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Species of *Bicellaria* (Diptera: Hybotidae) from Asia

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Abstract

Bicellaria amankutanensis sp. nov. (Uzbekistan), *B. chimganensis* sp. nov. (Uzbekistan), *B. farkaci* sp. nov. (China), *B. globulicauda* sp. nov. (Uzbekistan), *B. koreana* sp. nov. (North Korea, Russia), *B. kovalevi* sp. nov. (Georgia), *B. setitibia* sp. nov. (Georgia), *B. shatalkini* sp. nov. (Russia), *B. thailandica* sp. nov. (Thailand), and *B. woodi* sp. nov. (Japan) are described and illustrated. *Bicellaria montana* Kato is newly synonymised with *B. uvens* Melander. *Bicellaria spuria ingrata* Collin is considered a distinct species. A key to all known Asian species of *Bicellaria* is provided.

Key words: *Bicellaria*, Empidoidea, Hybotidae, Diptera, Palearctic Region, Oriental Region, new species, key

Introduction

Bicellaria Macquart, 1823, type species: *Bicellaria nigra* Macquart, 1823 [= *B. spuria* (Fallén, 1816)] is a middle-sized mostly Holarctic genus of Hybotidae with 38 described species or subspecies; 27 of them are Palearctic and 11 are Nearctic (Barták & Kubík 2013). In this paper, an additional 10 species from Asia are described (one of them from the Oriental Region).

Asian species of *Bicellaria* are very poorly known. Tuomikoski (1955) described *B. stackelbergi* from Kanin (North of European Russia), Siberia (Yakutsk, Altai) and Kamchatka, and reported *B. vana* Collin, 1926 (as subspecies) from Yakutsk, *B. subpilosa* Collin, 1926 from the Caucasus, and *B. uvens* Melander, 1928 (as *B. bisetosa* Tuomikoski, 1936; *B. bisetosa* was proposed as a junior synonym of *B. uvens* by Barták & Kubík 2013) from the Russian Far East but it is unclear if all these species were correctly identified. Collin (1960) described additional species (*B. femorata*) and subspecies (*B. spuria ingrata*) from Palestine (now Israel). Kato (1971) described three species from Japan; however, we found that one of his species (*B. montana*) was identical with *B. uvens* and propose a formal synonymy here. Other authors have not attempted to identify Asian *Bicellaria* to species level: Smith (1965) reported one species from Nepal and indicated it could be *B. vana*, Chvála (1983) reported one undescribed species close to *B. spuria* from Kazakhstan, and Bezzi (1912) from Formosa (= Taiwan) (doubtfully *B. spuria*).

Material and methods

The material studied is deposited in the following collections: CNC (Canadian National Collection of Insects and Arachnids, Ottawa), CULSP (Czech University of Life Sciences, Prague); NHMH (Natural History Museum, Helsinki); NMWC (National Museum of Wales, Cardiff), QSBG (Entomology Museum, Queen Sirikit Botanic Garden, Chiang Mai, Thailand), TAU (Tel Aviv University Entomological collection, Israel), ZMMU (Zoological Museum of Moscow State University, Russia).

Genitalia, together with the preceding 2–3 abdominal segments were removed from the rest of the body using small scissors and macerated in potassium hydroxide solution (approx. 10 %) in small vials submerged in hot water