



## Short communication

# New records of two Staphylinine species (Coleoptera, Staphylinidae) in the Korean peninsula



Young Bok Cho\*

Natural History Museum, Hannam University, Daejeon, South Korea

## ARTICLE INFO

### Article history:

Received 4 March 2016

Received in revised form

21 March 2016

Accepted 24 March 2016

Available online 31 March 2016

## ABSTRACT

*Philonthus (Philonthus) kiautschauensis* Bernhauer and *Platydracus (Platydracus) aureofasciatus* (Mot-schulsky) are reported for the first time in Korea. The habitus photographs and illustration of the male genitalia are provided.

Copyright © 2016, National Science Museum of Korea (NSMK) and Korea National Arboretum (KNA). Production and hosting by Elsevier. This is an open access article under the CC BY-NC-ND license (<http://creativecommons.org/licenses/by-nc-nd/4.0/>).

### Keywords:

Coleoptera

Korea

new record

*Philonthus*

*Platydracus*

Staphylinidae

## Introduction

One male of *Philonthus (Philonthus) kiautschauensis* Bernhauer and two males of *Platydracus (Platydracus) aureofasciatus* (Mot-schulsky) collected in Gangwon-do were identified. I report these two Staphylinine species of subfamily Staphylininae for the first time in the Korean peninsula.

The most species rich Staphylinine genus *Philonthus* Stephens contains about 1,255 species worldwide (Herman 2001) and 33 species in Korea (Cho 2014). This genus is characterized by last maxillary palpomere more or less fusiform, usually > 1.3 times as long as penultimate palpomere; labial palpus moderately long, last labial palpomere at least 1.5 times as long as penultimate palpomere; superior line of pronotal hypomeron not turning downwards until close to front angle, lateral puncture of pronotum bearing long seta separated from lateral margin by at most little more than the width of the puncture (Smetana 1995).

The genus *Platydracus* Thomson contains about 178 species worldwide (Herman 2001) and 7 species in Korea. This genus is characterized as follows: puncture bearing postocular seta on head situated distinctly closer to posterior margin of head than to

posterior margin of eye; mandibular teeth (on both mandibles) appearing in two planes, dorsal and ventral, in most species; maxillary and labial palpi with last palpomere moderately elongate, fusiform, without setae; paramere of aedeagus devoid of any sensory peg setae and attached to median lobe in such a way that it is somewhat dorsoventrally flexible (Smetana and Davies 2000).

Accordingly, a total of 34 species of genus *Philonthus* and 8 species of genus *Platydracus* have been recorded in Korea.

## Materials and methods

Material examined herein is deposited in the Natural History Museum, Hannam University, Daejeon, Korea. To examine the genitalic structures, the last three abdominal segments of specimen were dissected from the body after softening in hot water. Habitus photographs were taken based on a former study by Cho et al (2016).

## Taxonomic accounts

***Philonthus (Philonthus) kiautschauensis* Bernhauer, 1916** 복방종  
반날개 (신칭)  
(Figures 1A, 2A, and 2B)

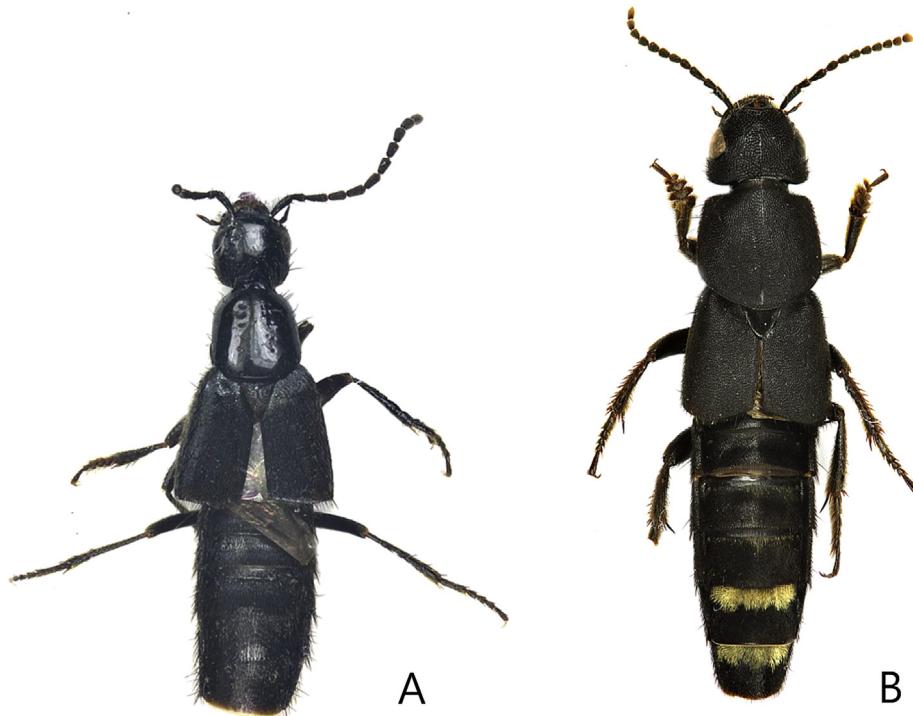
*Philonthus kiautschauensis* Bernhauer, 1916: 30 [TL: Kiautschau (China)]

*Philonthus altaicus* Bernhauer, 1923: 124.

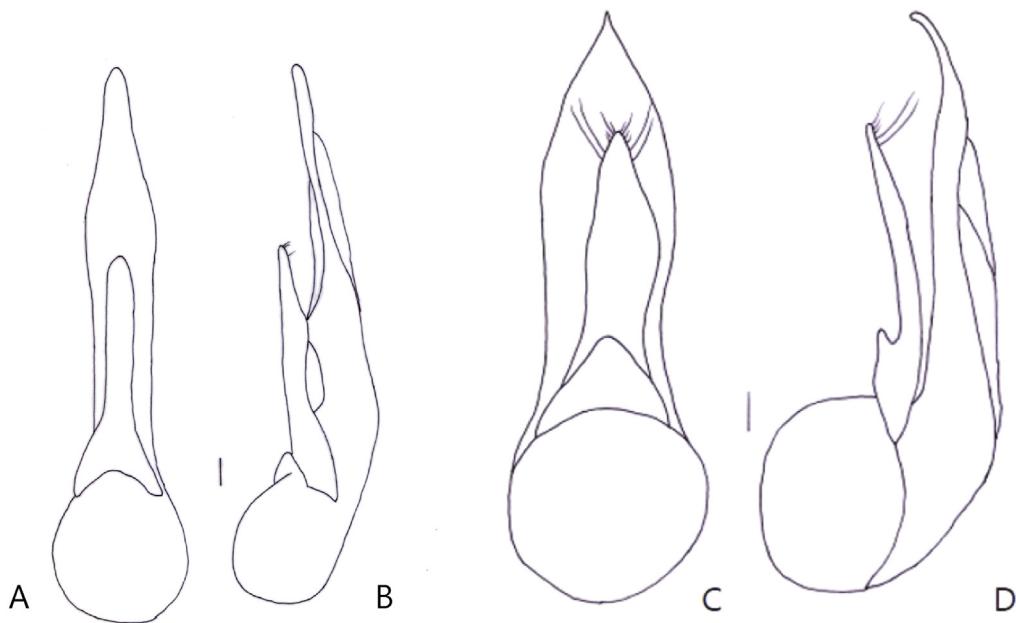
\* Corresponding author.

E-mail address: [youngcho@hnu.kr](mailto:youngcho@hnu.kr).

Peer review under responsibility of National Science Museum of Korea (NSMK) and Korea National Arboretum (KNA).



**Figure 1.** Habitus: A, *Philonthus (Philonthus) kiautschauensis* (7.5 mm); B, *Platydracus (Platydracus) aureofasciatus* (17.5 mm).



**Figure 2.** Male genitalia: A, ventral view of *Philonthus (Philonthus) kiautschauensis*; B, ditto, lateral view; C, ventral view of *Platydracus (Platydracus) aureofasciatus*; D, ditto, lateral view. <scale bars: 0.04 mm (A, B); 0.21 mm (C, D)>

*Philonthus khnzoriani* Coiffait, 1967: 352.

*Philonthus septempunctatus* Tikhomirova, 1973: 169 (Homonym).

*Philonthus (Philonthus) kiautschauensis*: Schülke and Smetana, 2015: 1042.

**Diagnosis.** Body length about 7.5 mm. Body black and strongly glossy, head and pronotum with microsculpture, antennae, and legs black. Head subquadrate, slightly narrower than pronotum, each

antennomere longer than wide, eye slightly protruded, as long as temple; pronotum rectangular, longer than wide, dorsal row with six or seven punctures; aedeagus (**Figures 2A and 2B**) narrow and elongate; lateral margin of median lobe almost parallel, subapical area slightly dilated, apical area abruptly narrowed, with a large tubercle on face adjacent to subapical area of paramere in lateral view; paramere much shorter than median lobe, without sensory peg seta on underside, apex rounded.

**Material examined.** Korea: Gangwon-do, 1♂, Gajeon-ri, Seohwameyeon, Inje-gun, N38° 18'41.7" E128° 12'12.8", alt. 390 m, 20. v. 2008, Y. B. Cho.

**Distribution.** Korea (new record), China (Shandong), Russia (Far East, West Siberia).

**Remarks.** This species is similar to *Philonthus* (*Philonthus*) *prolatus chonrima* Hayashi but the former is darker and thicker and can be distinguished by the shape of aedeagus.

#### ***Platydracus* (*Platydracus*) *aureofasciatus* (Motschulsky, 1861)**

황색털검정반날개 (신칭)

(Figures 1B, 2C, and 2D)

*Staphylinus aureofasciatus* Motschulsky, 1861: 40 (Type locality: Russia).

*Staphylinus teter* Bondroit, 1913: 90 (Type locality: Russia).

*Platydracus* (*Platydracus*) *aureofasciatus*: Schülke and Smetana, 2015: 1096.

**Diagnosis.** Body length 17.5–18.1 mm. Body black, dull, antennae black but last three antennomeres reddish brown, legs black but tibia and tarsi reddish black. Head rectangular, slightly wider than long, coarsely and densely punctured, punctures larger than ones of pronotum and elytra; eye longer than temple (1:0.7). Pronotum slightly dilated towards posteriad, wider than head, with smooth median line at posteromiddle area. Abdomen with yellow dense pubescence at the basal portion of sixth and seventh tergites; medioapical margin of sixth sternite in male very shallowly emarginated; seventh one deeply emarginated. Aedeagus with robust median lobe, each lateral middle area broadly and shallowly emarginated, apical portion narrowing towards apically, apical area slightly bent ventrally in lateral view; paramere asymmetrical, clearly shorter, and narrower than median lobe.

**Material examined.** Gangwon-do: 1♂, Nodong valley, Nodong-ri, Yongpyeong-myeon, Pyeongchang-gun, N37° 42.08' E128° 28.89', alt. 900 m, by malaise trap, 26. viii – 1. x. 2006, Tripotin P.; 1♂, near Dongdaesa temple, Mount Odaesan, Pyeongchang-gun, N37° 44.31' E128° 35.71', alt. 800 m, by malaise trap, 21. vi – 2. viii. 2006, Tripotin P.

**Distribution.** Korea (new record), Russia (East Siberia, Far East).

**Remarks.** This species is easily separated from the other Korean *Platydracus* species by yellow dense pubescence along basal portion of sixth and seventh tergites.

#### **Acknowledgments**

I thank Mr. Kwang-Sik Oh (Hannam University) for taking photographs and Mr. Tripotin for valuable samples. This study was supported by a grant from the National Institute of Biological Resources.

#### **References**

- Bernhauer M. 1916. Kurzflügler aus dem deutschen Schutzgebiete Kiautschau und China. *Archiv für Naturgeschichte* (A) 81:27–34.
- Bernhauer M. 1923. Neue Staphyliniden der palaearktischen Fauna. 1922. *Koleopterologische Rundschau* 10:122–128.
- Bondroit J. 1913. Descriptions de Staphylinides nouveaux. *Annales de la Société Entomologique de Belgique* 57:90–93.
- Cho YB. 2014. Philonthina. In: Insect Fauna of Korea. *National Institute of Biological Resources* 12 (18):95.
- Cho YB, Oh KS, Song KH. 2016. New report of the subfamily Micropeplinae Leach (Coleoptera, Staphylinidae) in Korea. *Korean Journal of Applied Entomology* 55: 73–75.
- Coiffait H. 1967. Nouveaux Staphylinidae (sensu lato) d'Asie central. *Bulletin de la Société d'Histoire Naturelle de Toulouse* 103:353–357.
- Herman LH. 2001. Catalog of the Staphylinidae (Insecta: Coleoptera). 1758 to the end of the second millennium (Parts I–VII). *Bulletin of the American Museum of Natural History* 265:1–4218.
- Motschulsky V. 1861. Diagnoses d'insectes nouveaux des rives du fl. Amur et de la Daourie méridionale. *Etudes Entomologiques* 9:39–41.
- Schülke M, Smetana A. 2015. Hydrophiloidea – Staphylinoidea. In: Löbl I, Löbl D, editors. *Catalogue of Palaeartic coleoptera*. revised and updated edition, Volume 2/2, Leiden: Brill. pp. 1007–1134.
- Smetana A. 1995. Rove beetles of the subtribe Philonthina of America north of Mexico (Coleoptera: Staphylinidae). Classification, phylogeny and taxonomic revision. *Memoirs on Entomology, International* 3:1–946.
- Smetana A, Davies A. 2000. Reclassification of the north temperate taxa associated with *Staphylinus* sensu lato, including comments on relevant subtribes of Staphylinini (Coleoptera: Staphylinidae). *American Museum Novitates* 3287:1–88.
- Tikhomirova AL. 1973. [New taxa]. In: Kryzhanovskii O, Tikhomirova A. & Filatova L. 1973. Stafilinidy (Coleoptera, Staphylinidae) luchnogo Primor'ia. In: Giliarov M, editor. *Ekologiya pochvennykh bespozvonochnykh*. Izdatel'stvo Nauka, Moskva, 226 pp.