4 Paul Aston

First record of the subfamily Hitelinae (Coleoptera, Carabidae) for Hong Kong and China

Paul Aston

2F, 102, Wang Tong, Mui Wo, Lantau, Hong Kong S.A.R. China Email: paulaston70@hotmail.com

ABSTRACT

The first record of *Eucamaragnathus angulicollis* (Jeanel 1937) and the subfamily Hitelinae for Hong Kong, China and the Palaearctic fauna (in the lateral sense) is given. The habitat requirements and where the specimen may have originated from are discussed.

Key words: Carabidae, Hitelinae, Coleoptera, Hong Kong, *Eucamaragnathus angulicollis*

INTRODUCTION

The Hiletinae is a small and little known subfamily of Carabidae with pan-tropical distribution. It contains two genera: *Hiletus* with six species confined to Tropical Africa and the more widely distributed *Eucamaragnathus* with 15 species (Erwin & Stork 1985 and Assman et al 2011).

METHODS

On 20 November 2014, Graham Reels was sampling with a dip net in Luk Keng marsh, as part of a Hong Kong University freshwater invertebrate survey he was conducting. In the waterlogged grasses and low-lying herbs at the back of Luk Keng village he netted a medium- to large-sized Carabidae beetle. This was passed on to the author, along with other Coleoptera specimens collected by Mr Reels during the course of the invertebrate survey. Most of these specimens are currently deposited in the author's collection.

RESULTS

Initial examination of the specimen revealed geniculate antennae (see figure 1), deeply sculptured head and zigzag shaped mandibles (figure 2) clearly indicating it did not belong to any of the previously known, locally occurring carabid groups. Using the key given in Andrewes (1929), the author was able to place the specimen in Hiletinae.. The specimen was identified as *Eucamaragnathus* (*Parahiletus*) *angulicollis* (Jeanel 1937) using Erwin & Stork's (1985) and Negre's (1967) keys.

Eucamaragnathus angulicollis (Jeanel 1937)

Differential diagnosis to known species of *Eucamarag-nathus* after Erwin & Stork (1985):Elytron with stria five and seven continued to apex and with apex rounded; pronotum with lateral channel and adjacent surface

punctate; abdominal sternum two coarsely punctured. The length of the Hong Kong specimen at 10.0 mm is slightly under the 10.8 - 12.0 mm range given by Erwin & Stork (1985).

Although only previously recorded from Vietnam, this species has quite a large distribution, the most southerly being Ho Chi Min city (Saigon), latitude 10o 45'N, to the most northerly; the type locality Chiem Hoa, latitude 22o 12'N (almost the same latitude as Hong Kong (22o 14'N).

ACKNOWLEDGEMENT

I thank Dr. Borislav Guéorguiev of the National Museum of Natural History, Sofia, Bulgaria for advice and help with literature and Dmitri Fedorenko, Russian Academy of Sciences for reviewing the original manuscript. I also thank Graham Reels of Hong Kong University for providing the specimen and Prof. Benoit Guénard; HKU for the imaging of *E. angulicollia*.

REFERENCES

Andrewes, H.E. 1929: *The Fauna of British India including Ceylon and Burma. Coleoptera Carabidae*. Vol 1 - Carabinae -1. London. Taylor and Francis.

Assman T., Drees C., Matern A. & Schuldt A. 2011. *Eucamaragnathus desenderi*, a new ground beetle species from Africa. (Coleoptera, Carabidae) *ZooKeys* 100: 37–46

Erwin T.L. & Stork N.E. 1985. The Hiletini, an ancient and enigmatic tribe of Carabidae with Pantropical distribution (Coleoptera). *Systematic Entomologist* 10: 405-451.

Jeanel R. 1937. Les Hilétides (Coleoptera Adephaga), une lignée african-brésilienne. *Revue Française d'entomologie*, 4: 202-219.

Löbl, I. & Smetana, A. (eds) 2003. *Catalogue of Palae-arctic Coleoptera*. Vol 1. Archostemata - Myxophaga - Adephaga. Apollo Books. Stenstrup. 1-819.

Negre J. 1967. Remarques sur les Hilétides (Col. Carabiques) avec description de deux espéces nouvelles. *Miscellanea Zoologica* 16: 57-62.



Figure 1: Dorsal view of Eucamaragnathus angulicollis (Photo, B. Guénard)



Figure 2: Dorsal view of the head (Photo, B. Guénard)



Figure 3: Dorsal view of the pronotum (Photo, B. Guénard)