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Taxonomy of the genus *Gabrius* Stephens, 1829 (Coleoptera: Staphylinidae: Philonthina) from China, with description of two new species

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Taxonomy of the genus *Gabrius* Stephens, 1829 (Coleoptera: Staphylinidae: Philonthina) from China, with description of two new species

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In this paper, two new species of the genus *Gabrius* from China are described and illustrated: *G. zhoui* sp. nov. from Sichuan and *G. invisus* sp. nov. from Beijing, Hubei, Hunan, Henan, Shaanxi, Sichuan and Zhejiang. *Gabrius imitator* (Fauvel, 1895), *G. lebedevi* (Bernhauer, 1910), *G. tirolensis* (Luze, 1903), *G. kambaitiensis* Scheerpeltz, 1965, *G. cinctiventris* Scheerpeltz, 1965, *G. egens* (Sharp, 1874), *G. smetanai* Schillhammer, 1997 and *G. zerchei* Schillhammer, 1996 are reported from China for the first time. Thus, a total of 53 species of the genus *Gabrius* are known from China.

Keywords: Staphylininae; Philonthina; *Gabrius*; new species; China

Introduction

With more than 350 described species worldwide, the genus *Gabrius* Stephens, 1829 is one of the largest groups in the subtribe Philonthina (Staphylinidae: Staphylininae: Staphylinini) (Herman 2001; Assing 2004, 2009; Hromadka 2007; Schillhammer 2000, 2001, 2004, 2007; Shibata 2007; Chani-Posse 2009; Li et al. 2010). Of all these species, only 43 species had been reported to occur in China (Herman 2001; Schillhammer 2001; Shibata 2007; Smetana 2004; Li et al. 2010). In this paper, two new species of the genus *Gabrius* from China are described and illustrated: *G. zhoui* sp. nov. from Sichuan and *G. invisus* sp. nov. from Beijing, Hubei, Hunan, Henan, Shaanxi, Sichuan and Zhejiang. *Gabrius imitator* (Fauvel, 1895), *G. lebedevi* (Bernhauer, 1910), *G. tirolensis* (Luze, 1903), *G. kambaitiensis* Scheerpeltz, 1965, *G. cinctiventris* Scheerpeltz, 1965, *G. egens* (Sharp, 1874), *G. smetanai* Schillhammer, 1997 and *G. zerchei* Schillhammer, 1996 are reported from China for the first time. Thus, a total of 53 species of the genus *Gabrius* are known from China.

Materials and methods

For dissection, specimens were relaxed in warm water (60–70°C) for about 7–10 hours, then cleared in 10% KOH for 5 minutes, and transferred in 75% alcohol. Cleared

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specimens were dissected to observe morphological details of the eighth–10th abdominal segments and male aedeagus. After examination, the body parts were stored permanently in glycerin for future studies. Observation and drawing were done under a compound microscope (Zeiss).

This study was based on material deposited in the following collections: BMNH (The Natural History Museum, London; Roger Booth); CRL (Guillaume de Rougemont collection, London, UK); CSB (Michael Schülke collection, Berlin, Germany); CSO (Aleš Smetana collection, Ottawa, Canada); IZ-CAS (Institute of Zoology, Chinese Academy of Sciences, Beijing, China); and NMW (Naturhistorisches Museum, Wien, Austria)

The following abbreviations are used in the text with the measurements in millimetres (mm):

- AW Abdomen width (the width of the abdomen at its widest point)
- BL Body length (from the anterior margin of the head to the posterior margin of styli of tergite IX)
- CEL Eyes length (from the anterior margin to the posterior margin of the eyes, viewed from above)
- EL Elytron length (from the anterior margin to the posterior margin of the elytron)
- EW Width of both elytra combined (the width of the elytra at their widest point)
- HL Head length (from the anterior margin of the head to the posterior margin of tempora, labrum and mouthparts not included)
- HPL Head and pronotum length, combined (from the anterior margin of the head to the posterior margin of pronotum, neck included)
- HW Head width (the width of the head at its widest point, eyes included)
- PL Pronotum length (from the anterior margin to the posterior margin of the pronotum)
- PW Pronotum width (the width of the pronotum at its widest point)
- TL Tempora length (in dorsal view, from the posterior margin of the eyes to an imaginary line going through the points where the tempora meet the neck)

Taxonomy

Gabrius astutus group

Gabrius zhoui sp. nov.

(Figure 1A–F)

Type material

Holotype: male, China: Sichuan: Baoxing: Fengtongzhai, 7 June 1997, leg. Zhou Haisheng (IZ-CAS). *Paratype*: one female, Sichuan: same data as holotype (IZ-CAS).

Description

Head black, shining. Pronotum, elytra, scutellum and antennae reddish brown. Abdomen black with posterior margin of each tergite markedly reddish brown. Mandibles, maxillary and labial palpi and legs reddish brown.

Body 5.79–5.96 mm long (HPL = 1.63–1.71 mm). Head of rounded quadrangular shape, 0.73–0.82 mm long, 0.65 mm wide (HW:HL = 0.80–0.89). Tempora 0.33 mm

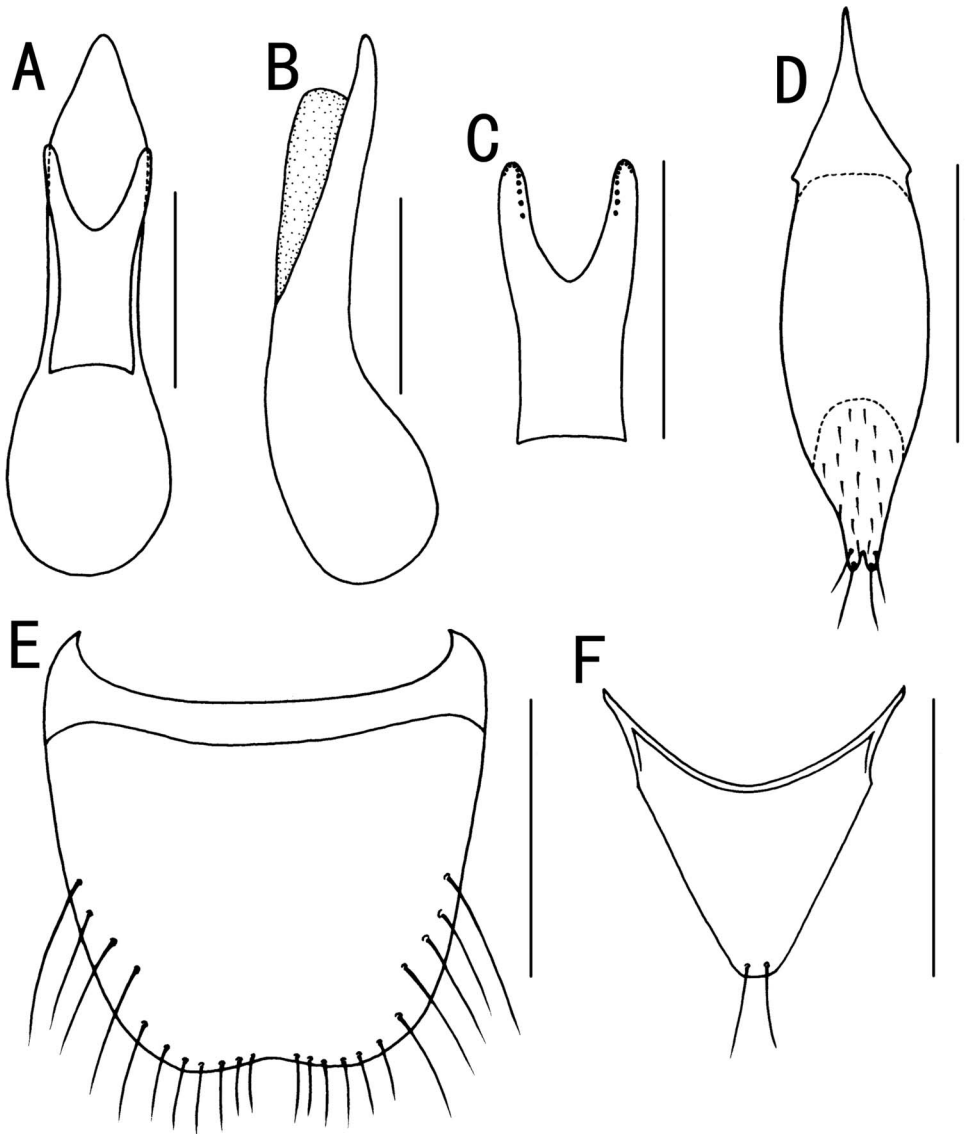


Figure 1. *Gabrius zhoui* sp. nov. (A) aedeagus, ventral view; (B) median lobe of aedeagus (paramere removed), lateral view; (C) underside of paramere; (D) sternite IX of male; (E) sternite VIII of male; (F) tergite X of male. Scale bars 0.5 mm.

long, almost evenly rounded, sparsely and coarsely punctate; eyes small, slightly protruding, 0.16–0.25 mm long, 0.50–0.75 times as long as tempora. Dorsal surface of head with scattered, large setiferous punctures along lateral sides, vertex largely impunctate; entire head with distinct and profound microsculpture of transverse waves. Antennae short, first segment long, slightly thickened towards apex, third segment slightly longer than second, fourth–fifth segments almost as long as wide, sixth–10th segments distinctly transverse, last segment longer than wide, obliquely truncated.

Pronotum slightly narrowed posteriad, 0.82–0.90 mm long, 0.82–0.90 mm wide, slightly wider than head (PW:HW = 1.25–1.38); dorsal rows each with six punctures, sublateral rows each with two punctures; microsculpture similar to that on head.

Elytra 0.98 mm long along sides, 1.14 mm wide, 1.09–1.20 times as long as pronotum, sparsely and largely punctate, punctures separated by 3–4 times their diameter. Scutellum large, triangular, sparsely and finely punctate and pubescent.

Abdomen slightly narrowed posteriad, widest 1.06–1.14 mm, finely and sparsely punctate, punctures separated by 5–6 times their diameter at base, gradually becoming sparser toward apex of each tergite; surface between punctures with exceedingly fine and dense microsculpture of transverse striae; tergites III–V with two basal lines, elevated area between basal lines almost impunctate.

Male. Sternite VIII with wide and shallow medioapical emargination (Figure 1E). Sternite IX largely membranous at medial portion, basal portion short and narrow, almost symmetrical, apical portion long with slightly emarginate, pubescent apex (Figure 1D). Tergite X simple, triangular, with subtruncated apex, bearing two long apical setae (Figure 1F).

Aedeagus moderately large; median lobe with apical portion evenly narrowed into obtusely acute apex (Figure 1A); in lateral view, apical portion of median lobe slightly bent dorsad (Figure 1B); paramere divided into two moderately wide and long branches, face adjacent to median lobe with sensory peg setae closely arranged along latero-apical margin of each branch (Figure 1C).

Female. Sternite VIII subrounded at apex, without medioapical emargination. Tergite X triangular, subrounded at apex.

Etymology

The species is named in honour of its collector Mr Zhou Haisheng.

Distribution

The species is at present known only from China (Sichuan).

Remarks

Gabrius zhoui sp. nov. is similar to *G. submolestus* Schillhammer, 2001 in having pronotum, elytra and antennae dark brown or reddish brown and abdomen black with posterior margin of each tergite reddish brown. *Gabrius zhoui* sp. nov. differs from *G. submolestus* by slightly wider apical portion of median lobe, narrower branches of paramere and many more sensory peg setae on underside of paramere.

Gabrius lebedevi (Bernhauer, 1910); first record from China

Bernhauer 1910, p. 72 (*Philonthus*, subgenus *Gabrius*, type locality: Ala-Tau, Syr Darja).

Smetana 1973, p. 134 (*Gabrius*, characters, notes).

Coiffait 1974, p. 79 (*Gabrius*, characters, Turkestan, Uzbekistan).

Herman 2001, p. 2632 (*Gabrius*, world catalogue).

Schillhammer 2003, p. 354 (*Gabrius*, characters, Kyrgyzstan, Afghanistan).
Smetana 2004, p. 635 (*Gabrius*, catalogue for Palaearctic region).

Examined material

One male, China: Sichuan: Baoxing: Fengtongzhai, 7 June 1997, leg. Zhou Haisheng (IZ-CAS); one male, one female, Sichuan: Luding: Daqiaoshan, 2555 m, 20 May 2009, leg. Liang Hongbin (IZ-CAS).

Distribution

China (Sichuan), Tadjikistan, Uzbekistan, Kyrgyzstan, Afghanistan.

Gabrius tirolensis (Luze, 1903); first record from China

Luze 1903, p. 386 (*Philonthus*, subgenus *Gabrius*, type locality: Osttirol, Taufers, 850 m Seehöhe).

Coiffait 1951, p. 107, 114 (*Gabrius*, characters in key, France).

Smetana 1953, p. 178 (*Gabrius*, Bavaria, Savinian Alps, Croatia).

Coiffait 1974, p. 81 (*Gabrius*, characters, Alps, Pyrenees).

Herman 2001, p. 2659 (*Gabrius*, world catalogue).

Schillhammer 2003, p. 355 (*Gabrius*, illustration of aedeagus).

Smetana 2004, p. 637 (*Gabrius*, catalogue for Palaearctic region).

Examined material

One male, one female, China: Xinjiang: Tuomuertai, 2400 m, 3 July 1977, leg. Li Changjiang (IZ-CAS); one female, Qinghai: Dulansi [Iamamsery] (37°00.7–02.0' N, 98°37.4–37.5' E), 3245–3730 m, 10 July 2005, leg. J. Hájek, D. Král & J. Ružička [Ch 16], individually under stones, in excrements and on vegetation along the mountain stream above the monastery, pasture and coniferous forest (CSB).

Distribution

China (Xinjiang, Qinghai), Uzbekistan, Europe.

Gabrius cinctiventris group

Gabrius invisus sp. nov.

(Figure 2A–I)

Type material

Holotype: male, China: Beijing: Xiaolongmen: Nangou, 1140–1270 m, 21–22 September 2001, leg. Yu Xiaodong (IZ-CAS). Paratypes: three males, nine females, same data as holotype (IZ-CAS); one male, CHINA: Beijing: Mentougou: Liyuanling, 13–16 May 2000, leg. Yu Xiaodong (IZ-CAS); one male, two females, Beijing: Mentougou: Liyuanling, 18–21 July 1999, leg. Luo Tianhong (IZ-CAS); one male, four females, Beijing: Badaling, 9 September 1980 [B.M.1980-491, P.M. Hammond (4 BMNH, 1 NMW)]; five males, six females, Beijing: Xiaolongmen, 25–29 June 1995, leg. G. de Rougemont (nine CRL, two NMW); one male, two females, Beijing: Songshan, 14 May 1993, leg. G. de Rougemont (CRL); one female, Beijing: Huangsangyu, 9 May 1995, leg. G. de Rougemont (CRL); two males, four females, China: Zhejiang: Lin'an: Qianqingtang, 1100 m, 6 August 2008,

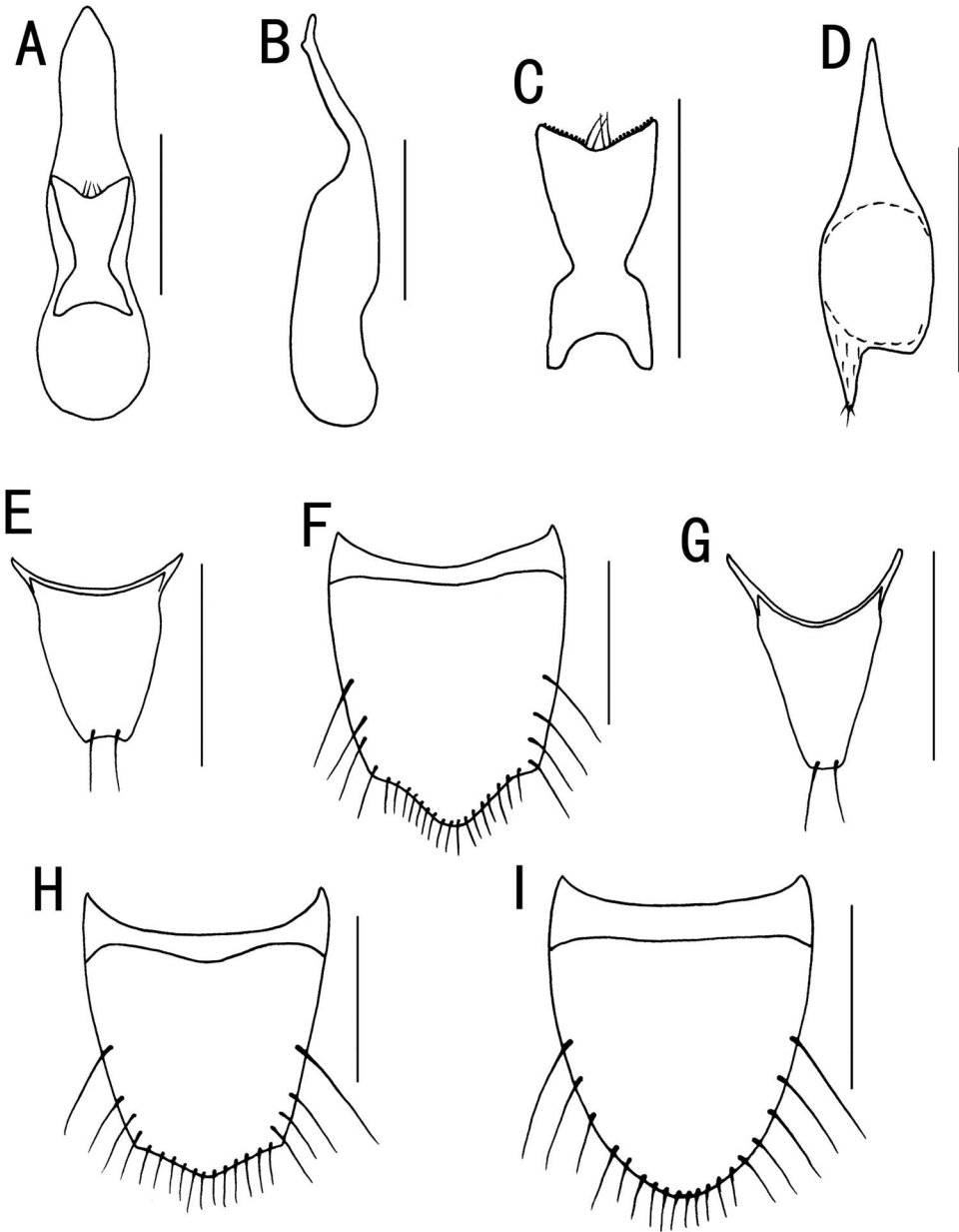


Figure 2. *Gabrius invisus* sp. nov. (A) aedeagus, ventral view; (B) median lobe of aedeagus (paramere removed), lateral view; (C) underside of paramere; (D) sternite IX of male; (E) tergite X of female; (F) tergite VIII of male; (G) tergite X of male; (H) tergite VIII of female; (I) sternite VIII of female. Scale bars 0.5 mm.

leg. Zhou Yulingzi (IZ-CAS); four males, seven females, Zhejiang: Fengyangshan, 1250–1450 m, 2–4 August 2008, leg. Zhou Yulingzi (IZ-CAS); one male, Zhejiang: Fengyangshan, 1400 m, 28–31 July 2007, leg. Zhao Zongyi (IZ-CAS); one female, Lin'an Co., W Tinamu Shan N.R., 300 m, 22 May 1996, leg. J. Cooter, Cryptomeria, Liriodendron dominant forest, Leaf litter, Winkler extractor (CRL); five males, Zhejiang: Tienmushan, 29 April 1993, leg. G. de Rougemont (CRL); 11 males, seven females, Zhejiang: Tienmushan, 2 September 1994, leg. G. de Rougemont (16 CRL, 2 NMW); eight males, 12 females, Anji Co., Longwangshan N.R., ca. 400 m, 14 May 1996, leg. J. Cooter, flight intercetion trap (18 CRL, 2 NMW); three females, China: Shaanxi: ca. 20 mi. S Xi'an, Nan Wutai, 19 September 1980 [B.M.1980–491, P.M. Hammond (BMNH)]; one male, Shaanxi: Qinlingshan above Houzhenzi, 115 km WSW Xi'an (33°47' N, 107°47' E), 1450 m, 5 July 2001, leg. A. Smetana [C95b] (CSO); one male, Shaanxi: Qinlingshan, pass on road Zhouzhi-Foping, 105 km SW Xi'an, N-slope, (33°44' N, 107°59' E), 1990 m, small creek valley, mixed dec. forest, bamboo, small meadows, 2–4 July 2001, leg. D. Wrase [01] (CSB); one female, Shaanxi: Qinlingshan, pass on road Zhouzhi-Foping, 105 km SW Xi'an, N-slope (33°46' N, 107°58' E), 1990 m, 3 July 2001, leg. M. Schülke [C01-02], small creek valley, mixed dec. forest, moss, sifted (CSB); three males, two females, Shaanxi: Nan Wutai, 17 September 1995, leg. G. de Rougemont (4 CRL, 1 NMW); one female, Shaanxi: Qinlingshan (34°00' N 108°30' E), riv. vall. 30 km SSW Xi'an, autoroute 33 km, env. source, 600 m, 31 August 1995, leg. D. Wrase (CSB); one female, Shaanxi: Qinlingshan (34°00' N 108°30' E), riv. vall. 30 km SSW Xi'an, autoroute 33 km, 600 m, sifted, 31 August 1995, leg. M. Schülke (CSB); one female, Shaanxi: Qinlingshan (34°00' N 108°30' E), riv. vall. 30 km SSW Xi'an, autoroute 33 km, 600 m, sifted, 31 August 1995, leg. A. Pütz (CSB); four males, one female, Shaanxi: Huashan, N-valley, 118 km E Xi'an, 1200–1400 m, sifted, 18/20 August 1995, leg. M. Schülke (4 CSB, 1 NMW); one male, two females, Shaanxi: Huashan, N-valley, 118 km E Xi'an, 1200–1400 m, sifted, 18–20 August 1995, leg. A. Pütz (2 CSB, 1 NMW); two males, two females, border Shaanxi-Sichuan, Dabashan, pass 20 km SSE Zhenping, 1700–1800 m (31°44' N, 109°35' E), 9 July 2001, leg. A. Smetana [C96a] (3 CSO, 1 NMW); two males, 11 females, same but [C96b] (12 CSO, 1 NMW); four males, two females, same but 12 July 2001, [C101] (5 CSO, 1 NMW); 23 males, 20 females, border Shaanxi-Sichuan, Dabashan, pass 20 km SSE Zhenping, 1700–1800 m (31°44' N, 109°35' E), 12 July 2001, leg. M. Schülke [C01-07C], mixed forest, small creek valley, moss, bark, sifted (38 CSB, 5 NMW); eight males, 10 females, border Shaanxi-Sichuan, Dabashan, pass 20 km SSE Zhenping, 1700–1800 m (31°44' N, 109°35' E), 9–12 July 2001, small creek valley, young mixed forest, leaf litter, moss, leg. D. Wrase [07] (16 CSB, 2 NMW); two males, four females: China: Hubei: Dabashan, pass E Mt. Dashennongjia, 12 km NW Muyuping (31°30' N, 110°21' E), 1950 m, 19 July 2001, leg. A. Smetana [C111] (CSO); one male, one female, Hubei: Dabashan, pass E Mt. Dashennongjia, 12 km NW Muyuping (31°30' N, 110°21' E), 2050 m, 19 July 2001, leg. A. Smetana [C112] (CSO); one male, two females, Hubei: Dabashan, pass E Mt. Dashennongjia, 12 km NW Muyuping (31°30' N, 110°21' E), 1950 m, 16 July 2001, leg. M. Schülke [C01-13], dry creek valley, mixed deciduous forest, dead wood, mushrooms, sifted (CSB); one male, two females, Hubei: Dabashan, pass E Mt. Dashennongjia, 12 km NW Muyuping (31°30' N, 110°21' E), 1950–2050 m, 19 July 2001, leg. M. Schülke [C01-13C], creek valley, mixed deciduous forest, dead wood, mushrooms, sifted (CSB); one male, four females, Hubei: Dabashan, pass E Mt.

Dashennongjia, 12 km NW Muyuping (31°30' N, 110°21' E), 1950–2050 m, 22 July 2001, leg. M. Schülke [C01-13E], dry creek valley, mixed deciduous forest, dead wood, mushrooms, sifted (CSB); three males, three females, Hubei: Dabashan, creek valley 8 km NW Muyuping (31°29' N, 110°22' E), 1550–1650 m, 18 July 2001, leg. A. Smetana [C115b] (5 CSO, 1 NMW); one male, Hubei: Dabashan, creek valley 8 km NW Muyuping (31°29' N, 110°22' E), 1550–1650 m, 18 July 2001, leg. M. Schülke [C01-16A], deciduous forest, moss, sifted (CSB); 13 males, three females, Hubei: Dabashan, crk. valley 4 km N Muyuping, 1700 m, 21 July 2001, leg. A. Smetana [C116] (13 CSO, 3 NMW); one male, Hubei: Dalaoshan forest park, 9–15 June 2004, pitfall traps, leg. J. Turna (NMW); three males, two females, Henan: N-Henan, Wangwushan (35°11' N, 112°16' E), 1175 m, 13 June 2007, leg. J. Turna (NMW); one male, China: Hunan: Wulingyuan, N Dayong, Zhangjiajie, 650 m, 29 October 1993, leg. H. Schillhammer [CWBS 1] (NMW); two males, China: Sichuan: Emeishan, 28–29 August 2005, leg. Zhang Yejun (IZ-CAS); one male, Sichuan: Jiulong, 2130 m, 9–12 July 2001, leg. Yu Xiaodong (IZ-CAS); one male, Sichuan: Ebian, Lawu Xiang, Xiaoliang Shan, 1820 m, 7 October 1997, leg. Toshio Kishimoto (CTK); five males, one female, Sichuan: Chengkou, Gaonan, Hojiawan, 1250 m, 26 September 1997, leg. Toshio Kishimoto (CTK); one female, W-Sichuan: Ya'an Pref., Tianquan Co., Jiajin Shan, Vall. above Labahe N.R.St., 57 km W Ya'an (30°06' N 102°25' E), litter bark, fungi, 1800 m, 12 July 1999, leg. M. Schülke (CSB).

Description

Head and pronotum black, shining. Antennae black with basal three segments reddish brown. Elytra and scutellum dark brown. Abdomen black with posterior margin of tergites III–VII narrowly reddish brown. Mandibles, maxillary and labial palpi and legs reddish brown.

Body 5.88–6.53 mm long (HPL = 1.72–1.96 mm). Head of rounded quadrangular shape, 0.82–0.90 mm long, 0.65–0.73 mm wide (HW:HL = 0.80–0.82). Tempora 0.33–0.41 mm long, almost evenly rounded, sparsely and coarsely punctate; eyes moderately large, slightly protruding, 0.25 mm long, 0.60–0.75 times as long as tempora. Dorsal surface of head with scattered, large setiferous punctures along lateral sides, vertex largely impunctate; entire head with distinct and profound microsculpture of transverse waves. Antennae short, first segment long, slightly thickened towards apex, third segment distinctly longer than second, fourth–sixth segments almost as long as wide, seventh–10th segments distinctly transverse, last segment longer than wide, obliquely truncated.

Pronotum slightly narrowed anteriorly, 0.90–1.06 mm long, 0.82 mm wide, slightly wider than head (PW:HW = 1.11–1.25); dorsal rows each with 6–7 punctures, sublateral rows each with two punctures; microsculpture similar to that on head.

Elytra 1.06–1.22 mm long, 1.06–1.22 mm wide, along sides 1.08–1.25 times as long as pronotum, densely and finely punctate, punctures separated by 2–3 times their diameter. Scutellum large, triangular, densely and finely punctate.

Abdomen slightly narrowed posteriorly, widest 0.98–1.14 mm, densely and finely punctate, punctures separated by 1–2 puncture diameters at base, gradually becoming sparser toward apex of each tergite; surface between punctures with exceedingly fine and dense microsculpture of transverse striae; tergites III–V with two basal lines, elevated area between basal lines almost impunctate.

Male. Tergite VIII with apical margin distinctly produced medioapically (Figure 2F). Sternite VIII with wide and shallow medioapical emargination filled by dense and long apical setae laterally, similar to that of *G. kambaitiensis* Scheerpeltz. Sternite IX largely membranous at middle portion, basal portion narrow and long, almost symmetrical; apical piece very short, shortly and sparsely setose (Figure 2D). Tergite X simple, triangular, with apex subtruncated, bearing two long apical setae (Figure 2G).

Aedeagus large; median lobe long, distinctly exceeding paramere, apical portion narrowed into subacuate apex (Figure 2A); in lateral view, median lobe with a small subapical dorso-lateral extension (Figure 2B); paramere with apical margin shallowly and widely emarginated, with four strong medial setae, face adjacent to median lobe with sensory peg setae arranged closely at apical margin, but sparing out middle, where stout medial setae situated. (Figure 2C).

Female. Tergite VIII with apical margin slightly produced medio-apically (Figure 2H). Sternite VIII subrounded at apex, without medio-apical emargination (Figure 2I). Tergite X triangular, with inconspicuously emarginate apex, bearing two long apical setae (Figure 2E).

Etymology

The specific epithet *invisus* (Latin: unseen) refers to the fact that initially the species was erroneously mistaken for *Gabrius kambaitiensis*.

Distribution

The species is widely distributed in China (Beijing, Zhejiang, Shaanxi, Hubei, Hunan, Henan, Sichuan).

Remarks

In this group, the new species is closely related to *Gabrius kambaitiensis* Scheerpeltz, 1965 and *G. eminens* Schillhammer, 2001. *Gabrius invisus* sp. nov. can be easily distinguished from *G. kambaitiensis* by distinctly acute apex of median lobe of aedeagus. The new species differs from *G. eminens* by middle portion of apical margin of paramere without sensory peg setae and distinctly narrower apical portion of median lobe of aedeagus in lateral view.

Gabrius cinctiventris Scheerpeltz, 1965; first record from China
Scheerpeltz 1965, p. 229 (type locality: Kambaiti).
Schillhammer 1997, p. 52 (characters, Myanmar).
Herman 2001, p. 2617 (world catalogue).

Examined material

Four males, four females, China: Yunnan: Nujiang Lisu Aut. P., Gongshan Co., Gaoligongshan, creek valley 17 km N Gongshan (27°45' N, 98°35' E), 2500 m, 21 June 2005, leg. M. Schülke [C2005-12], litter and debris around snow field, sifted during rain (6 CSB, 2 NMW); one male, one female, Yunnan: Dali: Cangshan, 2085–2200 m, 30 July 2006, leg. Li Xiaoyan (IZ-CAS).

Distribution

China (Yunnan), Myanmar.

Gabrius kambaitiensis Scheerpeltz, 1965; first record from China Scheerpeltz 1965, p. 228 (type locality: Kambaiti). Schillhammer 1997, p. 54 (characters, Myanmar). Herman 2001, p.: 2629 (world catalogue).

Examined material

Two males, China: Yunnan: Nujiang Lisu Aut. P., Gongshan Co., Gaoligongshan, creek valley 17 km N Gongshan (27°45' N, 98°35' E), 2500 m, 21 June 2005, leg. M. Schülke [C2005-12A], litter and debris around snow field (CSB, NMW).

Distribution

China (Yunnan), Myanmar.

Gabrius deceptor group

Gabrius smetanai Schillhammer, 1997; first record from China Schillhammer 1997, p. 22 (type locality: Nepal: Khandbari District, above Tashigaon, 3550 m). Herman 2001, p. 2654 (world catalogue). Smetana 2004, p. 637 (catalogue for Palaearctic region).

Examined material

One male, China: Yunnan: Gongshan (27°42' N, 98°30' E), 2955 m, 26 September 2007, leg. Liang Hongbin & Shi Hongliang (IZ-CAS); one female, Yunnan: Gongshan (27°36' N, 98°29' E), 3331 m, 3 October 2007, leg. Shi Hongliang (IZ-CAS).

Distribution

China (Yunnan), Nepal.

Gabrius imitator group

Gabrius imitator (Fauvel, 1895); first record from China Fauvel 1895, p. 265 (*Philonthus*, type locality: Carin Asciiü Ghecù, 1400–1500 m). Cameron 1932, p. 149 (*Philonthus*, characters, Burma, India). Coiffait 1982, p. 27 (*Gabrius*, characters, Nepal). Schillhammer 1997, p. 45 (*Gabrius*, lectotype designation: Carin Asciiü Ghecù, 1400–1500 m; characters, Burma, Thailand). Herman 2001, p. 2628 (*Gabrius*, world catalogue).

Examined material

One male, China: Sichuan: Dujiangyan: Longchi, 25 August 2005, leg. Zhao Caiyun (IZ-CAS); one male, four females, Yunnan: Nujiang Lisu Aut. Pref., Gongshan Co., Gaoligongshan, small creek valley 17 km N Gongshan (27°54.41' N, 98°39.55' E), 1525–1600 m, along creek, under stones, gravel, leaf litter, sifted, 20 June 2005, leg. M. Schülke [C2005-15] (CSB).

Distribution

China (Sichuan, Yunnan), Myanmar, Thailand.

Gabrius nigrutilus group

Gabrius egens (Sharp, 1874); first record from China

Sharp 1874, p. 44 (*Philonthus*, type locality: Hiogo).

Smetana 1960, p. 303 (*Gabrius*, characters, Japan).

Smetana 1984, p. 130 (*Gabrius*, characters, Japan).

Cho & Lee 1997, p. 272 (*Gabrius*, characters, Korea).

Herman 2001, p. 2621 (*Gabrius*, world catalogue).

Smetana 2004, p. 634 (*Gabrius*, catalogue for Palaearctic region).

Examined material

Three males, China: Zhejiang: Fengyangshan, 1050 m, 31 July 2008, leg. Zhou Yulingzi (IZ-CAS); one male, Zhejiang: Linan: Qianqingtang, 1100 m, 6 August 2008, leg. Zhou Yulingzi (IZ-CAS).

Distribution

China (Zhejiang), Japan, Korea.

Gabrius osseticus group

Gabrius zerchei Schillhammer, 1996; first record from China

Schillhammer 1996, p. 65 (type locality: Russia: Primorskiy Krai Ryazanovka, 14 km SW Slavyanka).

Herman 2001, p. 2664 (world catalogue).

Smetana 2004, p. 637 (catalogue for Palaearctic region).

Examined material

One male, China: Beijing: Mentougou: Liyuanling, 1050 m, 15 September 2000, leg. Yu Xiaodong (IZ-CAS); one male, one female, Beijing: Mentougou: Liyuanling, 1050–1100 m, 27 June–July 2000, leg. Yu Xiaodong (IZ-CAS).

Distribution

China (Beijing), Russia.

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