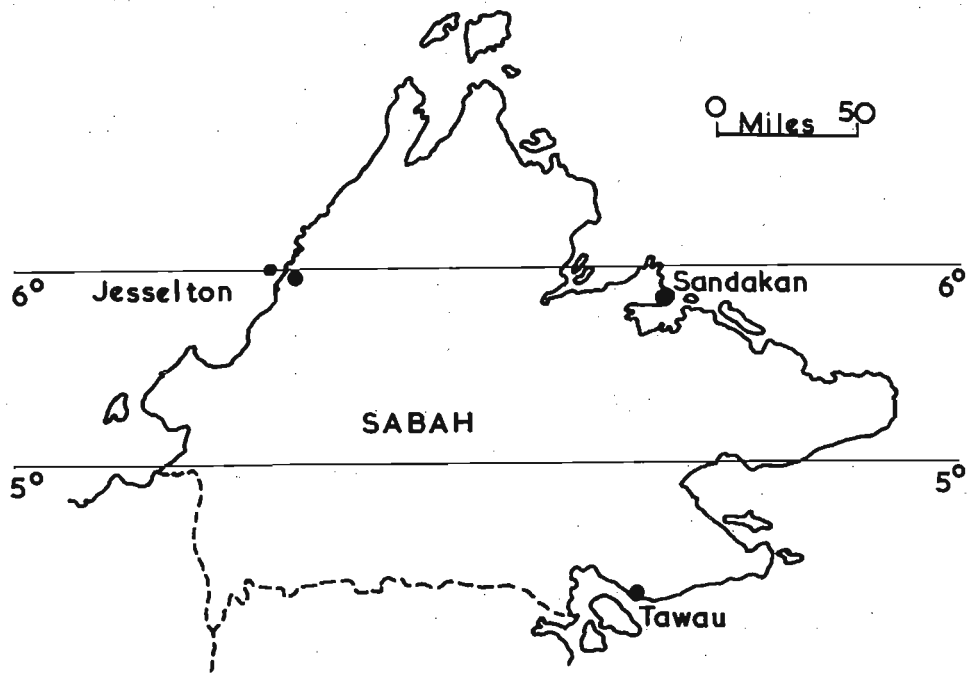

Fig. 1

The primary sorting of the flies yielded the results shown in Table I and samples of females from the melanogaster group gave the results shown in Table II determined from males when individually bred out.

Table I

Primary Sorting

	Jesselton		Sandakan		Tawau I		Tawau II	
D. setifemur	147	12%	346	26%	16	4%	37	2%
D. pararubida	10	1%	10	1%	15	3%	129	6%
D. tetrachaeta	-		-		2		-	
D. argentostriata	2		-		-		-	
D. silvistriata	-		-		-		-	
melanogaster group	1087	87%	966	73%	427	93%	1965	92%
Total	1246		1322		460		2131	

Table II

melanogaster group sample

	Jesselton		Sandakan		Tawau I		Tawau II	
D. ananassae	27	61%	24	43%	41	68%	5	12%
ananassae-like	-		-		-		2	5%
D. szentivanii	6	14%	12	21%	8	13%	34	81%
pseudotakahashii-like	4	9%	4	7%	2	3%	-	
D. dominicana	4	9%	15	27%	5	8%	-	
serrata-like I	1	2%	-		4	7%	1	2%
serrata-like II	2	4%	-		-		-	
serrata-like III	-		1		-		-	
Total	44		56		60		42	

It will be noted that at all stations the melanogaster group is very dominant. The immigrans group is represented by D. pararubida and D. setifemur.

Cultures of the species from the four stations have been preserved and are being studied in relation to cultures of the species from the Territory of Papua and New Guinea as regards chromosomal variation and reproductive isolation.

Acknowledgements are due to Research Assistant Sheridan Butler and Graduate Students V. Baimai and I. R. Bock for technical assistance.

Mather, Wharton B. University of Queensland, Australia. Chromosomal Polymorphism data in D. rubida from north eastern New Guinea.

One of the gaps in our knowledge of chromosomal polymorphism in D. rubida is in flies from the north coast of New Guinea. Some inversions have been recorded from small samples from Samarai, Popondetta and Lae (Mather, 1961 & 1963). This report records data from a sample of ten male flies at a new station - Madang. The new complex inversion J has limits of 7.1 and 14.1 in chromosome IIR on the giant chromosome photographic map (Mather, 1961).

Acknowledgements are due to Sheridan Butler and V. Baimai for technical assistance.

Chromosome		%
II	RC	62.5
	J	37.5
III	+	68.8
	A	18.8
	B	12.5
	D	6.3
	E	18.8

References:
Mather, W. B. 1961. Chromosomal polymorphism in Drosophila rubid Mather. Genetics, 46:799-810.
Mather, W. B. 1963. Patterns of chromosomal polymorphism in Drosophila rubida. Amer. Nat., 97:59-64.

Hirosé, Y. and S. Kaji. Kônan University, Kobe, Japan. ^{3}H-acetamide incorporation into eye discs of Bar strain.

Previous work has been shown that acetamide has strong effect to the facet-formation of the Bar eyes and increasing the number of facets as many as that of the wild type eye (Kaji, 1954). The sensitive periods of the eye discs to the chemical influence to lie between 60-80 hours after hatching (Kaji and Ogaki, 1953).

The present report describes studies on tritiated acetamide incorporation into eye discs of different larval ages.

In 55, 62, 70, 80 and 90 hours old larvae were treated with ^{3}H-acetamide (2%, 5.64 uCi/g) for 1 hour respectively, and then transferred to normal media for growth until the end of larval stage. Carnoy was used as a fixative, and sections ranged from 2 to 3 u. Autoradiographic exposure for tritiated acetamide was 3 days. The figure 1 shows photomicrograph of the preparation of Bar eye disc.