

Table 3. Estimation of P_{∞} between Crete-Parnes populations.

	$0_{3+4+8}^{ST} \times 0_{3+4+8}^{ST}$	$0_{3+4} \times 0_{3+4+8}^{ST}$	$0_{3+4} \times 0_{3+4}$	Total
total no. of crosses	174	913	417	1553
no. allelic crosses	1	2	0	3
allelism frequency	0.00575 ± 0.00573			0.0019 ± 0.0011

Table 4. Estimation of Q, P, P_{∞} , p, p_{∞} , n and N_{em} in Crete-Parnes population.

	Q	P	P_{∞}	p	p_{∞}	n	N_{em}	
Crete	uncorrected Q, P, P_{∞}	0.187	0.00540	0.00190	0.00505	0.00155	645	344
	corrected Q, P, P_{∞}	0.242	0.00704	0.00575	0.00568	0.00439	228	573
	corrected Q, P	0.242	0.00704	0.00190	0.00659	0.00145	689	175
Parnes	uncorrected Q, P, P_{∞}	0.248	0.00950	0.00190	0.00904	0.00144	694	115
	corrected Q, P	0.284	0.01449	0.00190	0.01396	0.00137	730	59

Diamantopoulou-Panopoulou, E. and H. Bacoulas, Agricultural College of Athens, Votanicos, Greece. "Sex ratio" in *D. obscura*.

One isofemale line of *D. obscura* from a Greek natural population (Mt. Parnes) produced offspring of only female sex; this continued for many generations (the male parent was taken from an *obscura* stock). A treatment was undertaken to clarify if this condition was similar

to that of "sex ratio" in *D. bifasciata*. After penicillin G was given "per os" for one or two generations, the culture produced both sexes (males and females vs. females only) progressively to fifty-fifty percent. After enough time the culture began to produce again only female flies.

An attempt to find the causal factor, spirochaete in the haemolymph of the female fly, gave no results.

Doane, W.W. Arizona State University, Tempe, Arizona. Midgut amylase activity patterns in *Drosophila*: nomenclature.

A control gene for tissue specific expression of α -amylase in the adult posterior midgut (PMG) in *D. melanogaster* was located at 2-80 \pm by Abraham and Doane (1976, 1978). This gene, called map for midgut activity pattern, lies approxi-

mately two crossover units to the right of the structural gene(s) for the enzyme (Amy). Strain specific differences in the regional expression of amylase in the PMG were attributed to allelic differences at the map locus. Three spatially different PMG patterns were found in an initial survey of isogenic laboratory strains. These patterns, which reflect the cellular dis-