

HALIPLIDAE:
III. *Haliplus (Haliplidius) rejseki* sp.n. from Sichuan
(Coleoptera)

J. ŠŤASTNÝ & M. BOUKAL

Abstract

Haliplus (Haliplidius) rejseki sp.n. (Coleoptera: Haliplidae) is described from Sichuan (southwestern China). The new species differs from all four known members of the subgenus mainly in the narrow body form and shape of the median lobe. Important diagnostic morphological characters are illustrated. A key to the Palearctic species of the subgenus *Haliplidius* GUIGNOT is provided. The subgenus is recorded for the first time from China.

Key words: Coleoptera, Haliplidae, *Haliplus*, *Haliplidius*, taxonomy, faunistics, new species, China.

Introduction

The Haliplidae are a relatively well known family of water beetles, although the last world-wide revision (ZIMMERMANN 1924) of the family was published a long time ago. It is a relatively small family with five genera (*Peltodytes* RÉGIMBART, 1878, *Brychius* THOMSON, 1859, *Haliplus* LATREILLE, 1802, *Algophilus* ZIMMERMANN, 1924 and *Apteraliplus* CHANDLER, 1943) and about 220 described species. The genus *Haliplus* is represented in the Palearctic region by four subgenera: *Haliplus* s.str., *Neohaliplus* NETOLITZKY, 1911, *Haliplidius* GUIGNOT, 1928 and *Liaphlus* GUIGNOT, 1928.

Four species of *Haliplidius* have been described, three from the Palearctic region (*H. confinis* STEPHENS, 1829, *H. obliquus* (FABRICIUS, 1787) and *H. varius* NICOLAI, 1822) and one, *H. subseriatus* ZIMMERMANN, 1921, from South America.

Earlier papers that dealt marginally with Chinese Haliplidae were published by ZAITZEV (1953) and LAFER (1989). Chinese members of the family were reviewed thoroughly by VONDEL (1991, 1992, 1995, 1998). In total, VONDEL (1995) recognised 16 species of the genus *Haliplus* from China.

During the examination of water beetle material from the Chinese province of Sichuan we found a very distinct species of the genus *Haliplus*, which belongs to the subgenus *Haliplidius*. This new species is described below. It is the first record of the subgenus from the territory of China. We also give a key treating all known Palearctic species of the subgenus *Haliplidius*.

Material, methods, and acronyms

JSCL coll. Jaroslav Šťastný, Liberec, Czech Republic

MBCD coll. Milan Boukal, Džbáňov, Czech Republic

NMW Naturhistorisches Museum Wien, Austria

beaded, thin border visible only at level of procoxae; surface irregularly and densely punctate, some punctures confluent and forming striae; isolated long hairs in middle visible at about 150x magnification. Metaventral process diverging posteriorly, with shallow anteromedian impression; irregularly and sparsely punctate. Metacoxal plates almost reaching ventrite 5; densely and coarsely punctate near median suture, punctation on disc sparse. Ventrites 4-6 laterally with tubercles and groove obliquely oriented to the middle; weakly punctate, shiny; posterolateral angles with golden hairs. Ventrite 7 triangular, apically pointed, strongly punctate and along lateral margin with row of hairs, posterior margin with distinct median groove.

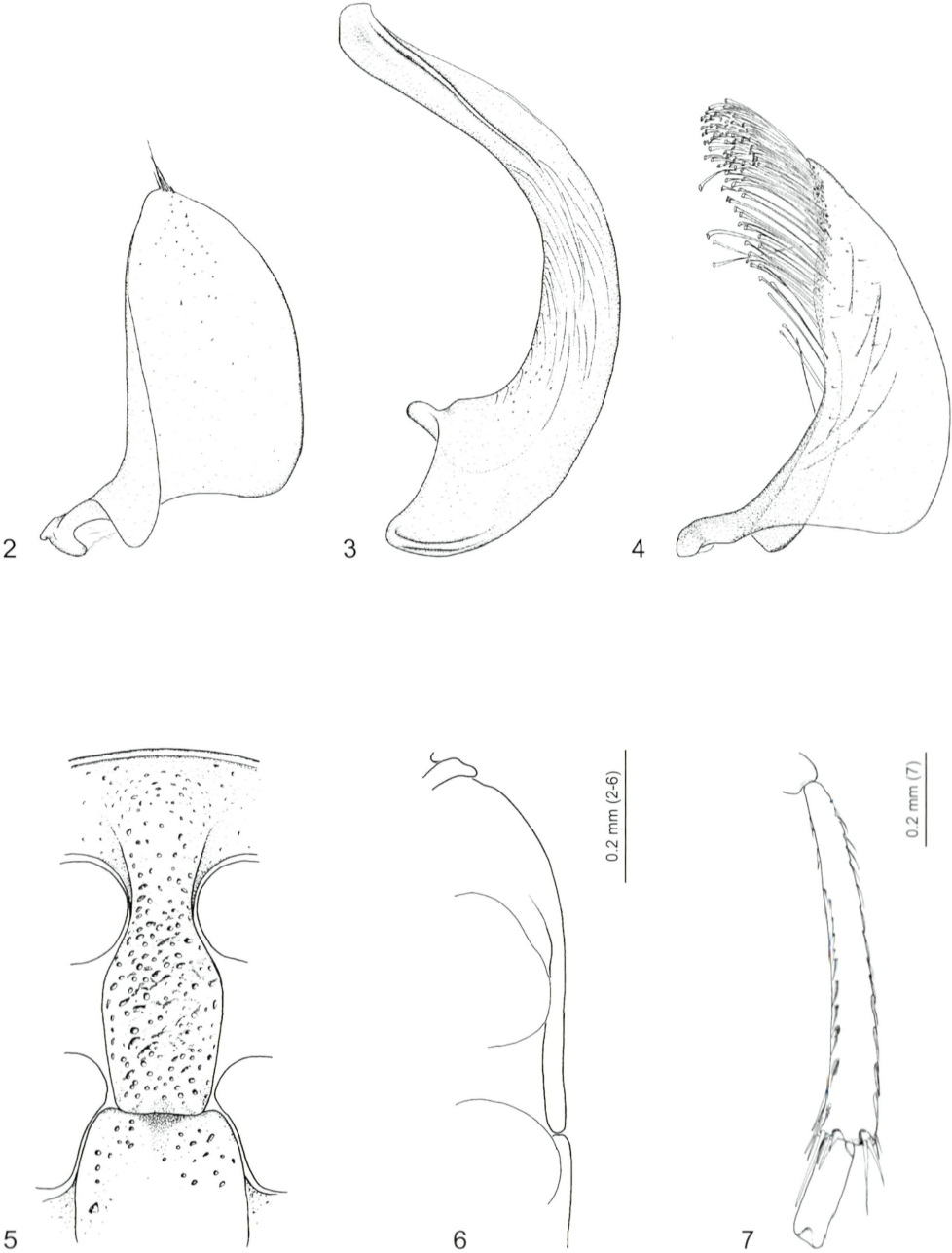


Fig. 1) *Haliphus rejseki*: habitus of male (paratype No 2).

Legs pale yellowish brown, femora slightly darkened towards coxae. Protarsal claws subequal in length, posterior claw very slightly shorter than anterior, protarsomere 5 being 1.8 times as long as the longer claw; pro- and mesotarsomeres 1 – 4 relatively long and slender ($MTR = 1.57 : 1.42 : 1.42 : 1.33 : 1$), pro- and mesotarsomeres 1 – 3 ventrally with sucker hairs. Metatibia (Fig. 7) without setiferous striae on dorsal face, metatarsomere 1 being 1.25 times as long as longer tibial spur.

Male genitalia. Shape as in Figs. 2-4. Median lobe (Fig. 3) approximately equally wide along its entire length, apically slightly tapered, dorsoapically with small tubercle, and with longitudinal grooves between about basal 0.2 and 0.6. Parameres as in Figs. 2 and 4, right paramere with peg-like, distally dilated setae.

Female differs from the male in the following characters: pro- and mesotarsi slender; elytral micropunctuation finer and dense. Female genitalia not examined.



Figs. 2 - 7: *Haliphus rejseki*: 2) left paramere; 3) median lobe of aedeagus, lateral view; 4) right paramere; 5) prosternal and metaventral process, ventral view; 6) prosternal and metaventral process, lateral view; 7) right metatibia.

Variability. Despite the small number of specimens, the type series varies somewhat in the pattern of black stripes on the elytron and very slightly in the shape of the less sclerotized parts (e.g. near base) of the male genitalia.

DIFFERENTIAL DIAGNOSIS: According to external characters, *Haliplus rejseki* belongs to the subgenus *Haliplidius*. This subgenus is clearly distinguishable from other subgenera of the genus *Haliplus* by the following characters: dorsal and ventral side of body with a clearly visible (30x) micropunctuation between the small primary punctures and the elytral epipleura are smooth, without strong punctures. In all remaining subgenera, the elytra are either smooth or with a finer micropunctuation (visible only at 50x) between the strong primary punctures; epipleura always bear coarse punctures (VONDEL 1995). *Haliplus rejseki* is a very distinct species within the subgenus *Haliplidius*. It can be distinguished easily from other members of the subgenus by the combination of the following characters: body narrow and elongate (resembling *Brychius* THOMSON, 1859); black stripes on elytra almost continuous and very distinct (Fig. 1); prosternal process not conspicuously beaded along sides (Fig. 5); median lobe without subapical denticle (the basad-oriented denticle is present only in *Haliplus confinis*) and with longitudinal grooves near midlength (Fig. 3); mesotarsomeres relatively slender and elongate in male.

COLLECTION CIRCUMSTANCES: The type specimens were found in shallow muddy pools with sparse macrovegetation, situated on a wet meadow along a stream in 3500 m a.s.l. (J. Rejsek pers. comm.).

ETYMOLOGY: The species is named after our friend Jiří Rejsek (Poděbrady), enthusiastic explorer of the family Scarabaeidae.

KNOWN DISTRIBUTION: Known only from the type locality in northern Sichuan. This is the first record of the subgenus *Haliplidius* from China.

Key to the Palearctic species of *Haliplidius*, modified partly after HOLMEN (1987)

- 1 Basal pronotal plicae distinct 2
- Basal pronotal plicae weak or absent 3
- 2 Sides of prosternal apophysis distinctly beaded. Body broad. Black coloration of elytral striae distinctly interrupted. Median lobe with subapical basad-directed denticle and without surface grooves near midlength *confinis*
- Sides of prosternal apophysis not beaded (Fig. 5). Body narrow, elongate. Black coloration of elytral striae almost continuous, very distinct. Median lobe without subapical denticle, surface grooved near midlength (Fig. 3) *rejseki* sp.n.
- 3 Basal pronotal plicae very weak but clearly indicated. Anterior and posterior margins of pronotum black. Femora distally with very narrow black border *varius*
- Basal pronotal plicae absent. Anterior and posterior margins of pronotum infusate but not black. Femora distally without black border *obliquus*

Acknowledgement

Our thanks are due to D.S. Boukal (České Budějovice) for critical comments and linguistic correction of the manuscript.

References

- HOLMEN, M. 1987: The aquatic Adephaga (Coleoptera) of Fennoscandia and Denmark. I. Gyrinidae, Haliplidae, Hygrobiidae and Noteridae. – Fauna Entomologica Scandinavica 20, 173 pp.

- LAFER, G.S. 1989: Haliplidae - Plavunchiki, pp. 222-227. - In Ler, P.A. (ed.): Opređelitel nasekhomykh dalnego vostoka SSSR, Vol. III. - Leningrad: Academy of Sciences. [In Russian]
- VONDEL, B.J. van 1991: Revision of the Palaearctic species of *Haliphus* subgenus *Liaphlus* Guignot (Coleoptera: Haliplidae). – Tijdschrift voor Entomologie 134: 75-144.
- VONDEL, B.J. van 1992: Revision of the Palaearctic and Oriental species of *Peltodytes* Régimbart (Coleoptera: Haliplidae). – Tijdschrift voor Entomologie 135: 275-297.
- VONDEL, B.J. van 1995: Haliplidae: Review of the Haliplidae of China, pp. 111-154. – In Jäch, M.A. & Ji, L. (eds.): Water Beetles of China, Vol. I. – Wien: Zoologisch-Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein, 410 pp.
- VONDEL, B.J. van 1998: Haliplidae: Additional notes on the Haliplidae of China and neighbouring countries (Coleoptera), pp. 131-136. – In Jäch, M.A. & Ji, L. (eds.): Water Beetles of China, Vol. II. - Wien: Zoologisch-Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein, 371 pp.
- ZAITZEV, Ph.A. 1953: Families Amphizoidae, Hygrobiidae, Haliplidae, Dytiscidae, Gyrinidae. - Fauna of the U.S.S.R., Coleoptera, Moskva – Leningrad, 375 pp. [in Russian, English translation: Jerusalem 1972]
- ZIMMERMANN, A. 1921: Beiträge zur Kenntnis der südamerikanischen Schwimmkäferfauna nebst 41 Neubeschreibungen. - Archiv für Naturgeschichte 87 (3): 181-206.
- ZIMMERMANN, A. 1924: Die Halipliden der Welt. - Entomologische Blätter (für Biologie und Systematik der Käfer) 20 (1): 1-16; 20 (2): 65-80; 20 (3): 129-144; 20 (4): 193-213.

Jaroslav ŠTASTNÝ

Kosmonautů 359, 460 05 Liberec, Czech Republic (stastnyj@jergym.hiedu.cz)

Milan BOUKAL

Džbánov 122, 566 01 Vysoké Mýto, Czech Republic (milanb@seznam.cz)

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Water Beetles of China](#)

Jahr/Year: 2003

Band/Volume: [3](#)

Autor(en)/Author(s): Stastny Jaroslav, Boukal Milan

Artikel/Article: [Haliplidae: III. Haliphus \(Haliplidius\) rejseki sp.n. from Sichuan \(Coleoptera\) 295-300](#)