

THREE SPECIES OF THE GENUS *MYTHIMNA* (LEPIDOPTERA: NOCTUIDAE, HADENINAE) NEW FOR THE FAUNA OF SERBIA AND MONTENEGRO

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Abstract - Five hundred and twenty species have been recorded for the fauna of Noctuidae (Lepidoptera) in Serbia (Va si ć, 2002). In addition to this, there are the research data for Mt. Durmitor in Montenegro (about 260 species have been recorded for the fauna of Noctuidae in Montenegro). The species *Mythimna languida* (Walker, 1858), *Mythimna congrua* (Hübner, 1817), and *Mythimna riparia* (Rambur, 1829), represent species of the genus *Mythimna* (Lepidoptera: Noctuidae, Hadeninae) new for the fauna of Serbia and Montenegro. These species were found in the Bay of Kotor or Boka Kotorska (southwest Montenegro). The finding of *Mythimna languida* represents the northernmost finding of that species in Europe.

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

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INTRODUCTION

Previous research in Serbia and Montenegro shows that 520 species of the family Noctuidae have been recorded in Serbia and 265 species of the same family in Montenegro until now. The present paper treats several interesting species of the genus *Mythimna* (Lepidoptera: Noctuidae, Hadeninae), namely *Mythimna languida* (Walker, 1858), *Mythimna congrua* (Hübner, 1817) and *Mythimna riparia* (Rambur, 1829). All of these species were found on the Bay of Kotor or Boka Kotorska (southwest Montenegro) and have not been recorded until now for the fauna of Serbia and Montenegro.

Thirty-seven species are known for the genus *Mythimna* in Europe (P e t t e r s o n; 1990, H a c k e r, 1989; K a r s h o l t and R a z o v s k i, 1996). Twenty-three species of that genus have been recorded in Serbia and Montenegro until now (including the findings reported in this paper). Based on the geographical distribution of species, it can be expected that some additional species will be found in the future. Here we will speculate which unrecorded species could also be present in Serbia and Montenegro.

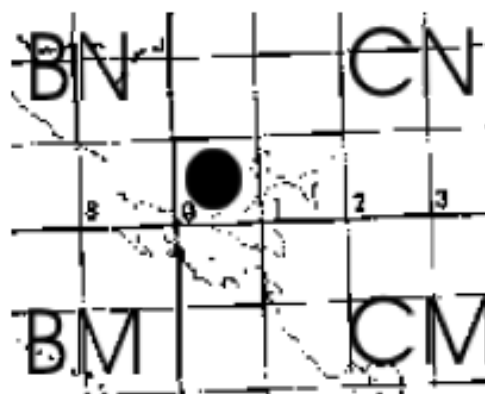


Fig. 1. Locality of finding

MATERIAL AND METHODS

The present research was carried out by field and laboratory methods. Field work included standard methods of entomological research on moths. The species in question were found on the Bay of Boka or Boka Kotorska (southwest Montenegro). The locality of finding is marked on the map with UTM grids (Fig. 1). Each side of the quadrants on the given map is 10 km long. The locality is marked as (CN00). The altitude is about 35 m.

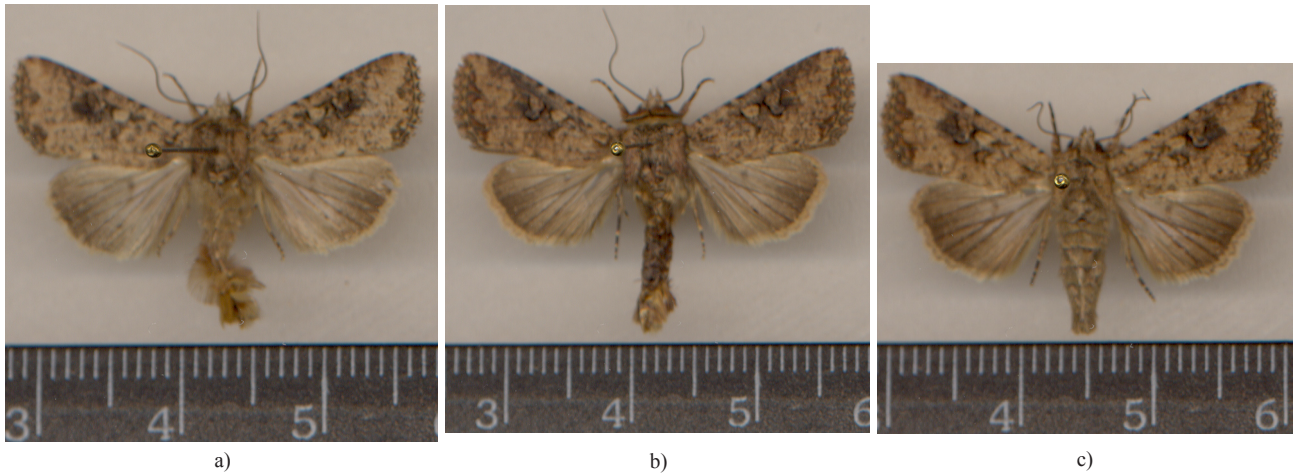


Fig. 2. *Mythimna languida* (Walker, 1858), males (a, b) and female (c)



Fig. 3. *Mythimna congrua* (Hübner, 1817). Males



Fig. 4. *Mythimna riparia* (Rambur, 1829). Male

RESULTS

The following five species of the genus *Mythimna* (Lepidoptera: Noctuidae, Hadeninae) were found on the Bay of Boka or Boka Kotorska (southwest Montenegro):

Mythimna languida (Walker, 1858). One male (Fig. 2a) was found in Meljine on the Bay of Kotor or Boka Kotorska (southwest Montenegro) on May 2-18, 2002. One male and one female (Fig. 2 b, c) were found on October 4, 2004.

Mythimna congrua (Hübner, 1817). Two males (Fig. 3) were found in Meljine on the Bay of Kotor or Boka Kotorska (southwest Montenegro) on October 2, 2004.



Fig. 5. *Mythimna languida* (Walker, 1858). Male.



Fig. 6. *Mythimna languida* (Walker, 1858). Aedeagus.

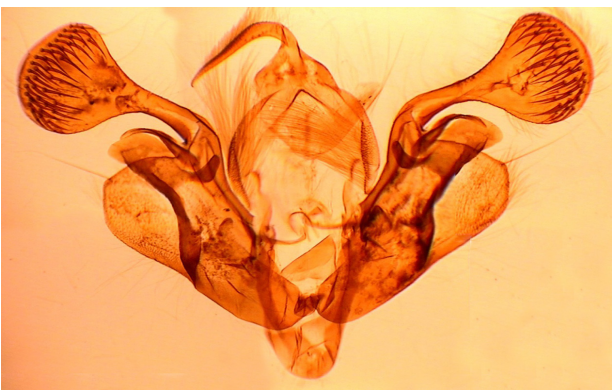


Fig. 7. *Mythimna congrua* (Hübner, 1817). Male.

Mythimna riparia (Rambur, 1829). One male (Fig. 4) was found in Meljine on the Bay of Kotor or Boka Kotorska (southwest Montenegro) on October 1, 2004.

DISCUSSION

The species *Mythimna languida* (Walker, 1858). Distribution: Palearctic-subtropical species. It is very rare



Fig. 8. *Mythimna congrua* (Hübner, 1817). Aedeagus.

in Europe. The species has been found in Turkey, Greece and Macedonia. It is a Mediterranean species. Bionomy: it occurs in warm and wet coastal habitats. Migratory species. Flight period: III-V, X-XII. The polyphagous larvae feed on herbaceous plants. Description of male genital armature (Fig. 5): *cucullus* paddled, *clavus* rounded, *saccus*



Fig. 9. *Mythimna riparia* (Rambur, 1829). Male

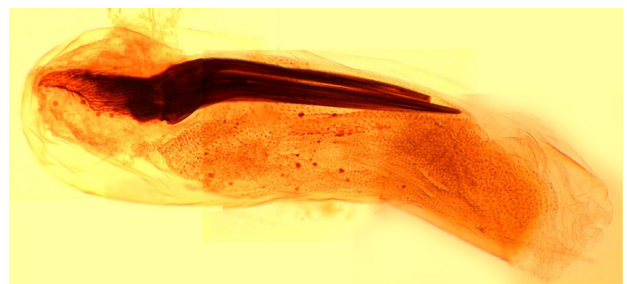


Fig. 10. *Mythimna riparia* (Rambur, 1829). Aedoeagus

lus extended, *aedoeagus* at the end of a tube. One group of larger teeth and two groups of smaller teeth inside present on *aedeagus* (Fig. 6).

The species *Mythimna congrua* (Hübner, 1817).

Distribution: Near Eastern-Mediterranean species, previously found in Spain, Albania, Bulgaria, Romania, Croatia, France, Turkey, Greece and Italy. Bionomy: It occurs in warm and wet Mediterranean coastal habitats. Flight period: III-VI, VIII-X. The polyphagous larvae feed on herbaceous plants. Description of male genital armature (Fig. 7): *cucullus* paddled, *clavus* scobinate and rounded, *clasper* thick and dumpy, *sacculus* elongated, *aedeagus* near *ductus seminalis*, with an elongated larger *cornutus* and several smaller and shorter ones (Fig. 8). The species *Mythimna riparia* (Rambur, 1829). Distribution: Near Eastern-Mediterranean species, previously found around the entire Mediterranean coast, in Spain, Portugal, Bulgaria, France, Greece, Italy, Turkey, Macedonia and Albania (B e s h k o v, 1995, 2000). Bionomy: Xerophilous species. It occurs in warm Mediterranean coastal habitats. Flight period: III-VI, VIII-X. Larvae feed on *Calamagrostis* species. Description of male genital armature (Fig. 9): *cucullus* paddled, *apex* like a small thorn, *clavus* rounded, *juxta* a scobination, *sacculus* elongated, *aedeagus* containing a group of larger, long teeth (Fig. 10). It can be expected that seven more species will be found in Serbia and Montenegro, viz.: *Mythimna palaestinae* (Staudinger, 1897), *Mythimna zae* (Duponchel, 1827), *Mythimna joannisi* (Boursin and Rungs, 1952), *Mythimna herrichi* (Herrich and Schaffer, 1849), *Mythimna umbriger* (Saalmüller, 1891), *Mythimna anderegii* (Boisduval, 1840), and *Mythimna prominens* (Walker, 1856). The remaining seven species of the genus *Mythimna* are from distant geographical locations and cannot be expected here (H a c k e r, 1989; K a r s h o l t and R a z o v s k i, 1996; Z e č e v i ć, 1996, 2002).

CONCLUSIONS

Thirty-seven species are known for the genus *Mythimna* in Europe. In Serbia and Montenegro, twenty-

three species have been recorded until now (including this study). This is the first report of the species *M. languida*, *M. congrua*, and *M. riparia*, (Lepidoptera: Noctuidae, Hadeninae) for the fauna of Serbia and Montenegro. These species were found on the Bay of Kotor or Boka Kotorska (southwest Montenegro). The finding of *M. languida* represents the northernmost finding of that species in Europe.

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REFERENCES

- Beshkov, S.V. (1995), A contribution to the knowledge of the Lepidoptera fauna of Albania 2. Some findings of a collecting trip in September 1993, *Atalanta* **26** (1/2): 365-399, Würzburg.
- Beshkov, S.V. (2000), An Annotated Systematic and Synonymic Checklist of the Noctuidae of Bulgaria (Insecta, Lepidoptera, Noctuidae). *Neue entomologische Nachrichten* **49**, 301 pp. Markt-leuchten.
- Hacker, H. (1989). Die Noctuidae Griechenlands. *Herbipoliana* **2**: 1-589.
- Karsholt, O., Razovski J. (1996). The Lepidoptera of Europe. A Distributional Checklist. Apollo Books, Stenstrup.
- Peterson, C.-A. (1990). *Aletia languida* Walk., A Moth New to Yugoslavia (Lep., Noctuidae, Hadeninae) and other Lepidoptera Species Collected in Yugoslavia, *Acta Entomologica Jugoslavica*, Vol. **23**, Num. 1-2, pp. 73-77.
- Turner, J. (1964). *Die Lepidopteren Fauna Jugoslavisch-Mazedoniens, I. Rhopalocera, Grypocera und Noctuidae*, Prirodnonaučen Muzej Skopje, Posebno izdanije **1**, Skopje, pp. 159.
- Zečević, M. (1996). An Overview of the Butterfly Fauna of Serbia, Aris, Beograd [in Serbian].
- Zečević, M. (2002). The Butterfly Fauna of Timočka Krajina, "Bakar" Bor [in Serbian].
- Vasić, K. (2002). *Fauna of Noctuids (Lepidoptera: Noctuidae) in Serbia*. Zbornik rad. o fauni Srbije, SANU, Beograd, **4**: 165-293. [in Serbian].

ТРИ ВРСТЕ РОДА *MYTHIMNA* (LEPIDOPTERA: NOCTUIDAE, HADENINAE), НОВЕ ЗА ФАУНУ СРБИЈЕ И ЦРНЕ ГОРЕ

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У Србији је до сада забележено 520 врста из фамилије *Noctuidae* (Lepidoptera) а за Црну Гору постоје подаци о истраживањима на подручју планине Дурмитор са око 260 констатованих врста. *Mythimna languida* (Walker, 1858), *M. congrua* (Hübner, 1817) и *M. riparia* (Rambur, 1829), представљају нове врсте из

рода *Mythimna* (Lepidoptera: Noctuidae Hadeninae) за фауну Србије и Црне Горе. Први пут су забележене у Бокоторском заливу (југозападна Црна Гора). За *M. languida* налаз у Бокоторском заливу представља њен најсевернији налаз у Европи.