

results of Lychev (1965) according to which inbreeding decreases puff activity.

In the other experiments puffs 63E<sub>1-5</sub> and 71CE and neighboring unpuffed bands (63A and 72A) were measured with an ocular micrometer. Average ratios puff diameters to band diameters were calculated for 0 hour prepupae developed in normal culture (yeast medium, 75 larvae per bottle) and overcrowded culture (75 larvae developed in a bottle to imago hatching. Their progeny were grown on stale food in the same bottle and subsequently was used for chromosome preparations). Average ratios in these puffs are similar in prepupae samples grown in normal conditions and very crowded conditions (Table 1). Therefore, the conditions under which the culture is maintained do not influence puff size, nor its variability. To analyze puff variability in a gland, aceto-orcein-stained gland was subdivided into 3 equal parts. No differences in puff size and the rates of occurrence were found in these puffs (Table 1).

Variability observed in all the samples was mainly due to the differences between the cells within a gland. However, these differences do not depend upon cell localization (Table 1).

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Reference cited: Lychev, V.A. 1965, Tsitolgia (USSR) 7:325-333.

Hoenigsberg, H.F., L.E. Castro and H.R. von Prahl. Universidad de los Andes, Bogotá, Colombia. The *Drosophila willistoni* group from Colombia.

The geographic distribution of the *willistoni* group in tropical America raises several questions concerning sympatric speciation of certain members of some of the species of the *pauistorum* complex (Spassky, et al., 1971). Furthermore, some of the courtship and sexual

isolation within the *pauistorum* complex which break up when Andean and Interior "species" from the Yaguaracacan (Amazon River branch) come together, permit hybridization which at least temporarily swarm the recently erected sexual barriers (Hoenigsberg, et al., 1973).

Moreover, the more general problem of the sexual isolation found within several "sub-species" of the *pauistorum* complex may gain somewhat if complete collecting records are shown. The following data may serve those interested in the speciation of this group. These figures constitute the complete records from 1968 - 1971.

Localities	Collected Species										Total
	willistoni		equinoxialis		tropicalis		insularis		paulistorum		
	#	%	#	%	#	%	#	%	#	%	
AMAZONIA											
Yaguaracaca A											
Leticia (Bajo)	64	24.52	172	65.90	4	1.53	-	-	21	8.05	261
Yaguaracaca B											
Leticia (Alto)	66	13.75	40	8.33	8	1.67	-	-	366	76.25	480
Marco - Brazil	201	21.16	308	32.42	315	33.16	-	-	126	13.26	950
CAQUETA											
Valparaiso - 1	204	51.78	50	12.69	62	15.74	-	-	78	19.80	394
Valparaiso - 2	348	40.80	92	10.79	95	11.14	-	-	318	37.28	853
VAUPES											
Mitú-1 (Rio arriba)	182	25.96	166	23.68	1	0.14	-	-	352	50.21	701
Mitú-2 (Misión)	438	43.93	141	14.14	17	1.71	-	-	401	40.22	997
MACARENA											
	31	18.67	80	48.19	30	18.07	-	-	25	15.06	166

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References: Hoenigsberg, H.F. and L.E. Castro 1973, *Genetica* (in press); Spassky, B., R.C. Richmond, S. Pérez-Salas, O. Pavlovsky, C.A. Mourao, A.S. Hunter, H.F. Hoenigsberg, Th. Dobzhansky and F.J. Ayala 1971, *Evolution* 25:129-143.