Pericentric Inversions: Chromosome 3

lpe(3) 1. #59. N-l. Lt. break in G; rt. break on 3R (obs) in hc. M larva. C2 x. 62c.
lpe(3) 2. #106. N-l. Lt. break in F; rt. break on 3R (obs) in E. F larva. A3 x. 62f.
lpe(3) 3. #241. R. Lt. break in D; rt. break on 3R (obs) in C. A3 x. 62g.
lpe(3) 4. #252. N-l. Lt. break in F; rt. break on 3R-1 (obs) in G. F larva. A3 x. 62g.
lpe(3) 5. #289. N-l. Lt. break in hc; rt. break on 3R (obs) in F1. M larva. Same A3 x as lpe(2)29. 62g.
lpe(3) 6. #362. N-l. Lt. break in C; rt. break on 3R (obs) in G. M larva. A1(O.) x. 62i.
lpe(3) 7. #449. N-l. Lt. break in L; rt. break on 3R (obs) in G. F larva. Same A1(Va.) x as lpa(XL)15 (Levitan 1964). 62l.
lpe(3) 8. #511. N-l. Lt. break in hc; rt. break on 3R (obs) in G. M larva. B1 x. 63c.

Lopez, M.M. University of Mar del Plata, Argentina. **Drosophila subobscura** has been found in the Atlantic coast of Argentina.

D.subobscura, a typical palearctic species, was found in South America in 1978 in Chile (Brncic et al. 1981) and in 1981 in the western region of Argentina (Prevosti 1983) around the Nahuel Huapi lake. This lake is part of a lacustral system which is a natural Andean pass. No **D.subobscura** were found by the same author in the east of the country (near the city of Buenos Aires).

During 1984, we took samples of Drosophila near Mar del Plata, a coastal city situated 400 Km south from Buenos Aires. In our captures, out of 1300 individuals, 26 were **D.subobscura** (i.e., about 2%). We found a considerable seasonal variation, similar to that found in Chile (Budnik et al. 1982).

This finding would indicate that the "pampa" plain is not a geographic barrier as suggested by Prevosti (1983). The absence of **D.subobscura** in the sample obtained in 1981 could have been due to: (1) the season when it was taken (not mentioned), and/or (2) colonization after 1981.

References: Brncic et al. 1981, Genetica 56: 3-9; Prevosti 1983, DIS 59:103; Budnik & Brncic 1982, Actas V Congreso Latinoamericano de Genetica 177-188.

Manousis, T.H. Aristotelian University of Thessaloniki, Greece. Larval saliva in several Drosophila species.

Salivary glands as well as isolated saliva of some developmental stages of the late third instar larvae and early prepupae of several Drosophila species were analysed by urea-polyacrylamide gel electrophoresis and the main components of the saliva of each species were localized on the zymograms (Fig. 1). There was an attempt to find correlations between the polypeptide content and the hardness of the "glue" in the fixative, the background the larvae pupate on and the degree of their phylogenetic relationship.

The number of the different saliva polypeptidic components seems to have no effect on the pupating behavior of the animals. Larvae with hard and rich in proteins content, tend to pupate on the container

TABLE

Subgroup	Drosophila species	Collection area	Stock No	main components of glue	colour of glue in fixative	hardness of glue in fixative	pupariation on the:
ananassae	varians	Los Banos-Luson Philippines	3146.53 Texas	4	white	very hard	container
	bipectinata	Thailand	3256.4	3	white	hard	container
	malerkotliana	Philippines	3146.56 Texas	2	white	hard	food
obscura	pseudoobscura		3339.5 standard Texas	2	light blue	hard	container
montium	serrata	Queensland	2404.6 Texas	4	transparent	syrup	food
	auraria	Kirishima Japan	3040.11b Texas	2	light white	very soft	food
	quadraria	Chi-Tou Taiwan	3075.1 Texas	3	white	medium soft	food
	triauraria	Tokyo, Japan	1731.1	2	white	medium soft	food
Takahashii	takahassii	Tagaytay-Luson Philippines	Texas	2	white	hard	container
willistoni	equinoxialis	Teffe Brazil	2533.3	5	white	hard	food & container

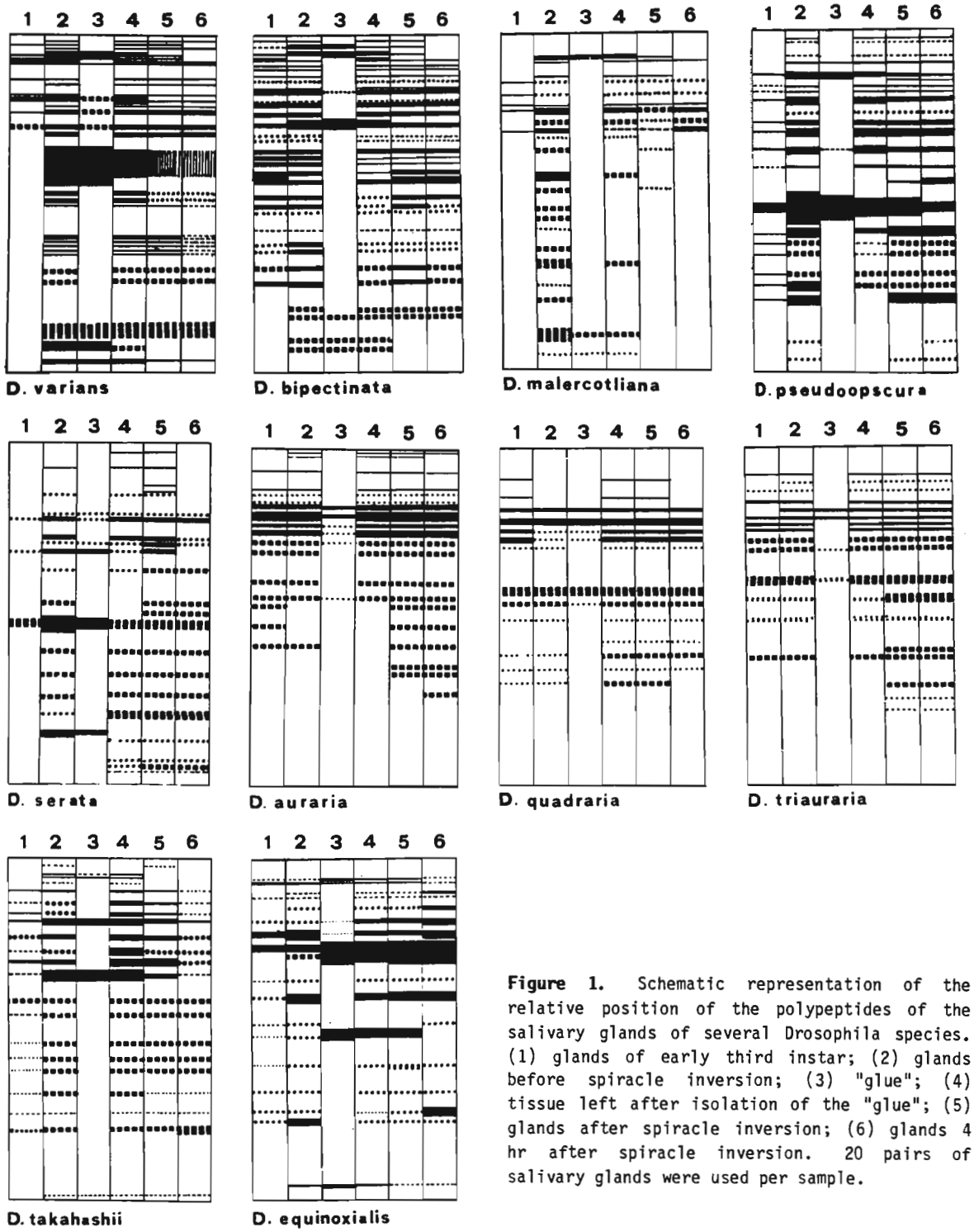

Figure 1. Schematic representation of the relative position of the polypeptides of the salivary glands of several Drosophila species. (1) glands of early third instar; (2) glands before spiracle inversion; (3) "glue"; (4) tissue left after isolation of the "glue"; (5) glands after spiracle inversion; (6) glands 4 hr after spiracle inversion. 20 pairs of salivary glands were used per sample.

and not on the food as larvae with soft or sirup-like saliva (Table 1). It seems that closely related species have similar hardness and richness of "glue" proteins and pupate on the same background. It should be noted though that in some cases there is still much saliva present in the glands even quite a few hours after formation of the puparium and even a second secretion into the lumen can be observed in the same species. This is evidence of an additional function of saliva other than the fixation of puparium on the substrate.

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References: Ashburner, M. 1970, Chromosoma 31: 356-376; Grossbach, U. 1969, Chromosoma (Berl) 28: 136-187; Korge, G. 1977, Devel. Biol. 8:339-355; Thomopoulos, G.N. & C.D. Kastritsis 1979, Wilhelm Roux's Arch. 187:329-354.