

First record of the subfamily Lepturinae from the Hong Kong Fauna (Coleoptera, Cerambycidae)

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ABSTRACT

The genus *Caraphia* Gahan, 1906 is recorded from Hong Kong for the first time, representing the first record of the subfamily Lepturinae from the Hong Kong fauna.

Key words. *Caraphia*, Lepturinae, Hong Kong, first record.

INTRODUCTION

Gahan (1906) established the genus *Caraphia* under the subfamily Lepturinae, and described two species, *C. cribrata*, originally designated as type species, and *C. minor*, both from Burma (Myanmar). A third species *Microrhabdium laticeps* Pic, 1922 was also described under Lepturinae. *Neosalpinia lepturoides* Matsushita, 1933 was initially placed in the subfamily Cerambycinae, though now the genus *Neosalpinia* Matsushita, 1933 is considered a junior synonym of *Caraphia* (Chou & Ohbayashi, 2008). Recent authors invariably place *Caraphia* in the Lepturinae, though tribal affiliation varies. Ohbayashi (1992) proposed it be placed in the Lepturini and this has been followed by recent authors (Löbl & Smetana, 2010). However, Chou & Ohbayashi (2008) suggested that the genus *Caraphia* should be placed neither in Lepturini nor in Xylosteini, and that a new tribe be designated to incorporate this genus.

Caraphia Gahan, 1906 contains 12 species (Tavakilian G. (Author) & Chevillotte (software), 2013), with seven species reported in the Palaearctic Catalogue (Löbl & Smetana, 2010). Only four species have been recorded from China (Löbl & Smetana, 2010).

No Lepturine species has previously been recorded in Hong Kong (Yiu, 2009). The specimens from Hong Kong closely resemble *Caraphia lepturoides* (Matsushita, 1933) which is known only from Japan.

MATERIALS AND METHODS

Material: 1 female, Hong Kong, Lantau, Wang Tong, 2011.vi, coll. Paul Aston. 1 male, Hong Kong, Lantau, Wang Tong, 2011.v.28, coll. Paul Aston, by light trap.

The specimens were observed using a Leica S8APO microscope, and sent to the Lepturinae expert Prof. Nobuo Ohbayashi for species identification. Pictures were taken with a SONY T 30 camera.

DESCRIPTION OF HONG KONG MATERIAL (Figs. 1-6)

Length: from antennal insertions to the apices of elytra 8.7 mm in male, 9.6 mm in female, width at humeri 2.4 mm in male, 2.8 mm in female.

Body: dark brown, head, antennal scape, prothorax and elytra deeply and closely punctured with scale-like sub-erect pale yellow hairs arising from the punctures; the hairs on the elytra arranged in 11 longitudinal rows; second to eleventh segment of antenna furnished with very thin appressed pubescence; ventral surface moderately punctured with curved recumbent pale yellow pubescence; legs moderately covered with pale yellow pubescence.

Head (Figs. 3 & 5): nearly as long as wide, widest across eyes; labrum very short, transverse; clypeus produced in front, trapezoidal; frons oblique with sides carinate in reverse parenthesis shape as Λ ; gena short; antennal insertion distinctly elevated; vertex depressed in U-shape; eyes very large, coarsely faceted (Fig. 5), deeply emarginate near the middle of lobes around antennal insertions. Antennae long and slender, about 1.5 times as long as body length and the middle of eighth segment exceeding the elytral apex; scape longer than third, 5th the longest; scape and second antennomere cylindrical, 3rd to 7th not so cylindrical and with irregular carinae, 8th to the last segments square shaped in cross section with regular carinae (Fig. 4); relative lengths of segments as follows: male: 54 : 10 : 43 : 49 : 73 : 70 : 68 : 65 : 63 : 60 : 63; female: 58 : 10 : 48 : 50 : 77 : 74 : 70 : 67 : 67 : 67 : 69.

Prothorax: widest near base, 1.2 times as long as wide, almost parallel-sided in basal half, then slightly convergent apically; disc lightly convex above with a transverse depression near base; apex marginate, 0.73 time as wide as basal width.

Scutellum linguat. Elytra about 2.5 times as long as basal width, widest near base, basal four fifths nearly parallel-sided, then gently narrowed toward the truncate apices; disc lightly swollen on both sides behind scutellum, provided with 11 rows of quadrate deep setigerous punctures.

Legs: moderately long and slender; femora sub-linear; hind tarsi short with first segment as long as second and third combined; third tarsal segment deeply cleft.

DISCUSSION

According to Prof. Nobuo Ohbayashi (personal communication, 2013-07-05), the two specimens from Hong Kong are close to *Caraphia lepturoides* (Matsushita, 1933) which is known only from Japan, though it will require careful comparison with other Asian species, including genital structures. Prof. Ohbayashi is currently working on a revision study of Chinese *Caraphia* and the details will be given in the near future. Shortly before printing Prof. N. Ohbayashi informed us that the *Caraphia* species described here is actually a new species to science and that a formal description will be published soon.

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REFERENCES

- Chou W.-I & Ohbayashi N. 2008. A New Species of the Genus *Caraphia* from Taiwan, with Consideration of the Status of the Genus (Coleoptera: Cerambycidae) Studies on the Taiwanese Lepturinae, II. *The Entomological Review of Japan* 63 (2): 135-144, 5 figs.
- Gahan C. J. 1906. *The Fauna of British India, including Ceylon and Burma. Coleoptera. - Vol. I. (Cerambycidae)*. London, C. T. Bingham: xviii + 329 pp., 107 figs.
- Hua L.-Z. 2002. List of Chinese Insects. Zhongshan (Sun Yat-sen) University Press, Guangzhou. *List of Chinese Insects* 2: 1-612.
- Löbl I. & Smetana, A. (2010) *Catalogue of Palaearctic Coleoptera, Vol. 6*. Stenstrup: Apollo Books, 924 pp.
- Ohbayashi N. 1992. Taxonomic Notes on Japanese Cerambycidae (Coleoptera). *Acta Coleopterologica Japonica* (2): 1-11, 22 figs.
- Pic M. 1922. Nouveautés diverses. *Mélanges Exotico-Entomologiques* 37: 1-32.
- Tavakilian G. (Author) & Chevillotte H. (Software) [2012]. Titan : base de données internationales sur les Cerambycidae ou Longicornes. Version 3.0, [15/10/2012]. [http://lully.snv.jussieu.fr/titan/sel_genre2.php (2013-5-9)]
- Yiu, V. (2009): *Longhorn Beetles of Hong Kong*. Insect Fauna of Hong Kong, Fascicle 1. Hong Kong Entomological Society. Hong Kong: 149pp.

FIGURES

Figures 1-6. *Caraphia* nr. *lepturoides* (Matsushita, 1933) from Hong Kong. **1.** Female, caught on June, 2011; **a**, dorsal view; **b**, lateral view. **2.** Male, caught on 28 May, 2011 by light trap. **3.** Head in frontal view. **4.** Antennomeres IX and X, showing the carinae. **5.** Head and pronotum in dorsal view, showing the scale-like hairs and coarsely faceted eyes. **6.** Divided stridulatory plate of mesonotum. **Note:** images 1-2 scale 2mm, images 3-6 not to scale.

