

Yannopoulos, G. University of Patras, Greece. Seasonal differences of spontaneous autosomal recessive lethal mutation frequencies in a wild Greek *Drosophila melanogaster* population.

The present communication constitutes a preliminary report of a much wider investigation on the polymorphism of spontaneous autosomal recessive lethal mutations in a wild *Drosophila* population of S.W. Greece.

Behnia, A. and G. Koliantz in a recent communication (1972) reported that they have not been able to observe seasonal changes of lethal gene frequencies in a natural population of Tehran.

The data presented here come from a place called Koleika which lies at a distance of about 8 km from Patras. (The town of Patras is situated in the N.W. of Peloponnesus.) Flies were collected during three seasons, namely summer, spring and autumn. Captured males were individually mated with virgin Cy L⁴/Pm females in order to detect in the F₃ the frequencies of second chromosomes bearing lethals. Table 1 shows the significant differences found be-

Table 1. Seasonal differences in spontaneous autosomal recessive lethal mutation frequencies.

Season of capture	No. of parents captured	No. of chromosomes tested in the F ₃	No. of lethals	Lethals (percent)	No. of parents which yielded lethals	No. of parents which yielded more than one lethal	χ^2 1 d. f.
Summer (June)	236	1127	374	33.19	114	100	$\left. \begin{array}{l} \chi^2 = 2.55 \\ P > 0.05 \end{array} \right\} \left. \begin{array}{l} \chi^2 = 11.7 \\ P < 0.01 \end{array} \right\}$ $\left. \begin{array}{l} \chi^2 = 4.7 \\ P < 0.05 \end{array} \right\}$
Spring (April)	231	933	341	36.55	89	72	
Autumn (November)	152	735	307	41.77	55	53	

tween the frequencies detected from summer and autumn and spring and autumn collections, respectively. No statistically significant differences were found between the summer and spring collections. It is also worthwhile mentioning that rates of spontaneous autosomal recessive lethal mutations found in northern Greece by other research workers (Pelecanos, M. and A. Pentzos-Daponte 1970) in autumn collections, is much lower as compared with ours. Further investigation and analysis of the data presented here are in progress.

References: Behnia, A. and G. Koliantz 1972, DIS 48:80; Pelecanos, M. and A. Pentzos-Daponte 1970, DIS 45:79.

Miller, D.D. and J. Jaenike. University of Nebraska, Lincoln, Nebraska; Princeton University, Princeton, New Jersey. Recent extensions of the known geographical ranges of "eastern" and "western-northern" *D. athabasca* based on salivary gland chromosome sequences.

As speculated by Miller and Voelker (Journ. Hered. 63:3-10, 1972), the zone of overlap of "eastern" and "western" (better "western-northern") *D. athabasca* probably extends eastward from Minnesota to New England (suggested by earlier studies on Y chromosome types, copulation durations, crossability). However, salivary gland chromosome material with which to determine the presence of the two kinds of *athabasca* together had come only from Minnesota. During the summer of 1972 one of us (J.J.) collected *D. athabasca* in Maine (mainland and islands just east of Penobscot Bay), and these col-

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