

FIVE SPECIES OF NOCTUIDAE (LEPIDOPTERA) NEW FOR THE FAUNA OF SERBIA AND MONTENEGRO

¹D. STOJANOVIĆ AND ²M. GLAVENDEKIĆ

¹ Fruška Gora National Park, Zmajev trg 1, 21208 Sremska Kamenica, Serbia and Montenegro.
E-mail: dejanstojanovic021@yahoo.co.uk

² Šumarski fakultet, Kneza Višeslava 1, 11030 Beograd, Serbia and Montenegro.
E-mail: gnilka@eunet.yu

ABSTRACT: Five hundred and twenty species of the family Noctuidae (Lepidoptera) have been recorded in Serbia until now. There are also research data for Noctuidae of Mt. Durmitor in Montenegro (265 species). The species *Ophiusa tirhaca* (Cramer, 1773), *Grammodes bifasciata* (Petagna, 1787), *Zebeeba falsalis* (Herrich-Schäffer, 1839), *Trichoplusia circumscripta* (Freyer, 1831), and *Ctenoplusia accentifera* (Lefèbvre, 1827) are new for the fauna of Serbia and Montenegro. These species were found around the Bay of Kotor (Boka Kotorska) in southwest Montenegro.

The present records of the species *Trichoplusia circumscripta* (Freyer, 1831) and *Ctenoplusia accentifera* (Lefèbvre, 1827) represent the first findings of these species for former Yugoslavia.

Key WORDS: Noctuidae, Lepidoptera, moths, fauna, Serbia and Montenegro

INTRODUCTION

Previous research in Serbia and Montenegro indicates five hundred and twenty species of the family Noctuidae have been recorded to date in Serbia and two hundred and sixty-five in Montenegro. The present paper treats five species new for the fauna of Serbia and Montenegro. Specimens of this species were found around the Bay of Kotor (Boka Kotorska) in southwest Montenegro.

AREA EXAMINED

As mentioned above the species were found around Boka Kotorska (southwest Montenegro). The locality of finding is marked on the map with UTM grids (Fig. 1). The side of each quadrant on the given map is 10 km long. The locality is marked as (CN00). The altitude is about 35 m.

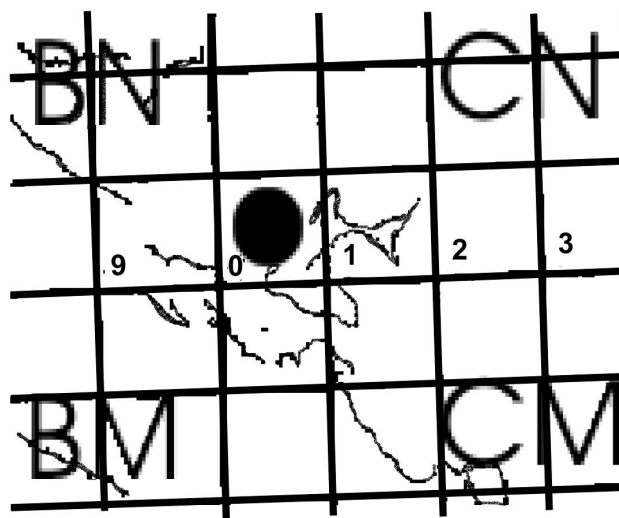


Fig. 1. Locality of investigation.

RESULTS

The following five species of family Noctuidae were found around Boka Kotorska (southwest Montenegro):

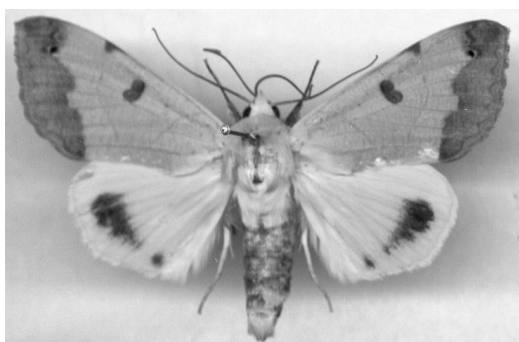
Ophiusa tirhaca (Cramer, 1773). One male (Fig. 2) and one female were found in Meljine, Boka Kotorska (southwest Montenegro), on May 02-18, 2002 and October 02, 2004, respectively.

Grammodes bifasciata (Petagna, 1787). One female (Fig. 3) was found in Meljine, Boka Kotorska (southwest Montenegro), on May 2-18, 2002. Two males were found on October 2, 2004, at the same locality.

Zebeeba falsalis (Herrich-Schäffer, 1839). Eight males (Fig. 4) were found in Meljine, Boka Kotorska (southwest Montenegro), on May 2-18, 2002. One female was found on October 2, 2004, at the same locality.

Trichoplusia circumscripta (Freyer, 1831). One male (Fig. 5) was found in Meljine, Boka Kotorska (southwest Montenegro), on May 2-18, 2002.

Ctenoplusia accentifera (Lefèbvre, 1827). Eight males (Fig. 6) were found in Meljine, Boka Kotorska (southwest Montenegro), on May 2-18, 2002. Three males were found on October 2, 2004, at the same locality.



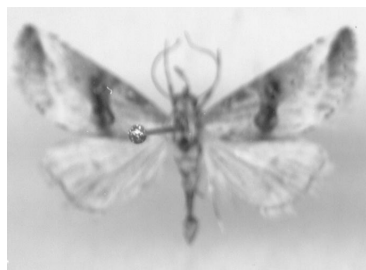
2



3



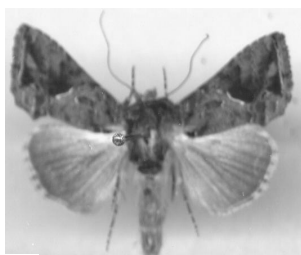
4a



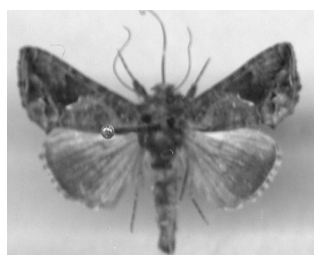
4b



5



6a



6b



6c

Figs. 2-6. 2-*Ophiusa tirhaca* (Cramer, 1773), male; 3-*Grammodes bifasciata* (Petagna, 1787), female; 4-*Zebeeba falsalis* (Herrich-Schäffer, 1839) (4a. female, 4b. male); 5-*Trichoplusia circumscripta* (Freyer, 1831), male; 6-*Ctenoplusia accentifera* (Lefèbvre, 1827) (6a. and 6b. females, 6c. male).

DISCUSSION

Ophiusa tirhaca (Cramer, 1773). *Distribution*: Paleotropical-subtropical species. Rare and local. Found in Spain, Portugal, Austria, Romania, Bulgaria, France, Turkey, Greece, Italy, and Bosnia and Herzegovina. Mediterranean species. *Bionomy*: It occurs in warm, coastal habitats. *Flight period*: III-X. Larvae feed on *Rhus* sp. and *Pistacia lentiscus* L. Description of male genital armature (Fig. 7): *harpae* rounded with large *clavus*. *Saccus* conical, developed. *Uncus* like three-armed fork. *Socius* present on sides below *uncus*. Penis shaped irregularly, with bulbed *coecum* (Fig. 8).

Grammodes bifasciata (Petagna, 1787). *Distribution*: African-tropic subtropical species. Like *Ophiusa tirhaca* (Cramer, 1773), it is found all around the Mediterranean coast, in Spain, Portugal, Austria, Bulgaria, Hungary, France, Turkey, Greece and Italy. *Bionomy*: It occurs in warm, Mediterranean coastal habitats. *Flight period*: IV-XI. Larvae feed on *Rubus*, *Cistus* and *Smilax* species. Description of female's genital armature (Fig. 9); *Lamellae postvaginalis* triangular, *bursa copulatrix* double-bulbed.

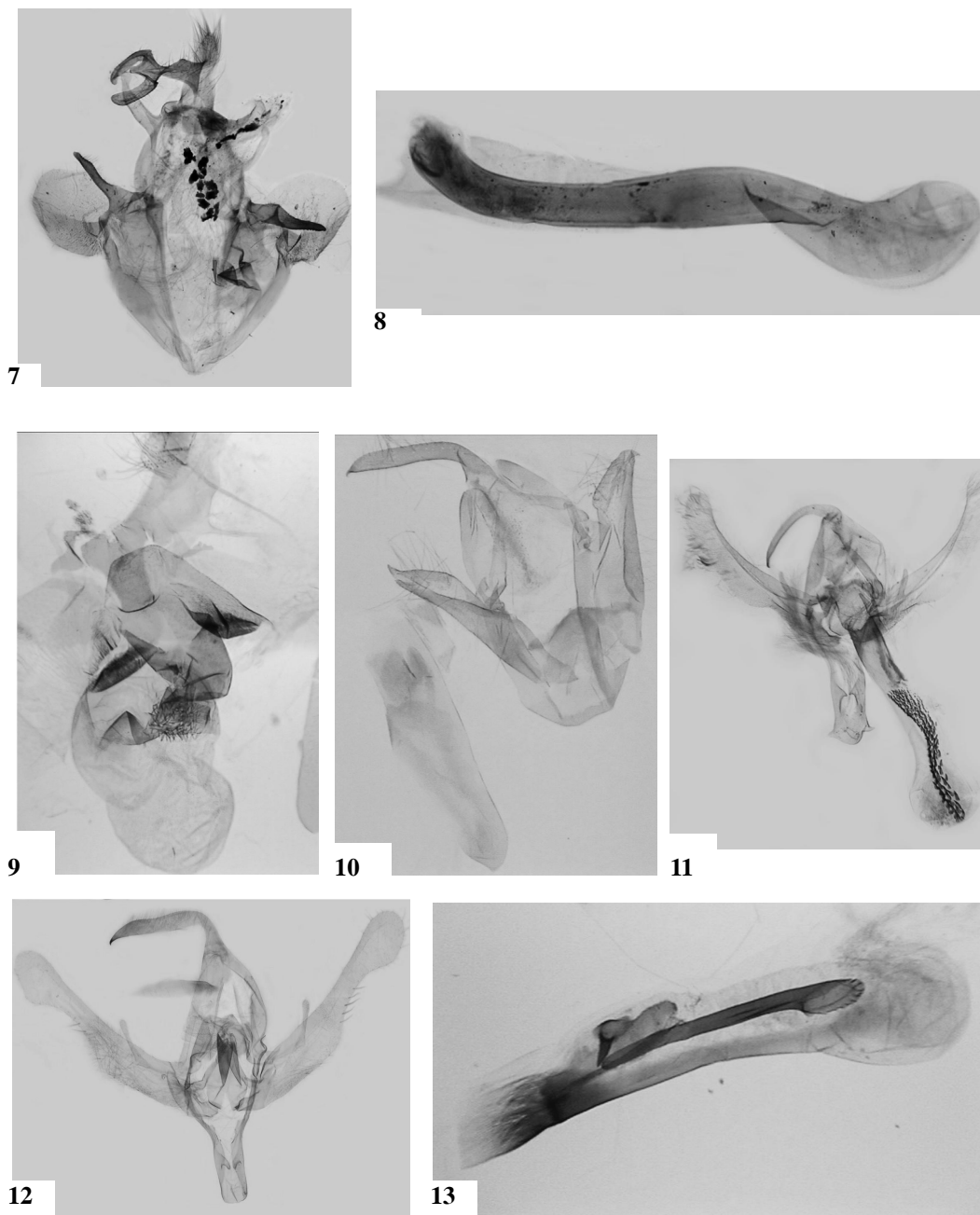
Zebeeba falsalis (Herrich-Schäffer, 1839). *Distribution*: Holomediterranean species. Found all around Mediterranean coast, similar like *Ophiusa tirhaca* (Cramer, 1773) and *Grammodes bifasciata* (Petagna, 1787), in Spain, Portugal, Bulgaria, France, Greece, and Italy. There is also data indicating its finding in Dalmatia (in Novi Vinodolski) on June 19, 1975 (Hacker, 1989). *Bionomy*: It occurs in warm Mediterranean coastal habitats. *Flight period*: III-X. Description of male's genital armature (Fig. 10): *uncus* long and with parallel sides. *Sacculus* extended to *cucullus* as *procesus ventralis*, *poma* large, *cucullus* elongated and tapered.

Trichoplusia circumscripta (Freyer, 1831). *Distribution*: Near Eastern-Mediterranean species. The species is very rare. Found in the eastern part of the Mediterranean region, more precisely in Sardinia, Sicily, Southern Italy and Greece. *Bionomy*: The species occurs in warm coastal areas in habitats with maquis. *Flight period*: IV-X. Description of male's genital armature (Fig. 11): *cucullus* rounded and elongated on ventral side, a bulge to *sacculus*. *Clavus* finger-like. *Saccus* with two extensions, one across another, and two lateral horns on the bottom. *Ampula* short and straight. *Coecum penis* bulbed. Many larger and smaller *cornuti*.

Ctenoplusia accentifera (Lefèbvre, 1827). *Distribution*: Paleotropical-subtropical species. The species is rare in Europe. Found around the coasts of the Mediterranean Sea, in France, Spain, Portugal, Sicily, Italy and Greece. Hacker (1989) cites data for Dalmatia, but Nowacki (1998) and Fibiger don't quote it for ex-Yugoslavia. *Bionomy*: The species occurs in warm coastal habitats, areas in with maquis. *Flight period*: IV-X. Larvae feed on *Mentha* and *Coleus* sp. Description of male's genital armature (Fig 12, 13): *Clavus* long, with rounded peak. *Ampula* dorsally elongated, wider on top. *Fultura inferior* with slit to *saccus*. *Cucullus* paddled. Several strong hairs ventral side under the *cucullus*. *Saccus* with two extensions, one across another. *Penis* with larger and smaller *cornuti* (one each).

ACKNOWLEDGEMENTS

The authors would like to thank Prof. Dr. Smiljka Šimić and Prof. Dr. Ljubodrag Mihajlović for their useful advice and valuable assistance.



Figs. 7-13. 7-*Ophiusa tirhaca* (Cramer, 1773), male; 8-*Ophiusa tirhaca* (Cramer, 1773), penis; 9-*Grammodes bifasciata* (Petagna, 1787), female; 10-*Zebeeba falsalis* (Herrich-Schäffer, 1839), male; 11-*Trichoplusia circumscripta* (Freyer, 1831), male; 12-*Ctenoplusia accentifera* (Lefèbvre, 1827), male; 13-*Ctenoplusia accentifera* (Lefèbvre, 1827), penis.

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ПЕТ НОВИХ ВРСТА NOCTUIDAE (LEPIDOPTERA) ЗА ФАУНУ СРБИЈЕ И ЦРНЕ ГОРЕ

¹Д. Стојановић и ²М. Главендекић

¹Национални парк Фрушка гора, Змајев трг 1, 21208 Сремска Каменица,
Србија и Црна Гора, Е-пошта: dejanstojanovic021@yahoo.co.uk

²Шумарски факултет, Универзитет у Београду, Кнеза Вишеслава 1, 11030 Београд,
Србија и Црна Гора, Е-пошта: gmlka@eunet.yu

У Србији је до сада забележено 520 врста за фауну *Noctuidae* (*Lepidoptera*), а за Црну Гору постоје подаци истраживања са планине Дурмитор (око 260 врста за фауну Црне Горе), такође постоје и публиковани подаци страних аутора. Врсте *Ophiusa tirhaca* (Cramer, 1773), *Grammodes bifasciata* (Petagna, 1787), *Zebeeba falsalis* (Herrich-Schdffer, 1839), *Trichoplusia circumscripta* (Freyer, 1831) и *Ctenoplusia accentifera* (Lefebvre, 1827) представљају нове врсте за фауну Србије и Црне Горе. Врсте су откривене у Бококоторском заливу (југозападна Црна Гора). Откриће врста *Trichoplusia circumscripta* (Freyer, 1831) и *Ctenoplusia accentifera* (Lefebvre, 1827) у Србији и Црној Гори уједно представља и први налаз ових врста за предходну Југославију.

Accepted June 29, 2005