# A Record of Chelisoches bimammatus (Dermaptera: Chelisochidae) on the Fruit Bat Eonycteris spelaea (Chiroptera: Pteropodidae) in Thailand

There are few records of earwigs found on bats and most of these refer to one of five parasitic species from the sub-order Arixeniina (NAKATA & MAA, 1974). Individuals from this suborder have been found on bats of the family Molossidae in Southeast Asia and are primarily associated with *Cheiromeles torquatus* Horsfield, 1824, (NAKATA & MAA, 1974; MARSHALL, 1977a; 1977b), a large naked bat found in Malaya, Sumatra, Java, Borneo, The Philippines, and on the island of Tarutau, Peninsular Thailand (CORBET & HILL, 1992). There are also records of Arixeniina earwigs found on *Tadarida mops* (NAKATA & MAA, 1974) and *T. johorensis* (MEDWAY & YONG, 1969) in Malaysia, the latter misidentified as *T. plicata* (MARSHALL, 1977b). However, these records are considered incidental and only occur where the bats are associated with *C. torquatus* (NAKATA & MAA, 1974; MARSHALL, 1977b). The only other records of earwigs being found on bats are those by START (1974) and WELLS & LABANG (1974), who recorded *Chelisoches bimammatus* HEBARD, 1929, from the sub-order Forficulina, on the fruit bat *Eonycteris spelaea* (DOBSON, 1871).

This note records the occurrence of *C. bimammatus* on two *E. spelaea* from Thailand. The specimens were discovered by one of us (MFR) while mist-netting for bats, at Kapuk Kapeang Sub-Station, Huai Kha Khaeng Wildlife Sanctuary (HKK), Uthai Thani Province, in western Thailand on 16 August 1993. Nets placed alongside wild and cultivated varieties of banana *Musa* spp., in a forest clearing surrounded by mainly deciduous dipterocarp forest with small patches of mixed deciduous and dry evergreen forest, caught four *E. spelaea*. Two of the bats, an adult male and a juvenile, had earwigs clustered around their rumps. The adult had 14 individuals (2 male, 6 female and 6 nymphs) and the juvenile had 3. The 14 earwigs from the adult male bat were removed and stored in alcohol. These are now housed at the British Museum (BMNH (E) 1997–110).

The specimens, identified by one of us (JM), agreed with the original description given by HEBARD (1929) and with that of the male holotype and female paratype (BMNH (E) 1929–295) which are also housed in the British Museum (Natural History).

Eleven other *E. spelaea* were caught from five sites in HKK and in Thung Yai Naresuan Wildlife Sanctuary which is adjacent to HKK, but none of these individuals had earwigs on them.

There are few previous records of *C. bimammatus* and those that are known are from a fairly localised area in Selangor, Peninsular Malaysia. The type specimens were recovered from Batu Cave (HEBARD, 1929), whereas the specimens found on *E. spelaea* by START (1974) and WELLS & LABANG (1974) were obtained from bats caught in mist-nets, c. 40 km from Batu Cave, a distance within probable commuting distance for such a large bat. It has been suggested by START (1974) and WELLS & LABANG (1974) that *C. bimammatus* may use *E. spelaea* as a means of transport between, and for the colonisation of new sites. Also, *C. bimammatus* may be parasitic, although there is no evidence to support this.

Received 15 August 1998; accepted 8 January 1999.



Figure 1. *Chelisoches bimammatus* collected from the fruit bat *Eonycteris spelaea* (upper specimen male, lower specimen female, both are approximately 24.0 mm long).

This current record of C. bimammatus, found approximately 600 km north of Selangor, is believed to be the first for this species in Thailand and only the third recorded ocurrence on E. spelaea.

We thank The National Research Council of Thailand and the Royal Forest Department, Thailand for permission to work in Thung Yai and Huai Kha Khaeng Wildlife Sanctuaries. The assistance of Angela L. Smith and Sara Bumrungsri in the field was greatly appreciated.

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