A NEW SPECIES OF THE GENUS SCOPARIA HAWORTH, 1811 (LEPIDOPTERA: PYRALOIDEA, CRAMBIDAE) FROM THE TRANSCAUCASIA

A. N. Streltzov1*), P. Ya. Ustjuzhanin2,3), R. V. Yakovlev2,3)

1) Herzen State Pedagogical University of Russia, 48 Moika Emb., Saint Petersburg 191186, Russia. *Corresponding author, E-mail: streltzov@mail.ru
2) Altai State University, 61 Lenina Ave., Barnaul 656049, Russia.
3) Biological Institute, Tomsk State University, 36 Lenina Ave., Tomsk 634050, Russia.

Summary. Scoparia sinevi Streltzov, sp. n. is described from the Republic of Southern Ossetia. The new species is very similar in its appearance to the Central Asian S. juldusella (Caradja, 1916) but distinctly differs from latter by the male genitalia with cornutus consisting of three large spines (cornutus with one large spine in S. juldusella). The moths of the new species were collected from forb subalpine meadows in the Rachinsky Range.

Key words: pyralid moths, taxonomy, new species, Southern Ossetia, Caucasus.
The species-rich genus *Scoparia* Haworth, 1811 (Crambidae: Scopariinae) includes about 250 species from all continents except Antarctica (Goater et al., 2005; Nuss, 1999). Almost all species have a similar coloration of the wings – a gray background with a dark pattern and, occasionally, red spots. At the moment, only one species, *Scoparia juldusella* (Caradja, 1916), is known to have a completely different wing color (white or yellowish white, almost without a pronounced pattern) (Caradja, 1916; Sinev, Korb, 2022). During our expedition to northern Transcaucasia, we collected a small series of very similar *Scoparia*. The study of the genital apparatus of males and females showed that we are dealing with a new species. The description of the new species is given below.

Materials are stored in the collection of the Zoological Institute of the Russian Academy of Sciences, Saint Petersburg (ZIN).

**MATERIALS AND METHODS**

The material was collected at night using a light trap with an exposure of 5-6 hours. Photographs of adult moths were taken with an Olympus Tough TG-5 camera, genital preparations with a Nikon DS-Fi1 camera using a Leica DM1000 microscope.

**DESCRIPTION OF NEW SPECIES**

*Scoparia sinevi* Streltzov, sp. n.  
https://zoobank.org/NomenclaturalActs/E500FC85-B24B-4422-9D22-D116820BDA47  
Figs 1–6

**MATERIAL.** Holotype: ♂, the Republic of Southern Ossetia: Dzaus Distr., the Rachinsky Range, near Dodtota, 42°27′25″ N / 43°43′18″ E, 1750 m, 1–2.VII 2021, A. Streltzov, P. Ustjuzhanin & R. Yakovlev leg. (ZIN). Paratypes: the same data as holotype, 6♂, 2♀ (ZIN).

**DESCRIPTION.** Male (Fig. 1). Head: forehead flat, covered with white scales, about half as wide as longitudinal width of eye. Nape with a nimbus of short protruding elongated scales. Labial palpus twice as long as eye width, internally covered with white elongated scales, external scales brown, some of them hairy. Maxillary palpus is short with a tuft of elongated scales at the apex. Antennae simple, flagellum covered with yellowish white flat scales. Thorax, tegulae and tarsi yellowish white. The wings are yellowish white with a rare coating of small brown scales, without a pattern. The length of the forewing is 9.5–11 mm, the wingspan is 20–23 mm.
Female (Fig. 2). Somewhat smaller than males, length of the forewing 8.5–10 mm, wingspan 19–20 mm. The coloration is the same as in males. Sexual dimorphism is expressed only in the width of the wings: in females the wings are noticeably narrower than in males.

Male genitalia (Figs 3, 4). The uncus is triangular, narrow with a pointed apex. The gnathos is thin with a pointed apex, approximately equal in length to the uncus. Valva wide, oval. Sacculus with slightly curved spiny ventral process. The juxta is large, gradually tapering to a slightly forked apex. Aedeagus somewhat shorter than valva, slightly curved in middle, with cornutus in the form of three large spines one of which is slightly longer than the others.

Female genitalia (Fig. 5). Papillae anales are oblong, triangular. Apophyses posteriors are thin, with slightly expanded apices, more than twice as long as papillae.
Figs. 3–5. *Scoparia sinevi* sp. n. 3, 4 – male genitalia: 3 – armature genitals; 4 – aedeagus; 5 – female genitalia.
anales. Apophyses anteriores are long, thin, with slightly widened apices, more than twice as long as apophyses posteriors. Antrum wide, membranous in the central part, with a small area of weak sclerotization in the distal part and with a semicircular strongly sclerotized area in the proximal part. The colliculum is thin, membranous, smoothly passes into the ductus bursae, which expands significantly before flowing into the corpus bursae. Corpus bursae is small, oval, with an area of granular sclerotization in the distal part. Signum is missing. Appendix bursae is not expressed.

DIFFERENTIAL DIAGNOSIS. The new species is closest to the Central Asian Scoparia juldusella (Caradja, 1916). The major difference is the complete absence of any pattern on the wings. Besides, significant differences were found in the structure of the male genitalia. Namely, in the new species, the aedeagus is shorter and bears a cornutus in the form of three large spines, while Scoparia juldusella has a cornutus with one large spine (Sinev & Korb, 2022: fig. 4).

DISTRIBUTION. The southern part of the Rachinsky Range in the center of the Greater Caucasus.

BIOLOGY. Inhabits subalpine meadows (Fig. 6), moths fly in July.

ETYMOLOGY. The species is named after the famous Russian lepidopterist Dr. Sergey Sinev (Saint Petersburg).

![Fig. 6. Biotope of Scoparia sinevi sp. n. – forb subalpine meadows of the Rachinsky Range (photo by A. Fomichev).]
ACKNOWLEDGMENTS

The authors would like to extend their gratitude to Dr S. Yu. Sinev for discussing some aspects of this article and to Mr S. K. Korb for his assistance with sources of literature.

REFERENCES

Caradja, A. 1916. Beitrag zur Kenntnis der geographischen Verbreitung der Pyraliden und Tortriciden des europäischen Faunengebietes, nebst Beschreibung neuer Formen. Deutsche entomologische Zeitschrift Iris, 30(1): 1–88.

Goater, B., Nuss, M. & Speidel, W. 2005. Pyraloidea I (Crambidae: Acentropinae, Evertgestinae, Heliolothinae, Schoenobiinae, Scopariinae). In: Huemer, P. & Karsholt, O. (Eds.), Microlepidoptera of Europe. Vol. 4. Apollo Books, Stenstrup. 304 pp. DOI: 10.1163/9789004475489

Nuss, M. 1999. Revision der Gattungen der Scopariinae. Lepidoptera: Pyraloidea, Crambidae. Nova Supplementa Entomologica, 13: 1–151.

Sinev, S.Yu. & Korb, S.K. 2022. Scoparia juldusellus (Caradja, 1916), a little-known snout moth species new to the fauna of Kyrgyzstan (Lepidoptera: Crambidae: Scopariinae). Zootaxa, 5125 (5): 597–600. DOI: 10.11646/zootaxa.5125.5.11