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First records of the genus *Hishimonus* Ishihara from Thailand (Hemiptera: Cicadellidae: Deltocephalinae: Opsiini) including description of three new species

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Abstract

Seven species of *Hishimonus* Ishihara are recorded in Thailand, four of which were previously recorded from neighbouring countries and three new species described herein: *Hishimonus pallidus* **sp. nov.**, *H. diffractus* **sp. nov.** and *H. gillespiei* **sp. nov.** The other four species are *H. concavus* Knight, previously known from the Philippines, *H. subtilis* Knight recorded from Singapore, *H. aberrans* Knight recorded from Taiwan and *H. phycitis* (Distant), which is widespread in Asia from the Middle East to China. These species are all newly recorded from Thailand and represent the first records of the genus *Hishimonus* in that country.

Key words: Hemiptera, Cicadellidae, Deltocephalinae, Opsiini, new species

Introduction

The genus *Hishimonus* Ishihara, 1953 (Cicadellidae: Deltocephalinae: Opsiini) was last revised by Knight (1970a) who recognized 25 species, 17 of which were described as new. A number of additional species have subsequently been added to the genus from Japan (Ishihara 1972), China (Kuoh 1976, Li 1988, 2011, Cai & Kuoh 1995, Li & Wang 2004), India (Knight 1973, Subba Rao & Ramakrishnan 1990, Ramachandra Rao 1991) and Indonesia (Kamitani 2011). The number of recognized species is currently 46 most of which are limited to the Oriental region with extensions into the Ethiopian, Australian and eastern Palaearctic regions. Additional undescribed species are also known from China, Australia and Fiji.

The species of the genus show remarkable uniformity in external appearance, a factor which has led to confusion between a number of species, a situation clarified by Knight (1970a). The characteristic coloration, with mottled pale brown tegmen with a large circular or triangular brown spot on the hind margin forming a circle or diamond-shape when the wings are folded, is also shared with related genera such as *Hishimonoides* Ishihara, 1965 *Naevus* Knight, 1970b and *Litura* Knight, 1970b. Knight (1970a) did not include *H. melaleucae* (Kirkaldy) from Australia in his study, which is unfortunate since this species does not have this characteristic colour pattern and appears to comprise a series of closely related species, which will be treated in a subsequent paper on the Australian fauna.

Knight (1970a) stated that many of the species he treated were endemic to the areas from which his specimens had originated but, in most cases, the material he used was fairly sparse and there was little evidence presented for endemicity. This paper demonstrates that some of those species are more widely distributed than Knight's (1970a) original material implied.

Some species of *Hishimonus* are known to be of economic importance. *H. sellatus* (Uhler) is recorded as the vector of dwarf disease of mulberry (Sakai 1937) and Rhus yellows and Hovenia witches broom (Kusunoki *et al.*

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