

New records of the family Phalacridae from Hong Kong (Coleoptera: Cucujoidea)

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Introduction

The Phalacridae is a family of small, round, glabrous beetles with rather homogeneous external morphology. Members are commonly collected by sweeping grasses, dead vegetation, and flowers, and most feed on microfungi in these habitats as larvae and adults. Some feed within flower heads of certain Asteraceae as larvae and on pollen of various groups of dicots as adults. Because of their small size and uniform appearance they are among the most poorly studied groups of beetles worldwide. Generic limits and even identities are largely confused in non-Holarctic realms, and redefinitions and synonymies are sorely needed (Steiner 1984). Here we present a summary of the knowledge of the Phalacridae in Hong Kong, including two new country records for China. Two species were previously recorded from Hong Kong, bringing the total to four species, although one of these is likely a junior synonym. Phalacridae are most diverse in tropical and subtropical regions, and additional species are likely to be recorded from Hong Kong in the future.

One of us (Paul Aston) has been collecting and studying Coleoptera in Hong Kong for over five years. The collection, although from all regions of the Hong Kong SAR, is biased towards the large island of Lantau. Specimens are deposited in the AFCD collection in the Cheung Sha Wan Government Offices (AFCD-CSW) Hong Kong, China, and the Louisiana State Arthropod Museum (LSAM), Baton Rouge, Louisiana, USA.

Genus *Augasmus* Motschulsky, 1858

This genus is widespread and diverse in warm regions of the Old World. Habits of members of the genus are virtually unknown. It may be easily recognized by the following character states:

- hind tarsus elongate, filiform, with basal tarsomere subequal to or exceeding length of remaining tarsomeres;
- hind tibia with inner (ventral) apical ctenidium strongly obliquely oriented with respect to axis of tibia;
- metaventral process exceeding the mesocoxae anteriorly; and
- protibia with ctenidium on outer edge for at least half length of tibia.

Augasmus humilis (Guillebeau, 1893), new country record Figure 1.

One male from Hong Kong: "Wang Tong, Lantau Island, 14 Oct 2009, P. Aston" (AFCD-CSW). The aedeagus of our specimen matches the aedeagal illustration in Lyubarsky (1994: Fig. 4). This is a small, bright testaceous species that is widespread in southeast Asia. This represents a new record for both Hong Kong and China.

Augasmus noteroides (Blackburn, 1895)

This species was recorded by Champion (1924: 239) from Hong Kong as *Parischius noteroides* (Blackburn). It may, in fact, be a synonym of *A. humilis*. A thorough review of the genus, including dissection of the types of this species, is sorely needed.

Genus *Phalacrus* Paykull, 1800

This is the most widespread genus of Phalacridae, occurring on all continents except Antarctica and nearly coextensive with the family as a whole. It is easily recognized by the following suite of character states:

- scutellum large, width at base greater than greatest diameter of eye;
- clypeal margin arcuate, strongly shelf-like and concealing antennal scape from above; and
- metaventral process strongly anteriorly protruding between mesocoxae.

Members are mostly pitch black in colour, but some are rufotestaceous or have striking maculations on the elytra.

***Phalacrus punctatus* Champion, 1925**

Recorded from Hong Kong by Champion (1925: 605). A medium-sized (2.5–3.0 mm), totally black species with punctate elytra.

***Phalacrus rufoguttatus* Lyubarsky, 1994, new country record**

Figure 2.

Three specimens (two males, one female) from Hong Kong: "Po Lin Monastery, Lantau Island, in flowers of *L. sinense*, 9 Apr 2009, P. Aston" (two in AFCD-CSW, one in LSAM). The adult beetles were discovered visiting flowers of Chinese privet, *Ligustrum sinense* Lour. (Oleaceae), the first biological information recorded for this species. This represents the first record of the species outside of the Philippines. It is easily recognized by the large red subapical maculations on the elytra.

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Figure 1. *Augasmus humilis* (Guillebeau). Adult habitus (abdomen removed).



Figure 2. *Phalacrus rufoguttatus* Lyubarsky. Adult habitus.

