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11
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FURTHER RECORDS OF A NEW AND ONE KNOWN SPECIES OF *DROSOPHILA* FROM ARUNACHAL PRADESH, INDIA

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The present communication deals with the description of a new species, *D. (Scaptodrosophila) fringefera*, and also gives a new distribution record of one more known species, *D. (Drosophila) siamana* Hihara and Lin from India.

(Key words: new *Drosophila*, Arunachal Pradesh)

During last few years the results of our surveying studies in northeast region of the Indian subcontinent have indicated that the family Drosophilidae is fairly distributed in this region (Singh and Gupta, 1977; Gupta and Singh, 1979; Dwivedi and Gupta, 1979, 1980; Dwivedi et al., 1979; Singh and Gupta, 1981; Gupta and Kumar, 1986; Kumar and Gupta, in press). However, some of the states in this region still await exploration. This paper deals with the description of a new species, *D. fringefera* and also gives a new distribution record of one more known species, *D. siamana* Hihara and Lin from India.

Genus *Drosophila* Fallen

Drosophila Fallen, 1823, *Geomyzides Sueciae* 2:4. Type species; *Musca funebris* Fabricius; Sweden.

Subgenus *Scaptodrosophila* Duda.

Scaptodrosophila Duda, 1923, *Ann. Mus. Nat. Hung.* 20:37. Type species: *Scaptodrosophila scaptomyzoidea*; New Guinea.

Drosophila fringefera sp. nov.

cf *D. (D.) nigriculter* Okada, 1988. *Ent. Scand. Suppl.* 30:140
Body length : 3.5 mm (♂); 3.64 mm (♀).

Head, ♂ and ♀ : Arista with 3 sparsely placed dorsal and 1 ventral branches in addition to the small terminal fork. Antennae with second segment pale brown; third segment orange brown. Frons including ocellar triangle brown. Orbitals in ratio of 7:3:9, anterior reclinate orbital equidistantly placed between the other two. Second oral bristle not differentiated. Palpi yellowish brown, with 1 apical and 2-3 marginal setae. Carina yellow, high and broadened below. Face and cheek brown, greatest width of cheek one-seventh greatest diameter of eye. Clypeus pale brown. Eyes dark red.

Thorax: Acrostichal hairs regular, in eight rows above dorsocentrals, prescutellars not clearly distinguishable from acrostichal hairs. Anterior scutellars convergent; posterior scutellars crossing each other. Anterior dorsocentral 3/4 length of posterior dorsocentral; distance between anterior and posterior dorsocentral 1/3 of the distance between two anterior dorsocentrals. Mesonotum and scutellum brown. Humeral two, equal. Propleural bristles absent. Thoracic pleura yellowish brown. Sternite index 0.7.

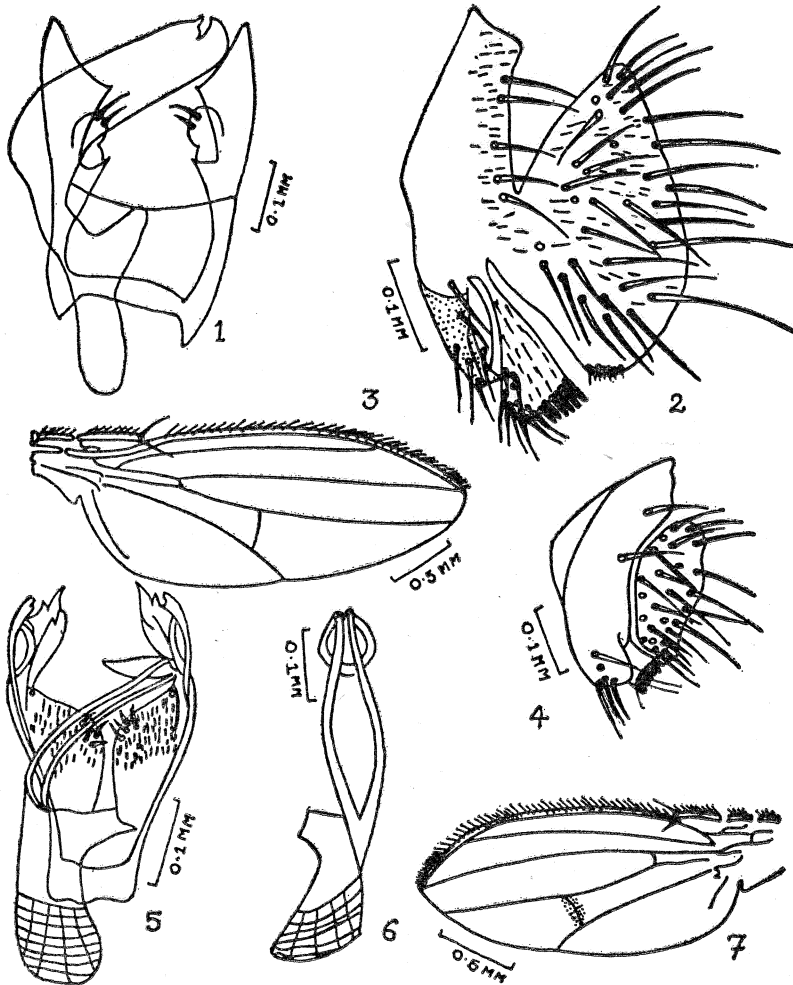
Legs: Coxae and proximal portion of femora light brown, remaining segments of all legs little darker. Preapicals on all three tibiae; apicals on first and second tibiae.

Abdomen : tergites pale brown, with broad, dark brown bands.

Wings (Fig. 3) : Clear. Two equal bristles at the apex of first costal section. C_3 fringe large.

C-index	4V-index	4C-index	5X-index
2.85	1.66	0.81	1.09

Periphallalic organs (Fig. 2) : Epandrium dark brown, elongate pubescent, upper portion with 5 bristles, lower portion with 7 bristles. Surstylus large, broadened distally, with 6 large black teeth arranged in a straight row on its upper half, and with 12 large setae ventrally. Cerci large, pubescent, fused with epandrium, and with



(B)
Figs. 1-3. *Drosophila (Scaptodrosophila) fringepera* sp. nov. 1. Phallic organs; 2.Periphallalic organs; 3. Male wings.

Figs. 4-7. *Drosophila siamana*. 4.Periphallalic organs; 5. Phallic organs; 6. Adeagus; 7. Male wing.

35 large bristles, lower tip with 8-7 small setae.

Phallic organs (Fig. 1): Aedeagus yellowish brown, large, bilobed at basal half. Anterior gonapophyses oval, each with two sensilla. Ventral fragma quadrate.

Holotype: ♂, INDIA: ARUNACHAL PRADESH, Tai, West Siang Dist. November, 1983 (Coll. Gupta and Gupta).

28657
genitalia missing
Paratypes: 1 ♂, 1 ♀, same locality and collector as holotype. Deposited in the "Drosophila Collection" of the Department of Zoology, Banaras Hindu University, Varanasi, India and Department of Biology, Tokyo Metropolitan University, Tokyo, Japan.

Relationships and comments: This species has been placed in the subgenus *Scaptodrosophila* of the genus *Drosophila* wherein it somewhat resembles the members of the *inornata* group in showing reduced arista and in not having propleural and prescutellar bristles, but distinctly differs from them in having large third costal fringe as well as in the details of male genital structures.

***Drosophila (Drosophila) siamana* Hihara and Lin**

Drosophila siamana Hihara and Lin, 1984. Bull. Inst. Zool. Academia Sinica 23: 205-209.

Head O and O : General features as described by Hihara and Lin (1984).

Wings (Fig. 7): Clear, posterior cross vein mildly fuscous.

C-index	4V-index	4C-index	5X-index
4.0	1.2	1.9	1.6

Periphallalic organs (Fig. 4) : Epandrium yellowish brown, having uniform width throughout, incised at the insertion of surstylus, upper portion with 2 bristles, lower portion with 5-6 bristles. Surstylus small, triangular, with 8 small black teeth arranged in a concaved row on outer margin and several fine setate below. Cerci elongate, separated from epandrium, with about 26 bristles.

Phallic organs (Figs. 5 and 6): Aedeagus yellowish brown, bifid and with a membranous structure apically, bilobed at basal half. Anterior gonapophyses large, each with four sensilla. Hypandrium without submedian spines. Ventral fragma quadrate, longer than broad.

Specimens examined: 60 ♂♂, Tai, Arunachal Pradesh, Sept., 1983; 10 ♂♂, Medziphema, Nagaland, August, 1987.

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