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Female of *Chaetopsilomerus hainanensis* (Coleoptera, Cerambycidae), with Notes on the Systematic Position of the Genus

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Abstract The female of *Chaetopsilomerus hainanensis* Niisato et Han, 2017 is described for the first time. The systematic position of the genus *Chaetopsilomerus* Niisato et Han, 2017 is briefly discussed based on the additional materials in both sexes.

Introduction

The monotypic genus *Chaetopsilomerus* Niisato et Han, 2017 is a peculiar clytine genus which was recently established based on *Chaetopsilomerus hainanensis* Niisato et Han, 2017 from Hainan Is., southeastern China (Niisato & Han, 2017). Although being common with an elongate stem at the apico-internal corner of the antennomere III, this genus is clearly separable from the related taxon, *Psilomerus* Chevrolat, 1863 by the cylindrical antennomeres V–XII which are provided with the short uniform pubescence in the dense regular lines on the surface. The feature of antennae may be the sex dimorphism in the male, since only two males of *C. hainanensis* were available in the original description. During the field survey in Hainan Is. in 2017, a pair of the specimens were successfully brought to us. In the following lines, we newly describe the female of *C. hainanensis* and briefly discussed the systematic position of the genus based on the additional specimens in both sexes.

Material and Methods

Specimens used in the present study were originated from the collection of Bin Insect Taxonomy Studio, Beijing, China (BITS) and T. Niisato, Tokyo, Japan (TNT).

The morphological observation and the abbreviations used in the measurements follow Niisato and Han (2017, p. 201).

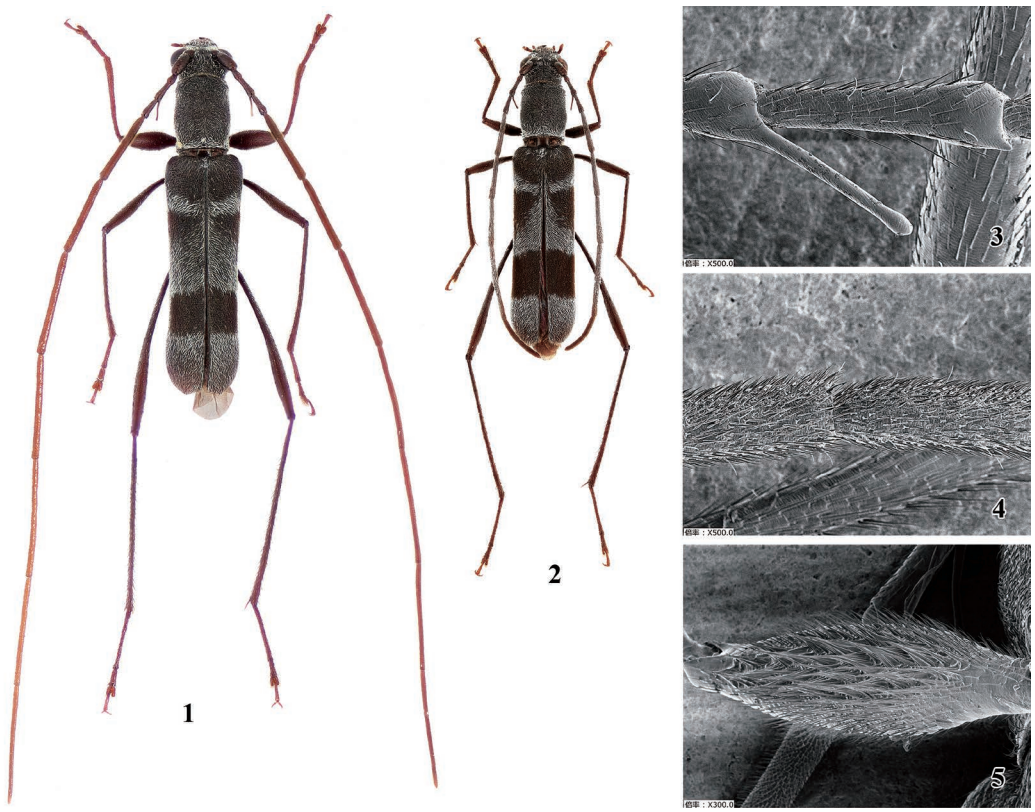
Taxonomy

Chaetopsilomerus hainanensis Niisato et Han, 2017

(Figs. 1–6)

Chaetopsilomerus hainanensis Niisato et Han, 2017: 202, figs. 1–14; type locality: “Hainan: Jianfengling”.

Description of female. Antennae slightly longer than body, surpassed elytral apices near the apex of antennomere VIII; antennomere IV half the length of V, briefly but clearly dent at apico-internal corner; V–X gradually decreased in length, and strongly abbreviated in VIII–X, thickened at each apex of V–VII; XI slightly longer than the preceding; V–VII rather densely clothed with pale gray pubescence;



Figs. 1–5. *Chaetopsilomerus hainanensis* NIISATO et HAN, 2017. —— 1, Whole habitus, ♂; 2, ditto, ♀; 3, antennomeres III–IV, ♀; 4, antennomeres IX–X, ♀; 5, underside of fore femur, ♂. —— 1 & 2, Optical image; 3–5, SEM image.

Fig. 6. The main peak of Mt. Jianfengling, Hainan Is.

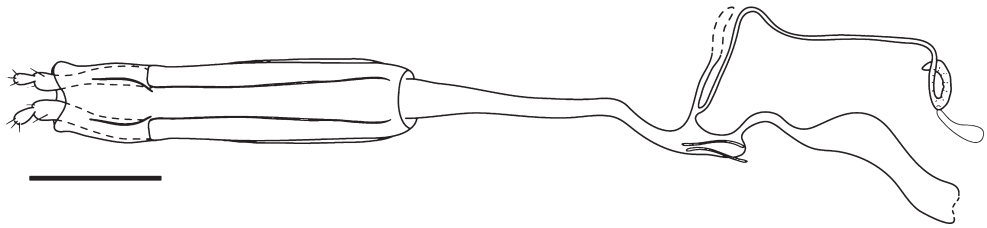


Fig. 7. Female genitalia of *Chaetopsilomerus hainanensis* NIISATO et HAN, 2017. Scale: 0.50 mm.

VIII to basal half of IX densely with thick pale gray pubescence, and the apical remainders with thick dark brown pubescence. Pronotum shorter than in male. Elytra very weakly prominent anteriad at humeri, gently emarginate on sides. Anal ventrite semicircular, 2/5 the length of basal width. Legs shorter than in male, with hind femora surpassed elytral apices by about apical third.

Female genitalia (Fig. 6) basically similar to that of *Psilomerus*; ovipositor medium in length in Clytini; coxite ovate, moderately developed; spermatheca slender, slightly bent ventrad near apex, with long, almost straight duct, and relatively large gland.

Measurements. Female (n = 1): Body length 7.30 mm; HW/PA 1.24; PL/PA 1.37; PL/PW 1.11; PA/PB 0.90; PL/EL 0.28; EL/EW 3.20.

Additional specimens examined. 1 ♀ (BITS), The main peak of Mt. Jianfengling, alt. 1,412 m, 18°43’0.85” N / 108°52’17.74” E, Jianfeng Township, Ledong Li Autonomous County, Hainan Province, China, 20.V.2017, Bin LIU leg.; 1 ♂ (TNT), same locality, 13–14.VII.2017, native collector leg.

Distribution. China: Hainan.

Remarks. Despite the sexual dimorphism, the specialized features in the fore femora and antennomeres V–XI in male, VIII–XI in female are with no doubt the autapomorphies for the monotypic genus *Chaetopsilomerus* and seldom provided in the other genera of the Clytini (NIISATO & HAN, 2017). A similar feature in male antennae was recently found in the genus *Trichochelidonium* VIVES, 2017 in the Callichromatini (VIVES, 2017). Apart from the exception, however, the abbreviated antennomere IV which is 1/4 in the male or half in the female as long as V, may be the most peculiar feature of *Chaetopsilomerus*. Whereas among several genera related to *Chaetopsilomerus*, the antennomere IV is equal or only slightly shorter than V in *Psilomerus*, and about 2/3 the length of V in *Demonax* THOMSON, 1860 even in the male. With those distinctive features, *Chaetopsilomerus* seems to be a unique genus within the tribe Clytini, although it has a close relationship with *Psilomerus* as noted by NIISATO and HAN (2017).

Bionomics. Adults of *Chaetopsilomerus hainanensis* appear from early March to middle of July in Mt. Jianfengling, Hainan Is., and sometimes collected on a windblown mountain peak in cloudy weather, but have not collected from the blossoms like other clytine beetles.

Acknowledgment

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要　　約

新里達也・刘　彬・韓　昌道：*Chaetopsilomerus hainanensis* の雌記載および属の類縁関係について（鞘翅目カミキリムシ科）．――― *Chaetopsilomerus* は，中国海南島産のタイプ種の雄個体に基づいて創設されたトラカミキリ族の一属である．最近になってタイプ種の雌標本が得られたので，本論文で雌の記載を行うとともに，改めて本属の特異性について述べた．本属の触角と前腿節に現れる特殊な毛房状構造は，第二次性徴であることが判明したが，いずれにしてもこの形質は本属に固有のものである．また，本属の触角第 4 節は著しく短く，雄で第 5 節の 1/4，雌で 1/2 である点もきわめて特異である．

References

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