

To, Prof. T. Okada

with
author's best

regards

J. P. Gupta

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ORIENTAL INSECTS

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D. ORISSAENSIS, A NEW SPECIES OF *DROSOPHILA*
FROM ORISSA, INDIA

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ABSTRACT. Ten species of *Drosophila* were collected from Orissa, representing five subgenera. One of them, *D. orissaensis*, sp. nov., belonging to the subgenus *Drosophila*, is described.

***Drosophila (Drosophila) orissaensis*, sp. nov. (Figs. A-G)**

Male and female: Arista with about 3 dorsal and 2 ventral branches in addition to the terminal fork. Antennae light brown; third segment darker. Front including ocellar triangle dark brown, white lining around ocellar triangle, orbits also with white lining along eye margin. Carina whitish, narrow and high. Anterior reclinate orbital more than 0.5 other two. Second oral not differentiated. Palpi dark brown, with few prominent setae. Cheek dark brown, the greatest width of cheek from base of oral to eye border about 1/8 greatest diameter of eye. Eyes bright red.

Acrostichal hair regular, in six rows, no prescutellars. Anterior scutellars convergent. The distance from anterior dorsocentral to posterior dorsocentral about 0.5 the distance between two anterior dorsocentrals. Mesonotum and scutellum brown, former with five complete white stripes, the lateral two continuing along the lateral edges of scutellum, and two incomplete stripes on either side of middle one joined with laterals through transverse connection (Fig. 1A). Thoracic pleura dark brown, with white stripes. Sterno-index about 0.5. Legs brownish-yellow; coxa and femur dark brown, pre-apicals on all three tibiae; apicals on first and second tibiae.

Wings (Fig. 1G): Dusky, first costal section light brown basally. C-index about 2.0; 4V-index about 1.58; 4C-index about 1.0; 5X-index about 1.5. Single bristle at the apex of first costal section; C₃ fringe about 0.68. Halteres yellow.

Abdominal tergites light dull brown, with faint and narrow bands on anterior margin.

Length: Male body, 2.3 mm; female body 2.6 mm.

Periphallic organs (Fig. 1B): Genital arch large, with about 16 bristles running from top of posterior margin along that margin down to toe, heel roundish, toe produced into a pointed process. Anal plate large, nearly oval, fused with genital arch at lower half. Clasper one, primary teeth about 6 arranged in a straight row; lower portion with irregularly distributed teeth, about 11-12, 2 of them slightly long (Fig. 1E). *Decasternum* (Fig. 1F): Pale

yellow, median piece rounded and narrowing apically. *Phallic organs* (Fig. 1D) : Aedeagus dark yellow, fused and apically rounded. Anterior paramere elongated, with inward median projection and with about 3 apical sensilla. Posterior paramere oblong, pointed at tip. Novasternum bilobed, each lobe with a pair of weak submedian spines. Ventral fragma basally rounded. *Egg-guide* (Fig. 1C) : Lobe pale, distally narrowing with tapering end, with about 14 marginal teeth, ultimate tooth stout and largest. Basal isthmus very small.

Holotype ♂, INDIA : ORISSA : Jatili near Padmapur, Berhampur District, 17.x.1970 (K.K. Panigrahi), mounted on slides. In the Department of Zoology, Banaras Hindu University, Varanasi, India. *Paratypes* : 4 ♀♀, same data as for holotype.

Relationships : It closely resembles *Drosophila (Drosophila) grandis* Kikkawa and Peng (1938) from Japan, in having striped mesonotum and thoracic pleura but distinctly differs from it in having broad and apically rounded aedeagus, toe produced into a pointed process, primary clasper with two sets of teeth, egg-guide lobe distally narrowing with tapering end, and in many other notable characters.

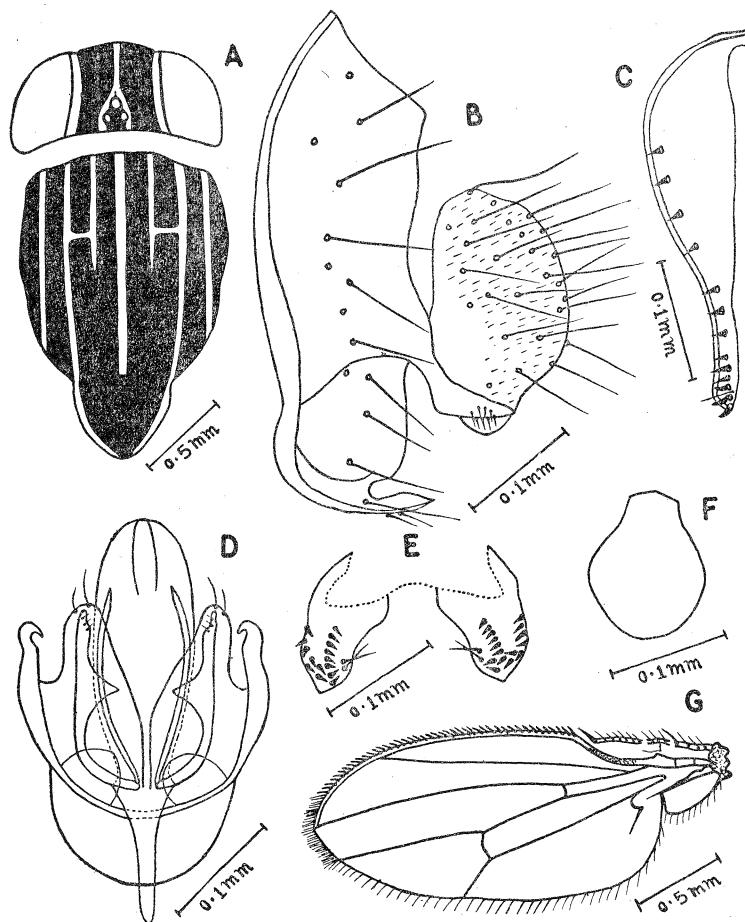
DROSOPHILIDS FROM ORISSA

<i>Name of species</i>	<i>Number of specimens</i>
1. <i>D. (Sophophora) malerkotliana</i>	102
2. <i>D. ,, bipectinata</i>	14
3. <i>D. ,, seguyi</i>	4
4. <i>D. ,, ficusphila</i>	2
5. <i>D. ,, kikkawai</i>	5
6. <i>D. (Tanygastrella) gracilis</i>	3
7. <i>D. (Dorsilopha) busckii</i>	3
8. <i>D. (Scaptodrosophila) bambuphila</i>	7
9. <i>D. (Drosophila) nasuta</i>	41
10. <i>D. ,, orissaensis</i>	5
Total	186

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REFERENCE

KIKKAWA, H. AND F.T. PENG 1938. *Drosophila* species of Japan and adjacent localities. *Japan J. Zool.* 7 : 507-552.



Drosophila orissaensis, sp. nov. : A, head and thorax; B, periphallal organs; C, egg-guide; D, phallic organs; E, primary claspers; F, decasternum; G, male wing.

**DIRECTORY OF ZOOLOGICAL
TAXONOMISTS OF INDIA**

Dr. V.C. Kapoor, Associate Professor of Zoology, Punjab Agricultural University, Ludhiana, is bringing out a "Directory of Zoological Taxonomists of India". He has sent a proforma to various zoological taxonomists of India to furnish the information on their groups of specialisations in which they would be able to identify the material. This information will be of considerable use to all workers who are facing great difficulty in getting the diversified material identified. Many persons have already sent the required information. He requests that those who have not yet sent the required information may do so at their earliest so that all Taxonomists are included in the directory.