

Elachista fuscofrontella Sruoga (Lepidoptera, Elachistidae) from Estonia, new to Europe, with description of the female

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Elachista fuscofrontella Sruoga, previously known only from a single male from the Russian Far East, is now reported from Estonia. Diagnoses and descriptions of both sexes are presented.

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Elachista fuscofrontella Sruoga, 1990, was originally described on the basis of a single male from Russia, at Primorskiy Kray, close to the Korean border (Sruoga 1990). The description is detailed and includes drawings of the male genitalia.

During a trip to Estonia in 1990 the first author collected four *Elachista* specimens (3♂♂, 1♀) externally resembling *E. nobilella* Zeller, but with a leaden grey head. The male specimens exactly fit Sruoga's description of *E. fuscofrontella*, and although we have not had the opportunity to study the holotype, we are confident that our specimens belong to this species, despite the great distance between Estonia and the type locality.

Material: Estonia, Tartumaa, Järvelja, Saki 58°N 26°E, 5-6.VI.1990, 2♂♂ 1♀; Järvelja, Parapalu, 6.VI.1990, 1♂; all A. Albrecht leg.

Diagnosis

Elachista fuscofrontella belongs to the *E. bifasciella* group *sensu* Traugott-Olsen & Nielsen (1977). On the basis of similarities in the male genitalia, Sruoga (1990) regarded this species as a close rela-

tive of *E. albifrontella* (Hübner). Externally, however, *E. fuscofrontella* is more similar to *E. nobilella* Zeller, as the light pattern of the forewing is partly shiny silvery, and there is a silvery spot at the base of the apical cilia, similar to that of *E. nobilella* and *E. apicipunctella* Stainton. From all these species *E. fuscofrontella* is easily separated by its leaden grey head. The heads of *E. albifrontella* and *E. apicipunctella* are whitish, and the head of *E. nobilella* is silvery grey. The male genitalia resemble those of *E. albifrontella*, but the valva is not broadening towards the apex, the aedeagus lacks cornuti and is slightly bent near the caecum and in the middle, and the base of the digitate process is narrower.

The female genitalia most closely resemble those of *E. apicipunctella* and *E. albifrontella*. The spines on the dorsal wall of the ostium bursae are weaker, the colliculum narrower and the ductus bursae longer than in *E. apicipunctella*. From *E. albifrontella* it can be distinguished by having a less curved ventral margin of the ostium bursae, a longer ductus bursae and smaller signum. The female genitalia of *E. nobilella* are very different, with very large and sclerotized papillae anales, stouter apophyses, and a shorter colliculum.

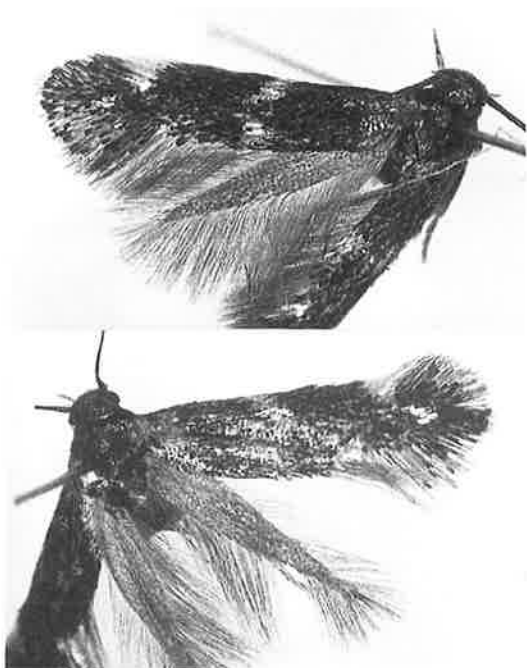


Fig. 1. *Elachista fuscofrontella*. — Male (top), and slightly worn female (bottom).

Description

Terminology as in Traugott-Olsen & Nielsen (1997).

Habitus: See Fig. 1.

Head shiny leaden grey with a slight bronzy sheen. Labial palpi light grey above, darker below. Antennae uniformly leaden grey. *Forewing*: Ground colour dark blackish grey with bronzy sheen, slightly mottled due to dark tips of the scales. Forewing at base with an indistinct grey patch; inner fascia silvery white, forming an obtuse angle outwards in the middle, where it is narrow or interrupted; costal spot triangular, pale yellowish white, in the posterior corner with a few silvery white scales; tornal spot small, indistinct, consisting of silvery white scales; apically, at base of the cilia with a silvery spot. Underside unicolourous grey.

Hindwing unicolourous grey.

Male genitalia: See Figs. 2–3 and the diagnosis above.

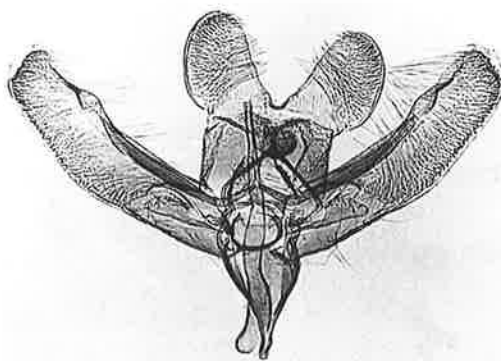


Fig. 2. *Elachista fuscofrontella*. — Male genitalia.

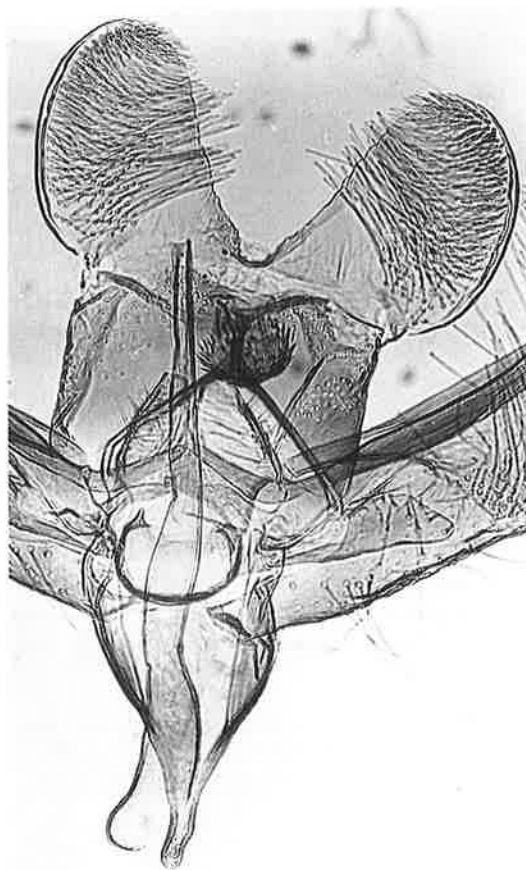


Fig. 3. *Elachista fuscofrontella*. — Male genitalia: Aedeagus, digitate processes and juxta lobes.

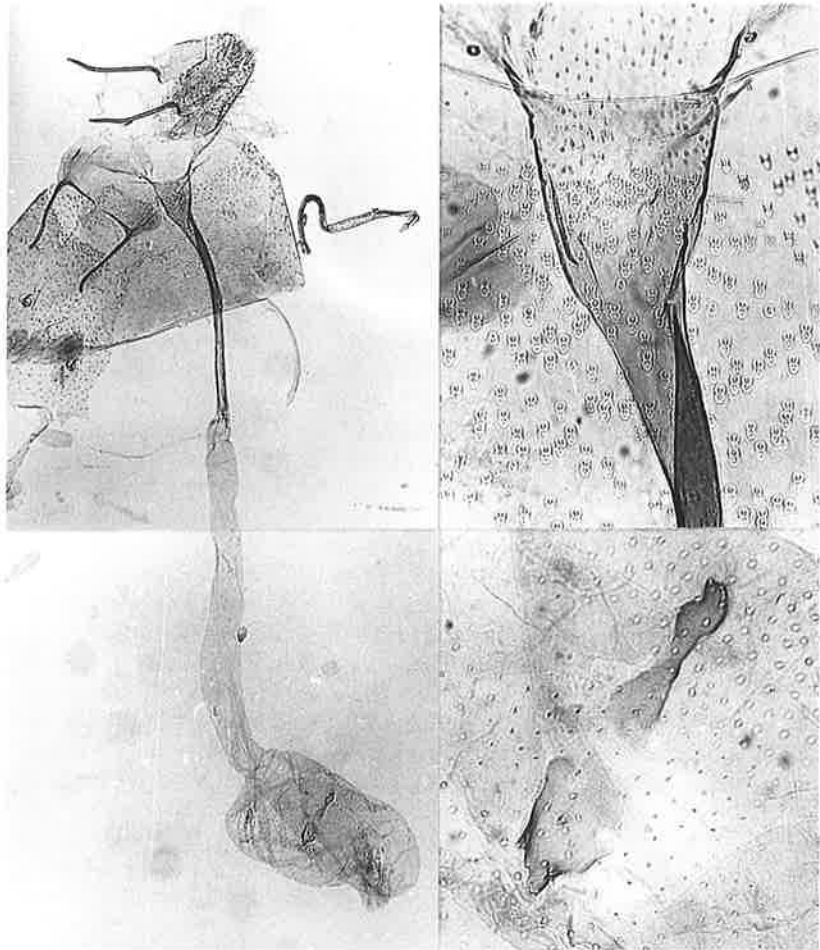


Fig. 4. *Elachista fuscofrontella*. — Female genitalia (left), with details (right): ostium bursae (top), and signum of bursa (bottom).

Female genitalia (Fig. 4): Apophyses anteriores and posteriores slender, rather short, of equal length; antrum elongate, funnel-shaped, gradually tapering into colliculum; dorsal wall of ostium bursae with small internal spines, ventral margin almost straight, only slightly curved; colliculum narrow, twice as long as apophyses; ductus bursae long, longer than colliculum and antrum together; corpus bursae with weak internal spines; signum elongate, weakly sclerotized in the middle, margins irregular.

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References

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