

## DIPTERA FROM SILENT VALLEY

A. N. T JOSEPH\* and P. PARUI  
*Zoological Survey of India, Calcutta*  
[With one Text-figure]

**ABSTRACT.** This paper deals with 15 species of Diptera from Silent Valley, Kerala. belonging to as many as 7 families. Of these, 1 species is new (Asilidae), 4 are new to South India and another 6 are new to Kerala. It also includes other 6 species, which cannot be identified beyond the generic level because they are badly damaged.

### Family TIPULIDAE

#### ***Limonia (Bhipidia) antennata* (Brunetti)**

*Ceratostephanus antennatus* Brunetti, 1911, *Rec. Indian. Mus.* 6 : 272.

*Limonia (Rhipidia) antennata* (Brunetti) : Alexander and Alexander, 1973, *A Catalog of Diptera of the Oriental Region* 1 : 113 ; Joseph, 1976, *Oriental Ins.* 10(2) : 236.

**Material :** 1 ex., 5 km. towards Mukkali, 12. xii. 1980, Coll. R. S. Pillai.

**Remarks :** The species has characteristically elongate antennae with each flagellar segment bearing a pair of strong diverging bristles above and an elongate palp-like process below. It is recorded for the first time from South India. It is a rare species and this is the third specimen so far collected.

#### *Tipula* sp.

**Material :** 1 ex., Kariamala Thodu, 29. iv. 1980, Coll. R. S. Pillai.

#### *Dicranomyia* sp.

**Material :** 1 ex., Valiapara Thodu, 2. v. 1980, Coll. R. S. Pillai.

#### *Limnophila* sp.

**Material :** 1 ex., Kariamala Thodu, 29. iv. 1980, Coll. R. S. Pillai.

#### *Styringomyia* sp.

**Material :** 1 ex., way to Valiapara Thodu, 5. xii. 1980, Coll. R. S. Pillai.

---

\* Present address : Freshwater Biological Station, Hyderabad

## Family THEREVIDAE

**Psilocephala sequa (Walker)**

*Thereva sequa* Walker, 1852, *Ins. Saund.* Diptera : 157 ; *Psilocephala sequa*(Walker) : Brunetti, 1923, *Fauna Brit. India*, Diptera, 3 : 305-306 ; Lyneborg, 1975, *A Catalog of Diptera of the Oriental Region 2* : 92.

*Material* : 1 ex. Road to Mukkali, 8. xii. 1980, Coll. R. S. Pillai

*Remarks* : This is the first record of the species from South India.

## Family ASILIDAE

**Microstylum ananthkrishnani Joseph & Parui**

*Microstylum ananthkrishnani* Joseph and Parui, *Ent. Scand.* 1 : 449—420

*Material* : 2 exs., Dam site, 27. iv. 1980, Coll. R. S. Pillai.

*Remarks* : This species is described from Kerala.

*Ommatius pillai* n.sp. (Fig. 1.)

A small black species with concolourous legs marked with a little yellowish-brown, and infuscated wings.

*Male* : Length 7-8 mm, wing 6 mm ; *Female* : length 7 mm, wing 6 mm.

*Males* : Head black infuscated with grey tomentum ; mystax black above and pale below ; bristles of front and ocellarium black ; occiput sparsely grey tomentose with black bristles and hairs above and white hairs below. Antenna black, bristles of the basal two segments 1 and 2 nearly equal, 3 longer. Palpi and proboscis black, the former with black and the latter with pale hairs.

*Thorax* black with greyish-yellow to grey tomentum ; pronotum pale haired ; mediolongitudinal stripe of mesonotum indistinct ; pleuron sparsely grey tomentose ; scutellum also sparsely grey tomentose, disc bears sparse pale hairs and the hind border a pair of pale bristles ; bristles of metapleuron pale. Halteres light yellowish-brown.

*Legs* black ; tibia basally light yellowish-brown, more so in the foreleg so much so for considerable part of it is light yellowish-brown, basitarsus of foreleg yellowish-brown but in paratype male yellowish-brown basally and black distally, in the mid and hind legs basitarsi lighter coloured but not yellowish-brown ; hindfemur with

a ventral row of pale bristles, clothing hairs and bristles black and pale, basitarsi of all the legs ventrally bear dense golden yellow clothing hairs.



Fig. 1. Lateral view of male terminalia of *Ommatius pillaii* n. sp

*Wings* infuscated except for the extreme base which is hyaline.

*Abdomen* black, posterolateral sides of tergite 1 and to a lesser extent the succeeding tergite bear long pale hairs, clothing hairs pale. Male terminalia (Fig.) black to dark brown with concolovrous and pale hairs.

*Female* : Similar, but the mediolongitudinal stripe of mesonotum faintly marked and the hind basitarsi black.

*Material* : Holotype ♂, Reg. No. 6625/H6, S. India : Kerala State : Silent Valley, 5 kms. towards Mukkali, 12. xii. 1980, Coll. R. S. Pillai. Paratypes 1 ♂, Reg. No. 6626/H6, 2 kms. towards Mukkali, 6. xii. 1980, rest of data as in the preceeding. 1, Reg. No ♀, 6627/H6, details as in holotype.

There are a number of similarly coloured, apparently looking alike, species of *Ommatius* Wiedemann, all of which can be recognised mainly by the structural details of male terminalia. *O. pillai* n. sp. is quite distinct in the details of male terminalia from all the other known species under the genus. It shows some similarity to *O. nanus* Walker in this character. This species is named in honour of Dr. R. S. Pillai, who explored the little known, difficult, Silent Valley.

#### *Machimus* sp.

*Material* : 2 exs., River Kunti, 24. iv. 1980, Coll. R. S. Pillai, 1 ex., Aruvenkadu, 28. iv. 1980, Coll. R. S. Pillai.

#### *Xenomyza* sp.

*Material* : 1 ex., Valiapara Thodu, 2. v. 1980, Coll. R. S. Pillai.

### Family BOMBYLIIDAE

#### *Anthrax distigma* Wiedemann

*Anthrax distigma* Wiedemann, 1928, *Auss. Zweifl. Insekt.* 1 : 309.

*Argyromoeba distigma* (Wiedemann) : Brunetti, 1923, *Fauna Brit. India*, Diptera, 3 : 218.

*Anthrax distigma* Wiedemann : Bowden, 1975, *A Catalog of Diptera of the Oriental Region* 2 : 175.

*Material* : 1 ex., site on the left of River Kunti, 24. iv. 1980 Coll. R. S. Pillai.

*Remarks* : This is the first record of the species from Kerala.

Family SYRPHIDAE

**Melanostoma univittatum** (Wiedemann)

*Syrphus univittatus* Wiedemann, 1824, *Analecta Ent.* : 36

*Melanostoma univittatum* (Wiedemann) : Brunetti, 1923, *Fauna Brit. India* Diptera, 3 : 50-51 ; Knutson, 1975, *A Catalog of Diptera of the Oriental Region 2* : 325.

*Material* : 1 ex., towards Mukkali, 6. xii. 1980, Coll. R. S. Pillai.

*Remarks* : This species enjoys wide distribution all over India.

**Melanostoma orientale** (Wiedemann)

*Syrphus orientale* Wiedemann, 1824, *Analecta Ent.* : 36.

*Melanostoma orientale* (Wiedemann) : Brunetti, 1923, *Fauna Brit. India* Diptera 3 : 48-50 ; Knutson, 1975, *A Catalog of Diptera of the Oriental Region 2* : 325.

*Material* : 1 ex., road to Cardamam estate, 11 xii. 1980, Coll. R. S. Pillai.

*Remarks* : This is the first record of the species from Kerala.

**Eristalinus arvorum** (Fabricius)

*Syrphus arvorum* Fabricius, 1787, *Mantissa Insect.* 2 : 335.

*Eristalis arvorum* (Fabricius) : Brunetti, 1923, *Fauna Brit. India* Diptera, 3 : 181-183.

*Eristalinus arvorum* (Fabricius) : Knutson, 1975, *A Catalog of Diptera of the Oriental Region 2* : 347.

*Material* : 1 ex., towards Mukkali, 6. xii. 1980, Coll. R.S. Pillai.

*Remarks* : This species is very common all over India.

**Phytomia (Dolichomerus) crassa** (Fabricius)

*Syrphus crassus* Fabricius, 1787, *Mantissa Insect.* 2 : 334.

*Megaspis crassus* [Fabricius] : Brunetti, 1923, *Fauna Brit. India*, Diptera, 3 : 197-199.

*Phytomia (Dolichomerus) crassa* [Fabricius] : Knutson, 1975, *A Catalog of Diptera of the Oriental Region 2* : 368.

*Material* : 1 ex., Kumattan Thodu, 7.xii. 1980, Coll. R. S. Pillai.

*Remarks* : This species is well distributed in India.

**Paragus (Paragus) serratus (Fabricius)**

*Mulio serratus* Fabricius, 1805, *Syst. Antliat.* : 186.

*Paragus serratus* (Fabricius) : Brunetti, 1923, *Fauna Brit. India*, Diptera, 3 : 31-32.

*Paragus (Paragus) serratus* (Fabricius) : Knutson, 1975, *A Catalog of Diptera of the Oriental Region* 2 : 327.

*Material* : 1 ex., Dam Site, 9 .xii. 1980, Coll. R. S. Pillai.

*Remarks* : The species has characteristic serration on scutellum and is widely distributed in India.

## Family MUSCIDAE

**Musca (Viviparomusca) bezzii Patton and Cragg**

*Musca bezzii* Patton and Cragg, 1913, *Indian J. Med. Res.* 1 : 19.

*Musca (Viviparomusca) bezzii* Patton and Cragg : Emden, 1965, *Fauna India*, Muscidae, 7 (1) : 83-84 ; Pont, 1977, *A Catalog of Diptera of the Oriental Region* 3 : 461.

*Material* : 2 exs., 2 km. towards Mukkali, 6. xii. 1980, Coll. R. S. Pillai.

*Remarks* : In South India the species is so far recorded only from Tamil Nadu.

**Orthellia claripennis Malloch**

*Orthellia claripennis* Malloch, 1923, *Ann. Mag. nat. Hist.* (9) 12 : 515 ; Pont, 1977, *A Catalog of Diptera of the Oriental Region* 3 : 463.

*Material* : 2 exs., road to Mukkali, 9. xii. 1980, Coll. R. S. Pillai.

*Remarks* : Though the species is widely distributed in India, it is the first record from Kerala.

**Orthellia timorensis (Robineau-Desvoidy)**

*Musca coerulea* Wiedemann, 1830, *Zool. Mag.* 3 : 23.

*Orthellia coerulea* (Wiedemann) : Emden, 1965, *Fauna India*, Muscidae, 7 (1) : 124-125.

*Orthellia timorensis* (Robineau-Desvoidy) : Pont, 1977 *A Catalog of Diptera of the Oriental Region* 3 : 465-466.

*Material* : 1 ex., road to Cardamam estate, 11.xii. 1980, Coll. R. S. Pillai.

**Remarks :** The species has been recorded from different places of South India.

Family CALLIPHORIDAE

***Stomorphina discolor* (Fabricius)**

*Musca discolor* Fabricius 1794, *Ent. Syst.* 4 : 320.

*Stomorphina discolor* (Fabricius) : Senior-white, Aubertin and Smart, 1940, *Fauna Brit. India*, Diptera, 6 : 192-194 ; James, 1977, *A Catalog of Diptera of the Oriental Region* 3 : 554-555.

**Material :** 1 ex., road to Cardamam estate, 11. xii. 1980, Coll. R. S. Pillai.

**Remarks :** It is the first record of the species from South India.

***Idiella euidielloides* Senior-white**

*Stomorphina euidielloides* Senior-white 1923, *Mem. Deptt. Agric. India* (ent. ser) 7 : 166.

*Idiella euidielloides* (Senior-white) : James, 1977, *A Catalog of Diptera of the Oriental Region* 3 : 545.

**Material :** 1 ex., road to Cardamam estate, 11. xii. 1980, Coll. R. S. Pillai.

**Remarks :** This is the first record of the species from South India.

ACKNOWLEDGEMENTS

We are grateful to Dr. B. K. Tikader, Director, Zoological Survey of India, Calcutta, for placing the material at our disposal for study and to Dr. S. K. Bhattacharyya, Deputy Director of the same department for the encouragements.

## REFERENCES

- BRUNETTI, E. 1912. *The Fauna of British India including Ceylon and Burma*. Diptera, Nematocera, (excluding Chironomidae and Culicidae). xxvii + 581 pp., 44 figs., 8 pls. London.
- BRUNETTI, E. 1920. *The Fauna of British India, including Ceylon and Burma*. Diptera, Brachycera, 2 : ix+401 pp., 40 figs., 4 pls. London.
- BRUNETTI, E. 1923. *The Fauna of British India, including Ceylon and Burma*. Diptera, Pipunculidae, Syrphidae, Conopidae and Oestridae, 3 : xi+424 pp., 85 figs., 6 pls. London.
- EMDEN, F. I. VAN. 1965. *The Fauna of India and the adjoining countries*. Diptera, Muscidae, 7 (1) : xiv+647 pp., 156 figs., 2 pls. Calcutta.
- DELFINADO, M. D. and HARDY, D. E. 1973. *A Catalog of Diptera of the Oriental Region*. 1 : 618 pp., Honolulu.
- DELFINADO, M. D. and HARDY, D. E. 1975. *A Catalog of Diptera of the Oriental Region*. 2 : 459 pp., Honolulu.
- DELFINADO, M. D. and HARDY, D. E. 1977. *A Catalog of Diptera of the Oriental Region* 3 : 854 pp., Honolulu.
- JOSEPH, A. N. T and PARUI, P. (In press). New and little-known Indian Asilidae (Diptera) VI. Key to Indian *Ommatius* Wiedemann with descriptions of fourteen new species. *Ent. Scand.*
- JOSEPH, A. N. T and PARUI, P. (1984.) New and little-known Indian Asilidae (Diptera) VII. The genera *Xenomyza* and *Microstylum* with descriptions of ten new species. *Ent. Scand.*, 15 : 443-453.