

First records of invasive species *Silvanoprus cephalotes* (Reitter, 1876) (Coleoptera: Silvanidae) from the Republic of Adygea, Russia

Первая находка инвазивного вида *Silvanoprus cephalotes* (Reitter, 1876) (Coleoptera: Silvanidae) в Республике Адыгея (Юг России)

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Ключевые слова: *Silvanoprus*, Silvanidae, распространение, инвазивный вид, светоловушка, Республика Адыгея.

Abstract. The invasive species *Silvanoprus cephalotes* (Reitter, 1876) (Silvanidae: Coleoptera) is recorded for the first time from the territory of the Republic of Adygea. This represents the second record of the species in Russia. Diagnostic morphological characters of the imago are illustrated. An identification key to species of the genus *Silvanoprus* recorded in the south of the European part of Russia is provided.

Резюме. Впервые с территории Республики Адыгея указывается инвазивный вид *Silvanoprus cephalotes* (Reitter, 1876) из семейства Silvanidae (Coleoptera). Это вторая находка данного вида в России. Проиллюстрированы характерные морфологические особенности имаго. Приводится определительная таблица видов рода *Silvanoprus*, отмеченных на юге европейской части России.

Introduction

The native range of *Silvanoprus cephalotes* (Reitter, 1876) (Silvanidae: Coleoptera) comprises tropical and subtropical Asia, including Southeast, South and East Asia: India, Sri Lanka, Bangladesh, Nepal, Bhutan, China, Taiwan, South Korea (Chungnam, Gyeongnam and Jeju provinces), Japan, Vietnam, Malaysia (Malay Peninsula), the Indonesian islands (Borneo, Sumatra, Java), and Papua New Guinea [Halstead, 1993; Halstead et al., 2006; Shin et al., 2024]. In the second half of the 20th century, the species was introduced into Great Britain from Malacca [Aitken, 1975] and into the United States from Hong Kong [Zimmerman, 1990]. The record from Tanzania is also probably to be associated with accidental introduction [Halstead, 1993].

According to verified crowdsourced data available through the Global Biodiversity Information Facility (GBIF), the species was recorded in Ukraine in 2010 (Volyn Oblast, Turiysk District, the settlement of Turiysk) [GBIF, 2026].

More recently, in 2014, *S. cephalotes* was registered in the European part of Russia on the basis of a single record from the Black Sea coast of Krasnodarskii Krai (Chemitekvadzhe settlement) [Kovalev, 2016].

Materials and methods

In the field, imago beetles were collected using a custom-designed entomological light trap equipped with high-intensity LEDs. The trap was installed in the settlement of Novy (Giaginsky District, Adygea) on a privately owned land plot used for the cultivation of various agricultural crops. Adjacent plots were likewise used for small-scale agricultural production.

Identification and photography of imago specimens were conducted under laboratory conditions using an ADF X100 stereomicroscope and an ADF Ultra09 digital camera. Specimen mounting and collection curation followed standard entomological methods [Golub et al., 2021]. Mounted specimens and preparations are deposited in the collection fund of the Laboratory of Bioecological Monitoring of Invertebrates of Adygea, Adyge State University, Maykop (ASU).

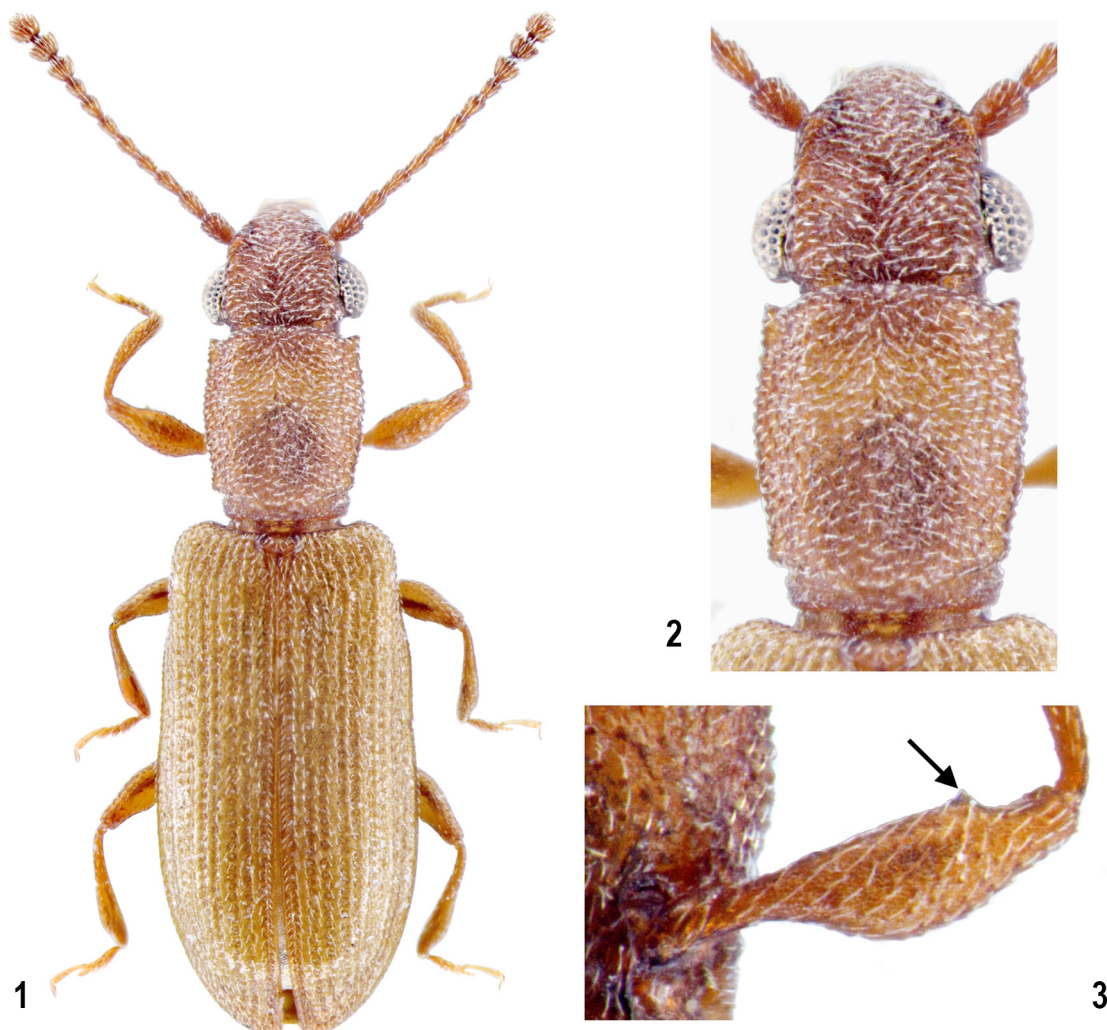
The present work is registered in ZooBank (www.zoobank.org) under urn:lsid:zoobank.org:pub:A7E53B05-EE22-4440-B995-D37196DDD3DE

Results and discussion

Coleoptera: **Silvanidae**
Silvanoprus cephalotes (Reitter, 1876)

Figs 1–3.

Material. Russia, Republic of Adygea: Giaginsky district, Novy vill., 44.937147 °N, 40.173667 °E, 29.VII.2022, light trap, M. Shapovalov leg. — 2♂♂ [ASU].



Figs 1–3. Details of male morphology of *Silvanoprus cephalotes* Adygea: dorsally (1, 2) and ventrally (3). 1 — general view; 2 — head and pronotum; 3 — right anterior femur.

Рис. 1–3. Детали строения самца *Silvanoprus cephalotes* из Адиги: сверху (1, 2) и снизу (3). 1 — внешний вид; 2 — голова и переднеспинка; 3 — переднее правое бедро.

Remarks. This species is registered for Republic of Adygea for the first time. Further records of this species in other regions of the European part of Russia appear likely in the near future.

The biology of the species under the conditions of the recorded habitats in Russia remains unstudied. Therefore, the following account of its biology is based on published data. Imago have been recorded in decomposing plant substrates and in stored products of plant origin. In India, the species is common in haystacks and leaf litter [Sengupta, Pal, 1996]. In China, it occurs in plant-derived products such as grain and copra, including grain storage facilities [Halstead, 1993]. *S. cephalotes* is apparently not a pest of stored products but feeds on ascomycete and deuteromycete fungi developing on plant substrates.

Imago were attracted to an artificial light source at night. During the same period and at the same locality, the following Silvanidae species were collected using the light trap: *Ahasverus advena* (Waltl, 1834) (5♂♂, 4♀♀) and *Psammoeus bipunctatus* (Fabricius, 1792) (1♂, 3♀♀).

In the south of the European part of Russia, another species of the genus *Silvanoprus* Reitter, 1911, the widely distributed

S. fagi (Guérin-Méneville, 1844), is also present and has been recorded from Adygea [Nikitsky et al., 2008].

KEY TO SPECIES OF THE GENUS *SILVANOPRUS* RECORDED IN THE SOUTH OF THE EUROPEAN PART OF RUSSIA

- 1(2). Head, including the eyes, wider than the distance between the apices of the anterior angles of the pronotum. Anterior pronotal angles short and sharply pointed. Front femur with a small denticle *S. cephalotes* (Reitter, 1876)
- 2(1). Head, including the eyes, narrower than the distance between the apices of the anterior angles of the pronotum. Anterior pronotal angles larger, well developed and rounded apically. Front femur without denticle
..... *S. fagi* (Guérin-Méneville, 1844)

From the territory of the European part of Russia, namely: Saratovskaya Oblast, Moskovskaya Oblast, Yaroslavl'skaya

Oblast and the Republic of Bashkortostan, another recently recorded alien species of the genus, *Silvanoprus fangusticollis* (Reitter, 1876), has also been reported [Sazhnev, 2024].

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