

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).

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

Hirose, Y. and S. Kaji. Kōnan University, Kobe, Japan. ³H-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 ³H-acetamide (2%, 5.64 μ Ci/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 μ . Autoradiographic exposure for tritiated acetamide was 3 days. The figure 1 shows photograph of the preparation of Bar eye disc.