

CORRESPONDENCE

One new record species, *Ithocritus ruber* (Hope, 1839) from China (Coleoptera: Cerambycidae: Lamiinae: Petrognathini)

Mei-Ying Lin, Xing-Ke Yang*

Key Laboratory of Zoological Systematics and Evolution, Institute of Zoology, Chinese Academy of Sciences, Beijing 100101, China;
E-mail: linmeiying@ioz.ac.cn

*Corresponding author, E-mail: yangxk@ioz.ac.cn

Abstract *Ithocritus ruber* (Hope, 1839) is recorded from Yunnan, China for the first time. Supplementary description of the female genitalia is made. Photographs of habitus and genitalia of female, a key to the 3 genera 4 species of the tribe Petrognathini reported from China are presented.

Key words *Ithocritus ruber* (Hope, 1839), new record, female, key, China.

The tribe Petrognathini contains 2 African and 7 Asian genera (Breuning, 1956; Breuning & Teocchi, 1985; N. Ohbayashi & Lin, 2012; Tavakilian & Chevillotte, 2014). Among the 7 genera and 10 species from Asian, 3 genera and 3 species were reported from China (Lin & Jiroux, 2011; N. Ohbayashi & Lin, 2012; Tavakilian & Chevillotte, 2014). Recently, one pair specimens of *Ithocritus ruber* (Hope, 1839) were collected from Yunnan, which indicated the 4th species from China.

Materials were deposited in the following collections or Museums; abbreviations as shown in the text. EUMJ: Ehime University Museum, Matsuyama, Japan; IZCAS: Institute of Zoology, Chinese Academy of Sciences, Beijing, China; OUMNH: Oxford University Museum of Natural History, Oxford, UK.

Ithocritus ruber (Hope, 1839) (Figs 1–11)

Monohammus ruber Hope, 1839: 43 (Assam of India); Hope, 1840: 441, pl. 30, fig. 5.

Ithocritus ruber; Lacordaire, 1872: 449; Breuning, 1956: 354, fig. 1; Löbl & Smetana, 2010: 291; Lin & Jiroux, 2011: 108, figs 13–18; N. Ohbayashi & Lin, 2012: 238, figs 1–5.

Supplementary description of female. Antennae about twice of body length, middle of 6th antennomere exceeding elytral apex. Antennomere ratio. Female: 34:4:89:74:61:56:53:47:45:42:66. Female genitalia (Figs 9–11). The paraproct is very short and without baculi; the coxite lobes are very long and bear small styli; apex of coxite lobe and stylus (Fig. 11) bearing tactile hairs; spermathecal capsule (Fig. 10) with apical lobe more strongly sclerotized and apex expanded, but the very long and twisted stalk without distinct separations from both apical lobe and spermathecal duct; tergite and sternite VIII (Fig. 9) with moderate long setae, more than half part of setae extending beyond apex; distinct lateral notch absent, basal pigmented patch present; tignum (= spiculum ventrale = anterior apodeme of sternite VIII, Fig. 9b) much shorter than abdomen in ventral view, in our observation, tignum is 4.0 mm for a 13.5 mm abdomen.

Notes. N. Ohbayashi and Lin (2012) missed the distribution information of “Sikkim (coll. Itzinger); Silhet (coll. Lepesme)”, which was mentioned by Breuning (1956). Here we correct the mistake and add the new locality Yunnan of China.

Female of this species was described by Breuning (1936) and illustrated by Breuning (1936) and N. Ohbayashi and Lin (2012), but the female genitalia is described and illustrated for the first time. The easiest ways to identify female from male are: antenna shorter (Figs 1–2); apex of ventrite V (sternite VII) with a bidentate protruding (Figs 3–4); femora of

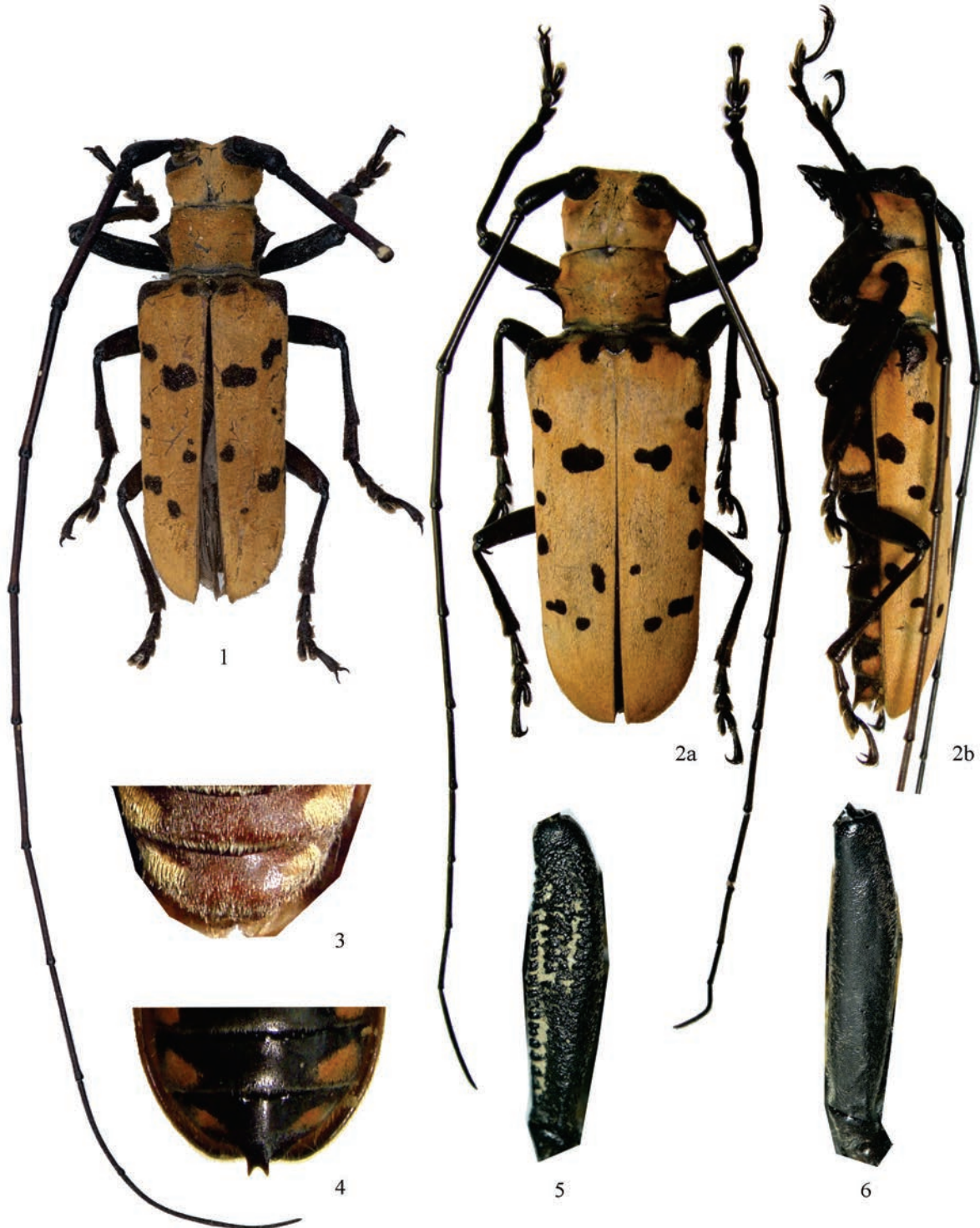
urn:lsid:zoobank.org:pub:AFA09F12-90DD-4073-AEE8-37E64961D474

Received 16 September 2013, accepted 9 April 2014.

© Zoological Systematics, 39 (2): 309–312

fore legs without coarse wrinkling sculpture (Figs 5–6, male fore femora with coarse wrinkling sculpture in both inner side and outer side).

Male of this species was described and illustrated several times (Hope, 1839, 1840; Lin & Jiroux, 2011; N. Ohbayashi & Lin, 2012), male genitalia was described and illustrated by Lin and Jiroux (2011). The specimen from Yunnan matches



Figs 1–6. *Ithocritus ruber* (Hope, 1839). 1. Syntype, male, from Assam of India. 2. Female, from Yunnan of China. 2a. dorsal view. 2b. lateral view. 3–4. Ventrite V. 3. Male, apex almost rounded. 4. Female, apex with a bidentate protruding. 5–6. Femora of fore leg, inner side. 5. Male, showing the coarse wrinkling sculpture. 6. Female, without coarse wrinkling sculpture. Not to scale.

with specimen from India very well in both external features and genitalia (Figs 7–8).

Distribution. China (new country record, Yunnan), India (Assam, Sikkim), Bangladesh (Silhet=Sylhet), Myanmar (Kachin, Mandaley).

Type material examined. Syntypes of *Monohammus ruber* Hope, 2♂, India, Assam, leg. William Griffith (OUMNH). Examined by pictures taken by James Hogan.

Other material examined. China. 1♂, 1♀, Yunnan, Longchuan, Husa Xiang (24.358315°N, 97.834079°E, elev. 1353 m), 10 August 2013, leg. Zhi-Shun Song, Qiang-Feng Zheng (IZCAS). India. 1♂, Khasia Hills (OUMNH, Ex Hope-Westwood Collection. Pres. 1849-1857 OX. UNI. MUS. NAT. HIST.). Myanmar. 1♀, N. Myammer, North Putao, Kachin, Mt. Shan Gunung, elev. 1400 m, 7 August 2000, leg. Hiroshi Miyama (EUMJ); 1♂, 1♀, Burma, Ruby Mina (= Mogok, Mandalay Div.) (EUMJ).

Discussion

The definition of the tribe Petrognathini sensu Breuning (1956) seems to be unstable, even after transferring the 11



Figs 7–11. Genitalia of *Ithocritus ruber* (Hope, 1839), from Yunnan of China. 7–8. Male genitalia. 7. Tergite VIII and sternites VIII & IX. 8. Tegmen and median lobe. 9–10. Female genitalia. 9a. Dorsal view. 9b. Ventral view, showing the anterior apodeme of sternite VIII. 10a, 10b. Twisted stalk of spermathecal capsule without distinct separations from apical lobe and spermathecal duct. 11. Tactile hairs on apex of coxite lobe and the stylus. Not to scale.

African genera to the tribe Pachystolini (= Neopachystolini) and the genus *Tetraulax* to the tribe Tetraulaxini (Breuning & Teocchi, 1985). Vives and Heffern (2012) synonymized *Mimomacrochia* Breuning, 1972 with *Grammoxyla* Aurivillius, 1911 and transferred it to the tribe Xylorhizini. The 9 genera included in the tribe are quite variable even among the Asian genera, and some of them look like heterogeneous (N. Ohbayashi & Lin, 2012). Based on the known locality information, we may expect the discovery of *Trenetica lacrymans* (Thomson, 1868) and *Falsimalmus niger* Breuning, 1956 from South China.

Key to Chinese species of Petrognathini

1. Antennal segments with 3rd to 6th or 7th segments densely fringed beneath; sutural angles of elytra not produced (*Ioesse* Thomson, 1864); body densely covered with red pubescence (China (Hainan, Yunnan), Myanmar, Thailand, Vietnam, Laos) *Ioesse rubra* (Pic, 1925)
- Antennal segments without fringe of hairs or sparsely fringed on 2nd to 4th; sutural angles of elytra more or less produced 2
2. Elytra parallel-sided, provided with several small granules on humeri; prosternal process widened at apex; antenna slender and very long, exceeding elytral apex at middle of 5th or 6th in male, middle of 6th or 7th in female, 3rd>4th> twice of 1st (*Ithocritus* Lacordaire, 1872) 3
- Elytra convergent apically, provided with two distinct tubercles at corner of humeri; prosternal process not widened at apex; antenna stout and moderately long, exceeding elytral apex at middle of 7th in male, middle of 10th in female, 3rd>4th>1st (*Pseudapriona* Breuning, 1936); body black; antenna with basal 3 segments, basal half and apex of 4th, bases and apices of 5th to 11th segments black, others yellow (China (Tibet), India, Myanmar) *Pseudapriona flavoantennata* Breuning, 1936
3. Occiput and pronotum without black vitta; elytral black maculae less than 12; antenna exceeding elytral apex at middle of 5th in male, middle of 6th in female (China (Yunnan), India, Bangladesh, Myanmar) *Ithocritus ruber* (Hope, 1839)
- Occiput with 3 vittae and pronotum with 2 black vittae; elytral black maculae much more than 15; antenna exceeding elytral apex at middle of 6th in male, middle of 7th in female (China (Guangxi), Vietnam) *Ithocritus multimaculatus* Pic, 1934

Funding This research was supported by a grant from the Key Laboratory of the Zoological Systematics and Evolution of the Chinese Academy of Sciences (O529YX5105) and National Natural Science Foundation of China (J1210002, 31000967).

Acknowledgements We wish to express our thanks to James Hogan (OUMNH) for offering type pictures and the loans of specimens. We thank Dr. Zhi-Shun Song (IZCAS) for bringing the specimens to us, and thank Dr. Kui-Yan Zhang (IZCAS) for helping to take pictures with Keyence VHX-1000C Digital Microscope.

References

- Breuning, S. 1956. Révision des "Petrognathini". *Longicornia*, 3: 349–392. Paul Lechevalier, Paris.
- Breuning, S. and Teocchi, P. 1985. Note concernant les tribus Pachystolini Auriv., Petrognathini Blanch., Xylorhizini Lac. et Microcymaturini nov. (Coleoptera Cerambycidae Lamiinae). *Bulletin de l'Institut Fondamental d'Afrique Noire, Dakar*, 44, série A (1-2) [1982]: 153–159, 10 figs.
- Hope, F. W. 1839. Descriptions of some new insects collected in Assam, by William Griffith, Esq., assistant surgeon in the Madras Medical Service. *Proceedings of the Linnean Society of London*, 1: 42–44.
- Hope, F. W. 1840. Descriptions of some new insects, collected in Assam by William Griffith, Esq., assistant-surgeon in the Madras Medical Service, and attached to the late scientific mission to Assam. *The Transactions of the Linnean Society of London*, 18: 435–447, pls. 30–31.
- Lacordaire, J. T. 1872. Histoire Naturelle des Insectes. Genera des Coléoptères ou exposé méthodique et critique de tous les genres proposés jusqu'ici dans cet ordre d'insectes. Famille LXVIII. Longicornes. (suite). Sous-famille III. LAMIIDES. *Paris. Librairie Encyclopédique de Roret*, 9 (2): 411–930.
- Lin, M-Y and Jiroux, E. 2011. Notes on the genera *Pseudapriona* Breuning, 1936, *Ithocritus* Lacordaire, 1872 and *Ioesse* Thomson, 1864, of the tribe Petrognathini (Coleoptera, Cerambycidae, Lamiinae). *Les Cahiers Magellanes* (NS), 5: 104–114, 33 figs.
- Löbl, I. and Smetana, A. 2010. Catalogue of Palaearctic Coleoptera, Vol. 6. Apollo Books, Stenstrup. 924 pp.
- Ohbayashi, N. and Lin, M-Y 2012. A review of the Asian genera of the Petrognathini, with description of a new species and proposal of a new synonym (Coleoptera, Cerambycidae, Lamiinae). *Japanese Journal of Systematic Entomology*, 18 (2): 235–251.
- Tavakilian, G. and Chevillotte, H. 2014. Titan: base de données internationales sur les Cerambycidae ou Longicornes. Version 3.0. Available from: <http://lully.snv.jussieu.fr/titan/> (Accessed on March 27, 2014).
- Vives, E. and Heffern, D. 2012. Descriptions and notes on Oriental longhorned beetles, mostly from Borneo (Coleoptera, Cerambycidae). *Les Cahiers Magellanes, NS*, No 10: 1–17.