Mitragomphus ganzanus Needham, 1944, a geographically misplaced dragonfly, is a junior synonym of Gomphidia kirschii Selys, 1878 (Odonata: Gomphidae)

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Abstract

Based on comparison of specimens and descriptions, Mitragomphus ganzanus Needham, 1944, described from Braganza [Bragança], Pará State, Brazil, and known only from the holotype, is found to be a junior synonym of Gomphidia kirschii Selys, 1878, a species from the Philippines. The monotypic genus Mitragomphus Needham, 1944, is synonymized with the genus Gomphidia Selys, 1854.

Key words: taxonomy, Brazil, Philippines

Resumen

Sobre la base de comparación de ejemplares y descripciones, se encuentra que Mitragomphus ganzanus Needham, 1944, descripto de Braganza [Bragança], Estado de Pará, Brasil, y conocido solo sobre la base del holotipo, es un sinónimo junior de Gomphidia kirschii Selys, 1878, una especie de Las Filipinas. El género monotípico Mitragomphus Needham, 1944, es sinonimizado con el género Gomphidia Selys, 1854.

Introduction

Needham (1944) described Mitragomphus ganzanus n. gen. & sp. based on a unique male in the USNM from Braganza [Bragança], Pará State, Brazil, Miss H. B. Merrill as collector. Needham's thorough description included a diagnosis commenting on features differing from all other known neotropical Gomphidae. At the time of his description, Needham had accidentally broken both cerci but was able to recover one of these organs. His illustrations show, in addition to the head and ventral view of the epiproct, two outline views of the detached cercus. Belle (1996), based on wing illustrations supplied to him by Dr. Oliver S. Flint, Jr., and reproduced here in Fig. 5, included it together with Zonophora under the subfamily Zonophorinae and tribe Zonophorini Belle, 1983 stating that adults of both genera ".... of this tribe are unique in having the metaparapteron armed with a strong posterior spine and in having the hind wing with an open anal loop (Schmidt, 1941a)" and "The exuviae referred to Mitragomphus by supposition (Belle 1977: 298 [sic! 290]) undoubtedly belongs to another genus since its abdomen has well-developed middorsal hooks (cf. Belle 1992: 19)." No other specimens had been found since the original description, and at the time that Garrison et al. (2006) were writing the chapter on the New World Gomphidae, Garrison borrowed and illustrated the holotype male providing illustrations of the wings (copied from Belle 1996), S1, subalar spines of the synthorax, auricle on S2, epiproct in dorsal view, S10 in lateral view, and three views of the detached cercus. Garrison erroneously attempted to place the cercus in its natural position in lateral view on S10 in that volume.
a Philippine specimen of *Gomphidia kirschii* with incorrect labels when describing *Mitragomphus*? Needham & Gyger (1939) also described *Moroagrion danielli*, n. gen. & sp. (Coenagrionidae) from the Philippines, and it was recently (Dijkstra & Kalkman 2013) found to be a junior synonym of the Palearctic *Pyrrhosoma nymphula* (Sulzer, 1776). The holotype labels for *M. ganzanus* give "Miss [Harriet][Bell]/Merrill" (Fig. 1b) as collector of the specimen. Merrill (1863–1915) did indeed collect in Brazil, and her specimens of *Argia tinctipennis* Selys from "Peixe-Boi, Para, Brazil," were included in Calvert's (1909) account of the Odonata of South America. She is listed in Skinner (1903: 731) as giving a talk on South American Cladocera, and she later sold 500 specimens of insects to the USNM (Rathbun 1911: 98). According to Anderson (2004), Merrill's mentor and colleague, Dr. Edward Asahel Birge of the University of Wisconsin, had suggested she go to South America despite many of her friends cautioning her not to do so. She left for Brazil by ship in early July 1902, collecting there for a year, and she returned to South America staying from 1907 to 1909. Hartridge (1997: 186) provides a chronological listing of Merrill's journeys in South America during 1902 and 1907-1909. In 1902, she visited Pernambuco, Bahia, Rio de Janeiro (Petrópolis), and São Paulo states in Brazil from ca 19 July – 25 September. In 1907–1908, her visits to Pará State included "[Ilha de] Marajó" ("17 August to at least 20 October 1907") the "Botanic Garden, Bosque Park, Igarape, Peixe Boi stream, Val de Camas" (December, 1907), "Rio Aramá" (12–20 November 1908) and the "Amazon River region near Santarem" (12–22 October 1908). There is no mention of Bragança, approximately 150 km east of Peixe Boi, in her itinerary. Merrill was a scientist and a keen observer, and she provided living color notes for Calvert's (1909: 145) specimens of *Argia tinctipennis* that were collected at Peixe Boi on 26 & 29 November 1907, just before her notation of "December" in her itinerary. Although it is possible that Merrill might have visited the region near Bragança, we believe that this locality would have been mentioned in her itinerary. We believe that the collector was incorrectly associated with the holotype specimen of *Mitragomphus* and further believe that the specimen was mislabeled as to locality.

This is the second instance of an Old World odonate species described under a different name being incorrectly assigned to the New World. The first was *Skiallagma baueri* Förster, 1906, which was found to be a junior synonym of the Paleotropical *Xiphiagrion cyanomelas* Selys, 1876 (Garrison 2012). Both cases are similar in that *Skiallagma baueri* and *Mitragomphus ganzanus* were known only from the type series, and the authors for both species had previously published on the Odonata fauna of the Old World.

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**References**


