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**BEETLES OF THE SUBGENUS *ASIOBATES* THOMSON, 1859
(*OCHTHEBIUS* LAECH, 1815, COLEOPTERA: HYDRAENIDAE)
OF THE RUSSIAN FAR EAST**

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Summary. A new species, *Ochthebius (Asiobates) sihotealiniensis* Zinchenko, **sp. n.** (Coleoptera: Hydraenidae), is described from the Botchinsky Nature Reserve (Khabarovskii krai). The new species differs from all the congeners in the shape and surface structure of the pronotum and the conformation of the genitalia. *O. (A.) lurugossus* Jäch, 1998 is redescribed and illustrated by specimens from Primorskii krai (Russia).

Key words: Coleoptera, Hydraenidae, *Asiobates*, *Ochthebius*, new species, Eastern Palaearctic.

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Резюме. Из Ботчинского заповедника (Хабаровский край) описан новый вид *Ochthebius (Asiobates) sihotealiniensis* Zinchenko, **sp. n.** (Coleoptera: Hydraenidae). От других известных видов подрода новый вид отличается формой и поверхностной структурой переднеспинки и формой гениталий. По материалу из Приморского края приведено иллюстрированное описание *O. (A.) lurugossus* Jäch, 1998.

INTRODUCTION

The scavenger beetle subgenus *Asiobates* Thomson, 1859 consists of some 90 valid species in the world fauna. The subgenus is widespread in the Palaearctic Region, and is also known from the Neotropics (Ecuador), Ethiopian and Oriental Regions (India, Vietnam). Seven species have been described or recorded from the Eastern Palaearctic: one species from the Russian Far East, six species from China, one species from Japan (Shatrovskij, 1989; Jäch, 1990, 1998, 2003, 2004; Hansen, 1998; Zinchenko 2014; Litivkin, 2018). *Ochthebius (Asiobates) lurugossus* Jäch, 1998 is the only *Asiobates* species occurring in the Russian Far East and known to date. The second, new to science species collected from the Botchinsky State Reserve is described herein. The holotype and paratypes of new species and other material mentioned in the present paper are deposited in the collection of the Siberian Zoological Museum, Institute of Systematics and Ecology of Animals, SB RAS, (Novosibirsk).

DESCRIPTION OF THE SPECIES FROM THE RUSSIAN FAR EAST

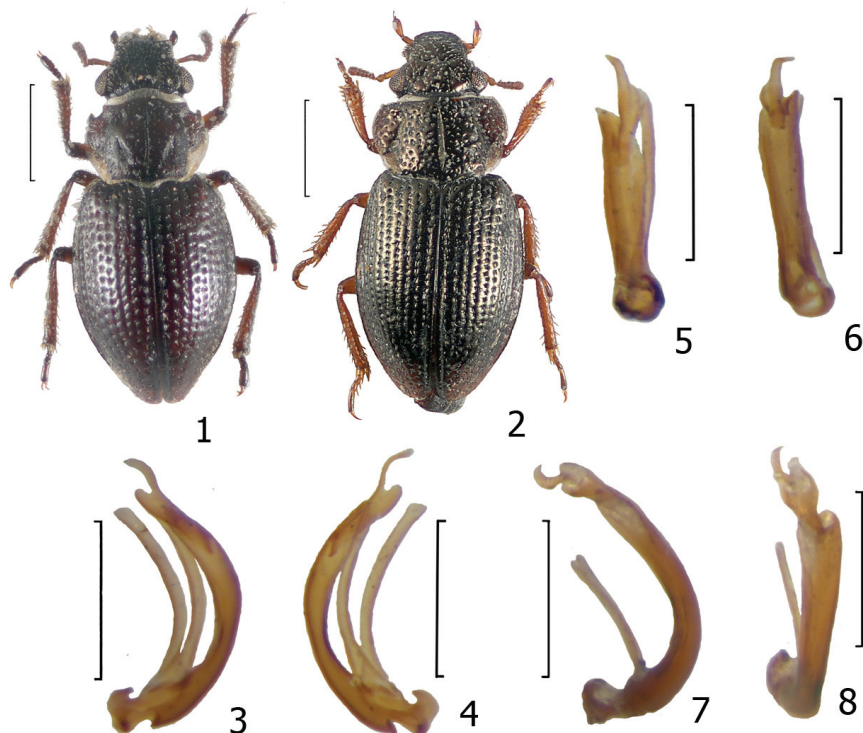
Genus *Ochthebius* Leach, 1815

Subgenus *Asiobates* Thomson, 1859

Ochthebius (Asiobates) sihotealiniensis Zinchenko, sp. n.

Figs 1, 3–6

MATERIAL. Holotype – ♂, **Russia**: Khabarovsk Province, Botchinsky Nature Reserve, cordon Komarov Kluch, 48°15.7' N, 139°25.5' E, h~200 m, 21.VI 2016, R. Yu. & A. Yu. Dudko, E. R. Dudko. Paratypes: idem, 6–7.VII 2016, 1 ♂, 2 ♀, R. Yu. & E. R. Dudko.



Figs 1–8. *Ochthebius* spp. 1, 3–6 – *O. sihotealiniensis* sp. n., male holotype: 1 – habitus, dorsal view; 3–6 – aedeagus: 3 – left lateral view; 4 – right lateral view; 5 – ventral view; 6 – dorsal view; *O. lurugossus*: 2 – habitus, dorsal view; 7–8 – aedeagus: 7 – left lateral view; 8 – dorsal view. Scale bars 0.5 mm (1–2); 0.2 mm (3–8).

DESCRIPTION. MALE (Fig. 1). Length 1.95 mm. Body black-brown, antennal palpa and legs dark brown.

Labrum distinctly transverse, with emarginate distal margin. Apical palpomere four times shorter than penultimate ones. Head covered with short semi-erect hairs. Forehead-clypeal suture arch-shaped and deeply depressed. Forehead shining and canaliculate at its sides. Eyes large, well-developed.

Pronotum transverse, 1.56 times wider than long, covered with short sparse hairs that are longer on its sides. Anterior margin slightly convex in the middle and notched twice, apical angles sharp; lateral sides strongly sinuate at their basal halves. Hyaline membrane developed. Surface of disc and sides with sparse punctures and distinct microsculpture. Median groove whole and not deep. Anterior disc depressions small and almost completely round, posterior depressions elongate and oblique.

Elytra oval, shining, with distinct microsculpture, strongly convex; separately rounded at their apices. Five rows of punctures noticeable on disc between suture and humerus. The rows straight, with strong chaetophorous pores deeply depressed and densely located. Row intervals narrower than puncture diameter. Lateral grooves markedly narrow. Pseudo-epipleurae wide anteriorly and evenly narrowed posteriorly, not reaching the elytral apex.

Aedeagus (Figs 3–6), body evenly curved, distal lobe with short archly curved flagellum; parameres widely moved apart from their bases, distinctly curved lacking apical setae; the right paramere reaches the aedeagus apex, the left one slightly longer reaching the distal lobe.

FEMALE. Similar to the male.

MEASUREMENTS. The length of the body: ♂ and ♀ 1.95–2.0 mm.

DIAGNOSIS. From the East Palaearctic species of the subgenus (*viz.* *Ochthebius hakaidensis* Jäch, 1998 – Japan; *O. lurugossus* Jäch, 1998 – Russia Far East and China; *O. furcatus* Pu, 1958, *O. unimaculatus* Pu, 1958, and *O. yunnanensis* d'Orchymont, 1925 – China), having the pronotum without distinct admedian foveae (Fig. 2), the new species can be distinguished by the pronotum with distinct admedian foveae, its anterior margin being slightly convex in the middle, notched twice and with sharp apical angles, as well as by the conformation of genitalia (Figs 1, 3–6). From the three last species, *O. sikhotealinensis* also differs in the monochromatic dorsal surface of the body. From the Chinese species having distinct admedian foveae (*O. flagellifer* Jäch, 2003; *O. pui* Perkins, 1979), it can be separated by the less marked admedian foveae, the shape of the anterior margin of the pronotum and the conformation of genitalia.

DISTRIBUTION. Russia: Khabarovskii krai: Botchinsky Nature Reserve.

ETYMOLOGY. The name is derived from the Sikhote-Alin Mt. Range.

***Ochthebius (Asiobates) lurugossus* Jäch, 1998**

Figs 2, 7, 8

Ochthebius lurugossus Jäch, 1998: 182. Type locality: China: Heilongjiang province, Harbin, a small pond in Taiyang Dao [= Sun Island]. Type is deposited in the Natural History Museum, London.

Ochthebius (Asiobates) lurugossus Jäch, 1998 – Zinchenko, 2014: 202 (Russia: Primorskii krai, near Kaimanovka village)

Ochthebius (Homalochthebius) minimus (Fabricius, 1792): Shatrovskij, 1989: 263 (mis-identification).

DESCRIPTION. Length 1.95 mm. General appearance as in Fig. 2. Body dark green, with rufous tint; antennae, palpa and legs dark brown. Labrum transverse, with notched distal margin. Apical palpomere three times shorter than penultimate ones. Head surface covered with short semi-erect hairs. Forehead-clypeal suture arch-shaped and extremely deeply depressed. Forehead shining and deeply canaliculate at its sides. Eyes large, well-developed.

Pronotum transverse, 1.6 times wider than long, surface bare. Anterior margin straight; lateral sides extremely archly narrowed at their basal halves. Hyaline membrane developed.

Disc surface and sides glabrous, with double puncturation, sparse strong punctures with small punctures amongst them. Median groove complete and not deep.

Elytra oval, semi-shining, strongly convex, separately rounded at apex. Five rows of punctures noticeable on disc between suture and humerus. The rows straight, with strong chaetophorous pores deeply depressed and densely located. Intervals of rows narrower than puncture diameter. Lateral grooves extremely narrow. Pseudo-epipleurae wide anteriorly and evenly narrowed posteriorly, not reaching elytral apices.

Aedeagus (Figs 7, 8; see also Jäch, 1990: 84, Fig. 14c and Jäch, 1998: 176, Fig. 3), main lobe irregularly curved, distal lobe with large apical tube, upturned distally. Lateral sclerite directed upwards and forward. Parameres widely moved apart from basal part, weakly curved, not reaching 2/3 of the length of the main lobe of the aedeagus.

NOTES. The species was first mentioned for the Russian Far East by A.G. Shatrovskij (1989), but it was misidentified as *Ochthebius (Homalochthebius) minimus* (Fabricius, 1792) and the distribution for this species was reported as the Russian Far East. Zinchenko (2014) was the first author who provided an exact locality for this species in Russia: Kaimanovka, Ussuri District.

DISTRIBUTION. North-Eastern China (Heilongjiang: Harbin); the Russian Far East (Primorskii krai).

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REFERENCES

- Hansen, M. 1998. Hydraenidae (Coleoptera). In: Hansen, M. (Ed.) *World Catalogue of Insects. Vol. 1*: Apollo Books. Stenstrup, 168 pp.
- Jäch, M.A. 1990. Revision of the Palaearctic species of the genus *Ochthebius* Leach V. The subgenus *Asiobates* (Coleoptera: Hydraenidae). *Koleopterologische Rundschau*, 60: 37–105.
- Jäch, M.A. 1998. Revision of the Palaearctic species of the genus *Ochthebius* Leach V. The *O. (Asiobates) rugulosus* Wollaston species complex (Coleoptera: Hydraenidae). *Koleopterologische Rundschau*, 68: 175–187.
- Jäch, M.A. 2003. Hydraenidae: II. Synopsis of ochthebius Leach from Mailand China, with descriptions of 23 new species. P. 313–369. In: M. A. Jäch & L. Ji. (Eds.). *Water beetles of China, Vol. III*. Zoologisch - Botanische Gesellschaft in Österreich and Wiener Coleopterologenverein, Wien, VI + 572 pp.
- Jäch, M.A. 2004. Family Hydrophilidae Mulsant, 1844. P. 102–122. In: Löbl, I., Smetana, A. (Eds). *Catalogue of Palaearctic Coleoptera. Vol. 2. Hydrophiloidea – Histeroidea – Staphylinoidea*. Apollo Books. Stenstrup.
- Litovkin, S.V. 2018. List of species of the family Hydraenidae for Russia. URL: <http://www.zin.ru/animalia/coleoptera/rus/hydraeru.htm> (last update 5.02.2018).

- Shatrovskij, A.G. 1989. Fam. Hydraenidae. P. 260–264. In: Lehr, P.A. (Ed.). *Key to the insects of Soviet Far East. Vol. III. Coleoptera. Pt. 1.* Nauka, Leningrad. [In Russian]
- Zinchenko, V.K. 2014. New records of beetles of the family Hydraenidae (Coleoptera) in the Asian part of Russia and Kazakhstan. *Euroasian Entomological Journal*, 14(3): 201–204. [In Russian]

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