

FURTHER ADDITION TO THE INDIAN FAUNA OF DROSOPHILIDAE

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ABSTRACT. Taxonomic account of seven species of Drosophilidae is given. Three of them are described as new, while the remaining four species are recorded for the first time from India. Indian species of Drosophilidae excluding the genus *Drosophila* are listed and keys to genera and species are provided.

Recent studies have provided considerable data on Indian species of *Drosophila*, but the allied genera of Drosophilidae have been rather neglected. Gupta (1974) attempted a comprehensive review of the Indian species of Drosophilidae excluding the genus *Drosophila*, but since then many more species have been added (Vaidya and Godbole, 1973, 1976; Singh and Gupta, 1974; Singh, 1976). In this paper we review further information on this subject in addition to providing descriptions of seven more species of Drosophilidae, recording two genera, *Amiota* and *Liodrosophila*, for the first time from India.

KEY TO INDIAN GENERA OF DROSOPHILIDAE

The key includes all genera of Drosophilidae recorded so far from India, though all were not collected by the present authors.

- 1. Body often with metallic colour 2
 Body without metallic colour 3
- 2. Wings typically with a black stripe running diagonally across base from costal break to alula. Fore femora without a row of short black spinnules *Lissocephala* Malloch
 Wings without a black stripe. Fore femora often with a row of short black spinnules *Liodrosophila* Duda
- 3. Normally one sternopleural bristle present and postvertical bristles absent *Hypselothyrea* de Meijere
 Normally three sternopleural bristles, and postvertical bristles present 4
- 4. Arista bare or pubescent *Gitonides* Knab
 Arista plumose, with several long branches 5
- 5. Species often with milky white areas on face, humeri and below wing bases *Amiota* Loew
 Species without white areas on face, humeri and below wing bases 6
- 6. Small cuneiform bristles on second and third tarsi present . *Zaprius* Coquillett
 Small cuneiform bristles on second and third tarsi absent 7

7. Periorbit much broadened anteriorly. Anterior dorsocentrals situated near suture *Microdrosophila* Malloch
 Periorbit not much broadened anteriorly. Anterior dorsocentrals situated much behind suture 8
8. Distal costal break deeply incised, costa forming a blackened lappet *Mycodrosophila* Oldenberg
 Distal costal break normal, costa not forming a blackened lappet 9
9. Mid tibia with a row of long stout bristles along outer margin . . . *Stegana* Meigen
 Mid tibia without a row of long stout bristles along outer margin 10
10. Arista usually with one or two ventral branches. Body and wings somewhat slender *Scaptomyza* Hardy
 Arista usually with several ventral branches. Body and wings not slender . . . 11
11. Discal and second basal cells confluent , 12
 Discal and second basal cells separated 13
12. Third costal section with thorn-like spines *Leucophenga* Mik
 Third costal section without thorn-like spines *Paraleucophenga* Hendel
13. Anterior reclinate orbital as long as proclinate, situated before proclinate
 *Chymomyza* Czerny
 Anterior reclinate orbital much shorter than proclinate, situated behind proclinate
 *Drosophila* Fallén

Genus *Amiota* Loew

Amiota Loew, 1862, *Berlin. Ent. Zeit.*, 6 : 229. Type-species : *Amiota leucostoma* Loew; by designation of Coquillett, 1910, *Proc. U.S. Natl. Mus.*, 37 : 505.

Small to large species, often with milky white areas on face, on humeri and below wing bases; thorax uniformly dark brown; anterior reclinate orbital well developed.

1. *Amiota shillongensis* Singh and Gupta, sp. nov. (Figs. 1 A-D)

Male and female : Male and female dark brown. Mean body length, males (5 males) 2.83 mm; females (2 females) 3.00 mm.

Head, ♂ and ♀ : Arista with 5-6 dorsal branches only. Antennae with second segment brown; third segment yellowish brown. Frons including ocellar triangle dark brown, with a pair of white anteriorly convergent longitudinal stripes. Orbitals in the ratio of 23 : 9 : 22. Face and cheek brown, greatest width of cheek from base of oral to eye border one-seventh greatest diameter of eye. Palpus yellowish with one apical seta. Second oral not well differentiated. Eyes dark red. *Thorax*, ♂ and ♀ : Acrostichal hairs regular, in 8 rows in front of dorsocentrals. Prescutellars well developed. Anterior scutellars convergent. Distance from anterior dorsocentral to posterior dorsocentral one-third distance between two anterior dorsocentrals. Mesonotum pale yellow, with broad dark brown patches. Scutellum pale, brownish at margin. Thoracic pleura dark brown. Sterno-index 0.94. *Wings*, ♂ and ♀ (Fig. 1 C) : Clear, veins dark brown. Indices : C-index 2.45; 4 V-index 2.87; 4 C-index 1.46; 5 × - index 0.97. Heavy bristles on basal three-fourth of third costal section. Halteres yellow. *Legs* : Pale with dark brown bands, preapicals on all tibiae; apicals on first

and second tibiae. *Abdomen*, ♂ and ♀ : 2-3 tergites with dark brown medially interrupted broad apical bands, 4th tergite band somewhat medially projected, 5-6 tergites completely black. 2-4 tergite bands laterally enclosing yellowish rounded areas.

Periphalllic organs (Fig. 1 A) : Genital arch dark brown, dorsally broadened, pubescent, and with 15 bristles scattered on upper half. Clasper quadrate, directed ventrally, with a row of 14-15 short stout black teeth on ventral margin, and dorsally with numerous fine setae. Anal plate oval, pubescent, with numerous large thin bristles dorsally, a few small bristles ventrally. *Phallic organs* (Fig. 1D) : Aedeagus brown, slender and curved. Anterior parameres large, apically each with 4 sensilla, subapically with numerous fine setae. Posterior parameres small, apex swollen and rounded, with several serrations. *Egg-guides* (Fig. 1 B) : Lobe rounded apically, with numerous short and a few long setae ventrally. Basal isthmus reduced.

Holotype ♂, INDIA : MEGHALAYA : Shillong district : Khasi Hills : Motinagar forest, 9.iv.1976, Coll. B. K. Singh and J.P. Gupta. Deposited in the Department of Zoology, Banaras Hindu University, Varanasi. *Paratypes* : 4 ♂ and 2 ♀, same locality and collectors as holotype. In the Department of Zoology, B.H.U., Varanasi and Department of Biology, Tokyo Metropolitan University, Tokyo, Japan.

Distribution : India : Meghalaya.

This species belongs to the subgenus *Phortica* of the genus *Amiota*.

Genus *Liodrosophila* Duda

Liodrosophila Duda, 1922, *Arch. Naturgesch.*, A 88 (4) : 153. Type-species : *Camilla coeruleifrons* de Meijere; Java.

Body shiny, often with metallic colour; postvertical bristles small; acrostichal hairs in 2-8 rows; no prescutellars; scutellum dark brown to black, fore femora often with a row of short black spinnules; wing clear.

KEY TO INDIAN SPECIES OF *LIODROSOPHILA*

1. Body light brown to orange brown 2
 Body dark brown to black *angulata* Dwivedi and Gupta, sp. nov.
2. Fore femur with a row of 8 short spinnules *rufa* Okada
 Fore femur with a row of 13-15 short spinnules
 *penispinosa* Dwivedi and Gupta, sp. nov.

2. *Liodrosophila rufa* Okada (Figs. 1 E-H)

Liodrosophila rufa Okada, 1974, *Mushi*, 48 (5) : 41. Type-locality : Hong Kong.

Head, ♂ and ♀ : Arista with 4-5 dorsal and 2 ventral branches in addition to terminal fork. Carina brown, high, broader below. Second oral thin, approximately half length of vibrissa. *Thorax*, ♂ and ♀ : Acrostichal hairs regular, in 6 rows. Anterior scutellars convergent. Distance from anterior

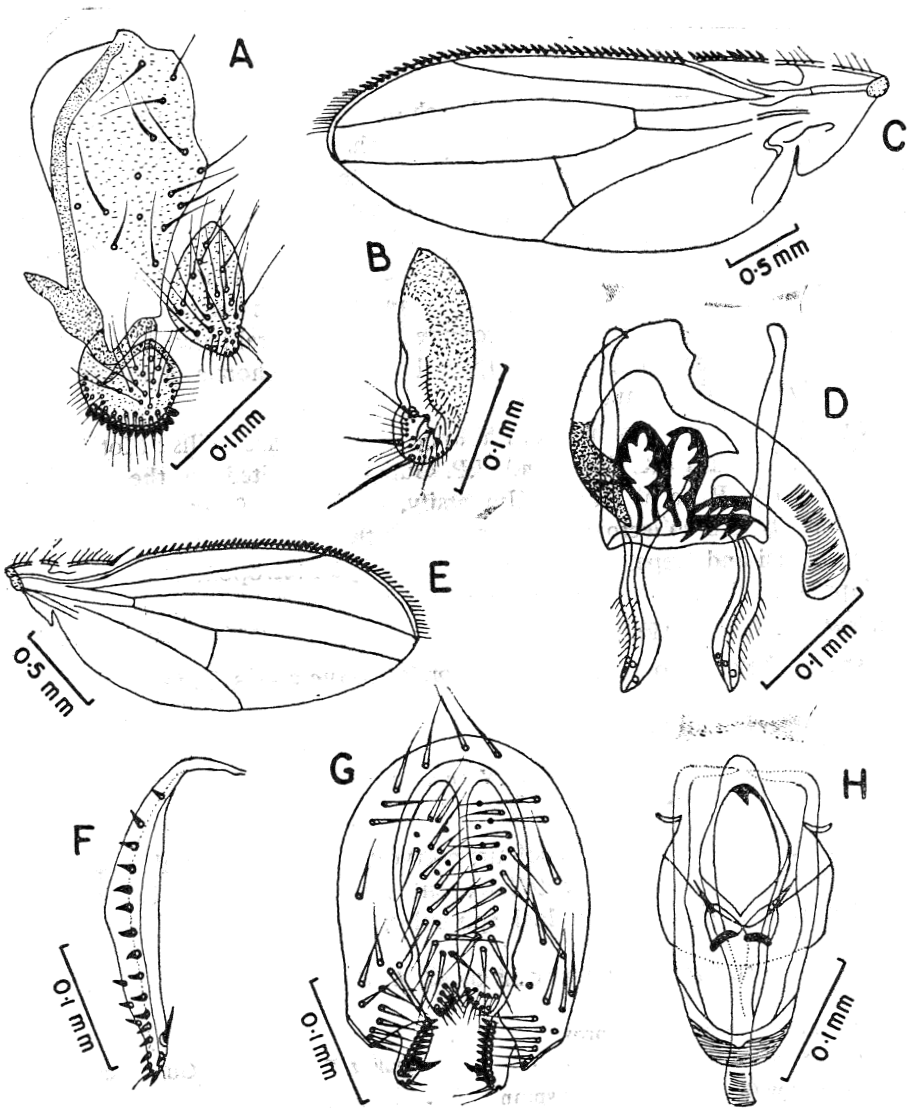


Fig. 1. (A-D) : *Amiota shillongensis*, sp. nov. : A, periphallic organs; B, egg-guide; C, wing; D, phallic organs.
 (E-H) : *Liodrosophila rufa* : E, wing; F, egg-guide; G, periphallic organs; H, phallic organs.

dorsocentral to posterior dorsocentral approximately half distance between two anterior dorsocentrals. Thoracic pleura black. *Wings*, ♂ and ♀ (Fig. 1 E) : Hyaline. Indices : C-index 1.72; 4V-index 2.15; 4C-index 1.43; 5X-index 1.7. *Legs* : Yellowish brown, fore femur with a row of 8 short spinules. Other details as described by Okada (1974).

Periphallic organs (Fig. 1 G) : Genital arch pale brown, with 18 bristles. Clasper triangular, pale yellow with 12 black teeth arranged in a straight row, a median tooth twice as long as others. Anal plate pale yellow, oblong, with 23 large bristles and several small setae at lower tip. *Phallic organs* (Fig. 1 H) : Aedeagus yellowish brown, fusiform, apex with a short claw dorsally. Hypandrium with a pair of small submedian spines. Ventral fragma rounded at tip. *Egg-guides* (Fig. 1F) : Lobe yellowish brown, narrow, with 19 marginal and 3 discal teeth. Basal isthmus narrow and long.

Specimens examined : INDIA : MEGHALAYA : Shillong district, 4 ♂, 3 ♀, xi. 1976, Coll. Dwivedi and Gupta.

Distribution : Hong Kong and India (new record).

3. *Liodrosophila penispinosa* Dwivedi and Gupta, sp. nov. (Figs. 2 A-D)

Male and female : Male and female light brown to orange brown. Mean body length, males (2 males) 1.75 mm, females (3 females) 1.97 mm.

Head, ♂ and ♀ : Arista with 4-5 dorsal and 2 ventral branches in addition to terminal fork. Antennae with second segment yellowish brown. Frons including ocellar triangle glossy dark brown, frontal shield approximately quadrate. Carina orange brown, high and confined to upper portion only. Anterior reclinate minute, proclinate two-thirds length of posterior reclinate. Second oral thin and half length of vibrissa. Palpi brown, with one apical seta. Face and cheek brown, greatest width of cheek from base of oral to eye border one-sixth greatest diameter of eye. Clypeus dark brown. Eyes dark red. *Thorax*, ♂ and ♀ : Acrostichal hairs regular in 6 rows. Anterior scutellars convergent; posterior scutellars crossing each other. Anterior dorso-central two-thirds length of posterior dorsocentral; distance from anterior dorsocentral to posterior dorsocentral half distance between two anterior dorsocentrals. Mesonotum and scutellum unicolorous, shining orange brown. Thoracic pleura orange brown. Sterno-index 0.61. *Wings*, ♂ and ♀ (Fig. 2 D) : Hyaline. Indices : C-index 1.71; 4 V-index 2.0; 4 C-index 1.39; 5 × -index 1.66. One bristle at the apex of first costal section; heavy bristles on basal half of third costal section. Halteres whitish yellow. *Legs* : Yellow, coxae and femora of prothoracic legs brownish, fore femur with a row of 13-15 short spinules, preapicals on all tibiae; apicals on first and second tibiae. *Abdomen*, ♂ and ♀ : Tergites with broad brownish apical bands.

Periphallic organs (Fig. 2 C) : Genital arch brownish, pubescent, upper portion with 3-4 bristles, lower portion with 10 bristles. Clasper with 12-13 short black teeth arranged in a concave row on outer margin. Anal plate

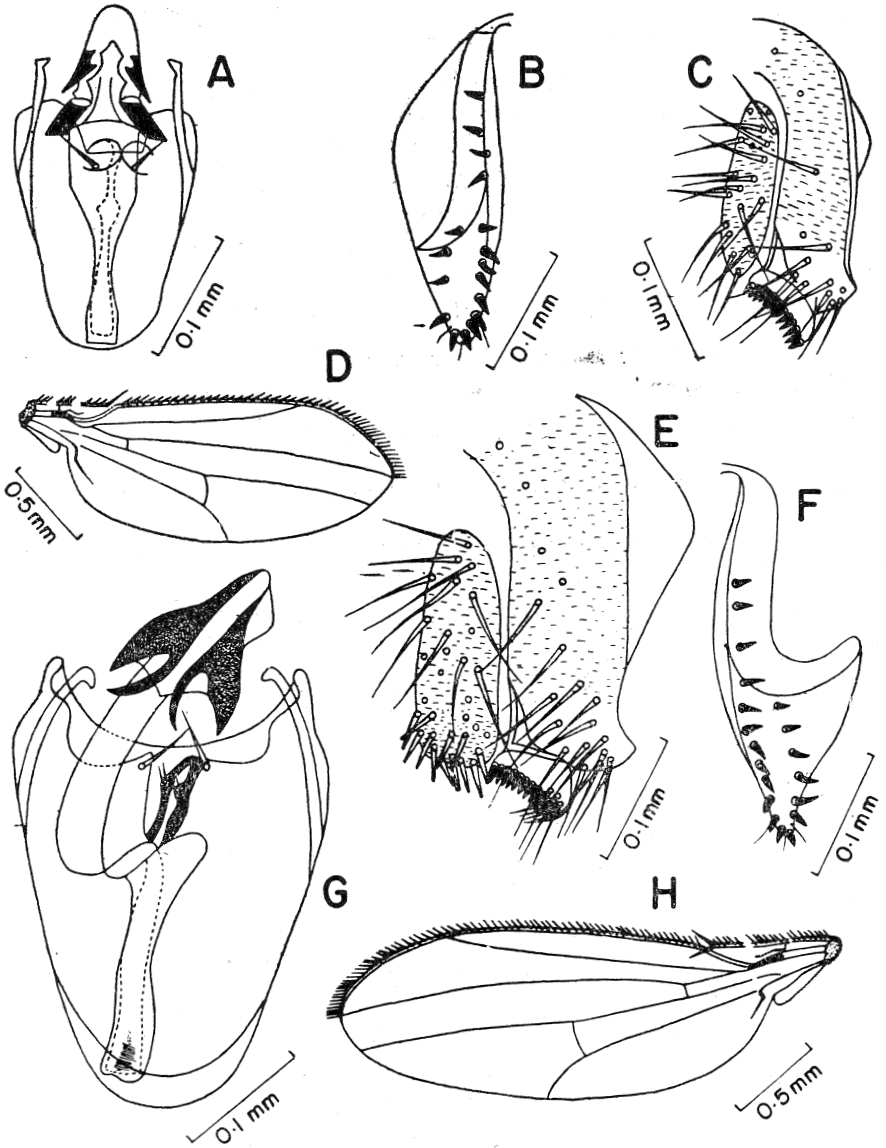


Fig. 2. (A-D) : *Liodrosophila penispinosa*, sp. nov. : A, phallic organs ; B, egg-guide ; C, peripheral phallic organs ; D, wing.
 (E-H) : *Liodrosophila angulata*, sp. nov. : E, peripheral phallic organs ; F, egg-guide ; G, phallic organs ; H, wing.

elongate, pubescent, with 21 bristles. *Phallic organs* (Fig. 2 A) : Aedeagus yellowish brown, short and broadly rounded apically, with two pairs of black spine like processes laterally. Basal apodeme of aedeagus longer than aedeagus. Caudal margin of hypandrium with prominent median depression and a pair of short stout submedian spines. Ventral fragma longer than broad. *Egg-guides* (Fig. 2 B) : Lobe pale yellow, pointed apically, with 14 marginal and 3-4 discal brownish teeth. Basal isthmus short.

Holotype ♂, INDIA : MEGHALAYA : Shillong district : Motinagar forest, Khasi Hills, 3.xi.1976, Coll. Y.N. Dwivedi and J.P. Gupta. Deposited in the Department of Zoology, Banaras Hindu University, Varanasi. *Paratypes* : 1 ♂ and 3 ♀, same locality and collectors as holotype. In the Department of Zoology, B.H.U., Varanasi and Department of Biology, Tokyo Metropolitan University, Tokyo, Japan.

Distribution : India : Meghalaya.

4. *Liodrosophila angulata* Dwivedi and Gupta, sp. nov. (Figs. 2E-H)

Male and female : Male and female dark brown to black. Mean body length, males (2 males) 1.8 mm, females (4 females) 2.0 mm.

Head, ♂ and ♀ : Arista with 5 dorsal and 2 ventral branches in addition to terminal fork. Antennae with second segment reddish brown. Frons including ocellar triangle glossy dark brown, frontal shield quadrate. Carina brown, high and restricted to upper region. Anterior reclinate minute, proclinate two-thirds as long as posterior reclinate. Second oral subequal to vibrissa. Palpi brown, with a long apical seta. Face and cheek orange brown. Clypeus dark brown. Eyes dark red. *Thorax*, ♂ and ♀ : Acrostichal hairs regular, in 6 rows. Anterior scutellars convergent. Anterior dorsocentral three-fifths length of posterior dorsocentral; distance from anterior dorsocentral to posterior dorsocentral two-third distance between two anterior dorsocentrals. Mesonotum and scutellum unicolorous, glossy dark brown. Thoracic pleura brownish black. *Wings*, ♂ and ♀ (Fig. 2H) : Hyaline. Indices : C-index 1.81; 4V-index 1.88; 4C-index 1.23; 5X-index 1.61. Two equal bristles at the apex of first costal section; heavy bristles on basal half of third costal section. Halteres white. *Legs* : Yellowish, coxae and femora of prothoracic legs brown, fore femur with a row of 20 stout spinnules, preapicals on all tibiae, apicals on first and second tibiae. *Abdomen*, ♂ and ♀ : Tergites completely shining brown.

Periphallitic organs (Fig. 2E) : Genital arch pale brown, broad, pubescent, with 19 bristles. Clasper small, with 12 short stout black teeth arranged on entire outer margin and 4 small bristles ventrally. Anal plate elongate, somewhat broadened ventrally, pubescent, with 19-20 long bristles in upper portion and 18-20 short setae ventrally. *Phallic organs* (Fig. 2G) : Aedeagus large, yellowish brown, with triangular scaly flap like processes subapically and a pair of curved spine like structures mediodorsally. Basal apodeme of aedeagus short. Caudal margin of hypandrium with shallow concavity and with a

pair of submedian spines. Ventral fragma slightly longer than broad. *Egg-guides* (Fig. 2F) : Lobe pale brown, narrowing ventrally, with 15 marginal and 4-5 discal teeth.

Holotype ♂, INDIA : MEGHALAYA : Shillong district : Motinagar forest, Khasi Hills, 3.xi.1976, Coll. Y.N. Dwivedi and J.P. Gupta. Deposited in the Department of Zoology, Banaras Hindu University, Varanasi. *Paratypes* : 1 ♂ and 7 ♀, same locality and collectors as holotype. In the Department of Zoology, B.H.U., Varanasi and Department of Biology, Tokyo Metropolitan University, Tokyo, Japan.

Distribution : India : Meghalaya.

Genus *Lissocephala* Malloch

Lissocephala Malloch, 1929, *Ann. Mag. Nat. Hist.*, **10**(4) : 250. Type-species : *Lissocephala unpuncta* Malloch; Africa.

Species often with metallic colour; acrostichal hairs in six or more rows; wings typically with a broad black stripe running diagonally across base from costal break to alula.

KEY TO INDIAN SPECIES OF *LISSOCEPHALA*

The genus in India is represented by two species.
(Key after Wheeler and Takada, 1964)

Upper pleura with a more or less evident brownish band, sterno-pleura entirely pale
 *metallescens* (de Meijere)

Upper pleura with, at most, a trace of band, sternopleura largely brown, colour typically reaching mid ventral line *sabroskyi* Wheeler and Takada

5. *Lissocephala metallescens* (de Meijere) (Figs. 3A-D)

Drosophila metallescens de Meijere, 1914, *Tijdschr. Ent.*, **57** : 265. Type-locality : Java.

Liodrosophila metallescens Duda, 1922, *Arch. Naturgesch.*, (A) **88** (4) : 160.

Lissocephala metallescens Malloch, 1934, *Insects of Samoa*, **6** (8) : 289; Harrison, 1954, *Trans. Roy. Ent. Soc. London*, **105** : 112; Wheeler and Takada, *Insects of Micronesia*, **14** (6) : 220.

Head, ♂ and ♀ : Arista with 3 dorsal and 2 ventral branches in addition to terminal fork. Palpi yellowish, with 3 prominent marginal setae. *Thorax*, ♂ and ♀ : Mesonotum shining tan, scutellum slightly darker. Distance from anterior dorsocentral to posterior dorsocentral two-third distance between two anterior dorsocentrals. Other details as described by Wheeler and Takada (1964). *Wings*, ♂ and ♀ (Fig. 3B) : with a black, diagonal, basal stripe. Indices : C-index 0.9; 4V-index 2.0; 4C-index; 1.63; 5X-index 1.7. *Abdomen*, ♂ and ♀ : Tergites dark brownish, with metallic lusture.

Periphalllic organs (Fig. 3A) : Genital arch dark brown, narrow and long, with 14 bristles. Clasper triangular, with 11 black teeth arranged in a concave

row along entire length of its distal margin, and 2 fine small bristles dorso-medially. Anal plate oval, with 16 bristles. *Phallic organs* (Fig. 3C) : Aedeagus straight, somewhat narrowing apically. Anterior parameres small, hairy apically, and with 5 sensilla on lower half. Posterior parameres large, curved and finely serrated. Hypandrium with one pair of submedian bristles. Ventral fragma longer than broad. *Egg-guides* (Fig. 3D) : Lobe pale yellow, with 15 marginal and 5 discal yellowish brown teeth.

Specimens examined : INDIA : UTTAR PRADESH : Varanasi : Sankat Mochan garden, 2 ♂, 2 ♀, ix.1976, Coll. Dwivedi and Gupta.

Distribution : New Guinea, Indonesia, Solomon Is., Santa Cruz Is., Micronesia and India (new record).

Genus *Hypselothyrea* de Meijere

Hypselothyrea de Meijere, 1906, *Ann. Hist. Nat. Mus. Natl. Hungarici*, 4 : 193.
Type-species : *Hypselothyrea dimidiata* de Meijere; New Guinea.

Anterior reclinate orbital greatly reduced or absent; postvertical bristles absent; only one sternopleural bristle present.

KEY TO INDIAN SPECIES OF *HYPSELOTHYREA*

This genus in India is represented by two species, of which one is described in the present paper.

Wings extensively ornamented. Acrostichal hairs in six rows . . . *guttata* Duda
Wings not ornamented. Acrostichal hairs in two rows . . . *varanasiensis* Gupta

6. *Hypselothyrea guttata* Duda (Figs. 3E-H)

Hypselothyrea guttata Duda, 1926, *Supplta Ent.*, 14 : 56. Type-locality : Sumatra.

Male and female : Arista with 3 dorsal and 2 ventral branches in addition to terminal fork. Other details as described by Okada (1966). *Wings*, ♂ and ♀ (Fig. 3E) : Extensively ornamented, enclosing several white areas. Indices : C-index 0.82; 4V-index 3.89; 4 C-index 3.65; 5 × -index 1.21. One bristle at the apex of first costal section; heavy bristles on basal two-third of third costal section.

Periphalllic organs (Fig. 3H) : Genital arch dark brown, pubescent, upper margin with 2-3 bristles and lower margin with 10 bristles. Clasper elongate, with 10 black stout teeth arranged in a concave row and with 6-7 setae ventrally. Anal plate dark brown, elongate, pubescent, with 18-20 large bristles and numerous setae at lower tip. *Phallic organs* (Fig. 3G) : Aedeagus brown, fusiform, apex pointed and slightly darker. Caudal margin of hypandrium medially concave, with two pairs of submedian spines; inner pair relatively smaller. Ventral fragma quadrate. *Egg-guides* (Fig. 3F) : Lobe yellowish brown, large, with 17 marginal teeth and 4 bristles like discal teeth. Basal isthmus narrow and short.

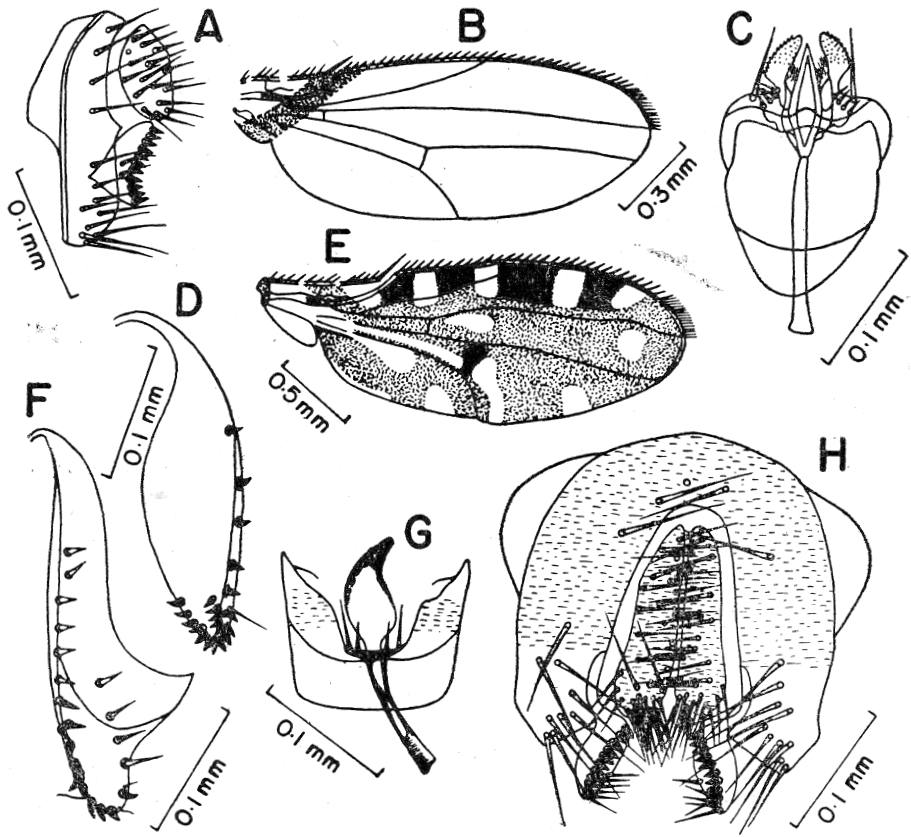


Fig. 3 (A-D) : *Lissocephala metallescens* : A, periphallic organs; B, wing, C, phallic organs; D, egg-guide.
(E-H) : *Hypselothyrea guttata* : E, wing; F, egg-guide; G, phallic organs; H, periphallic organs.

Specimens examined : INDIA : WEST BENGAL : Darjeeling district : Ramam, 2 ♂, 1 ♀, v.1977, Coll. Dwivedi and Gupta.

Distribution : Sumatra, Taiwan, Nepal and India (new record).

Genus *Zaprius* Coquillett

Zaprius Coquillett, 1902, *Proc. U.S. Natl. Mus.*, 24 : 31, Type-species : *Zaprius vittiger* Coquillett; Rhodesia, Southern Africa.

Carina exceedingly swollen, a row of cuneiform bristles present on mid and hind tarsi.

KEY TO INDIAN SPECIES OF *ZAPRIONUS*

This genus in India is represented by three species, of which one is described fully in the present paper.

1. Mesonotum brown, with nine white longitudinal stripes *multistriata* Sturtevant

- Mesonotum pale yellow to dark brown, with four white longitudinal stripes **2**

2. Fore femora without tubercles *indiana* Gupta
 Fore femora with tubercles *paravittiger* Godbole and Vaidya

7. *Zaprionus multistriata* Sturtevant (Figs. 4A-F)

Zaprionus multistriata Sturtevant, 1927, *Philippine J. Sci.*, **32** : 365. Type-locality : Philippine Is.

Head, ♂ and ♀ : Arista with 3-4 dorsal and 1 ventral branches in addition to terminal fork. Antennae with second segment brownish; third segment slightly darker. Front brown, with a pair of whitish longitudinal stripes along eye margin, a similar stripe medially also encircling ocellar triangle. Orbitals in the ratio of 9 : 5 : 8. Carina yellowish brown, high. Face and cheek pale brown, greatest width of cheek one-fifth greatest diameter of eye. Palpus pale, with one apical seta. Eyes red. *Thorax*, ♂ and ♀ : Acrostichal hairs regular, in 6 rows. Anterior scutellars convergent; posterior scutellars crossing each other. Distance from anterior dorsocentral to posterior dorsocentral one-third distance between two anterior dorsocentrals. Mesonotum brown, with 9 whitish longitudinal stripes, penultimate stripe on either side interrupted at middle. Scutellum yellowish brown, with a pair of longitudinal stripes at outer margin. Thoracic pleura brown. *Wings*, ♂ and ♀ (Fig. 4E) : Clear. Indices : C-index 3.2; 4V-index 1.9; 4C-index 0.9; 5X-index 1.3. One bristle at the apex of first costal section; heavy bristles on basal two-third of third costal section. *Legs* (Fig. 4A) : Fore metatarsal segments in male distally with a tuft of fine hairs. Other details as described by Sturtevant (1927). *Abdomen*, ♂ and ♀ : Tergites uniformly brown.

Periphallalic organs (Fig. 4D) : Genital arch yellow, narrow, upper margin with 3 bristles. Anal plate yellow, broad, lower half contiguous to genital arch, with 28 bristles and a tuft of short hairs at its lower tip. Clasper yellow, rectangular, with a row of 6-8 stout black teeth in upper half and 18-23 stout yellowish black scattered teeth in lower half. *Phallic organs* (Fig. 4B) : Aedeagus pale yellow, apex expanded and notched, finely serrated subapically, basal apodeme of aedeagus thick. Caudal margin of hypandrium with a pair of long submedian spines. Ventral fragma almost rectangular. *Egg-guides* (Fig. 4C) : Lobe yellowish brown, broadly rounded at tip, with 4 upper bristle like and 6 lower marginal teeth, and also with two bristle like discal teeth. Basal isthmus short.

Specimens examined : INDIA : MEGHALAYA : Shillong district, 3 ♂, 5 ♀, xi. 1976, Coll. Dwivedi and Gupta.

Distribution : Philippine Islands and India (new record).

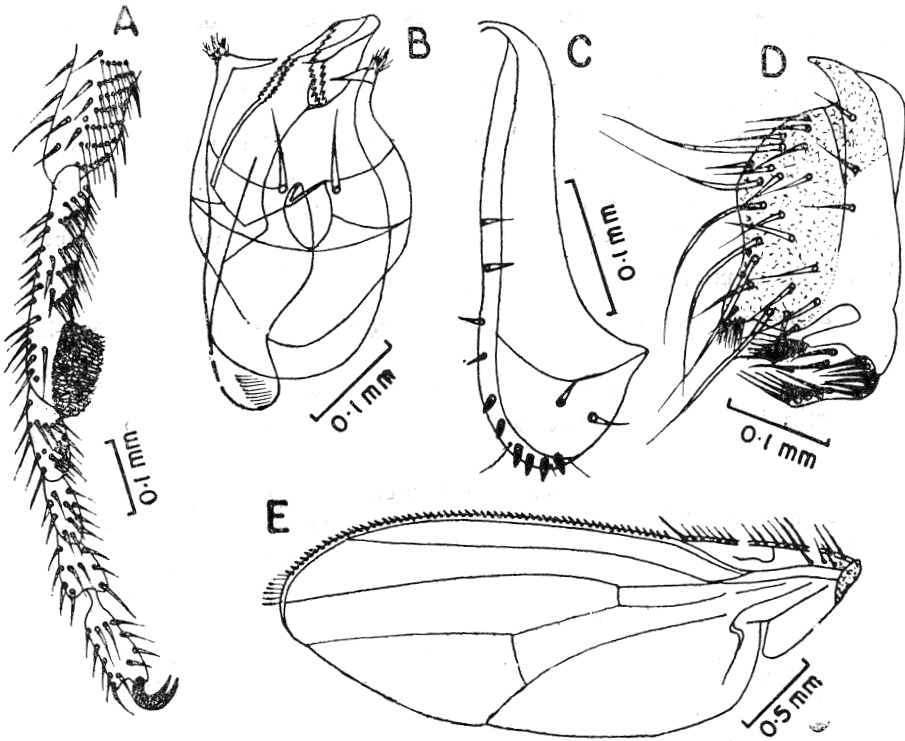


Fig. 4. (A-E) : *Zaprionus multistriata* : A, male fore leg; B, phallic organs; C, egg-guide; D, periphallic organs; E, wing.

LIST OF INDIAN DROSOPHILIDS (EXCLUDING *DROSOPHILA* SPECIES)

Gitonides Knab

perspicax Knab, 1914

Mycodrosophila Oldenberg

gratiosa (de Meijere, 1911)

Leucophenga Mik

albicincta (de Meijere, 1908)

flavicosta Duda, 1926

guttiventris (de Meijere, 1911)

interrupta Duda, 1924

neoangusta Vaidya and Godbole, 1976

subpollinosa (de Meijere, 1914)

Paraleucophenga Hendel

invicta (Walker, 1857)

Scaptomyza Hardy

cristata Singh, 1976

graminum (Fallén, 1823)

pallida (Zetterstedt, 1847)

plumata Singh, 1976

Chymomyza Czerny

vaidyai Okada, 1976 : Nom. nov. for *Chymomyza pararufithorax* Vaidya and Godbole, 1973, *DIS*, 50 : 71.

Microdrosophila Malloch

purpurata Okada, 1956

Stegana Meigen

subexcavata Vaidya and Godbole, 1976

Cacoxenus Loew

punctatus Duda, 1924, Syn. of *Gitonides perspicax* Knab, 1914. Ref. Mc Alpine, 1968, *Canad. Ent.*, 100 (5) : 514.

Lissocephala Malloch

metallescens (de Meijere, 1914) (new record)

sabroskyi Wheeler and Takada, 1964

Hypselothyrea de Meijere

guttata Duda, 1926 (new record)

varanasiensis Gupta, 1974

Amiota Loew

shillongensis, sp. nov.

Zaprionus Coquillett

indiana Gupta, 1970

multistriata Sturtevant, 1927 (new record)

paravittiger Godbole and Vaidya, 1972

Liodrosophila Duda

rufa Okada, 1974 (new record)

penispinosa, sp. nov.

angulata, sp. nov.

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