

Research Note

A new record of *Fannia pusio* (Wiedemann) (Diptera: Fanniidae) from Malaysia

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Received 22 May 2007; received in revised form 26 June 2007; accepted 30 June 2007

Abstract. *Fannia pusio* (Wiedemann) (Diptera: Fanniidae) is newly recorded from Malaysia. This record is based on 1♂ 1♀ from Sarawak, east Malaysia and 1♂ 2♀ from Selangor, peninsular Malaysia. It is included in the pusio group of *Fannia* wherein are included *Fannia femoralis* (Stein), *Fannia howardi* Malloch, *Fannia trimaculata* (Stein), *Fannia leucosticta* (Meigen) and *Fannia punctiventris* Malloch. The male of *Fannia pusio* is differentiated from other members of the group by the following features: hind femur with a swelling bearing a number of setae that are usually curled at tip; squamae creamy; tergite 1+2 broadly grey dusted at sides.

Filth flies have been implicated as disease vectors and cause of nuisance. Their presence in places where food is served, such as restaurants, may implicate these places as unsanitary. For these reasons, fly control is important in preventive medicine and public health.

Species of *Fannia* such as *Fannia canicularis*, the lesser house fly, vies with *Musca domestica* as the most important pest fly in households especially in temperate countries. However, in warmer tropical countries, *Fannia* tend to be of lesser importance (Pont, 1977).

Fannia spp. belong to the non-biting muscoid flies, together with *Musca* spp. Important adult morphological characters are medium size, grayish (dull coloured),

with absence of deep bent of fourth wing vein, fourth wing vein reaching margin quite far below third vein, arista bare and the anal vein characteristically curved forward as if to intersect the sixth vein. The larvae characteristically have spinose fleshy processes laterally and dorsally or terminally.

Habitat of *Fannia* spp. varies from bird nest (*Fannia cana* Nishida 2004); mushroom (*Fannia rokkoensis* Nishida 2004) to chicken dung (*Fannia pusio*) (Nishida, 2004). The pusio group of *Fannia* Robineau-Desvoidy includes the following species: *Fannia pusio* (Wiedemann), *Fannia femoralis* (Stein), *Fannia howardi* Malloch, *Fannia trimaculata* (Stein), *Fannia leucosticta* (Meigen) and *Fannia punctiventris* Malloch. Pusio group has the following common morpho-

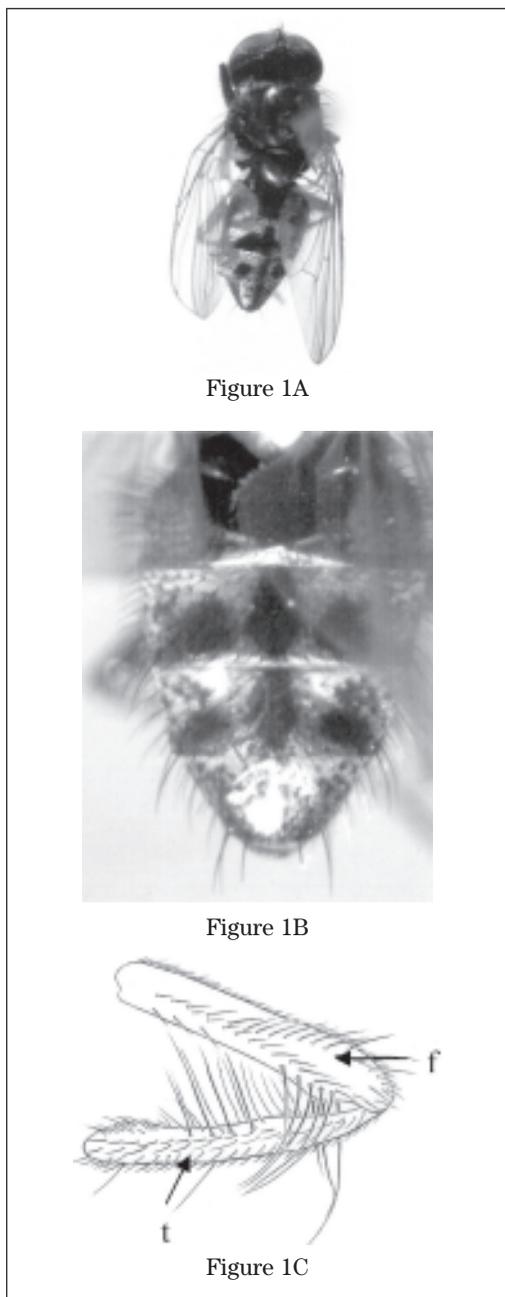


Figure 1. Male *Fannia pusio*. (A. Dorsal view; B. Abdominal tergite; C. hind femur (f) and tibia (t))

logical characters: bare parafaciala, presence of posteroventral setae on hind coxa and cercal plate longer than wide.

Here we report the occurrence of *F. pusio* from Malaysia from two localities:

Kuching, Sarawak (east Malaysia) and Shah Alam, Selangor (peninsular Malaysia).

Male *F. pusio* has hind femur with a swelling bearing a number of setae that are usually curled at tips; squamae creamy; tergite 1+2 broadly grey dusted at sides and mesonotum with some grey dust in front of mesoscutellum. *Fannia pusio* is common in tropical and subtropical America (Chilcott, 1961) and has been recorded in Cameroon (Disney, 1973), and Japan (Kurahashi, 2005). *Fannia pusio* is also known as chicken dung fly. The adult fly is associated with man, and the larvae breed in all kinds of decaying vegetable and animal matter, especially shellfish and rotting meat.

Notes on specimens' localities and collectors:

MALAYSIA: SERIAN MT. SEDONG KG. TARAT, SARAWAK: 1♂ 23 IX 2005 H.KURAHASHI; KUCHING, BAKO 1♀ 26 IX 2005 H.KURAHASHI; SHAH ALAM, SELANGOR 2005 1♂ 2♀ YASOHDHA, LAU and MARK.

REFERENCES

- Chilcott, J.G. (1961). A revision of the nearctic species of Fanniidae (Diptera: Muscidae). *Canadian Entomologist* **92** Suppl. 14.
- Disney, R.H.L. (1973). A note on some filth-inhabiting flies of Cameroon. *Entomology Monthly Magazine* **108**: 212-213.
- Kurahashi, H. (2005). Records of *Fannia pusio* from Okinawa-Honto I., Japan. *The Dipterist's Club of Japan 'HANA ABU'* **20**: 19-20.
- Nishida, K. (2004). Studies on the species of Fanniidae (Diptera) from Japan VI. Two new species closely related to *Fannia lineata* (Stein) and two newly recorded species from Japan. *Medical Entomology and Zoology* **55**: 269-279.
- Pont, A.C. (1977). A revision of Australian Fanniidae (Diptera: Calyptrata). *Australian Journal of Zoology* suppl. Series **51**: 1-60.