

cates that D. bocainoides is quite separate from the other two. Study of natural chromosomal variability, hybridization, and geographical distribution of these three entities is continuing.

Cooper, K. W. The Chapter on Spermatogenesis in Biology of Drosophila.

Although the introductory remarks to Biology of Drosophila by Dr. Demerec (p. vi) suggest that Professor

Alfred Huettnner's material on the spermatogenesis of *Drosophila* was placed at my disposal for drawing up the chapter on "Normal Spermatogenesis" (and have been so taken by at least one reviewer), in all fairness to both Dr. Huettnner and myself let it be said that this was not the case. Regrettably, I have never seen either Dr. Huettnner's notes or preparations, nor did I know of their availability until I had read Dr. Demerec's prefatory note in the published volume. The chapter on spermatogenesis was prepared on very short notice, which did not allow extensive original investigation on my part. The slide material used consisted of a large collection of very beautiful slides prepared by Professor Curt Stern, and generously loaned to me, some 40 slides made by myself for elucidation of the first meiotic prophase, and supplementary preparations of living spermatocytes; these formed the basis for such original observations as appear in the review.

da Cunha, A. Brito, Brncić, D. J., and Salzano, F. M. Comparative study of chromosomal polymorphism in populations of tropical *Drosophila*.

Groups of closely related species were chosen for this study: D. griseolineata and D. guaranuní; D. cardinoides and D. polymorpha; D. bandeirantorum. The results so far

obtained are:

<u>Species</u>	<u>No. ind. studied</u>	<u>No. different inversions</u>	<u>Mean no. of inv. heterozygous per individual in different populations.</u>
<i>D. griseolineata</i>	446	5	0,01 - 0,53
<i>D. guaranuní</i>	312	16	1,41 - 2,85
<i>D. cardinoides</i>	80	1	0,01
<i>D. polymorpha</i>	155	6	1,44
<i>D. bandeirantorum</i>	328	2	0,32 - 0,56

The ecological data we have indicate that D. guaranuní is ecologically more versatile than D. griseolineata, and the D. polymorpha is more versatile than D. cardinoides. D. bandeirantorum seems to be very specialized and common only a short time during the year. The cytological data suggests that the amount of chromosomal polymorphism is proportional to the degree of ecological versatility of the species and to the complexity of the environment where the population lives.

Dale, Ernest E. Differential mortality.

An attached-X stock of *Drosophila* (*D. melanogaster*.) with red-eyed females and white-eyed males gave

differential mortality of the two sexes when exposed to culture medium containing colchicine. Data are given on survival of colchicine-exposed flies and controls, the experiments being run simultaneously and covering an eight-day period.

<u>Colchicine exposed</u>	<u>No. surviving</u>	<u>Per Cent</u>
♀ 700	29	4.1
♂ 700	525	75.0
Controls		
♀ 449	355	79.1
♂ 451	371	82.3