

The Genus *Amamiclytus* (Coleoptera, Cerambycidae) Firstly Recorded from the Mainland China

Tatsuya NIISATO¹⁾ and Chang-do HAN²⁾

¹⁾ Bioindicator, Co., Ltd., Hara-machi 3–19, Shinjuku, Tokyo, 162–0053 Japan

²⁾ Korea University, Ogawa-chô 1–700, Kodaira City, Tokyo, 187–8560 Japan

Abstract A new species of the clytine genus *Amamiclytus* OHBAYASHI is described from Yunnan Province, Southwest China under the name *A. wenshuani* sp. nov. *Raphuma limaticollis* GRESSITT described from Mt. Tianmu Shan of Zhejiang Province is transferred to the genus *Amamiclytus*. The genus is first recorded from the mainland China.

Key word: *Amamiclytus*, Cerambycidae, new species, new record, China.

Introduction

No members of the clytine genus *Amamiclytus* OHBAYASHI, 1964 has so far been known from the mainland China in spite of a total eleven taxa were recorded from its neighboring areas; viz. one species with one subspecies from the Ryukyu Islands, six species from Taiwan, one species from northern Vietnam and two species from northern Thailand (OHBAYASHI, 1964; HOLZSCHUH, 1984, 1991; NIISATO, 2005; NIISATO & HAN, 2011). Members of this clytine genus are characterized by the widely separated antennal cavities, dilated apical segments of maxillary palpi in male, hairy hind tibiae and unique structures of male genital organs. Small collection of this clytine genus was recently submitted to me for taxonomic study through the courtesy of Mr. Wen-shuan Bi of Shanghai. They were included two species, one of which was undescribed species from Yunnan Province, and another from Zhejiang Province was determined as *Rhaphuma limaticollis* GRESSITT, 1939. The latter species was misplaced by the original author and should be transferred to the genus *Amamiclytus*. In this short paper, we first introduce two species of the genus into the fauna of mainland China.

Abbreviations used in the descriptions are shown in our recent paper (NIISATO & HAN, 2011).

Amamiclytus wenshuani sp. nov.

(Figs. 1, 4–9)

Male. Body length (from vertex to apices of elytra) 3.7–4.9 mm. Slender and medium-sized species of more or less glossy body, with long antennae and legs.

Colour almost black, slightly glossy in head, pronotum and elytra, brownish in clypeus, mandibles, antennae, 6–7th abdominal segments, and each femora and tibiae, yellowish brown in tarsi and maxillary and labial palpi. Body densely clothed with fine pale pubescence, sparsely with erect long pale brown hairs on head and abdomen, relatively with pale brownish spinous setae on antennae and legs; head thinly pubescent, scattered with a few erect long pale brown hairs, especially on genae, clypeus and mandibles, rather densely with gray pubescence on apical half of frons though sparsely with on the basal half; antennae densely clothed with pale gray pubescence on segments 4–11, provided with long pale brown spinous setae along undersides of segments 1–4, rather sparsely with the same setae along apical margins of segments 5–7; pronotum thinly pubescent, without long hairs, sparsely



Figs. 1–3. *Amamiclytus* spp. from China. — 1, *A. wenshuani* sp. nov., holotype ♂, from Yunnan Province, SW. China; 2, *A. limaticollis* (Gressitt, 1939), comb. nov., ♂, Mt. Tianmu Shan from Zhejiang Province, E. China; 3, ditto, ♀, from same locality.

with white pubescence at sides of basal margin, not formed conspicuous *Pb*; scutellum sparsely clothed with pale pubescence; elytra densely with pale brown pubescence, without long hairs, *B* absent, *S* on basal sixth more or less small and longitudinally oblong, *La* on basal fifth semicircular, slightly oblique, *Lp* on apical 2/5 almost complete, narrow, slightly oblique, *A* distinctly narrow and more or less sparse; prosternum densely with white pubescence on basal 2/3, *Msl* and *Mss* distinct, *Mta* rather sparse along posterior margin of metasternum, dense and entire on apical 2/3 of metepisternum; *V1* and *V2* at sides dense though narrowed to middle; legs slightly with short pale brownish spinous setae on mid- and hind femora and all tibiae, especially on hind tibia.

Head across eyes slightly narrower than pronotum, HW/PW 0.88–0.95 (M 0.90); frons slightly longer than wide, arcuately dilated apicad, with a fine smooth median line, closely, coarsely punctured; clypeus almost flattened; vertex raised towards antennal cavities which are separated from each other by 2/5 the width of occiput; occiput distinctly convex, closely reticulate. Antennae thin and long, not thickened apicad, attaining apical third of elytra, with scape almost cylindrical, 3rd segment 1.5–1.7 times as long as 4th segment, terminal segment 1.2–1.3 times as long as 10th segment.

Pronotum moderately longer than wide, rather weakly arcuate at sides; PL/PW 1.11–1.26 (M 1.18), PB/PA 1.00 (M 1.00), EL/PL 2.64–3.09 (M 2.84), PW/EW 0.74–1.00 (M 0.85); disc distinctly convex though depressed above, densely provided with uniform large shallow punctures. Scutellum regularly triangular, acute at apex.

Elytra long, slender, nearly or more than three times as long as wide, EL/EW 2.90–3.25 (M

3.02); sides with completely rounded humeri, gently arcuate at a level between basal sixth and apical third then arcuately narrowed to apices which are obliquely arcuate with blunt teeth at external angles; disc almost evenly convex, closely provided with fine shallow punctures.

Ventral surface almost smooth, provided with a few coarse punctures on prosternum, minute ones on meso- and metathoraces, and abdomen; anal ventrite 7/10 the length of basal width, weakly arcuate at apical margin.

Legs long and slender; hind legs relatively long, 1.6–1.8 times as long as elytra, with femur gradually swollen apicad, slightly compressed, exceeding elytral apex at apical fifth, 1st tarsal segment 1.5–2.2 times as long as the following two segments combined.

Male genitalia. Median lobe almost 1/3 the length of elytra; dorsal plate almost equal in width to or a little shorter than ventral plate, gently narrowed to apex which is bluntly pointed; ventral plate almost parallel-sided in basal 2/3 then strongly narrowed to apex which is distinctly pointed at the extremity; median struts slender, almost half the length of median lobe. Endophallus more or less densely provided with minute spinous spicules behind crescent-like sclerites from basal 1/3 to 2/3, densely covered with minute serrate sclerites in apical sixth. Tegmen elongate, distinctly shorter than median lobe; parameres elongate, nearly 2/5 the length of tegmen, divided in apical fifth, with each lobe gently narrowed to apex, which is provided with numerous short and a few relatively long setae; ring part parallel-sided in apical third. Eighth tergite more or less elongate, gently narrowed from apical half to apex which is arcuate, provided with numerous short and long setae. Eighth sternite strongly transverse, distinctly emarginate at apical margin.

Type series. Holotype ♂, 1,500 m in alt., Lushui, Luzhabg County, Yunnan Province, SW. China, 7–VII–2010, Wenshuan Bi leg. Paratypes: 6 ♂♂, same data as the holotype. The holotype and one paratype are preserved in the Institute of Zoology, Chinese Academy of Sciences, Beijing, and the other paratypes are in the private collections of Bi and NISATO.

Distribution. Yunnan Province, SW. China.

Comparative notes. *Amamiclytus wenshuani* sp. nov. has closer relationship with *A. hirtipes* (MATSUSHITA, 1940) from Taiwan in the elongate pronotum and elytra, long antennae and hind legs, sparse white pubescent bands on base of pronotum and near bases of elytra, and distinctly elongate median lobe and tegmen. It can be distinguished from *A. hirtipes* by more or less glossy body, longer frons (longer than wide), shorter pronotum and elytra, and elongate male 8th tergite, with distinctly arcuate apical margin.

NISATO and HAN (2011) proposed the four morphological groups in the Taiwanese and Japanese members of the genus, mainly based on both the male and female genital organs. *Amamiclytus wenshuani* sp. nov. no doubt belongs to the Group IV which has so far been composed of only *A. hirtipes*.

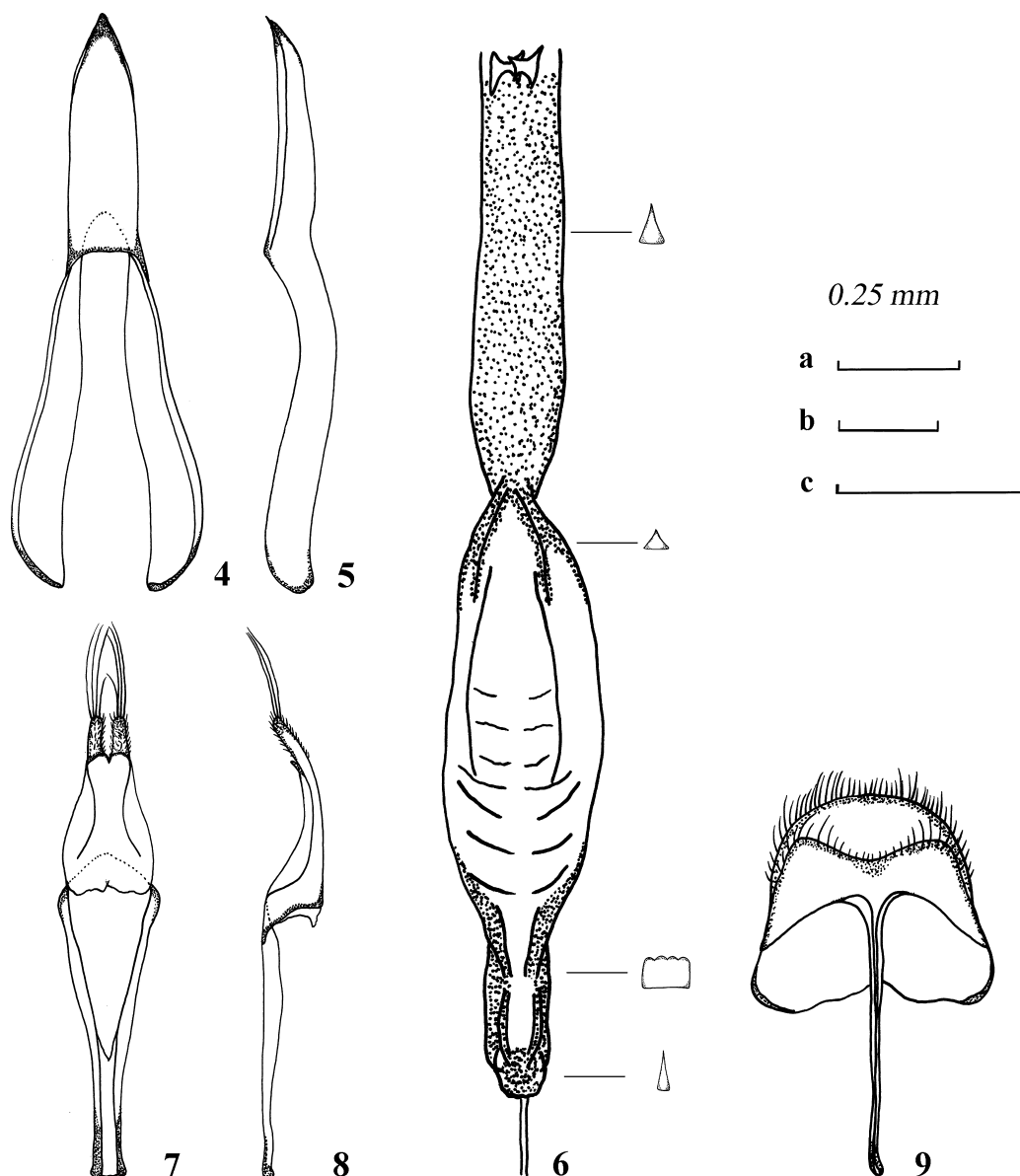
***Amamiclytus limaticollis* (Gressitt, 1939), comb. nov.**

(Figs. 2–3, 10–17)

Rhaphuma limaticollis GRESSITT, 1939: 101, pl. 3, fig. 6; type locality: T'ien-mu Shan, Chekiang, E. China.

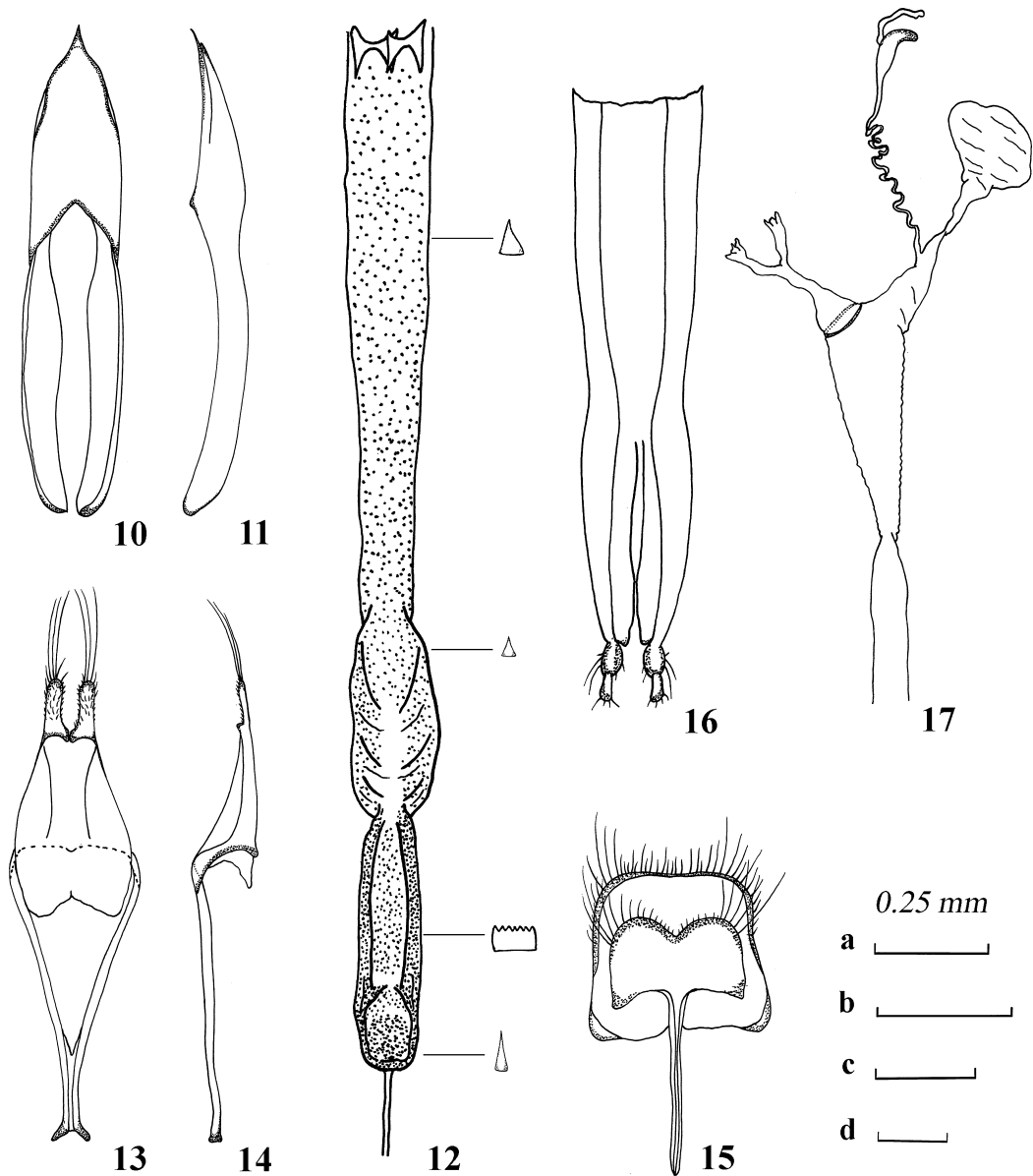
M a l e and f e m a l e. Body length (from vertex to elytral apices) 3.60–4.50 mm in ♂, 5.00 mm in ♀.

Medium-sized species of rounded body, and has closer relationship with *A. yulongi*. Colour black, more or less glossy in general, dark brown in antennae, meso- and metathoraces, and abdomen, brown in femora, mid- and hind tibiae, yellowish brown in fore tibia and tarsus, and mouthparts except for mandibles. Body densely clothed with fine pale pubescence especially on pronotum, elytra and ventral surface, sparsely with erect long pale hairs on head, antennae, pronotum, ventral surface



Figs. 4–9. Male genital organs of *Amamiclytus wenshuani* sp. nov., from Yunnan Province, SW. China. — 4, Median lobe, ventral view; 5, ditto, lateral view; 6, endophallus; 7, tegmen, ventral view; 8, ditto, lateral view; 9, abdominal segment 8, ventral view. Scale bar: a for 4–5, 7–8, b for 6, c for 9. Scale 0.25 mm.

and legs, with short pale brownish spinous setae on antennae and legs; head sparsely with erect long pale hairs on genae, clypeus and mandibles, more or less densely clothed with pale gray pubescence on frons in ♂, sparsely so on that of ♀; antennae with long pale brownish spinous setae along undersides of segments 1–4, and sparsely with the same setae along apical margins of segments 5–7; pronotum sparsely with erect long pale hairs on basal and apical margins, densely with pale gray pubescence in ♂, more or less sparsely so in ♀, except for middle of disc which is almost glabrous and



Figs. 10–17. Male and female genital organs of *Amamiclytus limaticollis* (GRESSITT, 1939), comb. nov., from Mt. Tianmu Shan from Zhejiang Province, E. China. —10, Median lobe, ventral view; 11, ditto, lateral view; 12, endophallus; 13, tegmen, ventral view; 14, ditto, lateral view; 15, abdominal segment 8, ventral view; 16, paraproct, coxite, coxite lobe and stylus; 17, vagina, bursa copulatrix, spermatheca and median oviduct. Scale bar: a for 10–11, 13–14, 15, b for 12, c for 16, d for 17. Scale: 0.25 mm.

formed a vague oblong black spot, *Pb* absent; scutellum thinly with pale pubescence; elytra densely with light brown pubescence throughout, *B* absent, *S* on basal tenth longitudinally oblong, *La* on basal 3/10 obliquely arcuate, *Lp* on apical 2/5 almost complete, narrow, slightly oblique, *A* rather narrow; prosternum densely with pale pubescence on basal half in ♂, rather weakly so in ♀, *Msl* and *Mss* dis-

tinct, though *Mss* almost absent in ♀, *Mta* rather sparse along posterior margin of metasternum, dense and entire on apical half of metepisternum; *V1* widely separated at sides, dense though gently narrow to middle, *V2* feeble and sometimes disappeared; legs relatively densely with short pale brownish spinous setae on mid- and hind femora and all tibiae, especially on hind tibia.

Head across eyes slightly narrower than pronotum, HW/PW 0.89–0.90 (M 0.90) in ♂, 0.83 in ♀; frons as long as wide, arcuately dilated apicad, almost without thin smooth median line, densely, finely punctured; clypeus flattened, coarsely punctured; vertex raised towards antennal cavities which are separated from each other by half the width of occiput; occiput distinctly convex, rather densely, coarsely punctured. Antennae thin and relatively short, gradually thickened apicad, attaining apical third in ♂ or apical half in ♀ of elytra; 3rd segment 1.6–1.8 times as long as 4th segment; terminal segment in ♂ distinctly longer than in ♀.

Pronotum slightly longer than wide, more or less strongly arcuate at sides; PL/PW 1.00–1.11 (M 1.07) in ♂, 1.08 in ♀, PB/PA 0.88–0.93 (M 0.90) in ♂, 0.94 in ♀, EL/PL 2.64–3.00 (M 2.86) in ♂, 2.77 in ♀, PW/EW 0.81–0.91 (M 0.86) in ♂, 0.89 in ♀; disc slightly convex, almost flattened above, densely coarsely provided with shallow punctures. Scutellum regular triangular, feebly acute at apex.

Elytra relatively short, EL/EW 2.54–2.64 (M 2.61) in ♂, 2.70 in ♀; sides with more or less strongly rounded humeri, gently arcuate at a level between basal and apical third, then arcuately narrowed to apices which are slightly arcuate, without any spine at outer or inner angle; disc almost evenly convex, though distinctly depressed near suture in basal sixth, densely provided with deep punctures.

Ventral surface almost smooth, densely provided with coarse punctures on prosternum, rather coarsely with minute punctures on meso- and metathoraces, and abdomen; anal ventrite in ♂ half the length of basal width, distinctly arcuate at apical margin.

Legs relatively short and slender; hind legs relatively short, 1.3–1.4 times as long as elytra, with femur gradually swollen apicad, exceeding elytral apex at apical sixth, 1st tarsal segment 1.6–2.0 times as long as the following two segments combined.

Male genitalia. Median lobe about 1/3 the length of elytra; dorsal plate nearly as wide as ventral plate, distinctly narrowed to apex which is bluntly pointed; ventral plate subparallel-sided in basal half then more or less strongly emarginated in apical half to fourth, and strongly narrowed to apex which is sharply pointed at the extremity; median struts long and slender, almost 3/5 the length of median lobe. Endophallus largely, densely provided with medium-sized spinous spicules behind crescent-like sclerites from basal fifth to 3/5, densely covered with minute crenulate spicules on apical fifth. Tegmen elongate, slightly shorter than median lobe; parameres more or less wide, nearly 2/5 the length of tegmen, divided in apical 2/5, with each lobe moderately narrowed to apex, provided with numerous short setae and a few relatively long setae; ring part almost approximate in apical fifth. Eighth tergite more or less quadrate, moderately narrowed from apical fourth to apex which is slightly emarginate near middle, provided with numerous short to long setae. Eighth sternite distinctly narrower than 8th tergite, with apical margin arcuately rounded, triangularly concave near middle.

Female genitalia. Coxite lobe ovoid, provided with a few rather long setae. Stylus elongate, as long as coxite lobe, gently dilated apicad. Bursa copulatrix relatively large, semicircular, though more or less strongly constricted at basal half. Spermatheca relatively narrow, moderately arcuate, bluntly pointed at apex; gland attached at apical third; duct thin, slightly sinuate in basal 2/3, strongly coiled in apical third.

Specimens examined. 4 ♂♂, 1 ♀, Mt. Dong Tianmu Shan, 600 m in alt., Linan City, Zhejiang Province, E. China, 25–IV–2008, W.-S. Bi leg.; 1 ♂, Longwang Shan 350–550 m in alt., Anji County, Zhejiang Province, 24–IV–2006, Y.-Y. WAN leg. The specimens examined are separately preserved in

the Institute of Zoology, Chinese Academy of Sciences, Beijing, and the private collections of BI and NIISATO.

Distribution. Zhejiang Province, E. China.

Comparative notes. *Amamicyltus limaticollis* has closer relationship with *A. yulongi* NIISATO et HAN from Taiwan in the glossy body, rather coarsely punctured pronotum, bluntly pointed apical part of median lobe and dense spinous spicules on endophallus. Therefore, it no doubt to belong to the Group III proposed by NIISATO and HAN (2011). It is easily distinguished from *A. yulongi* by brown femora, mid- and hind tibiae, yellowish brown all tarsi and fore tibia, rather narrow white pubescent bands on anterior and posterior to middle of elytra, sharply pointed apical part of ventral plate of median lobe, longer median struts which is almost 3/5 the length of median lobe, and parameres divided in apical 2/5.

Discussion

Two species of the genus *Amamicyltus* OHBAYASHI first recorded herein from the mainland China have closer relationship with the Taiwanese members of the genus. *Amamicyltus wenshuani* sp. nov. is no doubt a close relative of *A. hirtipes* (MATSUSHITA) and *A. limaticollis* (GRESSITT), comb. nov. is does to of *A. yulongi* NIISATO et HAN. They are classified the former two species into the Group IV and the latter two into Group III, respectively, in the four morphological groups proposed by NIISATO and HAN (2011). It is very strange fact that the members of the genus have so far been little found in the mainland China, in spite of more than ten taxa are recorded from its neighboring areas. Besides, we have collected seven or eight unnamed species by the recent field surveys in Laos and North Vietnam of eastern Indochina. Therefore, such a wide blank of distribution may be caused by an insufficiency of field survey in the territory of China. It is expected that the members of the Groups I and II will be found from somewhere in South China or Southwest China.

Acknowledgements

We are much indebtedness to Mr. Wen-Shuan BI for his kind offer of material used in this study, and to Dr. Nobuo OHBAYASHI for his usual guidance and cooperation for our study. Special thanks are also due to Dr. Shun-Ichi UENO for his constant guidance to the first author and critical reading the original manuscript of this paper.

要 約

新里達也・韓 昌道：中国本土から初記録となるケズネチビトラカミキリ属(コウチュウ目カミキリムシ科)。——ケズネチビトラカミキリ属 *Amamicyltus* は、琉球や台湾、インドシナなどから10種以上が知られているにもかかわらず、その中間に位置する広大な中国本土は分布の空白地帯であった。このたび、浙江省と雲南省から得られた本属の標本を検討したところ、ホソトラカミキリ属に誤認されて記載された *Rhaphuma limaticollis* GRESSITT と未記載種の2種を見出した。本論文において、前者は *A. limaticollis* (GRESSITT), comb. nov. のように新結合し、また後者は *A. wenshuani* sp. nov. のように新たに命名記載した。いっぽう、*A. limaticollis* は台湾産の *A. yulongi* NIISATO et HAN, *A. wenshuani* はやはり台湾産の *A. hirtipes* (MATSUSHITA) に近縁で、NIISATO and HAN (2011) が台湾と琉球産の本属の種をもとに提唱した第III群と第IV群にそれぞれが含まれる。未発表ながら、近年になってインドシナ東部から本属の種が多数発見されている事実を勘案するならば、台湾に分布する第I群と第II群などの未知の種が将来、中国本土から発見される可能性も高いであろう。

References

- GRESSITT, J. L., 1939. A collection of longicorn beetles from Tien-mu Shan, East China (Coleoptera: Cerambycidae). *Notes Ent. Chin.*, **6**: 81–132 (including 3 pls.).
- HOLZSCHUH, C., 1984. Beschreibung von 24 neuen Bockkäfern aus Europa und Asien, vorwiegend aus dem Himalaya (Coleoptera, Cerambycidae). *Ent. Basil.*, **9**: 340–372.
- 1991. 63 neuen Bockkäfern aus Asien, vorwiegend aus China und Thailand (Coleoptera: Disteniidae und Cerambycidae). *FBVA-Berichte*, **60**: 1–71.
- NIISATO, T., 2005. Two new taxa of the Japanese Clytini (Coleoptera, Cerambycidae). *Elytra, Tokyo*, **33**: 383–390.
- & C. HAN, 2011. A revision of the genus *Amamiclytus* OHBAYASHI from Taiwan and the Ryukyu Islands (Coleoptera, Cerambycidae). *ZooKeys*, **118**: 19–52.
- OHBAYASHI, K., 1964. New Cerambycidae from Japan (7). *Bull. Jap. ent. Acad.*, **1**: 19–26, pls. 4–5.

Manuscript received 7 April 2013;
revised and accepted 26 July 2013.