

of 2,4-dinitrophenyl-hydrazone shows carbonyl group at the sidechain. And the ultraviolet absorption spectrum of neosepiapterin resembles that of isosepiapterin. These data indicate that the structure of neosepiapterin is 2-amino-4-hydroxy-6-acetyl-7,8-dihydropteridine.

The distribution of neosepiapterin in sepia fly remains unknown, but it is supposed to be contained in the eye since sepiapterin and isosepiapterin are the eye pigments. Neosepiapterin was not detected when pterins were extracted from a large amount (1.2 kg) of wild type flies. Many derivatives of pteridine, which have three carbons at the sidechain on C-6 of the pteridine ring, have been isolated from natural sources. But those with two carbons have never been isolated before. Therefore, the occurrence of reduced 6-acetyl pterin suggests an unknown pathway of pteridine metabolism. Studies on the origin of a two carbon sidechain of the pigment is under investigation.

References: Forrest, H.S., C. Van Baalen and J. Myers 1959, Arch. Biochem. Biophys. 83: 508; Fukushima, T. and M. Akino 1968, Arch. Biochem. Biophys. 128:1; Nawa, S. 1960, Bull. Chem. Soc. Japan 33:1555; Tsusue, M. and M. Akino 1965, Zool. Mag. Tokyo 74:91; Viscontini, M. and E. Möhlmann 1959, Helv. Chim. Acta 42:836; Ziegler-Günder, I. and E. Hadorn 1958, Z. Vererbungslehre 89:235.

Bächli, G. University of Zürich,
Switzerland. Drosophilidae of Kanha
National Park, M.P., India.

Drosophilidae were collected by net sweeping
over banana baits during the period of August
26 to September 18, 1972. The 8 collection
sites are located in the center of the Kanha
National Park, about 200 km northeast of Nagpur.

The altitude is around 600 m above sea level. The species collected and the number of specimens are listed in Table 1. *Drosophila* (*Scaptodrosophila*) sp. and *Hypselothyrea* sp. are new species, while *Leucophenga flavicosta*, *Lissocephala sabroskyi* and *Drosophila minima* are reported for the first time from India. Domestic and cosmopolitan species were mostly absent. In the collection period (end of monsoon season), the ecological conditions of the center of the Park are therefore considered non-domestic.

Table 1. List of species collected, in order of frequency.

Species	Number of Specimens	Species	Number of Specimens
<i>D. malerkotliana</i>	10,643	** <i>D. (Scaptodros.)</i> sp.	6
<i>D. jambulina</i>	4,115	Leuc. albicincta	4
<i>D. paratriangulata</i>	1,349	* Leuc. flavicosta	4
<i>D. albomicans</i>	387	** <i>Hypselothyrea</i> sp.	2
<i>D. takahashii</i>	373	* <i>Lissocephala sabroskyi</i>	2
<i>D. latifshahi</i>	62	Leuc. guttiventris	1
<i>D. kikkawai</i>	26	<i>D. silvalineata</i>	1
<i>D. chandrabrahiana</i>	9	<i>D. bipectinata</i>	1
		* <i>D. minima</i>	1

* first record from India

** new species

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University of California, San Diego, La
Jolla, California. Three dimensional
measurements of spermatid nuclei in *Drosophila melanogaster* from electron micrographs of serial cross sections.

We have developed a method for measuring the volume and morphology of spermatid nuclei. Testes are prepared for electron microscopy by the method of Tokuyasu, Peacock and Hardy (Z. Zellforsch. 124:479-506, 1972). Serial sections of an entire bundle of nuclei of spermatids in the early coiling stage are cut and the thickness of each is estimated from its interference

color. Electron micrographs of selected sections are scanned with a digital densitometer connected to an IBM 1800 computer (Xuong, J. Physics E. 2:485, 1969). A program written in