



A preliminary report on *Drosophila* fauna of Lahore, Pakistan.

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Despite the fact that luxuriant flora and suitable climatic conditions exist in Pakistan for propagation of *Drosophila* species, little is known about *Drosophila* fauna of Pakistan. A few people have initiated the work in this field in Pakistan.

With a view to surveying *Drosophila* fauna of whole Pakistan, a project was begun during 1990-1992 in the Department of Biological Sciences, Quaid-e-Azam University, Islamabad, under the supervision of Dr. Mahmud Ahmad. As a part of that project, Din and Mazhar conducted a survey of Islamabad (33° 43'N, 73° 04'E) and identified ten *Drosophila* species. Another attempt was made by Shahjehan and Iqbal in NWFP (34.00°N 71.32°E) and, as a result, nine species had been reported.

Another attempt was made during 1990 to 1991 to explore *Drosophila* fauna of Lahore, Pakistan (31° 32' 59"N, 74° 20' 37"E). Baits were tried with different fruits such as banana, apple, guava, plum, muskmelon, orange, and lemon. Of all these fruits, fermenting bananas with a little yeast extract were found to be most effective bait. Net sweeping over bins containing peeling and decaying fruits also proved quite useful to collect large numbers of flies. It was found that *Drosophila* flies were most abundant during April, September, and October. Cultures were made by using single female trapped from the wild, and their progeny was used to identify species. As a result ten species were identified on the basis of morphological criteria, which are as follows: *D. busckii*, *D. setaria*, *D. immigrans*, *D. melanogaster*, *D. takahashii*, *D. nepalensis*, *D. malerkotliana*, *D. ananassae*, *D. jambulina*, and *D. brevis*. The first three of these belong to subgenera *Dorsilopha*, *Pholadoris*, and *Drosophila*, respectively, and each of the remaining seven belongs to *melanogaster* species group of subgenus *Sophophora*. In order to verify identification further, seven species were studied for their reproductive isolation and mitotic as well as salivary gland chromosome complements. The chromosome number and morphology of each of these species were found to be in full conformity with already published literature on chromosomes of these species.

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References: Amin ud Din, Muhammad, K. Mazhar, S. Haque, and M. Ahmed 2005, Dros. Inf. Serv. 88: 6-7; Shahjehan, Ia, Hu Khan, and F. Iqbal 2004, Pakistan Journal of Zoology 36(4): 339-341.



Sucrose improves sexual performance in the male fruit fly.

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We are interested in the regulation of sexual behavior in *Drosophila* (Terhzaz *et al.*, 2007) and would like the males we use in our experiments to be in good physiological shape. From the extensive work by Dethier (1976), we know that male blow flies feed essentially on sugar water and