

Redescription of *Ypsolopha nervosella* (Zerny, 1940) (Lepidoptera, Ypsolophidae) with first description of the female genitalia

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In three successive papers, Zerny (1939, 1940a, b) catalogued the specimens collected during his expedition to Iran. His description of the external appearance of *Ypsolopha nervosella* was very short (Zerny 1940b). He mentioned that *Y. nervosella* was similar to *Y. instabilella* (Mann, 1866) collected in the same location. Such a terse description of the species does not allow for its correct identification and therefore the status of the species has remained unclear. Following the examination of its type specimen, we provide a more extensive description, including that of its genitalia.

Ypsolopha nervosella (Zerny, 1940)

(Figs. 1–5)

Cerostoma nervosellum Zerny, 1940: 43–44. Type locality: Iran, Elburz Mts. (2100–2200 m).

Wingspan 22 mm. Antenna partly damaged. Preserved part of antenna: scape white, with only slight admixture of black scales; flagellum presumably white (scales partly rubbed off). Forewing white, with irregularly scattered black scales; a broad white area basally; white lines along veins; a narrow, white band along dorsal margin to 1/3 of its length; fringe similarly tinged as wing. Hindwing and fringe grey and white; grey scales in apical area.

Female genitalia. Intersegmental membrane between papilla analis and 8th abdominal segment very long. Apophysis posterioris very long and slender, twice as long as apophysis anterioris. Apophysis anterioris slightly widely branched. Antrum cup-shaped, elongated, membranous, sclerotized in central part. Ductus bursae membranous, sclerotized only in short section near antrum, narrow, characteristically twisted at inception of bursa copulatrix. Bursa copulatrix oval, small, membranous, sclerotized slightly around inception of ductus bursae. Signum small, broad with two ridges. Short section of ductus bullae slightly sclerotized near junction with ductus bursae, bent; remaining part membranous, longer than ductus bursae. Bulla seminalis rounded, membranous. Ductus seminalis membranous and narrow.

Type. Holotype ♀, labelled: “Pers. Elbursgeb., Tarseegebiet, 2200 m, 14. –17.7.36, Schwingenschuss” [printed]; “*Cerostoma nervosellum*, Zerny Type ♀” [white rectangular label handwritten in red], deposited in Naturhistorisches Museum, Vienna, Austria.

Diagnosis. The external similarity of *Y. nervosella* with *Y. instabilella* mentioned by Zerny (1940b) in the original description is inaccurate. They are only of similar size. The external appearance of *Y. nervosella* completely precludes its confusion with *Y. instabilella*, which is differently coloured. Some similarity in colouration is noticeable between *Y. nervosella* and *Y. excisella* (Lederer, 1855), both having white lines along the forewing veins. The forewings of the latter species are, however, pale brown. The forewing patterns of the species are similar to those of *Y. indecorella* (Rebel, 1903), but in the latter species, apart from the white-sprinkled veins, a white stripe in the costal area is also visible. Additionally, the forewings of *Y. indecorella* are distinctively narrower.

The female genitalia of *Y. nervosella* are quite different from those of all other known *Ypsolopha* species. A unique feature of this species is a double twist of the ductus bursae at the inception of the bursa copulatrix. Modifications of this section of the ductus bursae in the form of a strong bend have been described in *Y. curatorella* Baraniak, 2005, *Y. longus* Moriuti, 1977, *Y. paralella* (Caradja, 1939), and a light twist in *Y. colleaguella* Baraniak, 2007, *Y. flavus* (Issiki, 1930) and *Y. saitoi* Moriuti, 1977 (Baraniak, 2005, 2007, Moriuti, 1964, 1977).

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