Pipkin, Sarah B. Howard University, Washington, D.C. Polymorphism of octonol dehydrogenase in neotropical Drosophila species.

Isozymes of octonol dehydrogenase have been studied in 30 neotropical Drosophila species using the method of Ursprung and Leone, 1965. When mass homogenates of 200 flies per species were subjected to electrophoresis, presented with a substrate of hexanol, heptynol, or octonol, in a formazan staining mixture, 18 species showed a single isozyme. The monomorphic species included D. neomorpha and D. carmargoi, each represented by 5 strains of different geographic origin, and D. briegeri and an annulimana group species, each represented by two strains. The remaining 14 monomorphic species were so characterised from the study of only one geographic strain per species. In the 12 polymorphic species, using mass homogenates, three isozymes, representing slow, fast, and hybrid enzymes of ODH usually were shown. In one strain of two different species, four isozymes were identified using mass homogenates. ODH polymorphism was found in 5 among 5 strains tested of D. metzii; 3 of 3 strains of D. pellewae; 6 of 9 strains of D. mediostriata; 4 of 5 strains of D. medionotata; 1 of 3 strains of D. capricorni; and a single strain of D. calloptera, D. sticta, D. crocina and an undescribed member of the flavopilosa species group. The widespread polymorphism of ODH has been found in five different neotropical species groups. A detailed study of D. metzii and D. pellewae using single flies instead of mass homogenates has revealed as many as 7 different alleles of the ODH gene were responsible for isozyme patterns in certain strains.

Tedeschi, M. Valéria and Luiz Edmundo de Magalhães. Universidad de São Paulo, São Paulo, Brazil. Sex-limited effect of detrimental autosomic chromosome in D. melanogaster.

In an analysis of the viability of homozygotes for the second chromosomes of D. melanogaster from São Paulo City, Brazil, two chromosomes were found with sex-limited detrimental effect. One of these kills all the pre-adult males but the females show normal viability. The other one has an opposite effect: it is semi-lethal for the females. In three cultures we counted 79♂ to 56♀; $x^2 = 3.9$; $P < 0.05$. (Work supported by FAPESP; Contract 66/066.)

Hunter, Alice S. Centro Experimental de Estudios Superiores, Barquisimeto, Venezuela. Preference in mating time of Drosophila mesophragmatica.

Courtship behaviour and discrimination among five species of the mesophragmatica group of Drosophila was studied by Koref-Santibañez (1963) who reported that D. mesophragmatica is relatively inactive in courting. She also noted that copulation of this species never took place while they were under observation.

In our laboratory preliminary studies of isolated pairs of virgin D. mesophragmatica have been made and it has been observed that they are sexually inactive during the first few days after hatching. A study of virgin pairs of two weeks of age has given the following data:

Copulations of Bogotá line 22 D. mesophragmatica

	% copulation	number of pairs tested
6 AM	33	64
10 AM	18	130
3 PM	9	80
7 PM	6	20

These data lead us to believe that there is a preferred time of day for copulation in this species. Additional experiments are being carried out in order to test this hypothesis.