

Materials on the Geometrid Moth fauna of the Northern Caucasus with description of *Entephria cyanata alanica* ssp. n. (Lepidoptera: Geometridae)

Материалы по фауне пядениц Северного Кавказа с описанием *Entephria cyanata alanica* ssp. n. (Lepidoptera: Geometridae)

E.V. Tsvetkov
E.B. Цветков

Russian Entomological Society, Russia. E-mail: tsvcountcal@rambler.ru
Русское энтомологическое общество, Россия

Key words: Lepidoptera, Geometridae, Caucasus, *Entephria*, new subspecies.

Ключевые слова: Lepidoptera, пяденицы, Кавказ, *Entephria*, новый подвид.

Abstract. Four Geometrid Moth species are reported as new for the fauna of the Northern Caucasus: *Narraga tessularia* (Metzner, 1845), *Horisme corticata* (Treitschke, 1835), *Nebula senectaria* (Herrich-Schäffer, 1852) and *Entephria cyanata* (Hübner, [1809]). *N. senectaria* is recorded for the first time for Russia. Caucasian populations of *E. cyanata* are attributed to a new subspecies *E. cyanata alanica* ssp. n.

Резюме. Четыре вида пядениц впервые приводятся для фауны Северного Кавказа: *Narraga tessularia* (Metzner, 1845), *Horisme corticata* (Treitschke, 1835), *Nebula senectaria* (Herrich-Schäffer, 1852) и *Entephria cyanata* (Hübner, [1809]). *N. senectaria* – новый вид для фауны России. Кавказские популяции *E. cyanata* отнесены к новому подвиду *E. cyanata alanica* ssp. n.

Narraga tessularia (Metzner, 1845)

Material. Kabardino-Balkaria: Verkhnyaya Balkaria, 1–3.07.1992, 17.07.1992, 3♂, 2♀, leg. Tikhonov (coll. Tikhonov).

This species is distributed in South-East Europe and in Kazakhstan. In European Russia it inhabits south-east of steppe zone (Lower and Middle Volga, South Ural). Finding of this species in mountains of the Central Caucasus was rather unexpected.

Horisme corticata (Treitschke, 1835)

Material. Krasnodar Prov.: W env. of Varvarovka, 27.04–19.05.2008, 3♂, leg. E. Tsvetkov (coll. E. Tsvetkov).

This species was found on bushy terraces at seashore. It inhabits South and Central Europe, Turkey. The species is rare in steppe zone of European Russia. Crimea is the closest locality. According to catalogue of the Lepidoptera of Russia *H. corticata* is present in Volga-Don and European central regions [Mironov et al., 2008]. However it has not been recorded in the Caucasus till now.

Nebula senectaria (Herrich-Schäffer, 1852)

Material. Krasnodar Prov.: W env. of Varvarovka, 27.04–21.05.2008, 6♀, leg. E. Tsvetkov (coll. E. Tsvetkov); Markotkh ridge, 22.05.2007, 18.05.2007, 1♂, 1♀, leg. V. Shchurov (coll. Tikhonov).

Near Varvarovka *N. senectaria* flies at seashore on bushy dry slopes with *Juniperus*, *Carpinus orientalis*.

Imagines usually sit at open places on bushes during the day-time. Second generation is supposed to appear in summer or autumn. The species is distributed in Mediterranean, Trascaucasus, Kopet-Dagh, North Iran. And it is first-time record for the Caucasus and Russia.

Entephria cyanata (Hübner, [1809])

The Northern Caucasus is inhabited by a few *Entephria* species, among them *E. muscosaria* (Christoph, 1893), *E. ignorata* (Staudinger, 1892), *E. flavicinctata elbrusensis* Tikhonov, 1994, *E. tejmurovi* Tikhonov, 1994 and *E. calcephila* Tikhonov, 1994. All of them are recorded at high altitudes from 1200 m above sea level.

Entephria cyanata (Hübner, [1809]) is known from mountain parts of Europe: from the Pyrenees in the west to the Carpathians and Crimea in the east. It was listed in catalogue of the Lepidoptera of Russia, basing on possibly erroneous record from Voronezh Region. And the presence of this species in the Northern Caucasus was indicated with a question sign [Mironov et al., 2008].

Dr. V. Tikhonov (Pyatigorsk) collected material from the region on a representative of *cyanata* group. The material was granted to me for the next studying. It came out then, that the butterflies are not distinguished from *E. cyanata* by genitalia structure (Color plate 16: fig. 1, 2), but some external differences from typical European *E. cyanata* are found. Taking into account the remoteness and isolation of Caucasian populations, I attribute them to a new subspecies of *E. cyanata*.

Entephria cyanata alanica ssp. n.
(Color plate 16: fig. 3, 4)

Material. Holotype, ♂, Kabardino-Balkaria, Verkhnyaya Balkaria, 17.07.1992, leg. V. Tikhonov. Deposited in collection of Zoological Institute of Russian Academy of Sciences (Saint-Petersburg).

Paratypes: Kabardino-Balkaria, Verkhnyaya Balkaria, 17.07.1992, 3♂, 2♀, leg. V. Tikhonov (coll. V. Tikhonov); Krasnodar Prov., r. Bezmyanka, near Pyaterykh pass, 19.07.2007, 1♂, leg. V. Schtchurov (coll. V. Tikhonov); Karachaevo-Cherkessia, Teberda, 22–27.08.1912, 27.08.1970, 2♂, 2♀ (coll. V. Tikhonov); Karachaevo-Cherkessia, Uchkulan, 17.07.1989, 14.08.1992, 2♂, leg. V. Tikhonov (coll. V. Tikhonov); Karachaevo-Cherkessia, Damkhurts, 19.08.1987, 2♀, leg. V. Tikhonov (coll. V. Tikhonov); North Ossetia, Chekhatsirtit ridge, 7.08.2005, 3♂, 2♀, leg. V. Tikhonov (3♂, 1♀ in coll.