

New data on the distribution of *Streblote primigenum* (Staudinger, 1887) (Lepidoptera: Lasiocampidae) in Uzbekistan, with notes on taxonomy of the species

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Abstract

New data on the distribution and taxonomy of *Streblote primigenum* (Staudinger, 1887) (Lepidoptera: Lasiocampidae) in Uzbekistan are provided based on a newly collected material and on analysis of literature and Internet sources. The species is recorded for the first time in the southern part of the country: Qashqadaryo and Surxondaryo Regions. The incorrect indication of the type locality of *S. primigenum* reported in the original description has been fixed according data on the capture of holotype of this species in subsequent study. Due to the absence of reliable morphological differences, the taxa *Taragama uzbeka* Sheljuzhko, 1935 and *Streblote primigenum kuhitanghicum* Dubatolov et Zolotuhin, 1992 are established as junior subjective synonyms of *S. primigenum* (Staudinger, 1887).

Keywords

Central Asia, Eastern Palaearctic, faunistics, lapped moths, new records, new synonyms

Introduction

Currently, the fauna of lappet moth (Lepidoptera: Lasiocampidae) of Uzbekistan comprises 13 species from eight genera in three subfamilies (Dubatolov and Zolotuhin 1992; Zolotuhin 2015). Unfortunately, there is no information on the distribution of these species within the country, with the exception of taxa described specifically based on the specimens from Uzbekistan. For example, in the study of Zolotuhin (1995) the distribution of Lasiocampidae in Central Asian countries and Kazakhstan was marked with dots on maps, but without specifying of studied specimens.

During joint entomological expedition of Samarkand State University (Samarkand, Uzbekistan; hereinafter SamSU) and Lomonosov Moscow State University (Moscow, Russia; hereinafter MSU) in May 2026, we collected a very interesting species of Lasiocampidae, *Streblote primigenum* (Staudinger, 1887), at three localities in southern Uzbekistan. These findings provide a new distributional data on *S. primigenum* and discussed below. Furthermore, the specimens previously collected in Uzbekistan by the last author were also included.

Additionally, an analysis of the literature data on this species, as well as a comparison of the morphology of the collected specimens with published descriptions and images, has revealed taxonomic issues which also treated in this publication.

This publication is a continuation of authors' study of various Lepidoptera of the Palearctic (including Uzbek) fauna (Gorbunov 2012, 2018, 2019, 2023, 2024, 2025a, b, 2026; Korb and Gorbunov 2015; Yakovlev and Witt 2017a, b; Yakovlev et al. 2023a, b; Efetov et al. 2024, 2025, 2026; Naydenov et al. 2025; Mironov et al. 2026).

Materials and methods

All images of habitus of the specimens were taken with a Sony α450 DSLR camera equipped with a Minolta 50 mm f/2.8 macro lens. The processing of all illustrations was finalized using Adobe Photoshop CC2020 software. Images of the specimens are labelled with a number which consists of the name of the family, two consecutive digits and a year (e.g., Lasiocampidae pictures №№ 0003-0004–2026). These numbers correspond to those of the illustrated specimens in the archives of the first author. All images of habitats were taken with a Nikon D810 camera equipped with a Nikkor 28–300 mm lens and iPhone 7 Plus (Fig. 9).

For each taxon, the original spelling from the primary source is given in quotation marks in the list of synonyms. The “References” subsection lists studies with

data on the distribution of *S. primigenum* in Uzbekistan and/or with information on the biology of the species.

We have analyzed literature with undoubtful species identifications, and data from the site “Lepiforum” (Lepiforum 2024), as well as information from the Internet resource iNaturalist (2023).

The material studied or mentioned below is kept in the following collections abbreviated in the text as follows:

RYT – private collection of Roman Yakovlev, Tyumen, Russia;

SZMN – collection of the Zoological Museum of the Institute of Animal Systematic and Ecology, Siberian Branch of the Russian Academy of Sciences, Novosibirsk, Russia;

ZMHB – collection of the Museum für Naturkunde, Zentralinstitut der Humboldt-Universität zu Berlin, Germany;

ZMKU – collection of the Zoological Museum of Shevchenko Kiev State University, Kiev, Ukraine;

ZMMU – collection of the Zoological Museum of Lomonosov Moscow State University, Moscow, Russia.

The map of the localities was made using the online resource Uzbekistan location map.svg by NordNordWest under license CC BY-SA.

Results and discussion

Streblote primigenum was described by the renowned German entomologist Otto Staudinger based on a single female specimen (Staudinger 1887). In the original description, the author noted that he had received the sole female specimen from Maurer, which had been collected in Margelan [= Uzbekistan: Fergana Region, Margilan] (loc. cit.: 101). However, in his seminal work on the Pamir Mountains and Pamir butterflies, Russian traveler and lepidopterist Grigoriy Grum-Grshimailo noted that “la seule ♀, que possède Staudinger, fut prise par Maurer, en ma présence, parmi des blocs de rochers, sur les pentes de l’une des élévations voisines de Chakhimardan, en Mai” [the only female specimen in Staudinger’s collection was collected by Maurer, in my presence, among boulders on the slopes of one of the hills near Chakhimardan, in May] (Grum-Grshimailo 1890: 563). Consequently, in accordance with Recommendation 76A.2 of the International Code of Zoological Nomenclature (ICZN 1999), the type locality “Margelan” [= Uzbekistan, Fergana Region, Margilan], should be considered erroneous and corrected to “Chakhimardan” [= Uzbekistan: Fergana Region, Shohimardon exclave].

In his seminal work on lapped moths of Russia and neighboring territories, Vadim Zolotuhin wrote the following in his taxonomic notes on *S. primigenum*, “The taxa listed above as synonyms [*Taragama uzbeka* Sheljuzhko, 1935 and *Streblote primigenum kuhitanghicum* Dubatolov et Zolotuhin, 1992] may be regarded as local subspecies of this species; however, given its low variability, subdivision into

subspecies is not adopted here.” (Zolotuhin 2015: 326). Consequently, Zolotuhin found no objective grounds for distinguishing subspecies within this species, but, at the same time, he did not formally treat them as synonyms. Respecting Zolotuhin’s opinion, and agreeing that this species exhibits very low level of geographical variation without any reliably delineated subspecies, we hereby formally synonymize the taxa *uzbeka* and *kuhitanghicum* with *Streblote primigenum* (Staudinger, 1887): *Taragama uzbeka* Sheljuzhko, 1935, **syn. nov.**, and *Streblote primigenum kuhitanghicum* Dubatolov et Zolotuhin, 1992, **syn. nov.**

Taxonomic account

Family Lasiocampidae Harris, 1841

Subfamily Lasiocampinae Harris, 1841

Triba Pinarini Kirby, 1892

Genus *Streblote* Hübner, 1820

Streblote primigenum (Staudinger, 1887)

Figs 1–13

“*Megasoma Primigenum* Stgr. (*Repanda* Hb. var.?)”: Staudinger 1887: 100. Type locality: “Chakhimardan” (Grum-Grshimailo 1890: 563) [= Uzbekistan: Fergana Region, Shohimardon exclave]. Holotype ♀ (ZMHU).

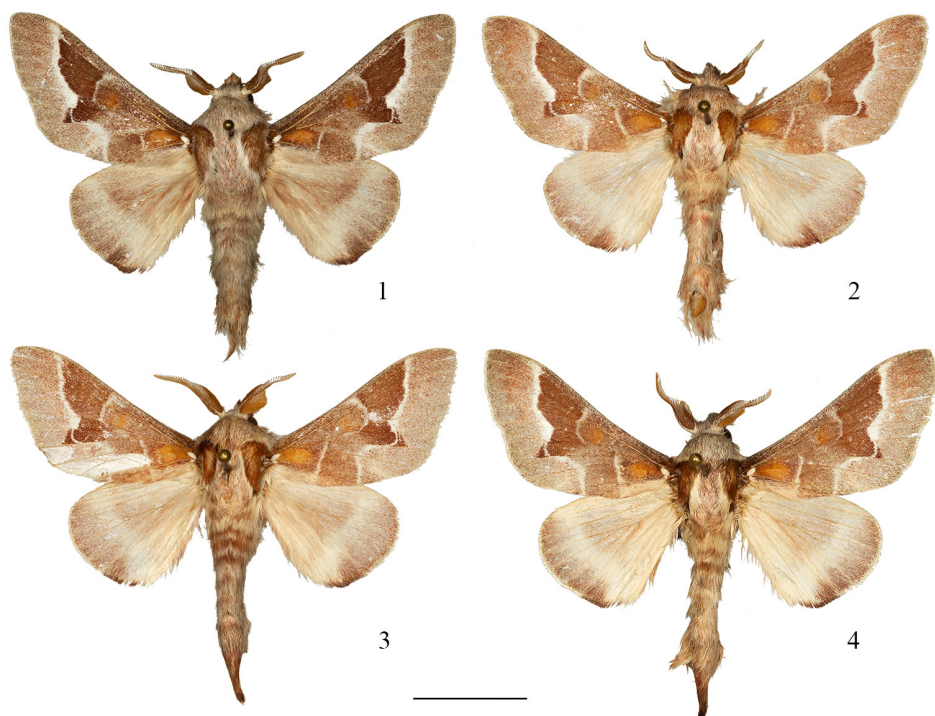
= “*Taragama uzbeka* (sp. nov.)”: Sheljuzhko 1935: 34, Taf. III, Fig. 10. Type locality: “bei Tshimgan, in unmittelbarer Nähe unserer Jurta, in der Höhe von ca. 1500 m” [= Uzbekistan, Tashkent Region, vicinity of Chimgan Mount]. Holotype ♂ (ZMKU). **Syn. nov.**

= “*Streblote premigenum kuhitanghicum* Dubatolov & Zolotuhin subspec. nov.”: Dubatolov and Zolotuhin 1992: 546, pl. 1, figs 6, 7. Type locality: “Turkmenia, Kuhitang mts., a top of Kara-belent mt. near Khelpe-baba sepulchre, 1720m” [= Turkmenistan: Labap Region, vicinity of Bazar-Depe Village]. Holotype ♂ (SZMN). **Syn. nov.**

Literature. Staudinger 1901: 125 (*Taragama*); Grünberg 1911: 176 (*Taragama*); Dubatolov and Zolotuhin 1992: 540, pl. 1, figs 5–7; Zolotuhin 1995: 288, map 14; Zolotuhin 2015: 325, figs a, b; pl. 9, figs ♂, ♀; iNaturalist 2023; Lepiforum 2024.

Material. 11 ♂♂: Surxondaryo Region: 2 ♂♂, 28 km SE Denov City, Babatag Range, 38°06.747'N, 68°11.493'E, 1200 m, 29.IV–01.V.2022, R.V. Yakovlev leg. (RYT); 1 ♂ (Figs 1, 5), Uzun District, 49 km E of Shurchi Village, W slope of Babatag Range, 38°05.203'N, 68°14.633'E, 1230 m, mountain xerophytic steppe with shrubs and trees, 08.V.2026, O.G. Gorbunov leg. (Lasiocampidae pictures No 0001–

0002–2026) (ZMMU); 1 ♂ (Figs 2, 6), same locality, 09.V.2026, O.G. Gorbunov leg. (Lasiocampidae pictures No 0003–0004–2026) (ZMMU); 1 ♂ (Figs 3, 7), Boysun District, 5.7 km N of Darband Village, SW spurs of Hisar Range, Baisuntau Mountains, Gamuz Landscape Unit, near Sheraboddarya River, 38°15.777'N, 067°1.551'E, 1150 m, mountain xerophytic steppe with shrubs and trees, 16.V.2026, O.G. Gorbunov leg. (Lasiocampidae pictures No 0005–0006–2026) (ZMMU); 1 ♂, same locality, 16.V.2026, A.S. Prosvirov leg. (ZMMU); 1 ♂ (Figs 4, 8), same locality, 17.V.2026, O.G. Gorbunov leg. (Lasiocampidae pictures No 0007–0008–2026) (ZMMU); 3 ♂♂, same locality, 17.V.2026, O.G. Gorbunov leg. (ZMMU). Qashqadaryo Region: 1 ♂, Shakhrisabz District, 4.4 km E of Miroqi Village, W slope of Hisar Range, near Hissarak Reservoir, 39°1.635'N, 067°10.458'E, mountain xerophytic steppe with shrubs and trees, 20.V.2026, O.G. Gorbunov leg. (ZMMU).

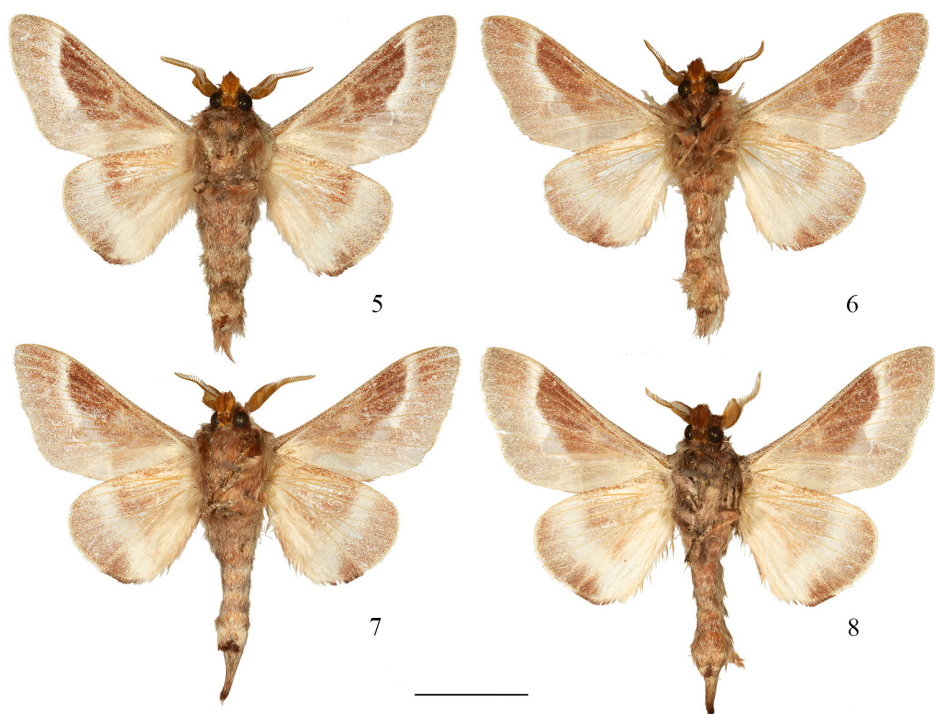


Figures 1–4. Males of *Streblote primigenum* (Staudinger, 1887). Dorsal view. **1** – Uzbekistan, Surxondaryo Region, Uzun District, 49 km E of Shurchi Village, W slope of Babatag Range, 38°05.203'N, 068°14.633'E, 1230 m, 08.V.2026, O.G. Gorbunov leg. (Lasiocampidae pictures No 0001–2026) (ZMMU); **2** – same locality, 09.V.2026, O.G. Gorbunov leg. (Lasiocampidae picture № 0003–2026) (ZMMU); **3** – Uzbekistan, Surxondaryo Region, Boysun District, 5.7 km N of Darband Village, SW spurs of Hisar Range, Baisuntau Mountains, Gamuz Landscape Unit, near Sheraboddarya River, 38°15.777'N, 067°1.551'E, 1150 m, 16.V.2026, O.G. Gorbunov leg. (Lasiocampidae pictures No 0005–2026) (ZMMU); **4** – same locality, 17.V.2026, O.G. Gorbunov leg. (Lasiocampidae picture No 0007–2026) (ZMMU). Scale bar: 10.0 mm.

Bionomics. According literature data (Zolotuhin 1995, 2015), the larvae of this species are polyphagous, feeding on various trees and shrubs from the families Aceraceae, Anacardiaceae, Fabaceae, Rosaceae, Salicaceae, and Ulmaceae. This species has two generations per year, with imagoes emerging in April–June and July–August. The pupa overwinters in a dense cocoon among fallen leaves.

Habitat. This species occurs in various types of habitats, such as mountain forests, floodplain thickets, orchards, sparse pistachio groves, and others, but always in stations where trees and/or shrubs are present (Figs 9–12).

Distribution. Locally in Southern Kazakhstan, Eastern Turkmenistan, Uzbekistan, Tajikistan, and Kyrgyzstan. In Uzbekistan (Fig. 13), it is known from the Qashqadaryo, Surxondaryo, and Tashkent Regions, as well as the Shohimardon exclave of the Fergana Region. This is the first record of this species in southern Uzbekistan (Qashqadaryo and Surxondaryo Regions).



Figures 5–8. Males of *Streblote primigenum* (Staudinger, 1887). Ventral view. 5 – Uzbekistan, Surxondaryo Region, Uzun District, 49 km E of Shurchi Village, W slope of Babatag Range, 38°05.203'N, 068°14.633'E, 1230 m, 08.V.2026, O.G. Gorbunov leg. (Lasiocampidae pictures No 0002–2026) (ZMMU); 6 – same locality, 09.V.2026, O.G. Gorbunov leg. (Lasiocampidae picture № 0004–2026) (ZMMU); 7 – Uzbekistan, Surxondaryo Region, Boysun District, 5.7 km N of Darband Village, SW spurs of Hisar Range, Baisuntau Mountains, Gamuz Landscape Unit, near Sheraboddarya River, 38°15.777'N, 067°1.551'E, 1150 m, 16.V.2026, O.G. Gorbunov leg. (Lasiocampidae pictures № 0006–2026) (ZMMU); 8 – same locality, 17.V.2026, O.G. Gorbunov leg. (Lasiocampidae picture No 0008–2026) (ZMMU). Scale bar: 10.0 mm.



Figures 9–10. Habitats of *Streblote primigenum* (Staudinger, 1887). **9** – Uzbekistan, Surxondaryo Region, 28 km SE Denov City, Babatag Range, 1200 m, 30.IV.2022; **10** – Uzbekistan, Surxondaryo Region, Uzun District, 49 km E of Shurchi Village, W slope of Babatag Range, 1230 m, 09.V.2026.



Figures 11–12. Habitats of *Streblote primigenum* (Staudinger, 1887). Uzbekistan, Surxondaryo Region, Boysun District, 5.7 km N of Darband Village, SW spurs of Hisar Range, Baisuntau Mountains, Gamuz Landscape Unit, near Sheraboddarya River, 1150 m, 17.V.2026.

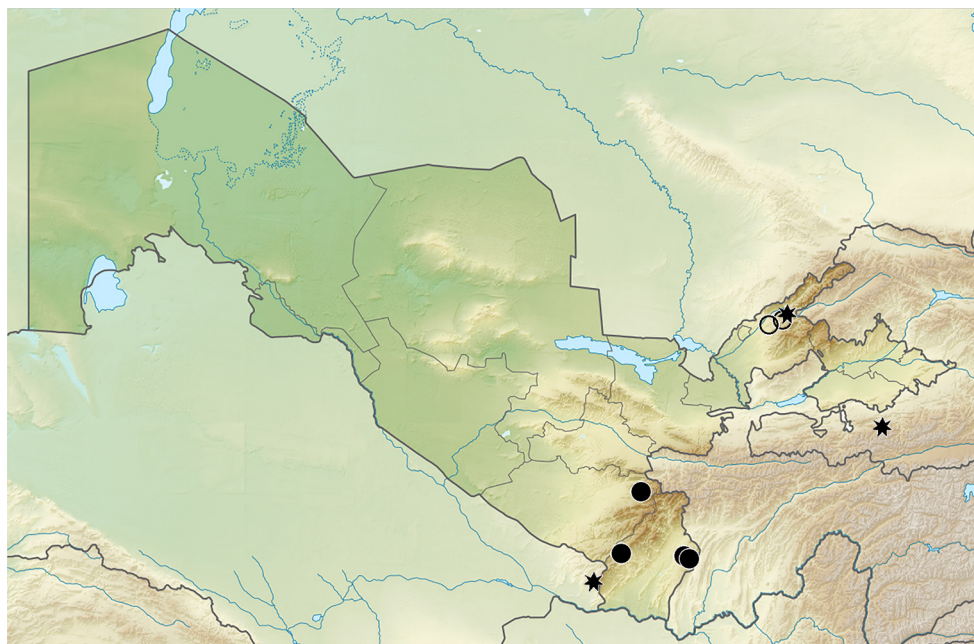


Figure 13. Map of the distribution of *Streblote primigenum* (Staudinger, 1887) in Uzbekistan. The type localities are shown by black stars, the locations of records from Internet resources are indicated by rings, and the locations of our own catches are shown by black dots.

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