

**Boursinia discordans (Boursin, 1940), a new Noctuidae species for the fauna of Cyprus (Lepidoptera: Noctuidae)**BALÁZS BENEDEK<sup>1\*</sup> & BALÁZS TÓTH<sup>2</sup><sup>1</sup> H-2045 Törökbalint, Árpád utca 53, HungaryE-mail: benedekia@gmail.com; <https://orcid.org/0000-0001-9533-1176><sup>2</sup> Hungarian Natural History Museum, Department of Zoology, Lepidoptera collection,

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**Abstract –** *Boursinia discordans* (Boursin, 1940) was collected on Cyprus for the first time during a trip in November 2021. Altogether nine males and one female were caught with portable light traps in the Troodos Mountains. Adults and genitalia of both sexes, as well as the habitat, are illustrated. With 7 figures.

**Key words** – grasslands, Mediterranean, new record, winter fauna

## INTRODUCTION

Cyprus is an island country in the eastern basin of the Mediterranean Sea. It is located 70 km south of Asia Minor and 110 km west of the Levant. The surface of the island is dominated by the Troodos Mountains, lying approximately in west-east direction close to 35°N (Fig. 1). The highest peak of these mountains and the whole island is Mt. Olympus with the altitude of 1951 m. Cyprus is not regarded as part of Europe in zoogeographical point of view in monographic works on European moth families (e.g. HAUSMANN 2001, RONKAY *et al.* 2001).

The family Noctuidae (s.s.) is represented by 207 species on Cyprus (LEWANDOWSKI & FISCHER 2004, LEWANDOWSKI 2006, ANONYMOUS 2022). In this paper we aim to record one species of Noctuidae recorded for the first time on Cyprus.

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## MATERIAL AND METHODS

A trip was organised by the first author, Mr Xavier Dobrzanski (Wrocław, Poland), Mr Luca Sattin (Mira, Italy), Mr Giuseppe Longo Turri (Verona, Italy), and Mr Alessandro Floriani (Milan, Italy) from 31 October to 8 November 2021 to Cyprus. Portable light traps with 15 W UV light source were used to attract moths. The light traps were operated from dusk to dawn. Species were identified either on field (Fig. 2) or after collecting, pinning, setting and labelling by traditional methods (Figs 3–4).

When necessary, genitalia slides were also prepared, with maceration in KOH solution, staining with eosin and mounting in Euparal on standard microscope slides (Figs 5–7). Set specimens were photographed with an Olympus C 7070 camera, genitalia slides with an Olympus SZX 12 stereo microscope and softwares DP Controller and DP Manager. Images were adjusted with the software Adobe Photoshop CS6.

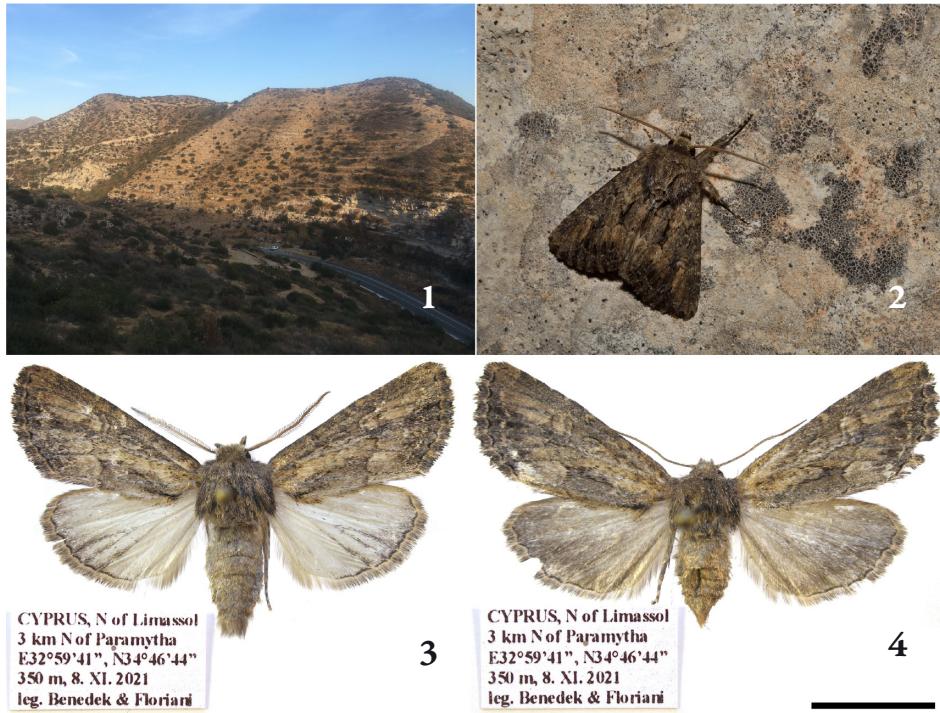
The collected specimens are deposited in the private collections of Balázs Benedek (BBT), Xavier Dobrzanski (XDW), Alessandro Floriani (AFM), and in the Hungarian Natural History Museum (HNHM: 1 ♂, 1 ♀). Full data of labels are given verbatim. Vertical line ( | ) marks the end of a line of the text.

## RESULTS AND DISCUSSION

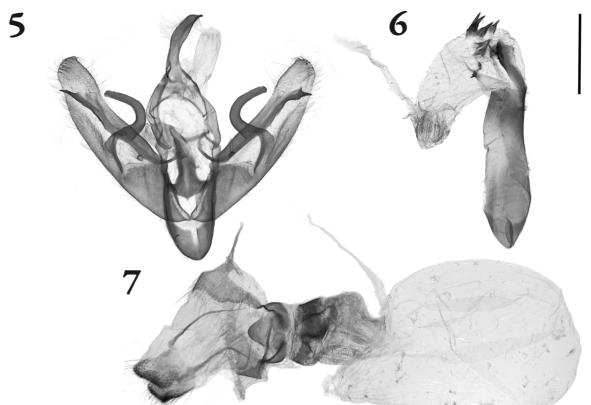
*Boursinia discordans* (Boursin, 1940): 4 ♂♂, 1 ♀ (Figs 3–4): “CYPRUS, N of Limassol | 3 km N of Paramytha | E32°59'41” N34°46'44” | 350 m, 8.XI.2021 | leg. Benedek & Floriani”, slide Nos TB2286m (Figs 5–6), TB2287f (Fig. 7) (coll. HNHM, BBT & AFM), 5 ♂♂: same data but “5–6.XI.2021| leg. Benedek & Dobrzanski” (coll. BBT & XDW).

During the field trip altogether 70 Noctuidae species were recorded. One of them, *B. discordans* was found on Cyprus for the first time, it is new for the fauna of this island. Its collecting site is situated at 350 m a.s.l. at the southern foothills of the Troodos Mountains. The habitat is a hilly slope on autochthonous sedimentary rock of Cyprus, a sequence of alternating layers of chalks and marls, covered by macchia scrub scattered in rich herb vegetation (Fig. 1).

*Boursinia discordans* is distributed in North Africa and from eastern Asia Minor to the Levant (KRAVCHENKO *et al.* 2007). In Asia Minor it is found in some eastern provinces of Turkey (KOÇAK & KEMAL 2018), thus these new records represent the westernmost data of its known range on the Eurasian continental plate. Not yet recorded in any European country and, as Cyprus is a member of the European Union, the species is new also for the fauna of the European Union. The habitat requirements of this species include several types of grassland such as bushy slopes, meadows or forests with rich grass vegetation (KRAVCHENKO *et al.* 2007). The collecting locality on Cyprus matches well with these habitats.



**Figures 1–4.** Documentation of *Boursinia discordans* (Boursin, 1940). **1** = the habitat in the Troodos Mountains, on 350 m a.s.l., Cyprus; **2** = a live male specimen of *B. discordans* in the habitat; **3** = a set male specimen and its label, dorsal view (coll. BBT); **4** = a set female specimen and its label, dorsal view (coll. HNHM). Scale bar to Figs 3–4 = 10 mm. Photos by B. Benedek (Fig. 1), L. Sattin (Fig. 2), and B. Tóth (Figs 3–4).



**Figures 5–7.** Genitalia of *Boursinia discordans* (Boursin, 1940) from Cyprus. **5** = clasping apparatus of male, slide No. TB2286m (coll. HNHM); **6** = aedeagus of male, slide No. TB2286m (coll. HNHM); **7** = female genitalia, slide No. TB2287f (coll. HNHM). Scale bar = 1 mm. Photos by B. Tóth.

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**Boursinia discordans (Boursin, 1940), Ciprus faunájára új bagolylepkefaj  
(Lepidoptera: Noctuidae)**

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Összefoglalás – Cipruson, 2021 novemberében egy gyűjtőíton a *Boursinia discordans* (Boursin, 1940) példányait gyűjtötték. Összesen 9 hím és 1 nőstény érkezett hordozható vödörcsapdák fényére a Troodosz-hegységben. A faj újnak bizonyult a sziget faunájára. A szerzők bemutatják minden két ivar imágóját, ivarszervét és a faj ciprusi élőhelyét. 7 ábrával.

Kulcsszavak – füvespuszta, Mediterráneum, téli fauna, új adat

### ÁBRAMAGYARÁZATOK

**1–4. ábrák.** A *Boursinia discordans* (Boursin, 1940) dokumentációja. **1** = az élőhely a Troodosz-hegységben 350 m magasságban, Cipruson; **2** = *B. discordans* hím példány az élőhelyen; **3** = preparált hím példány és cédrulája, felülnézet (coll. BBT); **4** = preparált nőstény példány és cédrulája, felülnézet, gen. prep. TB2287f (coll. HNHM). Méretléc a 3–4. ábrákhöz = 10 mm. (Fotók: Benedek B. (1. ábra), Sattin L. (2. ábra), és Tóth B. (3–4. ábrák))

**5–7. ábrák.** A *Boursinia discordans* (Boursin, 1940) ciprusi példányainak ivarszerve. **5** = a hím fogkészüléke, gen. prep. TB2286m (coll. HNHM); **6** = a hím aedeagusza, gen. prep. TB2286m (coll. HNHM); **7** = a nőstény ivarszerve, gen. prep. TB2287f (coll. HNHM). Méretléc = 1 mm. (Fotók: Tóth B.)

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