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## Towards resolving a problem of the identity of the *Aethus* species (Hemiptera: Heteroptera: Cydnidae) occurring in Cambodia

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### Abstract

The genus *Aethus* in Cambodia is known only from a single species collected in the 1950s that was originally identified as *A. indicus*. However, what was regarded as *A. indicus* in the Oriental and Australian regions appeared to consist of three sibling species, recognizable only on the basis of male genital structures, i.e., *A. philippinensis*, *A. pseudindicus*, and true *A. indicus*. To date, the lack of males representing this genus from Cambodia made it impossible to verify which species actually occur in this country. The present study, based on eight males collected at the same locality in Cambodia where the specimens were originally identified as *A. indicus* more than 50 years ago (i.e., Siem Reap), confirmed the occurrence of *A. pseudindicus*, not *A. indicus*, as previously reported. Male genitalia, i.e. the paramere, the opening of genital capsule, and the apex of aedeagus, are described and their photographs are provided for both species.

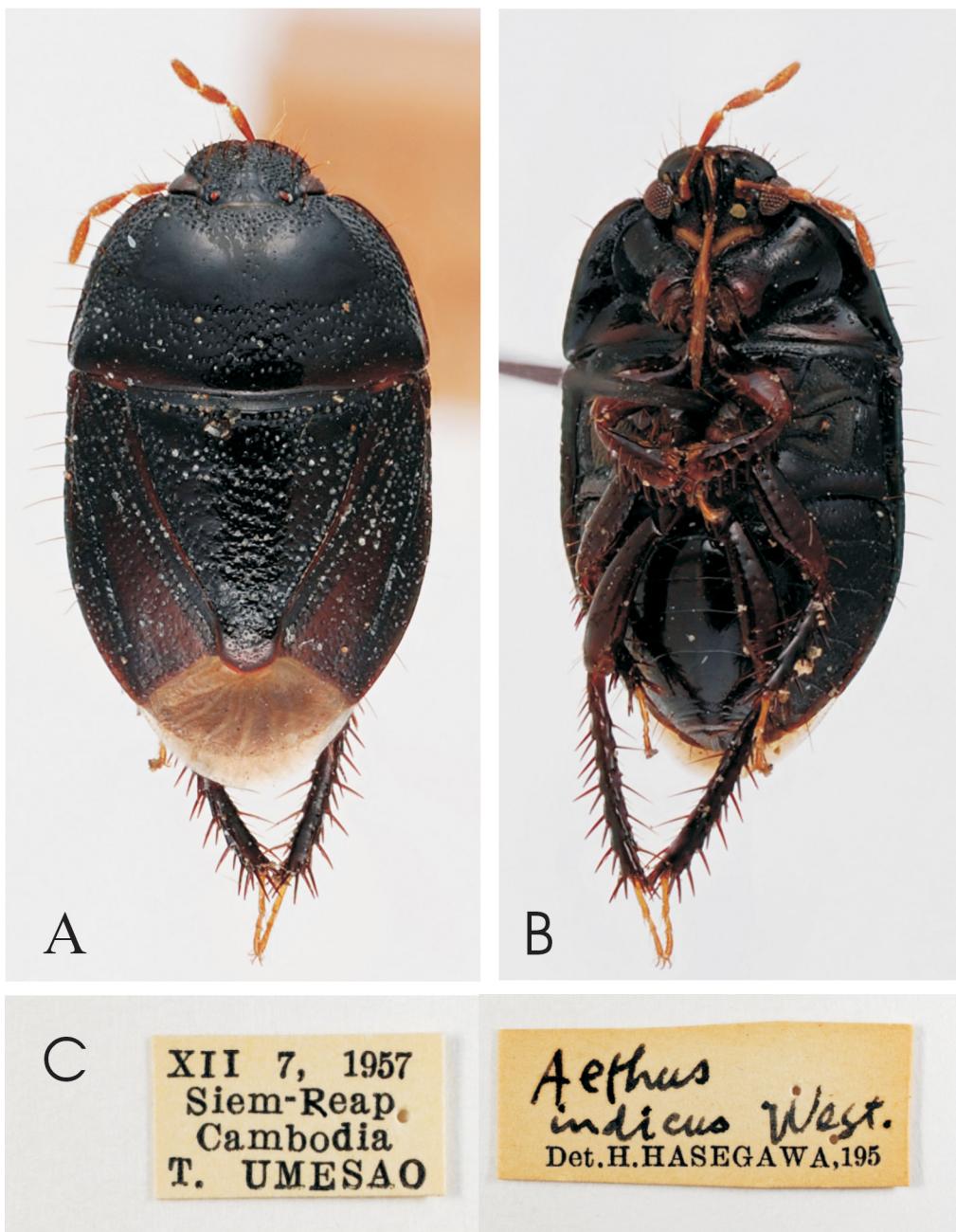
**Key words:** Heteroptera, Cydnidae, burrower bugs, *Aethus indicus*, *Aethus pseudindicus*, distribution, Cambodia

### Introduction

The burrower-bug (Hemiptera: Cydnidae) fauna of Cambodia is rather poorly known. Only 10 species, representing five genera and belonging to three subfamilies, have been recorded from this country (Walker 1867; Hasegawa 1962; Lis 1991a, 1991b, 1994, 1999a, 1999b, 2000). These include *Peltosys brevipennis* (Fabricius, 1798) of the subfamily Garsauriinae, *Stibaropus molginus* (Schiødte, 1848) of the subfamily Cephalocheinae, and eight species of the subfamily Cydninae, namely *Aethus indicus* (Westwood, 1837), *Alonips apicalis* (Dallas, 1851), *Byrsinus varians* (Fabricius, 1803), *Fromundiellus maurus* (Dallas, 1851), *Fromundus pygmaeus* (Dallas, 1851), *Lactistes minutus* J.A. Lis, 1994, *Macroscytus aequalis* (Walker, 1867), and *M. dominiqueae* J.A. Lis, 1991. When the Oriental Cydnidae were revised (Lis 1994), the presence in Cambodia was confirmed for all of the above species, except for *A. indicus*. This was due to the lack of specimens available for verification at that time.

*A. indicus* was, for a long time, regarded to be the most common and the most widespread burrower-bug species in the Old World tropics. However, the records from the Afrotropics appear to belong to *A. perosus* Stål, 1854 (Linnavuori 1993), and what was treated as the “*Aethus indicus*” in the Oriental and Australian regions actually consisted of three sibling species, i.e., *A. indicus*, *A. pseudindicus* J.A. Lis, 1993, and *A. philippinensis* Dallas, 1851, which are separated from each other only on the basis of the male genital structures (Lis 1993, 1994).

Among the samples of Cydnidae sent to the first author for identification from the Institut Royal des Sciences Naturelles de Belgique (ISNB), we found males of the *Aethus* species collected recently in Cambodia that enabled us to verify the species that actually occurs in this country; it appears that the species is *A. pseudindicus*.



**FIGURE 2.** The specimen representing a species the genus *Aethus* collected in Cambodia and identified as *A. indicus*: (A) body dorsal view; (B) body ventral view; (C) location and identification labels.

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