

New Nepticula Species from Hungary

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I succeeded to find two new *Nepticula* species in 1956, the description of which I give as follows.

Nepticula elisabethella sp. n.

On the 13th October 1956, I found, in the company of my wife and dr. Gy. Éhik, nine *Nepticula* mines, among others, in the leaves of *Sanguisorba officinalis*, on the wet meadows along the rivulet Mogyoród, near Fót, Central Hungary. Three of the mines still had the larvae in them, yielding the imagos 16 April 1956 (a female) and 27 April 1956 (two males). Having examined the material, I came to the conclusion that none of the animals is identical with any *Nepticula* species known up to now. I am naming the species to honor my wife who helps my work with eager enthusiasm. Indeed, she found the first living larva of the new species. It is also my agreeable duty to express my thanks also in this place to dr. J. Klimesch (Linz), who helped by cordially placing at my disposal the genital drawing of *N. poterii* Stt. which is wanting in my collection. I have also to thank dr. L. Gözmány, who made the necessary slides as well as the description and drawings of the genital organs of several species.

Alar exp.: 4–5 mm. Fore wing finely scaled, of a metallic shine. Basic color a deep green, with a basic golden suffusion. Apex a mixed violet-blue and golden brown, shiny. No line in ciliae, their color being bluish-grey in the males, blackish grey in the females. Fascia of the male broad, straight, of a shiny silvery white with some violet tint at a certain angle of light. Fascia about $\frac{3}{4}$ of fore wing. Fascia of the female decidedly narrower, scarcely to be seen in an oblique angle of light, its margins not sharp. Hind wings of both sexes grey, with ciliae also grey. Thorax of the basic color. Abdomen of the male greenish dorsally, with very small scales, leaden white laterally, with large, and ventrally with again very fine, scales. Abdominal tuft blackish above, whitish below. Female abdomen greenish violet, with a metallic shine. The distribution of the scales agrees with that of the male, but with an erect row of scales on all segments. Antennae long, reaching to middle of fascia, shorter in female, greyish brown. Head with rusty red hairs, antennal eyecaps small, yellowish white.

Male genital organ. Belongs to Petersen's Group 6/B (gen. prep. 871, dr. Gözmány). Uncus relatively large with a deep indentation centrally, subscaphium with two anterior and two lateral appendages, both thin, long, the upper ones appressed, parallel; valvae broadening, with two small teeth anteriorly and posteriorly, tip arched ventrally, straight and subserrated later-

ally; aedeagus with one large cornutus tapering to a sharp point (Fig. 1: A, D). The nearly related *geminella* Frey has a more appressed subscaphium, valvae more narrow, its central tip dominant laterally, costa arched (Fig. 1: B, E). *Poterii* Stt. has also an appressed subscaphium, valva with a very elongated central tip, serrated anteriorly (Fig. 1: C).

The egg-shell is to be found always glued on the rhachis of the underside of the leaf. The mine of the new species is long, narrow at the beginning, strongly broadening later, serpentine. Owing to the overlapping of the galleries, it be-

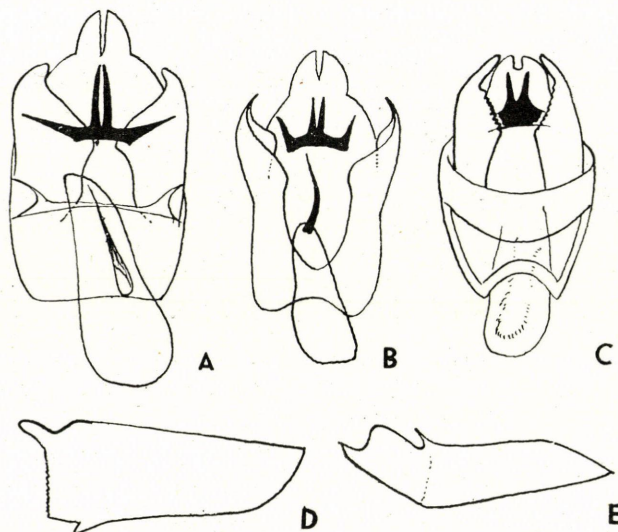


Fig. 1. Male genital organ, ventrally, of A: *Nepticula elisabethella* sp. n., B: *N. geminella* Frey, C: *N. poterii* Stt. Lateral view of valva of, D: *N. elisabethella* sp. n., E: *N. geminella*.

comes a secondary blotchmine but the excremental line will always testify that we are not dealing with a real blotch-mine. The margins of the galleries are not parallel. The excrement builds originally a narrow, central line, interrupted at uneven intervals, dispersing later into dense, smaller or bigger, grains. The excrement fills up about $\frac{1}{3}$ portion of the mine, always rather less than more. Its color is usually brown at the beginning of the mine, but may also be black. The grains are always black. Larva yellow, its head brown. Cocoon smooth, pyriform, greenish brown.

Holotype male: Fót, Mogyoród patak, 27 April 1956, e.l. leg. J. Szőcs, gen. prep. 871, dr. Gözmány; Allotype female: ditto, 16 April 1956; Paratype male: ditto, 27 April 1956. All type specimens in the Collection of the Hungarian Natural History Museum.

***Nepticula utensis* Weber var. biol. *hexapetalae* var. nov.**

On the 28 June 1956, I collected some *Nepticula thuringiaca* Petry larvae in the leaves of *Filipendula hexapetala*, on the hill Sashegy, in Budapest. In the collected material, I found six larvae which were green instead of yellow, so they manifestly belonged to a new species. Three imagos emerged between 22–26 July 1956. The animals are remarkably small (2.5–4 mm), but the description of *N. utensis* Weber absolutely agrees with my specimens, and also

their genital organ is wholly corresponding with the drawing of the organ of *N. utensis* Weber, made and published by Klimesch. Though, on the basis of the above considerations, I have to relegate this animal to *utensis* Weber, its small size, its foodplant and its life history all warrant a new name, the more so as not disposing of real *N. utensis* Weber specimens, I have been unable to compare the two species with the possibility that later examinations will result in the distinct specificity of my animals.

The serpentine mine is very narrow in the beginning, the excrement fills the mine almost completely. The gallery will strongly broaden later, eating the leaf usually completely away from the rhachis to the tips of the lobes. The excrement builds a central main line in its whole length, consisting of smaller and greater grains; they may even disperse to scattered grains in smaller intervals. The egg-shell is to be found on the underside of the leaf, usually adjacent to a vein. The larve is a pale green, its head brown. The cocoon is smooth, black, ellipsoid.

Holotype male: Budapest, Sashegy, 24 July 1956, e. l. leg. J. Szöcs, gen. prep. 944, dr. Gözmány; Allotype female: ditto, 22. July 1956; Paratype male: ditto, 26 July 1956. All type specimens in the Collection of the Hungarian Natural History Museum.

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