

A new species of the genus *Byctiscus* Thomson, 1859 (Coleoptera, Rhynchitidae) from Vietnam

Andrei A. Legalov

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A new species, *Byctiscus ivanovi* sp. nov. from northwest Vietnam is described and illustrated. This new species is similar to *B. fukienensis* Voss, 1948 from south-eastern China but differs in the other form of the basal sclerite, sparsely punctate pronotum, and the blue-green body. A key for species of the genus *Byctiscus* with four elytral spots are given. It is the first record of the genus *Byctiscus* from Vietnam.

Key words: Curculionoidea, Rhynchitinae, Byctiscini, Asia.

Andrei A. Legalov, Institute of Systematics and Ecology of Animals, Siberian Branch, Russian Academy of Sciences, Frunze street-11, Novosibirsk 630091 Russia, e-mail: fossilweevils@gmail.com;

Altai State University, Lenina-61, Barnaul 656049 Russia;

Tomsk State University, Lenina Prospekt, 36, Tomsk 634050 Russia.

INTRODUCTION

The tribe Byctiscini was presented by 105 described species from 12 genera mainly from Asia and only two species are distributed in the Western Palearctic (Legalov, 2007, 2009, 2018). The genus *Byctiscus* Thomson, 1859 differs from the similar genus *Aspidobyctiscus* Schilsky, 1903 in the not shortened 9th elytral striae (Legalov, 2007). This genus included 31 described species distributed in Eurasia with a center of diversity in China (Legalov, 2007, 2009). Ten species of this tribe were recorded in Vietnam, but the species of the genus *Byctiscus* were unknown. A new

species of the genus *Byctiscus* was collected in 2021 in northwest Vietnam. This species belongs to the group of species (*B. fukienensis* Voss, 1948, *B. qingensis* Legalov, 2009 and *B. princeps* (Solsky, 1872)) with four elytral spots. *B. princeps* is widespread in the Russian Far East, Korea, China and Japan (Sawada, 1993; Legalov, 2007), *B. fukienensis* is known from Fujian (Voss, 1948) and *B. qingensis* from Shaanxi (Legalov, 2009).

In this paper, the new species of the genus *Byctiscus* from Vietnam, which is the first record of this genus in this country, is described.

MATERIAL AND METHODS

Type specimen is kept in the ISEA = Institute of Systematics and Ecology of Animals (Russia: Novosibirsk). Types of *B. fukienensis* are kept in the Zoologische Forschungsinstitut und Museum «Alexander Koenig» (Germany: Bonn) and *B. princeps* in the Zoological Institute of Russian Academy of Sciences (Russia: St. Petersburg). Descriptions, body measurements, and photographs of the new species, were prepared using the Zeiss Stemi 2000-C dissecting stereomicroscope. The terminology of the weevil body structure is according to Lawrence et al. (2010). The systematics of studied taxa are based on the works of Legalov (2007, 2014).

RESULTS

Genus *Byctiscus* Thomson, 1859

Byctiscus ivanovi Legalov, sp. nov. (Fig. 1)

Type material: Holotype. Male (ISEA), Vietnam, near Lai Chau, IV.2021, local collector. **Paratype.** Female (ISEA), idem.

Description. Male. Body blue-green, covered with very fine light hairs. Apex, sides, and bottom of rostrum, antennomeres 1-8, sides of pronotum, elytra, trochanters, partially femora and tibiae, and tarsi blue. Back of rostrum, forehead, basal part of vertex, head ventrally, disk of pronotum, prosternum, meso- and metaventries, metepisternum, abdomen, coxae, partially femora and tibiae green. Four spots on elytra aureate. Rostrum long, 2.8 times as long as wide at apex, 4.0 times as long as wide in middle and at base, 1.1 times as long as pronotum, distinctly

curved, finely and densely punctate, with weak carina in middle and basal thirds. Antennal scrobes long, sulciform. Antennae inserted after rostrum middle. Forehead quite narrow, 0.9 times as narrow as rostrum base width, flat, punctate. Eyes almost not protruding from contour of head. Vertex sparsely punctate. Temples 1.1 times as long as eyes, transverse-rugose. Antennae long, reaching base of pronotum. Antennomeres 1 and 2 suboval, equal in wide. Antennomere 1 1.8 times as long as wide at apex. Antennomere 2 1.5 times as long as wide at apex, 0.8 times as long as antennomere 1. Antennomeres 3-5 subconical. Antennomere 3 1.4 times as long as wide at apex, 0.9 times as long as and 0.9 times as narrow as antennomere 2. Antennomere 4 2.0 times as long as wide at apex, 1.3 times as long as and 0.9 times as narrow as antennomere 3. Antennomere 5 1.8 times as long as wide at apex, equal in length as and 1.1 times as wide as antennomere 4. Antennomeres 6-8 subequal in length. Antennomere 6 rounded, 1.1 times as long as wide in middle, 0.7 times as long as and 1.1 times as wide as antennomere 5. Antennomeres 7 and 8 wide-conical, transverse. Antennomere 7 0.9 times as long as wide at apex, 1.3 times as wide as antennomere 6. Antennomere 8 0.8 times as long as wide at apex, 1.1 times as wide as antennomere 7. Club wide and lose, 0.8 times as long as antennomeres 1-8 combined. Antennomere 9 0.9 times as long as wide at apex, 1.8 times as long as and 1.5 times as wide as antennomere 8. Antennomere 10 subequal in length and width, 1.1 times as long as and equal in width to antennomere 9. Antennomere 11 1.6 times as long as wide at base, 1.3 times as long as and 0.8 times as narrow as antennomere 10. Pronotum transverse, campaniform, 1.4 times as long as wide at apex, 0.8 times as long as s wide in middle, subequal to wide at base, narrowed

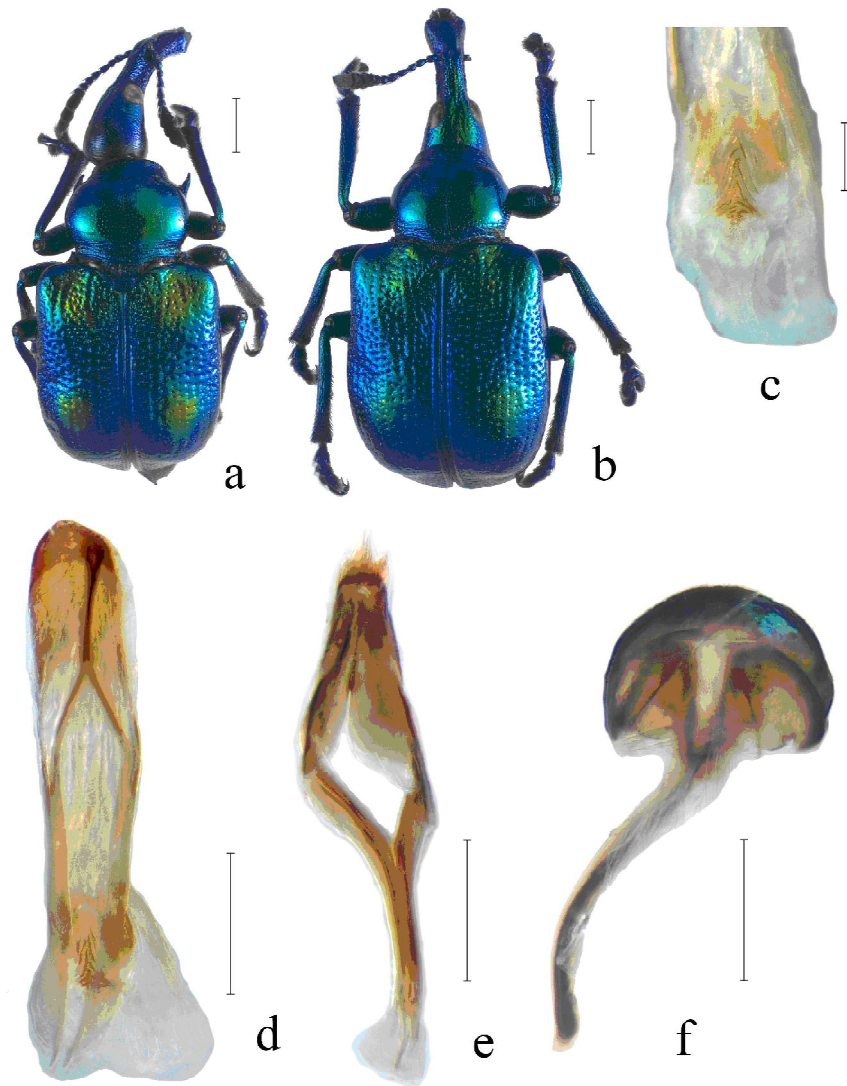


Fig. 1. *Byctiscus ivanovi* sp. nov.: a – holotype, male, habitus, dorsally, b – paratype, female, habitus, dorsally, c – holotype, basal sclerite, dorsally, d – holotype, aedeagus, dorsally, e – holotype, tegmen, dorsally, f – holotype, tergite 8, dorsally. Scale bar for a, b = 1.0 mm, for c = 0.2 mm, for d-f = 0.5 mm.

to apex, lustrous, finely punctate, with rounded sides. Greatest width in middle. Scutellum trapezoid, wide, 0.5 times as long as wide. Elytra wide, 1.4 times as long as wide at base, 1.3 times as long as wide in middle, 1.4 times as long as wide at apical

fourth, 2.5 times as long as pronotum, with distinct humeri. Interstriae quite wide, 2.0-2.5 times as wide as striae, weakly convex, lustrous, finely punctate. Scutellar striole present. Striae narrow. Points in striae distinct and small. Epipleuron distinct.

Prosternum punctate, with tooth. Precoxal portion of prosternum 0.5 times as long as procoxal cavity. Postcoxal portion of prosternum short, about 0.2 times as long as procoxal cavity. Procoxal cavities contiguous. Mesocoxal cavities narrowly separated. Metepisternum wide, 2.4 times as long as wide in middle, finely punctate. Metaventricle subequal in length to length of metacoxa, weakly convex, punctate. Abdomen convex

ventrally, punctate. Ventriles 1-3 subequal in length. Ventricle 1 0.6 times as long as length of metacoxa. Ventricle 4 0.8 times as short as ventrite 3. Ventricle 5 0.4 times as long as ventrite 4. Pygidium convex, finely punctate. Legs long. Procoxae subconical. Femora weakly widened. Tibiae weakly expanded to apex, with apical spur. Protibiae almost straight lines. Meso- and metatibiae weakly biconcave. Tarsi quite long. Tarsomere 1

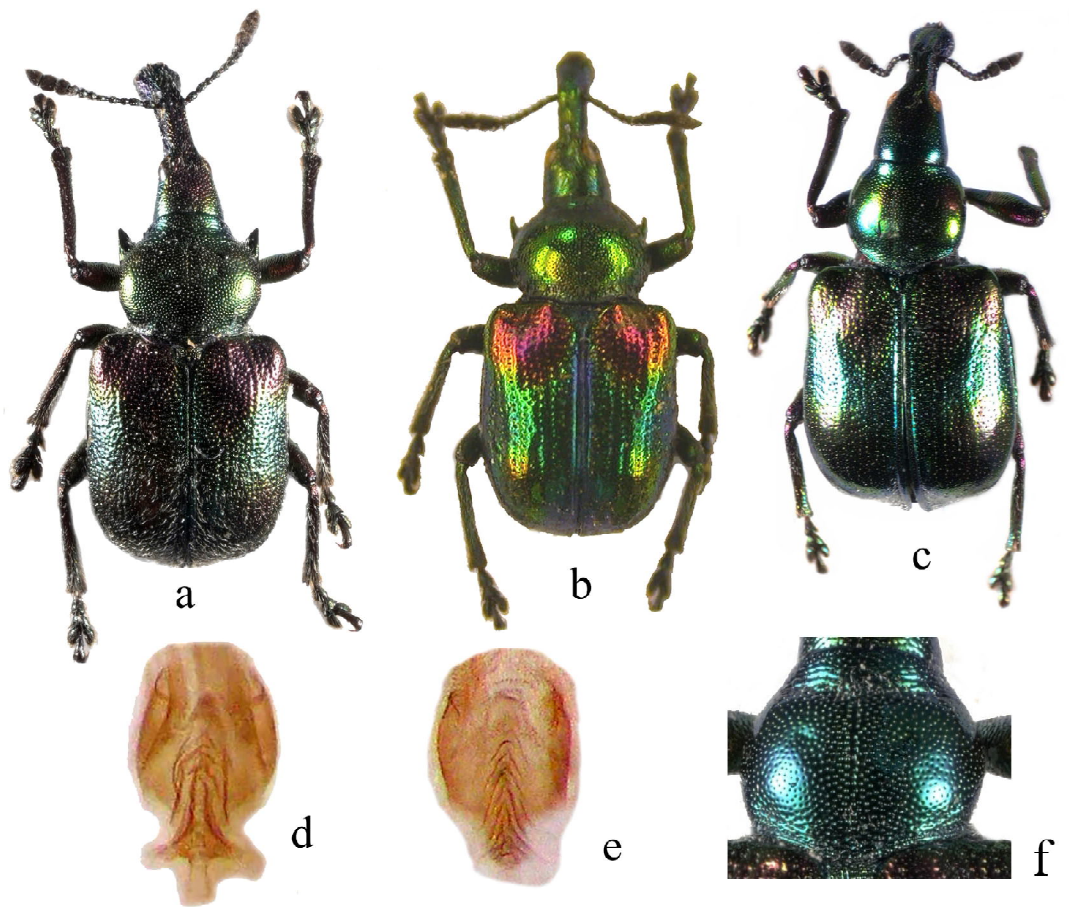


Fig. 2. *Byctiscus* spp: a – *B. princeps*, male, habitus, dorsally, b – *B. fukienensis*, lectotype, male, habitus, dorsally, c – *B. qingensis*, holotype, female, habitus, dorsally, d – *B. princeps*, male, basal sclerite, dorsally, e – *B. fukienensis*, lectotype, male, basal sclerite, dorsally, f – *B. princeps*, female, pronotum, dorsally.

conical. Tarsomere 2 wide-conical. Tarsomere 3 bilobed. Tarsomere 5 elongate. Claws with teeth. Total body length (without rostrum) 7.1 mm. Length of rostrum 1.9 mm. Female. Rostrum shorter, 2.4 times as long as wide at apex, 3.1 times as long as wide in middle and at base, 1.1 times as long as wide at pronotum, weakly curved. Pronotum 1.2 times as long as wide at apex, 0.7 times as long as wide in middle, 0.8 times as long as wide at base, with weakly rounded sides. Elytra 1.3 times as long as wide at base, 1.2 times as long as wide in middle, 1.5 times as long as wide at apical fourth, 2.8 times as

long as pronotum. Prosternum without tooth. Total body length (without rostrum) 7.1 mm. Length of rostrum 1.7 mm.

Diagnosis. This new species is similar to *B. fukienensis* from China but differs in the other form of the basal sclerite, sparsely punctate pronotum, and the blue-green body.

Etymology. The species is named in late Dr. Alexander V. Ivanov (Yekaterinburg, Russia).

Distribution. Northwest Vietnam.

Key to species of the genus *Byctiscus* with four elytral spots

1. Pronotum sparsely punctate. Basal sclerite as fig. 1c.....*B. ivanovi* sp. nov.
- Pronotum densely punctate. Basal sclerite as figs. 2d-e.....2
2. Head green (fig. 2b). Bottom blue-green. Elytral interstriae wide (fig. 2b). Basal sclerite as fig. 2d.
.....*B. fukienensis*
- Head purple (fig. 2a). Bottom with reddish sheen. Elytral interstriae narrow (fig. 2a). Basal sclerite as fig. 2e.3
3. Pronotum and elytra more coarsely punctate (fig. 2a). Sides of pronotum distinctly rounded (fig. 2f).....*B. princeps*
- Pronotum and elytra more finely punctate (fig. 2c). Sides of pronotum weakly rounded (fig. 2c).....
.....*B. qingensis*

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