

A NEW SPECIES OF GENUS *SCHRANKIA* HÜBNER (LEPIDOPTERA: NOCTUIDAE) FOR THE FAUNA OF SERBIA

D. STOJANOVIĆ

Fruška Gora National Park, Zmajev trg 1, 21208 Sremska Kamenica, Serbia

ABSTRACT: One species of the genus *Schrankia* Hübner, 1825 (Lepidoptera: Noctuidae) was recorded for the fauna of Serbia until now. *Schrankia costaestrigalis* (Stephens) was found on Mt. Goč (vicinity of the town of Kraljevo, Central Serbia) and in Brestovačka Banja (vicinity of the town of Bor, Eastern Serbia) by D. Stojanović. The species *Schrankia taenialis* (Hübner) is new for the fauna of Serbia. It was found in Fruška Gora National Park (in the northern province of Vojvodina). An overview of the main characteristics of the species *Schrankia costaestrigalis* (Stephens) and *Schrankia taenialis* (Hübner) is given in the present paper.

KEY WORDS: Lepidoptera, Noctuidae, *Schrankia*, fauna, Serbia, Fruška Gora

INTRODUCTION

The European fauna of noctuids consists of 1250 species (KARSHOLT AND RAZOVSKI, 1996). To date, 526 species of noctuids have been recorded in Serbia [ZEČEVIĆ, 1996, 2002; VASIĆ, 2002; STOJANOVIĆ, 2002, 2005; STOJANOVIĆ AND DODOK (in press), 2006; DODOK, 2003].

Recent research indicated that the subfamily Strepsimaninae is represented in Serbia by the genus *Schrankia* Hübner, 1825 and species *costaestrigalis* (Stephens, 1834) (VASIĆ, 2002). The species *Schrankia costaestrigalis* was found on Mt. Goč (leg. K. Vasić) and in Eastern Serbia (in Brestovačka Banja, vicinity of Bor) (leg. D. Stojanović). A description of the species *Schrankia taenialis* (Hübner, 1809), which is new for the fauna of Serbia, is given here. In addition, the main characteristics of the species *Schrankia costaestrigalis* are also given. Although some comprehensive and very detailed research has been conducted in the past (ZEČEVIĆ, 1996, 2002; VASIĆ, 2002), the Serbian fauna of noctuids (Lepidoptera: Noctuidae) has not been examined thoroughly enough.

Light attracts the species *Schrankia taenialis*, but specimens rarely stay long near the light

source. For this reason, as well as due to the small size of specimens, data on this species in the European fauna are very sparse and incomplete. In Serbia, such data have been completely lacking until now.

In the recent past, research on the fauna of Lepidoptera in Fruška Gora National Park was conducted by the lepidopterist Miloš Rogulja and by Prof. Dr. Konstantin Vasić. Investigations are currently being continued in the same area. The discovery reported here represents an important contribution to knowledge of the fauna of Lepidoptera in Fruška Gora National Park and Serbia as a whole.

MATERIALS AND METODS

Moths were collected by the author in nature using a light trap, e.g., a 400-W mercury bulb in a 400-W petromax lamp. Specimens were collected near the light source with an entomological net. Collecting was performed in the forest biocenosis of Fruška Gora National Park. Specimens were neutralized by diethyl ether. Material was prepared, labeled, identified, and conserved in the laboratory. Identification was accomplished by analyzing morphology of the wings and structure of the genital armature of males. Genital preparations were made using standard methods. Both col-

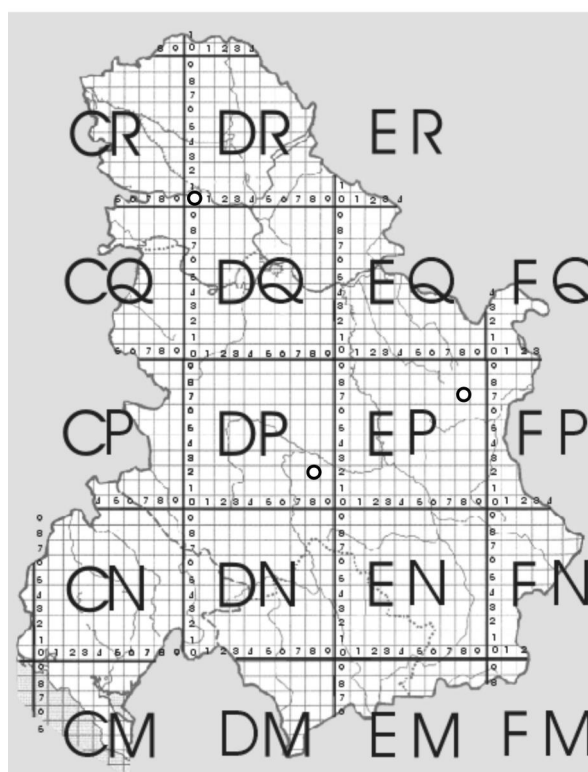


Fig. 1. Map of localities with UTM grids for species of the genus *Schrankia* Hübner found in Serbia: 1 - Brestovačka Banja EP87, 2 - Goč (DP82), 3 - Fruška Gora: Ledinci (DR00). The side of quadrants on the given map is 10 km long.

lected material and genital preparations are deposited in the collection of author. The specimen of *Shrankia costaestrigalis* caught by Prof. Dr. K. Vasić (VASIĆ, 2002) was not available to the author of this paper. The key of RÁKOSY (1996) was used to identify *Shrankia taenialis* and *Shrankia costaestrigalis*, whose taxonomic position is considered to be as given by KARSHOLT AND RAZOVSKI (1996).

The localities of findings are marked on a map with UTM grids (Fig. 1).

The species in question were found at the following three localities in Serbia :

- Brestovačka Banja (EP87), vicinity of the town of Bor, Eastern Serbia. The altitude of this locality is about 350 m.

- Mt. Goč (DP82), vicinity of the town of Kraljevo, Central Serbia. This locality's altitude is about 300 m.

- Ledinci (DR00), Fruška Gora National Park (in the northern province of Vojvodina), wich is shown on the map with appropriate scale. The altitude of this locality is about 340 m.

The photographs of prepared specimens given below were taken in the laboratory of Faculty of Forestry in Belgrade and in the author's laboratory in Novi Sad. Those of genital preparations were made with a MOTIC apparatus at the University of Novi Sad (Department for Biology). The resolution used were 300 x 300 dpi and 600 x 600 dpi.

RESULTS AND DISCUSSION

Shrankia costaestrigalis (Stephens, 1834).



Fig. 2. *Shrankia costaestrigalis* (Stephens). Male found in Brestovačka Banja

One male was found in Brestovačka Banja (vicinity of the town of Bor, Eastern Serbia) on October 18, 2000 (Fig. 2). Another male was found on Mt. Goč (vicinity of the town of Kraljevo, Central Serbia) in July of 1980.

Shrankia taenialis, (Hübner, 1809) (Figs. 3a, 3b, and 3c).

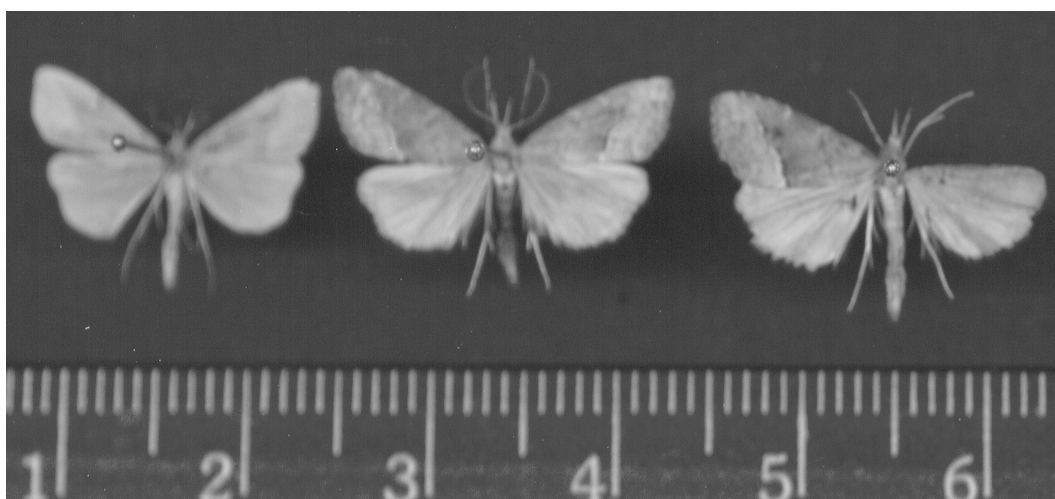


Fig. 3 a,b,c. *Shrankia taenialis* (Hübner). Males found at Ledinci Fruška Gora National Park.

Two males (Figs. 3b and 3c) were found at Ledinci in Fruška Gora National Park on June 2, 2002. One male (Fig. 3a) was found there on August 23, 2003.

The species *Shrankia costaestigalis*. Distribution: Euroasian species. Known throughout the whole of Europe, except in Norway and Iceland. Bionomy: *Shrankia costaestigalis* is linked with wetlands, muddy meadows, and marshy forests. Caterpillars feed on *Calluna*, *Thymus*, or *Melampyrum*.

Flight period: V-VII and VIII-IX, two generations.

Description of main characters of male's genital armature (Fig. 4): *Valvula* tapered, set below apex, which is with strong spines. *Costa* truncate, spined. Costal arm directed upwards. *Sacculus* directed inwardly, with a blunt point. *Aedoeagus* bulbed at the base.

The species *Shrankia taenialis*. Distribution: Ponto-Mediterranean species. Rare and local. Known throughout much of Europe, but not in Italy, Portugal, Ireland, Norway, Iceland, or Finland. Bionomy: This species is linked with dry or wet warm habitats, occurring also in well insulated deciduous and mixed forests, especially near the edges of roads.

Flight period: VI-VII and VIII-X, two generations. Lures and electric light attract the moths.

Description of main characteristics of male's genital armature (Fig. 5): Costal arm not devel-

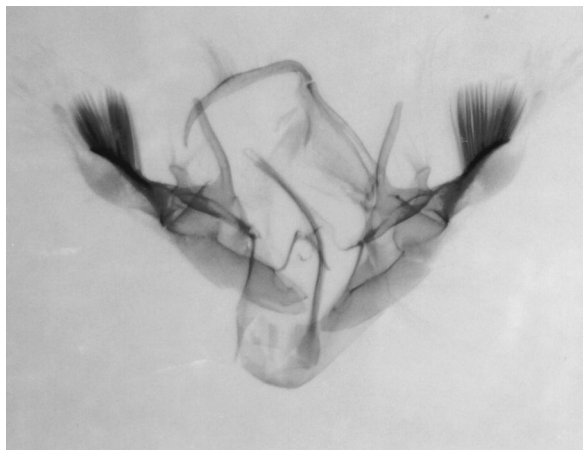


Fig. 4. *Shrankia costaestrigalis* (Stephens). Male, genital preparation.

oped. *Costa* obliquely truncate, spined. *Valvula* developed, inserted before *apex*. *Sacculus* directed inwardly, finely spined. *Vesica* finely dentate.

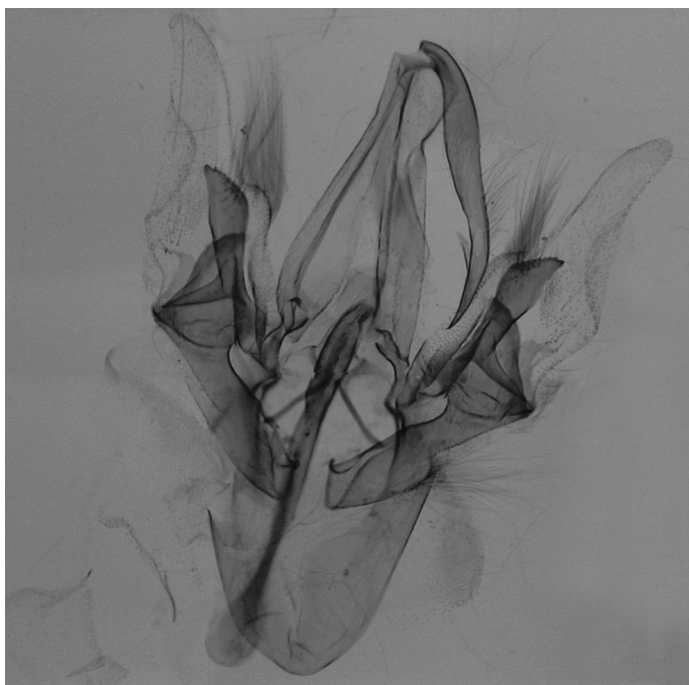


Fig. 5. *Shrankia taenialis* (Hübner). Male, genital preparation.

The bionomic data given above were taken from RÁKOSY (1996), while the distribution data were taken from KARSHOLT AND RAZOVSKI (1996).

CONCLUSIONS

Recent research indicated that the subfamily Strepsimaninae is represented in the fauna of Serbia by the genus *Schrankia* and species *costaestrigalis* (VASIĆ, 2002).

Presented here is the second record of the species *Schrankia costaestrigalis*, which was found in Brestovačka Banja (vicinity of the town of Bor, Eastern Serbia) (leg. D. Stojanović).

In addition to this, three males of the species *Schrankia taenialis* were found in Fruška Gora National Park (leg. D. Stojanović). This species is new for the fauna of Serbia. The total number of noctuids in Serbia is hereby increased to 527 species.

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**НОВА ВРСТА РОДА *SCHRANKIA* HÜBNER (LEPIDOPTERA:
NOCTUIDAE) ЗА ФАУНУ СРБИЈЕ**

Д. Стојановић

До сада је забележена једна врста из рода *Shrankia* Hübner, 1825 за фауну Србије (Lepidoptera: Noctuidae). Врсту *Shrankia costaestrigalis* (Stephens, 1834) уловио је професор Константин Васић на планини Гоч (Краљево, централна Србија), а аутор овог рада уловио је у Брестовачкој бањи (околина Бора, источна Србија). Овде приказана врста *Shrankia taenialis* (Hübner) (лег. Д. Стојановић) представља новооткривену врсту за фауну Србије. Врста је уловљена на подручју Националног парка Фрушка гора (покрајина Војводина). У раду је дат приказ основних карактеристика врста *Shrankia costaestrigalis* (Stephens) и *Shrankia taenialis* (Hübner) забележених у Србији.

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