

## New species of the genus *Atomaria* Stephens, 1829 (Coleoptera: Cryptophagidae) from Eastern Palaearctic

### Новые виды рода *Atomaria* Stephens, 1829 Восточной Палеарктики (Coleoptera: Cryptophagidae)

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KEYWORDS: *Atomaria*, Cryptophagidae, new species, Eastern Palaearctic, Siberia, Far East.

КЛЮЧЕВЫЕ СЛОВА: *Atomaria*, Cryptophagidae, новые виды, Восточная Палеарктика, Сибирь, Дальний Восток.

ABSTRACT. Two new species of Cryptophagidae are described from Siberia and Far East: *Atomaria aleatoria* sp.n. and *A. acerba* sp.n.

РЕЗЮМЕ. Из Сибири и Дальнего Востока России описано два новых вида рода *Atomaria* Stephens, 1829: *A. aleatoria* sp.n. и *A. acerba* sp.n.

#### Introduction

This work is chiefly based on material from Zoological Museum of Moscow State University (ZMMU). All materials, including types, have been deposited in this museum. The cryptophagid fauna of Palaearctic is currently known to contain 368 species [Johnson, 2007], including about 127 species from the genus *Atomaria*. Palaearctic is better investigated region, but at the species level the fauna of the Palaearctic realm studied insufficiently.

#### Taxonomy

##### Family Cryptophagidae Kirby, 1837

##### *Atomaria* Stephens, 1829

##### *Atomaria aleatoria* sp.n.

Figs 1–2

TYPE MATERIAL. Holotypus: ♂, Zeya State Reserve, 34 km, 27.06.1978, leg. S. Kurbatov; Paratypes: 1 ex., Zeya State Reserve, 52 km, 3.07.1978, leg. V. Belov; 1 ex., Zeya State Reserve, 52 km, 4.07.1978, hay, leg. S. Kurbatov; 1 ex., S Kunashir, Tretyakovo, 21.07.1985, leg. A. Makarov; 1 ex., Amur Area, Zeya, ultraviolet, 26.07.1978, leg. S. Kurbatov; 1 ex., S Ural, 500 m, 90 km W Sibay, nr. Beryozovka, 16–24.07.2000, leg. S. Kurbatov; 1 ex., Khanty-Mansiysk Autonomous Region, Surgut District, Yugansk State Reserve., Ai-Magromsy River Basin, Medvezhiy Ugol, in wood and land lamellar mushrooms, 16.09.2002, leg. A.B. Ryvkin; 1 ex., Khabarovsk Province, Verkhnebureinsky District, Bureinsky State Reserve, near Strelka, fungi et moss under bark, 550 m, 16.09.2006, leg. A.B. Ryvkin.

DESCRIPTION. Length 1.7–2.1 mm, elongate (Fig. 1), moderately arched, covered with slightly curved but decum-

bent pale pubescence of moderate length.

Head and prothorax dark brown or blackish, elytra reddish brown; antennae and legs reddish-brown.

Antennal structure as in Fig. 1, segment 1 ca. 2 times as long as broad, segments 9 and 10 strongly transverse.

Pronotum distinctly transverse, broadest at or just behind the middle where it is 1.3–1.4 times as broad as long, thence contracted the base where it is narrower than the base of the elytra; side borders only visible from above in the basal third; surface strongly and coarsely shagreened over the whole surface, moderately strongly and moderately densely punctured, punctures separated by 0.5–1.0 diameters apart from their lateral neighbours; base of the pronotum with a narrow and well-defined depression in the middle; hind angles obtuse; pronotal disk convex; hind margin finely bordered.

Elytra long oval, moderately arched, weakly curved at the sides, broadest near in middle, 2.5–2.7 times as long as the pronotum, 1.4–1.5 times as long as together broad. Surface shining, strongly shagreened, rather closely punctured, the punctures in the basal part slightly smaller than those on the pronotal disk, and approximately 1.0–1.5 diameters apart from their lateral neighbours on an average; elytral humeri toothed or not. Hind wings fully developed.

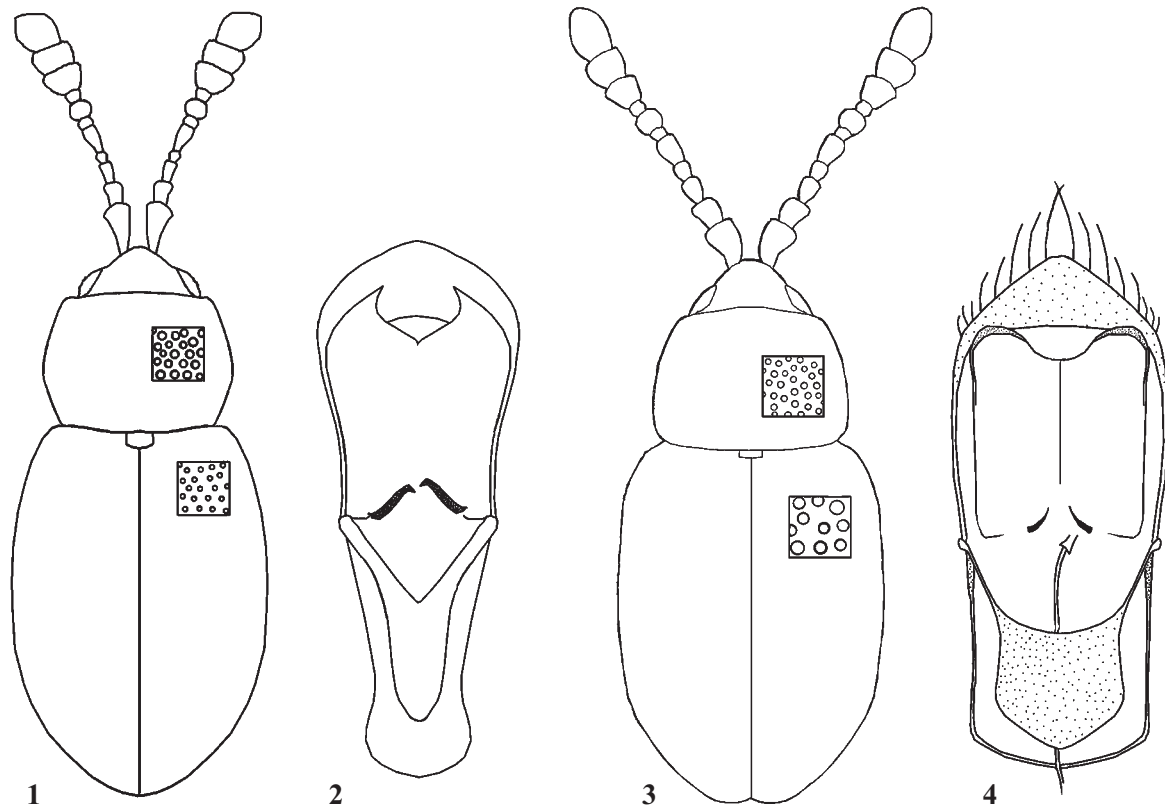
Male genitalia as in Fig. 2.

REMARKS. This species differs from nearest species with transversal club of antennae and elongated 1<sup>st</sup> segment of antennae (similar with *A. elongatula* Erichson 1846, *A. abietina* J.R.Sahlberg 1888, but *A. aleatoria* sp.n. with elongated 1<sup>st</sup> segment of antennae); similar with *A. vespertina* Maklin 1853, but *A. aleatoria* sp.n. with transversal club, strongly rounded sides of pronotum, and strongly excised aedeagus.

##### *Atomaria acerba* sp.n.

Figs 3–4

TYPE MATERIAL. Holotypus: ♂, Sikhote-Alin Mts., Tardoki Mt., fir grove, 1400 m, 01.07.1980, leg. G. Lafer; Paratypes: 2 ex., Amur Area, Zeya, ultraviolet, 11.06.1978, leg. S. Kurbatov; 1 ex., Amur Area, near Zeya, Sosnovyi Bor, 02.06.1978, leg. V. Belov, S. Kurbatov; 1 ex., Amur Area, Zeya State Reserve, 34 km, 27.06.1978, V. Belov; 1 ex., Evreyskaya Autonomous Region, Amur River, near Radde, Dichun, 130° 45'E, 08.08.1978, leg. S. Kurbatov; 1 ex.,



Figs 1–4. *Atomaria*, spp.: 1–2 — *Atomaria aleatoria* sp.n.; 3–4 — *Atomaria acerba* sp.n.; 1, 3 — total view; 2, 4 — male genitalia.  
Рис. 1–4. *Atomaria*, spp.: 1–2 — *Atomaria aleatoria* sp.n.; 3–4 — *Atomaria acerba* sp.n.; 1, 3 — общий вид; 2, 4 — гениталии самца.

Ussuriysk District, Kamenushka, 11.06.1984, leg. N.B. Nikitsky; 2 ex., Kamenushka, 12.05.1984, leg. N.B. Nikitsky; 1 ex., Kamenushka, 04.06.1984, leg. N.B. Nikitsky; 1 ex., Evreyskaya Autonomous Region, Amur River, near Radde, Dichun, 130° 45'E, 18.08.1978, leg. V. Belov, S. Kurbatov; 1 ex., Transbaikalia, Vitim River, Ust'-Zaza, 5–6.06.1969, leg. A.P. Rasnytsin; 3 ex., Krasnoyarsk Province, Ermakovo District, Verkhneusinsk, 25.05.-04.06.1989, leg. A.B. Ryvkin; 2 ex., Krasnoyarsk Province, Sayano-Shushensky State Reserve, Shugur, litter under stones near poplars and cereals, near brook, 21.05.1989, leg. A.B. Ryvkin; 1 ex., Khanty-Mansiysk Autonomous Region, Surgut District, Yugansk State Reserve, Ai-Magromsy River Basin, Medvezhiy Ugol, litter under stones, moss near *Pinus*, *Abies*, *Butula* with *Vaccinium vitis-idaea*, *V.myrtillus*, *Pleurozium schreberi*, *Hylocomium splendens*, *Dicranum polysetum*, *Sphagnum ?warnstortii*, *Linnaea borealis*, *Equisetum sylvaticum* and other, 18.09.2002, leg. A.B. Ryvkin.

**DESCRIPTION.** Length 1.6–1.9 mm, elongate (Fig. 3), moderately arched, covered with slightly curved but decumbent pale pubescence of moderate length.

Head and prothorax dark brown or blackish, elytra reddish brown; antennae and legs reddish-brown.

Antennal structure as in Fig. 3, segment 1 is 1.6–2.0 times as long as broad, segments 9 and 10 weakly transverse.

Pronotum 1.3–1.4 times as broad as long, distinctly transverse, broadest behind the middle, then contracted to the base where being narrower than the base of the elytra; side borders only visible from above in the basal third; surface strongly and coarsely shagreened over the whole surface, moderately strongly and moderately densely punctured, punctures separated by 0.5 diameters apart from their lateral neighbours; base of the pronotum with a narrow and weakly depression in the middle; hind angles obtuse; pronotal disk convex; hind margin finely bordered.

Elytra long oval, moderately arched, weakly curved at the sides, broadest near in middle, 2.3–2.6 times as long as the pronotum, 1.5–1.7 times as long as together broad. Surface shining, strongly shagreened, rather closely punctured, the punctures in the basal part slightly smaller than those on the pronotal disk, and approximately 1.0–1.5 diameters apart from their lateral neighbours on an average; elytral humeri toothed or not. Hind wings fully developed.

Male genitalia as in Fig. 4.

**REMARKS.** This species differs from nearest species with decumbent pubescence, weakly transversal club of antennae and short 1<sup>st</sup> segment of antennae. *A. gracilicornis* Reitter 1888 and *A. wollastoni* Sharp 1867 differ from *A. acerba* sp.n. in the following characters: elongated 1<sup>st</sup> segment of antennae, very narrow 9<sup>th</sup> segment of antennae, and weakly transverse pronotum. *A. acerba* sp.n. differs from *A. vespertina* in the following characters: elongated 1<sup>st</sup> segment of antennae, very narrow 9<sup>th</sup> segment of antennae, weakly transverse of pronotum too (sometimes club of antennae more transverse), and genital characters. *A. acerba* sp.n. differs from *A. gracilicornis*, and *A. edithae* Reitter 1888 in the following characters: rounded hind angles of pronotum, and unicolorous red colour (its differs from *A. edithae* in outstanding pubescence).

## References

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