Mather, W.B. and P. Thongmeearkom.
University of Queensland, Brisbane,
Australia. Inversion polymorphism in
D. sulfurigaster albostrigata.

In January, 1971, fifty-six iso-lines were established from a collection from Cebu, Philippines. The salivary chromosomes of approximately ten larvae from each line were examined and 11 simple and 5 complex inversions detected. (Table I and Fig. 1 - 2) It will be noted that inversion heterozygosity

is very marked. Only four flies were free of heterozygous inversions. It will also be noted that the heterozygosity is concentrated in chromosome III, particularly at the proximal end, and that some inversions are much more frequently heterozygous than others.

(The material was collected and maintained and the larvae reared for dissection by W.B.M. The chromosomes were prepared, analysed and photographed by P.T.)

| Inversion | Type | Position | Heterozygosity frequency % |
|--------------|------|----------|----------------------------|
| Α | Sim. | III P | 3.6 |
| В | Sim. | III P | 17.9 |
| C | Sim. | III D | 35.7 |
| D | Sim. | III D | 7.1 |
| E | Sim. | IIL C | 41.1 |
| \mathbf{F} | Com. | III P | 3.6 |
| G | Sim. | ΙP | 23.2 |
| H | Com. | III P | 5.4 |
| I | Sim. | III P | 12.5 |
| J | Com. | III C | 1.8 |
| K | Sim. | III D | 1.8 |
| L | Sim. | III P | 10.7 |
| M | Com. | III P | 3.6 |
| N | Sim. | III P | 5.4 |
| 0 | Com. | III P | 1.8 |
| P | Sim. | III P | 3.6 |

Note: Sim.=simple; Com.=complex; D=distal; C=central & P=proximal to centromere.

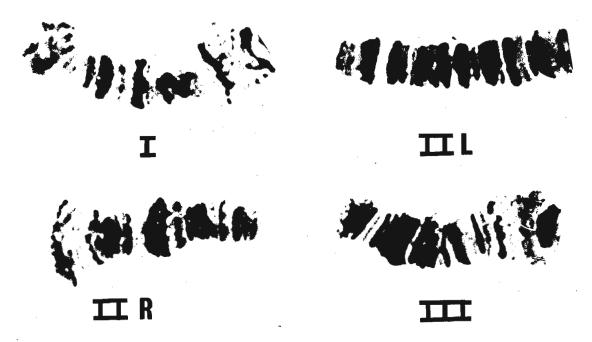


Figure 1. Chromosome ends. The free ends are to the left.



Figure 2. See legend next page.

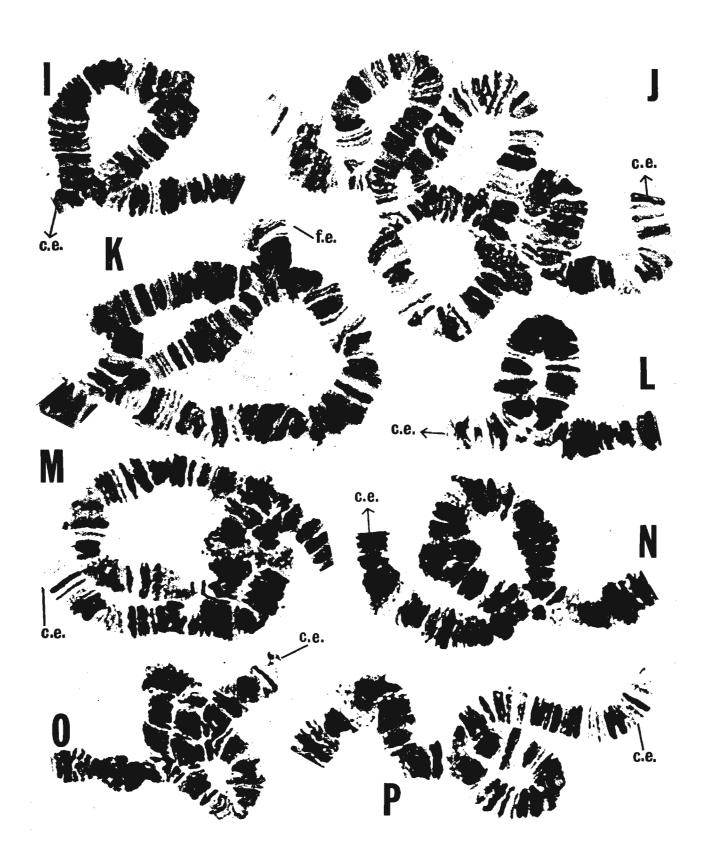


Figure 2. (Cont.) Inversions. c, chromocentre; c.e., centromere end; f.e., free end. Arrows point toward centromere ends.