



Rediscovery and revision of *Foenobethylus* Kieffer, 1913 (Hymenoptera, Bethyliidae)

GERGELY VÁRKONYI¹ & ANDREW POLASZEK^{2,3}

¹Kainuu Regional Environment Centre, Friendship Park Research Centre, Lentiirantie 342 B, FI-88900 Kuhmo, Finland.

E-mail: gergely.varkonyi@ymparisto.fi

²Department of Entomology and International Commission on Zoological Nomenclature, the Natural History Museum, London SW7 5BD, UK; Imperial College of Science, Technology and Medicine, London, U.K. E-mail: A.Polaszek@nhm.ac.uk

³Corresponding author

Abstract

The bethylid genus *Foenobethylus* Kieffer, 1913, unstudied for almost a century, is redescribed and assigned to the subfamily Pristocerinae based on a preliminary phylogenetic assessment. Four new species: *F. bidentatus* n. sp. (Brunei), *F. elongatus* n. sp. (Malaysia), *F. emiliacasellae* n. sp. (Thailand), and *F. thomascokeri* n. sp. (Malaysia) are described, based on males only, as females remain unrecognised in this genus. All specimens are deposited in the Department of Entomology, the Natural History Museum, London, U.K. The type species *F. gracilis* Kieffer (Philippines), although unrepresented by any traceable specimen, can be distinguished from these species based on the original description. A key to the five known species of *Foenobethylus* is provided.

Key words: Pristocerinae, *Foenobethylus*, Southeast Asia, taxonomy, phylogeny, 28S rDNA

Introduction

Described as a monotypic genus from the Philippines by J. J. Kieffer in 1913, *Foenobethylus* has remained almost completely neglected since. In the most recent revisions of world bethylid genera (Terayama 2003a, b) and in the latest catalogue of world Bethyliidae (Gordh and Móczár 1990) it was recorded as *incertae sedis*, with no affiliation to any known bethylid tribe or subfamily. One reason for the lack of data on *Foenobethylus* has undoubtedly been that the genus is known only from the male holotype of *F. gracilis* Kieffer, 1913, which has proved to be untraceable. Furthermore, as Kieffer's original description (1913) is insufficient for a modern revision of both generic and suprageneric status of the genus, authors have had to wait for the discovery of further specimens of *Foenobethylus*.

A further problem with *Foenobethylus* Kieffer is that females are unknown. The most conspicuous characters of male *Foenobethylus* are the elongated neck-like propleuron (hence the reference to *Foenus* Fabricius, 1798 = *Gasteruption* Latreille, 1796 in the name of the genus), the strikingly swollen fore femur and the moderately swollen hind femur bearing one or several spines ventrally (a single one in *F. gracilis*). As sexual dimorphism is rather strong in some bethylids – especially in some pristocerine lineages, within which, as we will demonstrate, *Foenobethylus* belongs – it is possible that females are already known to science under a different generic name. Clearly, there is a need for accumulating further, preferably molecular, evidence to clarify this issue and to resolve the exact phylogenetic status of *Foenobethylus*.

On the basis of a comprehensive morphological examination of several specimens deposited in the Natural History Museum in London we aim in the present paper to (i) assess the phylogenetic status of *Foenobeth-*