

***Batrisceniola fengtingae* sp. nov., the first record
of the genus in China
(Coleoptera: Staphylinidae: Pselaphinae)**

Zi-Wei YIN¹⁾ and Li-Zhen LI^{1, 2)}

¹⁾Department of Biology, College of Life and Environmental Sciences, Shanghai Normal University, 100 Guilin Road, Shanghai, 200234, P. R. China

²⁾Corresponding author; e-mail: pselaphinae@gmail.com

Abstract. *Batrisceniola fengtingae* sp. nov. from East China is described, figured, and compared with related congeners. The new species represents the first record of the genus in China. An updated identification key to the males of *Batrisceniola* Jeannel, 1958 is provided.

Key words. Coleoptera, Staphylinidae, Pselaphinae, Batrisini, *Batrisceniola fengtingae*, taxonomy, new species, China, Palaearctic Region

Introduction

The batrisine genus *Batrisceniola* Jeannel, 1958 currently contains three species from Japan: *B. dissimilis* (Sharp, 1874), *B. hiranoi* Nomura, 1991, and *B. semipunctulata* (Raffray, 1909) (SHARP 1874, RAFFRAY 1909, JEANNEL 1958, NOMURA 1991). Members of *Batrisceniola* have the abdominal tergite VII (fourth visible tergite) with a median bunch of erect setae in both sexes, which is possibly an autapomorphy of the genus.

A batrisine species recently collected in East China shares with the Japanese *Batrisceniola* the median bunch of setae, and is therefore considered congeneric. Here we provide the description of this new species together with some comparative notes, and illustrations of its habitus and relevant diagnostic characters. We also update the identification key to males of *Batrisceniola* given in NOMURA (1991) accordingly.

Material and methods

The type material is deposited in the Insect Collection of the Shanghai Normal University, Shanghai, P. R. China (SNUC).

The collection data of the material are quoted verbatim. Separate labels are indicated by a slash (/). Authors' notes are given in square brackets ([]).

The following abbreviations are applied:

AL	length of the abdomen along the midline;	HW	width of the head across eyes;
AW	maximum width of the abdomen;	PL	length of the pronotum along the midline;
EL	length of the elytra along the sutural line;	PW	maximum width of the pronotum.
EW	maximum width of the elytra;		
HL	length of the head from the anterior clypeal margin to the occipital constriction;		

Length of the body is a combination of HL + PL + EL + AL.

Description of the new species

Batrisceniola fengtingae sp. nov.

(Fig. 1)

Type locality. China, Zhejiang, Fengyang Shan Natural Reserve, 27°54'33"–55'18", 119°10'17"–20"E, 1,170–1,300 m.

Type material (22 ♂♂ 22 ♀♀). HOLOTYPE: CHINA: ♂, labeled 'China: S. Zhejiang, Lishui City, Fengyang Shan N.R., forest nr. Datianping, 27°54'33"-55'18", 119°10'17-20"E, mixed litter, moss, sifted, 1,170–1,300 m, 6.x.2013, Feng, Peng, Yu, Yin leg. / HOLOTYPE [red] ♂, *Batrisceniola fengtingae* sp. n., Yin & Li det., 2013, SNUC'. PARATYPES: CHINA: 21 ♂♂ 19 ♀♀, same data as the holotype; 3 ♀♀, same locality except 'forest nr. Lv'ye Hotel, 27°53'59"N, 119°09'41"E, coniferous & bamboo litter, sifted, 1,700 m, 8.x.2013, Z. Peng, Y.-M. Yu & Z.-W. Yin leg.'. All paratypes bear the following label: 'PARATYPE [yellow] ♂ [or ♀], *Batrisceniola fengtingae* sp. n., Yin & Li det., 2013, SNUC'.

Diagnosis. Medium in size, length 1.85–2.0 mm. Male with apices of pro- and mesotibiae, and abdominal tergite IV modified. Aedeagus with curved dorsal lobe much longer than ventral lobe.

Description. Male (Fig. 1A). Length 1.85–2.00 mm; body reddish brown, maxillary palpi and tarsi lighter. Head and pronotum shallowly and roughly punctate. Head slightly wider than long, HL 0.41–0.42 mm, HW 0.48–0.49 mm; frons lacking modification; each eye composed of about 30 facets. Antennal clubs loosely formed by apical three antennomeres. Pronotum about as long as wide, PL 0.43–0.46 mm, PW 0.44–0.46 mm; lateral margins rounded at middle, nearly parallel at base; basal portion roughened. Elytra wider than long, EL 0.61–0.68 mm, EW 0.75–0.80 mm; shallow discal striae reaching apical third of elytral length; with slight denticle on humeral angles. Protibiae (Figs 1B, D) with long apical tuft of setae; mesotibiae (Figs 1C, E) with distinct apical spur. Abdomen slightly narrower than elytra, AL 0.40–0.44 mm, AW 0.66–0.71 mm; tergite IV (first visible tergite,) much longer than V–VII combined, with small, transversely oval cavity at apicomedian portion, tuft of short setae at middle of cavity (Fig. 1F); posterior half of tergite VII with bunch of erect setae at middle (Figs 1G, H); sternite IX (Fig. 1I) nearly oval. Aedeagal length 0.33 mm (Figs 1J, K); ventral lobe broad throughout, dorsal lobe broad at base, then narrowing toward apex, strongly curved rightwards at apical third; broad membranous lamella attached to base of ventral lobe.

Female. Similar to male in general appearance. Each eye composed of about 25 facets. Elytra relatively shorter than in male. Pro- and mesotibiae simple. Abdominal tergite IV lacking modification. Width of genital complex (Fig. 1L) 0.32 mm; with transverse hind lobe and paired fore lobe, genital plate has elongate lateral arms slightly narrowing apically, with round apices.

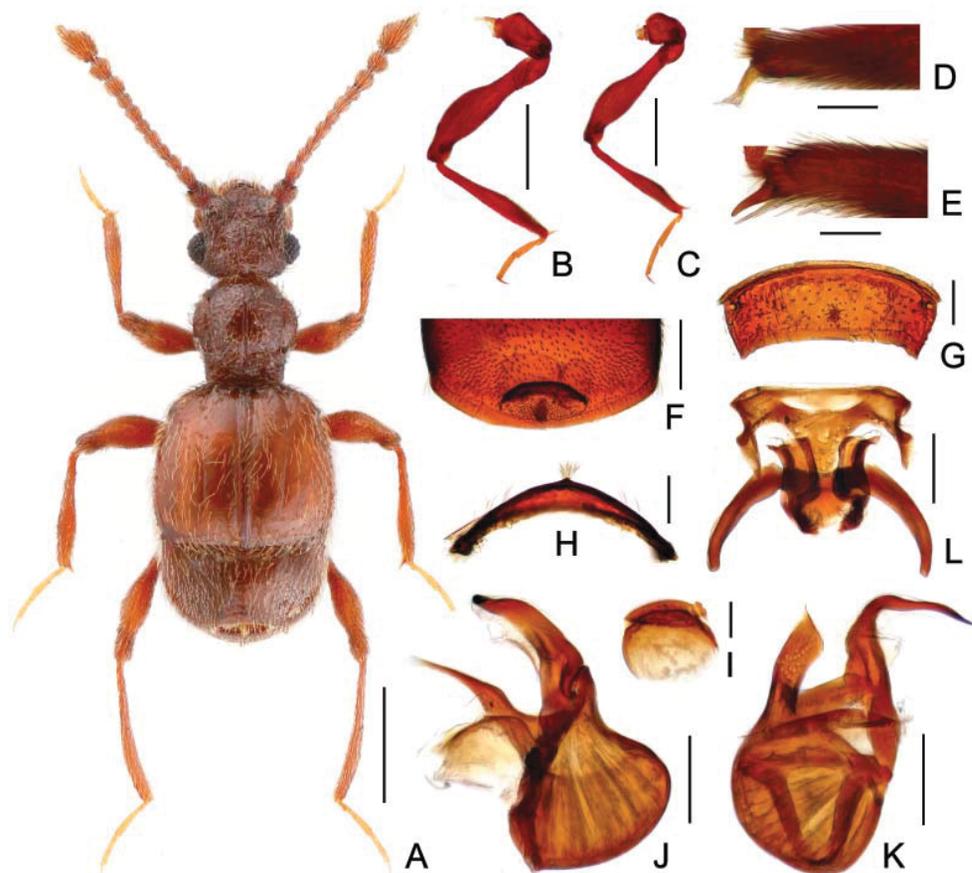


Fig. 1. *Batrisceniola fengtingae* sp. nov. (A–K – male, L – female). A – dorsal habitus; B – fore leg; C – middle leg; D – apical portion of protibia; E – apical portion of mesotibia; F – posterior half of tergite IV, showing sexual character; G – tergite VII in dorsal view; H – same, in anterior view; I – sternite IX; J – aedeagus, in lateral view; K – same, in ventral view; L – genital complex. Scales (in mm): A = 0.5; B, C = 0.3; F, G, H = 0.2; L, J, K = 0.1; D, E, I = 0.05.

Measurements: BL 1.87–1.99 mm, HL 0.40–0.42 mm, HW 0.46–0.48 mm, PL 0.44–0.45 mm, PW 0.44–0.46 mm, EL 0.56–0.61 mm, EW 0.73–0.76 mm, AL 0.47–0.51 mm, AW 0.69–0.71 mm.

Comparative notes. Males of the new species are most similar to those of *B. semipunctulata* in sharing the simple frons and a modified tergite IV, while the males of *B. dissimilis* and *B. hiranoi* have a pair of lateral frontal cavities and a simple abdomen. *Batrisceniola fengtingae* can be separated by the cavity of tergite IV being small, transversely oval, and at apicomedian portion of the tergite. In contrary *B. semipunctulata* has a large, subbasal median cavity.

Etymology. The species is named after the first author's wife Ting Feng, in acknowledgments for her company and assistance in field.

Biology. At the time of collecting (October, 2013) there was a distinct difference of pselaphine diversity between high and middle to low altitudes (with dividing line at about 1,300 m). Most adults of *Batrisceniola fengtingae* were collected by sifting moist leaf litter (mostly from bushes) along a small path in a mixed forest at 1,170–1,300 m, and only three females were collected by sifting coniferous and bamboo litter in a coniferous forest at 1,700 m where the air temperature was much lower than at lower altitudes.

Distribution. East China: Zhejiang.

Keys to males of *Batrisceniola*

(modified from NOMURA 1991)

- 1 Frons modified, with a pair of cavities covered by dense setae; abdominal tergite IV simple. 2
- Frons simple, lacking cavity; abdominal tergite IV with a median cavity. 3
- 2 Frontal cavities contiguous; pronotal punctation finer. *B. dissimilis* (Sharp, 1874)
- Frontal cavities widely separated; pronotal punctation more rough. *B. hiranoi* Nomura, 1991
- 3 Tergite IV with a large subbasal median cavity, surface of lateral circular setiferous patches concave. *B. semipunctulata* (Raffray, 1909)
- Tergite IV with a small, transversely oval cavity at apicomedian portion, surface of lateral circular setiferous patches flat. *B. fengtingae* sp. nov.

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References

- JEANNEL R. 1958: Révision des Psélaphides du Japon. *Mémoires du Muséum National d'Histoire Naturelle, (N.S., Série A, Zoologie)* **18**: 1–138.
- NOMURA S. 1991: Systematic study on the genus *Batrisoplisus* and its allied genera from Japan (Coleoptera, Pselaphidae). *Esakia* **30**: 1–462.
- RAFFRAY A. 1909: Nouvelles espèces de Psélaphides. *Annales de la Société Entomologique de France* **78**: 15–52.
- SHARP D. 1874: The Pselaphidae and Scydmaenidae of Japan. *Transactions of the Entomological Society of London* **1874**: 105–130.