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## ***Dachtylembia*, a new genus in the family Teratembiiidae (Embioptera) from Thailand**

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### **Abstract**

*Dachtylembia* **gen. nov.** (Embioptera: Teratembiiidae), is described and illustrated based on specimens of a new species (*D. siamensis*) collected from Thailand. The geographical distribution of this species in Thailand is mapped.

**Key words:** *Dachtylembia siamensis*, new species, taxonomy

### **Introduction**

The family Teratembiiidae, a relatively small group of Embioptera, was established by Krauss (1911). Four genera in this family are currently listed (Szumik 1994; Miller 2009): *Diradius* Friederichs, 1934, *Oligembia* Davis, 1939, *Paroligembia* Ross, 1952 and *Teratembia* Krauss, 1911. Teratembiiidae is considered a sister group of Oligotomidae (Szumik 1994; Szumik *et al.* 1996, 2008; Miller *et al.* 2012). This family is well represented in Nearctic, Neotropical and Afrotropical regions (Ross 1984, Miller 2009). Teratembiiids can be recognized by several characteristics: the forked anterior media (AM) in the wing; hind leg with only one basitarsal papilla; hemitergites of the tenth segment (10L and 10R) fused to an extremely large medial sclerite (MS); epiproct (EP) and right tergal process of tenth segment (10 RP) completely separated from the right 10R; left cercus-basipodite (LCB) fused to the base of left cercus and bearing one or more small mesal lobes; first segment of left cercus (LC<sub>1</sub>) not echinulate.

*Dachtylembia* **gen. nov.**, found in the west, north and northeast of Thailand, is erected to include a single species (*Dachtylembia siamensis* **sp. nov.**). This new genus is closely allied to *Oligembia* Davis, 1939. In *Dachtylembia* the process of the left hemitergite (10LP) is simply apically tapered while *Oligembia* has a forked 10LP with inner and outer processes subequal. *Dachtylembia* also can be distinguished from *Oligembia* by the process of the left cercus-basipodite (LCBP), which has a slender, talon-like appearance without an outer hook; in *Oligembia* the process of the LCB has only a single inner process terminated by a minute bifurcation.

The purpose of this paper is to describe *Dachtylembia siamensis* **n. gen., n. sp.** and discuss its known distribution.

### **Material and methods**

Specimens were obtained from the bark of trees or lichens in various habitat types of nine provinces in the west, north and northeast of Thailand (Fig. 1). Digital images in the field were generated with a Nikon DSLR camera. Specimens were preserved in 95% ethyl alcohol and examined in the laboratory under an Olympus stereoscopic light microscope with an ocular micrometer. Specimens are deposited in the collection of the Chulalongkorn University Museum of Natural History (CUMNH), Bangkok and Thailand Natural History Museum (TNHM), Pathum Thani, Thailand.

The symbols and explanations used in the identification are as follows; 8 (T8, S8) = eighth abdominal tergite/

**Discussion.** According to Ross (2007), diversity of Embioptera in southeastern Asia is high, particularly so in Thailand. Teratembidae was also included in a dichotomous key to the families and subsequently, teratembids were reported as an oriental group. However, no species of this family was listed for this geographic area; therefore, *Dachylembia* **gen. nov.** is considered the first known teratembid in Thailand. Morphological characteristics of the new genus place it in Teratembidae; however, the cladistic analysis has demonstrated that some species in Teratembidae (e.g., *Teratembia geniculata* Krauss, 1911) and Oligotomidae (*Haploembia solieri* (Rambur, 1842), *Aposthonia glauerti* (Tillyard, 1932), *A. gurneyi* (Froggatt, 1904) and *Oligotoma saundersii* (Westwood, 1837)) are closely related (Szumik, 1994). The phylogenetic relationship of these two families including this new species should be reconstructed for further study.

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