TAXONOMIC STUDY OF THE GENUS ISCHNOACTYLUS CHEVROLAT (COLEOPTERA, TENEBRIONIDAE) WITH DESCRIPTION OF A NEW SPECIES FROM CHINA

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Abstract The paper deals with the genus Ischnodactylus Chevrolat, 1877 from China. A key to species of genus from China is provided. A new species I. storthus sp. nov. is described. The type specimens are preserved in the Museum of Hebei University.

Key words Coleoptera, Tenebrionidae, Ischnodactylus, new species, China.

The genus Ischnodactylus was erected by Chevrolat in 1877, belonging to Diaperipini (Coleoptera, Tenebrionidae). Up to the present time, there have been 47 species and subspecies of the genus described in the world. The genus is mostly distributed in the Oriental Region and Japan. In China, 3 species were recorded and one new species, I. storthus sp. nov., is described here. The type specimens are preserved in the Museum of Hebei University.

Ischnodactylus Chevrolat, 1877

Type species: Ischnodactylus quadriloculatus Chevrolat, 1877.

Diagnosis. Oblong-oval. Head flattened. 2 symmetrical slender horns often on frons of male, base suddenly dilated and closer each other to forwars, terminal hairless or a cluster of fuzz; a few species no horns. Pronotum convex in middle, sides brightly reduced. Elytra often metallic shine, epipleuron entire, Shoulders un conspicuous, and base band flex or 0, 2, 4 or 6 round or angulose flck.

Key to known species of Ischnodactylus Chevrolat from China
1. Elytra with flex round or angular, not band .................................................. 1. rubromarginatus yunnanus Kaszab
2. Elytra with flex band .............................................................................. 2
3. Elytra not only with anterior band, but also with latter band .............. 3
4. Elytra not only with anterior band ......................................................... 1. rubromarginatus Kaszab
5. Elytra with flex round or angular, not band ........................................ 2

Horns of head have hairs in the apex ............................................. 1. formosanus Gebien
Horns of head have hairs in the apex ............................................. 1. storthus sp. nov.

The species of China
1) Ischnodactylus rubromarginatus yunnanus Kaszab, 1965

Distribution. China (Yunnan, Siaoemgian).

2) Ischnodactylus bisbifasciatus Gebien, 1925


Distribution. China (Taiwan).

3) Ischnodactylus formosanus Gebien, 1925

Distribution. China (Taiwan).

4) Ischnodactylus storthus sp. nov. (Figs. 1-10)

Colour bright black; horns of head, antennae, legs, abdominal and elytral lateral marginal beset reddish brown; each elytron with a saffron yellow anterior band which is occupying from 2nd to 5th interval, terminal reddish brown (♂) or black (♀).

Male. Head transversely triangular; clypeus feebly convex, the front margin nearly truncate; anterior genae convex, sides slightly arcuate, posterior genae inleted in compound eyes; frons smooth, with a pair of horns, which are very fine and long, riwer-form, close each other, horizontally running forwards, and whose base is thick and sheet-form, terminal cylindrical, slightly bent and haired. Antennae (holotype lack of the last two segments) reaching base of pronotum, beginning to swell and slowly stick from 3rd segment, relative length of each segment from 2nd to 9th: 1.9: 4.0: 4.1: 2.9: 3.0: 2.8: 2.9: 2.5.

Pronotum transverse, about 2.5 times as broad as long; front border arcuate; side borders arcuate, shrunk from base to apex; hind border protuberant in middle, and straight in side; beset distinct; front angles obtusely triangular, hind angles rectangular; disc weakly convex, covered with even punctures. Scutellum semicircle, sparsely punctured. Elytra oblong-oval, feebly convex, about 3.0 times as long as broad; Shoulders slightly caelate; lateral margins subparallel.

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beset visible in dorsal view; disc convex, the punctator striate deep, the punctures in striate distinct, intervals nearly flat, finely and evenly punctured. Legs slender, meso and metatibiae slightly broad, tarsi long. Prosternum in middle and prosternal process pubescent; Prosternal process long and narrow, acuate at apex, and lateral marginal beset visible. Anal segment transverse triangular, feebly convex, base and margin pubescent. Aedeagus length 1.4 mm, width 0.3 mm; parameres length 0.4 mm, spiky-form, base of sides weekly bent; basal plate length 1.0 mm, 2.5 times as long as parameres, and 2/3 sides parallel, 1/3 terminal shrunked, with 2 longitudinal carinae in 2/3 base in the dorsal view.

Female. Frons not horns; elytral fleck occupying from 2nd to 5th interval, and some parts extending to 6th interval; other characters as male.

Body length $\sigma$ 6.0–6.2 mm, $\varphi$ 5.8–6.0 mm, width $\sigma$ 2.9–3.0 mm, $\varphi$ 2.7–2.9 mm.

Holotype $\sigma$, Mt. Jianfeng, Ledong, Hainan Province, 17 May 2007, collected by BA Yi-Bin and LANG Jun-Tong. Paratypes 2 $\sigma\varphi$, 2 $\varphi\varphi$, same data as holotype.

Figs. 1-10. Ischnodactylus storthus sp. nov., $\sigma$. 1. Adult male. 2. Head and pronotum. 3. Left antenna. 4. Left elytron. 5-7. Aedeagus, dorsal, ventral and lateral view, $\varphi$. 8. Head and pronotum. 9. Right antenna. 10. Left elytron.

Diagnosis. The new species is close to I. formosanus Gebien, 1925, but differs in: 1) the body clearly wider and shorter than the latter; 2) the horns of frons thick and large on base, terminal hairy, or the latter horns of frons weakly $\delta$-form bent, terminal hairless; 3) the elytral fleck small, bowknot-form, which is occupying from 2nd to 5th interval, or the latter elytral fleck big, not bowknot-form, occupying from 2nd to 8th interval.

Etymology. The specific name is derived from that male specimen in the middle of frons having a pair of apposed rivet-form horns.

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REFERENCES


Lewis, G. 1894. On the Tenebrionidæ of Japan. Annals and Magazine of
Natural History, 6 (13) : 377-400.
Nakane, T. 1956. New or little-known Coleoptera from Japan and its adjacent Regions, XIII. The Scientific Reports of the Saito University, 2 (3A) : 131-174.
Pc, M. 1925. Contribution à l'étude des Trichobrionides du genre Basids

I. fumans Gebien, 1925

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