

First record of the family Aderidae (Coleoptera) from West Siberia, Russia

Первая находка семейства Aderidae (Coleoptera) в Западной Сибири

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Ключевые слова: Tenebrionoidea, адериды, *Phytobaenus amabilis*, новая находка, Республика Алтай, Сибирь.

Abstract. *Phytobaenus amabilis* R.F. Sahlberg, 1834 was found in a dark coniferous forest on the shore of Lake Teletskoye. This is the first record of the family Aderidae from Turochakskii District, Altai Republic, West Siberia. A distribution map of *P. amabilis* from Asia is provided.

Резюме. Вид *Phytobaenus amabilis* R.F. Sahlberg, 1834 обнаружен в темновойном лесу на берегу Телецкого озера. Это первое обнаружение семейства Aderidae в Сибири из Турочакского района Республики Алтай. Приведена карта распространения *Phytobaenus amabilis* R.F. Sahlberg в Азии.

Introduction

Aderidae is a small family distributed almost worldwide and comprising approximately 1000 described species [Volkovich et al., 2025]. Larvae usually occur in rotten wood, in leaf litter, or under bark and are thought to be saprophagous [Lawrence, Ślipiński, 2010]. The oldest fossils are known from early Cretaceous Lebanese amber [Kirejtshuk, Azar, 2013] and late Cretaceous Burmese amber [Bao et al., 2022]. In total, about 100 species from 14 genera are recorded in the Palearctic Region [Nardi, 2008]. The following species are known from Russia: *Aderus populneus* (Creutzer, 1796), *Anidorus nigrinus* (Germar, 1842), *Euglenes oculatus* (Paykull, 1798), *E. pygmaeus* (DeGeer, 1775), *Otolelus pruinosus* (Kiesenwetter, 1861), *Phytobaenus amabilis* R.F. Sahlberg, 1834, *Picemelinus flabellicornis* (Pic, 1910), *Pseudanidorus pentatomus* (C.G. Thomson, 1864), *Pseudolotelus japonicus* (Champion, 1890), *Syzeton quadrimaculatus* (Marseul, 1876), *Syzeton* sp., and *Vanonus brevicornis* (Perris, 1869) [Nardi, 2008, 2020; Dedyukhin, Nikitsky, 2009; Alekseev, Bukejs, 2010, 2014; Zinovyev, Parkhachev, 2017; Tomkovich

et al., 2022; Volkovich et al., 2025]. The genus *Phytobaenus* R.F. Sahlberg, 1834 includes about ten species [Volkovich et al., 2025]. The family Aderidae has not been previously recorded from Siberia.

This article reports the first registration of *Phytobaenus amabilis* in West Siberia, which is located approximately 1,960 km east of its European range and approximately 2,700 km west of its Far Eastern range.

Material and methods

The specimen is deposited in the private collection of S.V. Reshetnikov (Novosibirsk, Russia).

The present work is registered in ZooBank (www.zoobank.org) under urn:lsid:zoobank.org:pub:993EC28B-CA5E-4D06-B2AF-0A4203BFBE16

Results

Tenebrionoidea: Aderidae

Phytobaenus R.F. Sahlberg, 1834

Phytobaenus amabilis amabilis R.F. Sahlberg, 1834

Material. Russia, Altai Republic: 1 spm. — Turochakskii District, Artybash village, dark coniferous forest along shore of Lake Teletskoye, 51.7947° N, 87.3047° E, 9–15.VI.2024, S. Reshetnikov leg.

Distribution. Europe: France, Italy, Austria, Germany, Poland, Sweden, Norway, Finland, Latvia, Lithuania, Estonia, Belarus, Croatia, Czech Republic, Hungary, Romania, Slovakia, Ukraine; Iran; Russia: European part, West Siberia: Altai Republic: Turochakskii District; Russian Far East: Primorskii Krai, Kunashir Island; China (Inner Mongolia, Taiwan), South Korea, Japan (Hokkaido, Honshu, Shikoku, Kyushu, Tsushima, Yaku Island) [Sahlberg, 1834; Nomura, 1970; Schillhammer, 1993; Nardi, 2008, 2020; Dedyukhin, Nikitsky, 2009; Gusakov, 2009; Alekseev, Bukejs, 2010; Yuan et al., 2015; Jung, 2016; Telnov et al., 2016; Zinovyev, Parkhachev, 2017; Laugsand,



Fig 1. Locality map of *Phytobaenus amabilis* in Asia.

Рис. 1. Карта распространения *Phytobaenus amabilis* в Азии.

Staverlokk, 2020; Tomkovich et al., 2022; Sanchez, Chittaro, 2022; Zuber, 2022; Lekoveckaite et al., 2023; Nardi, Ghahari, 2024; Volkovich et al., 2025].

Host plants. They develop in the rotting wood of various trees, with a preference for birch [Dedyukhin, Nikitsky, 2009; Nikitsky et al., 2016].

Remarks. This is the first record of *Phytobaenus amabilis* from Siberia, located approximately 1,960 km east of its range in Europe and approximately 2,700 km west of its range in the Far East (Fig. 1).

Discussion

This species is found in Europe, extending eastward to Sverdlovskaya Oblast. *Phytobaenus amabilis* is also present in the Far East, including south of Primorsky Krai, South Korea, Japan (all main islands), Kunashir, and Taiwan. It is also recorded for Inner Mongolia, but without a specific location. *Phytobaenus amabilis* probably had a trans-Palaearctic distribution during the warm periods of the Pleistocene, but its range became disjunct during the Last Glacial Maximum. At this time, tundra-steppe landscapes were present in the south of Siberia [Legalov et al., 2016; Zinovyev et al., 2016; Gurina et al., 2018, 2019a, b, 2023; Dudko et al., 2022, 2024], but in the foothills of Altai, refugia for humid, but not nemoral, species were preserved [Gurina et al., 2024, 2025]. Modern finds of European or Far Eastern species [Dudko, 2011; Agrikolyanskaya et al., 2025; Reshetnikov, Legalov, 2026] in the north-eastern Altai confirm this point of view.

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