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Definition of the *Elachista puplesisi* Sruoga complex (Lepidoptera, Gelechioidea, Elachistidae), with description of a new species

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Abstract

The *Elachista puplesisi* group is defined. Its characterization is based on two species, *E. puplesisi* Sruoga, 2000, known from the holotype collected in Turkmenistan and *E. helia* sp. nov., from Rhodos, Greece. The group is assigned to the subgenus *Atachia* of *Elachista*, but its affinities within *Atachia* remain unknown.

Key words: Elachistinae, *Elachista*, *Atachia*

Introduction

Elachista puplesisi Sruoga, 2000 was described on the basis of a single male specimen collected from the Karakum desert in Turkmenistan. The species appeared bizarre in its morphology, and its systematic position was left unresolved in the original description, with the remark that it likely represents a separate species group within *Elachista*, or even a new genus (Sruoga 2000). The species indeed possesses features rare among *Elachista*, as well as an unusual combination of characters, which did not make it straightforward to place this species in the phylogenetic concept of Elachistinae of Kaila (1999). Recently, a series of another species with similar morphology was discovered in the collection of ZSM. A closer scrutiny of this species, along a detailed comparison of structural details of *E. puplesisi* appears to give a reasonably likely position for these species within the revised phylogenetic classification of Elachistinae of Kaila & Sugisima (2011). We place these species in the subgenus *Atachia* of *Elachista*, as delineated by Kaila & Sugisima (2011). We propose the informal *E. puplesisi* group for these species, merited by their unique combination of morphological traits as detailed below.

Material

Specimens examined are from the following collections:

MZH	Finnish Museum of Natural History, Zoology Unit, University of Helsinki, Finland (L. Kaila).
ZSM	Zoologische Staatssammlung, München, Germany (A. Segerer).
ZIN	Zoological Institute of the Russian Academy of Sciences, St. Petersburg, Russia (S. Sinev).
ZMUC	Zoological Museum, Natural History Museum of Denmark, Copenhagen, Denmark (O. Karsholt).

Systematics

Currently, four genera are recognized in Elachistinae (Kaila *et al.* 2011; Kaila & Sugisima 2011). There is a

process absent. Median plate of juxta rounded, without lateral or posterior extensions, medially somewhat convex to ventral direction. Juxta lobes laterally produced, near distal margin row of stout setae arising from erect pinacula. Phallus 0.8 times as long as valva, parallel-sided at basal half; distal opening extended to half the length of phallus; apex pointed; without cornuti; caecum absent.

Female genitalia. Unknown.

Life history. Unknown.

Distribution. Greece, Rhodos.

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