



RESEARCH ARTICLE

**Three new synonyms of *Mecynippus ciliatus* (Gahan, 1888)
(Cerambycidae: Lamiinae: Monochamini)**

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Abstract: Three new synonyms of *Monohammus ciliatus* Gahan, 1888 are proposed based on type material examination: *Mecynippus ciliatus* (Gahan, 1888) = *Mimothestus delkeskampi* Breuning, 1961 **syn. nov.** = *Monochamus rondoni* Breuning, 1965 **syn. nov.** = *Mimothestus luteicornis* Xie, Shi & Wang, 2012 **syn. nov.** Diagnosis, distribution data, taxonomic discussion and figure plates are presented.

Key words: Cerambycidae, Monochamini, *Mecynippus*, *Mimothestus*, new synonyms.

Introduction

When the first author was identifying some material from Hainan Island collected by the late Mr. Wenhsin Lin, she found one “common” but “problematical” species. Obviously, it is identical with recently described species, *Mimothestus luteicornis* Xie, Shi & Wang, 2012, which includes one female paratype collected from Bawangling of Hainan Island. However, it is confirmed that the species is undoubtedly identical to *Mecynippus ciliatus* (Gahan, 1888) based on the examination of the type specimen in NHML by Carolus Holzschuh (personal communication). Meanwhile, Carolus Holzschuh pointed out that it is identical to *Mimothestus delkeskampi* Breuning, 1961 (personal communication). Also the second author Wen-Xuan Bi pointed out that it should be identical to *Monochamus rondoni* Breuning, 1965.

These synonymic information had been given to Guang-Lin Xie, but he has no plan to make a note in the near future (personal communication). In order to make the Chinese catalogue of Cerambycidae clearer, the new synonyms are herein reported.

Material and methods

Specimens examined and related type materials are deposited in the following institutions or private collection (abbreviations shown in the text are as follows).

BM: Bernice P. Bishop Museum, Honolulu, USA

CBWX: Collection of Wen-Xuan Bi, Shanghai, China

CCCC: Collection of Changchin Chen, Tianjin, China

CCH: Collection of Carolus Holzschuh, Villach, Austria

IZAS: Institute of Zoology, Chinese Academy of Sciences, Beijing, China

MNHU: Museum für Naturkunde der Humboldt-Universität, Berlin, Germany (= ZMB)

NHML: The Natural History Museum, London, UK (= BMNH: British Museum (Natural History))

YUHC: Entomological Museum, Yangtze University, Jingzhou, Hubei, China

Results

Mecynippus ciliatus (Gahan, 1888)

Monohammus ciliatus Gahan, 1888: 273.

Meges ciliatus Gressitt, 1942: 8.

Monochamus ciliatus Breuning, 1944: 445.

Mecynippus ciliatus Gressitt, 1951: 383. – Breuning 1961a: 359. – Hua 2002: 214. – Yiu 2009: 86. – Hua et al. 2009: 459. – Hubweber et al. 2010: 281.

Mimothestus delkeskampi Breuning, 1961b: 311. **syn. nov.**; – Hubweber et al. 2010: 281.

Monochamus rondoni Breuning, 1965: 50, fig. page 51. **syn. nov.**; – Rondon & Breuning 1970: 460, 463, fig. 33 g. – Wang 1997: 440. – Hua et al. 2009: 460. – Hubweber et al. 2010: 283.

Mimothestus luteicornis Xie, Shi & Wang, 2012: 67, figs 6-9, 15-16. **syn. nov.**

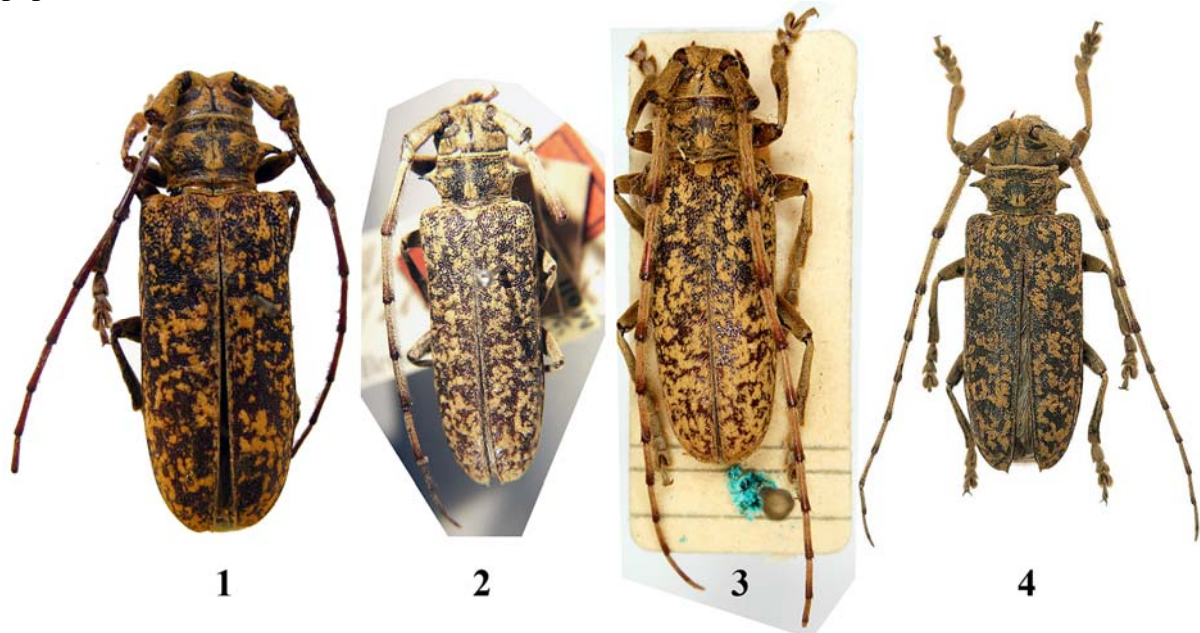
Diagnosis

This species can be easily identified by: antennal scape with a closed cicatrix, antennae densely fringed with short hairs beneath, antennomeres with darker apices; prothorax tuberculate laterally, the procoxal cavity closed; the 4th tarsomere absent; elytra brown to black with many (in part confluent) splotches of ochreous pubescence, elytral apex rounded at outer angle and spined at sutural angle. The pubescent appearance is similar to *Mimothestus atricornis* Pu, 1999 but their pronotal lateral tubercles and antennal fringed hairs beneath are very different. Clear pictures of both sexes are shown in figs 5-6. We don't know the right genus and temporarily followed other authors to keep it in *Mecynippus*.

Type material examined (all only through pictures or by other colleagues)

One of the syntypes of *Monohammus ciliatus* Gahan (Fig. 1), female, "China" (handwritten), "241/ 7/6/49" (handwritten), "Bowring 63·47*" (printed), "Monohammus ciliatus gahan/ type" (handwritten) examined through a picture taken by Helena Maratheftis in NHML. Holotype of *Mimothestus delkeskampi* Breuning (Fig. 2), female, Kwang-Tung, Lung Tao-shan, 21.V.1917, leg. Mell, examined through a picture (bad quality) taken by Andreas Weigel in MNHU. Holotype of *Monochamus rondoni* Breuning (Fig. 3), published as female but should be a male, "Laos: Xieng Khouang / 10.IV.64" (handwritten), "X. Khouang / 10.4.64" (handwritten), "Monochamus rondoni mihi Type" (handwritten), "Breuning dét." (printed), "Monochamus rondoni n. sp. Breuning / Coll. J. A. Rondon Laos"

(typed), “J. A. Rondon Collection Bishp Mus.” (printed), examined through pictures taken by Junsuke Yamasako and Nobuo Ohbayashi in BM. Holotype of *Mimothestus luteicornis* Xie, Shi and Wang (Fig. 4), China, Guangxi, Wuming, Damingshan, 28 June 2008, collected by Cheng-hui Zhan, deposited in YUHC, examined through the recently published paper.



Figures 1-4. Type pictures, not to scale. **1**, One syntype of *Monohammus ciliatus* Gahan, female, from China, picture taken by Helena Maratheftis; **2**, Holotype of *Mimothestus delkeskampi* Breuning, published as a female but may be a male, from China, Guangdong, picture taken by Andreas Weigel; **3**, Holotype of *Monochamus rondoni* Breuning, published as a female but should be a male, from Laos, Xieng Khouang, picture taken by Junsuke Yamasako and Nobuo Ohbayashi; **4**, Holotype of *Mimothestus luteicornis* Xie, Shi and Wang, female, from China, Guangxi, picture copied from Xie, Shi & Wang 2012.

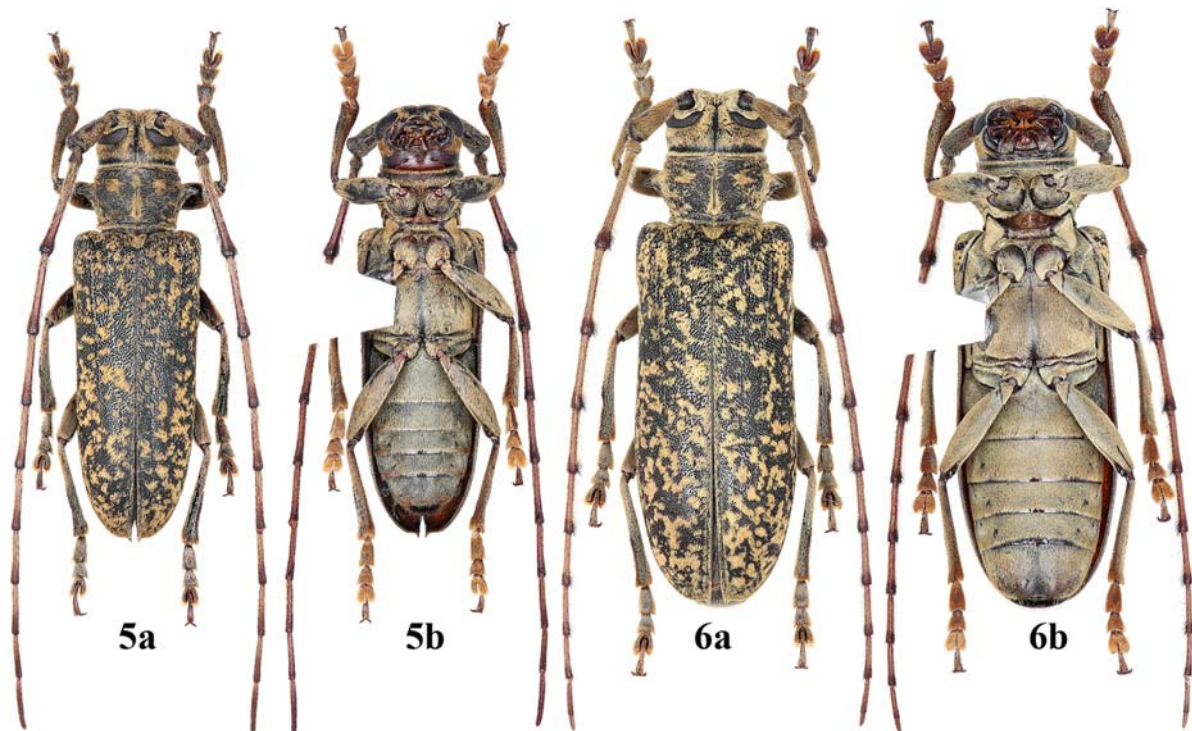
Additional material examined

Guangxi: 2 males (20.5-21.0 mm) 1 female (25.5 mm) (Fig. 6), 24 km, Mt. Damingshan, 2011.VII.1, leg. Chao Li (IZAS & CCCC). **Hainan:** 1 female (24.8 mm), Ledong County, Jianfengling, Jianfengzhen, Redaiyulinshiyansuo (tropical forest lab), alt. 150 m, 2011.V.30, leg. Wenhsin Lin (IZAS); 1 female (27.7 mm), Hainan, Ledong, Jianfengling, Mingfenggu, 950-1000m, 2011.V.22, leg. Wen-Xuan Bi (CBWX). **Jiangxi:** 1 male (21.3 mm) (Fig. 5), Jiangxi, Shangrao, Wuyishan, 2011.VII, leg. Chen Chu (CCCC). **Chongqing:** 1 male (20.0 mm), Chongqing, Simianshan, Dawopu, 1066m, 2008.VII.3, leg. You-Quan Zuo (CCCC), 1 female (25.0 mm), same data but 2008.VII.4, leg. Li-Jiang Wang (CCCC).

Laos: NE Laos, Hua Phan prov., Phou Pan (Mt.), Ban Saleui, 1300-1900 m, ~20°12'N, 104°01'E (GPS), C. Holzschuh, all deposited in CCH: 1 male & 2 females, 2007.V.17- VI.3; 1 male & 2 females, 2008.IV.23-V.15; 1 female, 2009.V.10-16; 1 male, 2011.V.2; 1 male, 2011.V.11; 1 female, 2011.V.15; 3 females, 2012.IV.23.

Distribution: **China:** Hongkong (Breuning 1944), Hainan (Xie, Shi & Wang 2012, and material), Guangdong (Breuning 1961b; Xie, Shi & Wang 2012), Jiangxi (**new province record**, material), Guangxi (Xie, Shi & Wang 2012, and material), Sichuan (Gressitt 1951),

Chongqing (material), Yunnan (Wang 1997); **Laos:** Xieng Khouang (Breuning 1965), Hua Phan Prov. (**new province record**, material).



Figures 5-6. Habitus pictures of *Mecynippus ciliatus* (Gahan, 1888), taken by Wen-Xuan Bi. **5**, male, from China, Jiangxi, 21.3 mm in length. **6**, female, from China, Guangxi, 25.5mm in length. **a.** dorsal view. **b.** ventral view.

Discussion

As indicated in the synonymy, *Mimotheustus delkeskampi* Breuning, 1961, *Monochamus rondoni* Breuning, 1965 and *Mimotheustus luteicornis* Xie, Shi & Wang, 2012 are thought to be synonyms of *Mecynippus ciliatus* (Gahan, 1888). The length of elytral apical spine is rather variable, long in holotype of *Mimotheustus luteicornis* Xie, Shi & Wang, 2012, shorter in holotype of *Mimotheustus delkeskampi* Breuning, 1961 and syntype of *Monochamus ciliatus* Gahan, and indistinct in holotype of *Monochamus rondoni* Breuning, 1965). The first author examined two male specimens from the same locality and one of them is indistinct while the other is as long as the Fig. 4. Carolus Holzschuh also confirmed that “the elytra apical spine is longer to indistinct in my series” (personal communication through email in 2013). We concluded that these differences are infraspecific variation.

The genus *Mecynippus* Bates, 1884 was established for Japanese species, *M. pubicornis* Bates, 1884 (monotypy). *Mecynippus ciliatus* (Gahan, 1888) was firstly placed in the genus *Monochamus* Dejean, 1835 (unjustified emendation and *Monochamus* Dejean, 1821 is available), then transferred to genus *Meges* Pascoe, 1866 by Gressitt (1942), which is now a synonym of *Monochamus*. Later Gressitt (1951) transferred it to the genus *Mecynippus* Bates, 1884. There are still only two species in this genus. According to our study, *Mecynippus* can be distinguished from *Monochamus* or *Mimotheustus* by the 4th tarsomere present. *Mecynippus ciliatus* Gahan, 1888 should be transferred to an other genus because its 4th tarsomere absent and the procoxal cavity closed. Further study is needed to find the “right” genus for it, which is out of our aim in this paper.

The genus *Mimothestus* Pic, 1935 was established for *M. annulicornis* Pic, 1935 (monotypy) from Guangdong of China. Until now, 4 species have been placed in this genus (Tavakilian G. (Author) & Chevillotte (software), 2013), but *Mimothestus delkeskampi* Breuning, 1961 and *Mimothestus luteicornis* Xie, Shi & Wang, 2012 should be new synonyms of *Mecynippus ciliatus* (Gahan, 1888). According to our study, *Mimothestus atricornis* Pu, 1999 should be moved out of this genus because of its very different pronotal lateral tubercles. Therefore, actually this genus contains only the type species.

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