

First record of the Carabidae subfamily Apotominae LeConte, 1853 from Hong Kong

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ABSTRACT

The first record for the Apotominae LeConte, 1853 for Hong Kong is given. Previous records of the group for China are discussed.

Key words: Coleoptera, Carabidae, Apotominae, *Apotomus*, Hong Kong

INTRODUCTION

The Apotominae is a small subfamily, consisting of a single genus *Apotomus* Leconte with just over 20 species recorded in all zoological regions except the Nearctic (Erwin 1980), the distribution generally being irregular.

Specimens of *Apotomus* are quite distinctive and can be separated from all other Carabidae in Hong Kong in having the following four features:

1. mesacoxal cavities entirely enclosed by the sterna, the mesepimera not attaining the coxae, as in Harpalinae;
2. rocoxal cavities with two openings inwards;
3. mandibles with a fixed seta in the scrobe, as in Trechinae;
4. elytra entire at the apex.

There are three other features that make this genus very distinctive: obsolete lateral borders to the pronotum, body penduculate, and very long and narrow labial palps. These features, coupled with the long thin legs, give members of the genus the appearance of an Elmidae at first sight, at least in the author's experience.

It is only in the last 20 years that this subfamily has been recorded in China. Wrase (2003) lists no species as occurring in Hong Kong or China. However, Lei (1998) was the first to record this subfamily for China, recording the wide-ranging species *Apotomus atripennis* Motschulsky 1858 in Hubei Province. Tian (2000) described *Apotomus qiongshanensis* Tian 2000 from Hainan Island.

DESCRIPTION

A female specimen (Figure 1) was collected on 23 September 2010 in Wang Tong, Lantau Island at night time, close to a mercury vapour light. It moved very slowly and was capable of flight. In this specimen the appendages and body parts were very weakly connected, such that when the abdomen was dissected all the appendages dropped off. The specimen was stored in dimethyl-hydantoin-formaldehyde. It was compared with at least one specimen of *A. qiongshanensis*, in the Insect collection of the South China Agricultural University, but

differs from that species in being paler and lacking the pronotal foveae. It differs from *A. atripennis* in having the entirety of its antennae pubescent. It is probable that this is an undescribed species, though more material is needed in order to ascertain its status.

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REFERENCES

- Erwin T.L. 1980. Systematic and Zoogeographic notes on Apotomini, an Old World faunal element new to the Western Hemisphere list, with a description of a new species from Brazil (Coleoptera: Carabidae). *The Coleopterists Bulletin* 34(1): 99-104.
- Lei, C.L. 1998. *Catalogue of Insects of Hubei Province*. Hubei Science & Technology Press, Wuhan. 182pp.
- Tian Ming-Yi 2000. Note on the genus *Apotomus* Illiger with description of a new species from China (Coleoptera: Carabidae). *Acta Zootaxonomica Sinica* 2000, 25(1): 73-75.
- Wrase, D.W. 2003: Subfamily Apotominae Leconte 1853. In: *Catalogue of Palaearctic Coleoptera*. Vol 1. Archostemata - Myxophaga - Adephaga p237, (Löbl, I. & Smetana, A. eds). Apollo Books. Stenstrup. 819pp.

FIGURE



Figure 1. *Apotomus* sp. 23 September 2010 in Wang Tong, Lantau Island.