



***POECILOCAMPA ALPINA CANENSIS* (MILLIÈRE, 1876)  
(LEPIDOPTERA: LASIOCAMPIDAE), A NEW MEMBER  
OF THE MOTH FAUNA OF CROATIA**

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**Abstract** – The first records of *Poecillocampa alpina canensis* in Croatia are presented. The species was recorded at two localities in southern Dalmatia, Pobrežje and Nature park Biokovo. This is a montane species active late in the year, with a rather low number of published records in western Europe. The closest populations to the ones from Croatia are from Slovenia and Montenegro. This is the 21<sup>st</sup> species of Lasiocampidae species in the fauna of Croatia.

**KEYWORDS:** distribution, lappet moths, Mt. Biokovo, southern Dalmatia

**Izveček** – *POECILOCAMPA ALPINA CANENSIS* (MILLIÈRE, 1876) (LEPIDOPTERA: LASIOCAMPIDAE), NOV ČLAN HRVAŠKE FAVNE NOČNIH METULJEV

Prispevek poroča o prvi najdbi vrste *Poecillocampa alpina canensis* na Hrvaškem. Vrsta je zabeležena na dveh nahajališčih v južni Dalmaciji, Pobrežju in v Krajinskem parku Biokovo. To je gorska vrsta, aktivna pozno jeseni. Doslej je znanih le manjše število objavljenih podatkov v zahodni Evropi, saj status vrste že ni povsem razjasnjen. Najdbam iz Hrvaške sta najbližja Slovenija in Črna gora. To je 21. vrsta vrste Lasiocampidae v favni Hrvaške.

**KLJUČNE BESEDE:** razširjenost, kokljice, Biokovo, južna Dalmacija

## Introduction

The moths of the family Lasiocampidae are commonly known as eggars, snout moths, or lappet moths. The members of this family are medium to large moths, with a hairy body and a rather robust appearance. Many species have a good mimicry and during the day, while resting, resemble leaves or tree bark. Lappet moths are mostly active during the night, with few exceptions of daytime wandering males during the breeding season (Macek *et al.* 2007). The main distribution of this family is in tropical areas, but they live worldwide (Regie *et al.*, 2000).

This cosmopolite family comprises more than 1500 species classified into 150 genera (Leraut 2006). In Europe, 38 species have been recorded so far (Leraut 2006) while in Croatia so far 20 species are known to occur (Koren 2012).

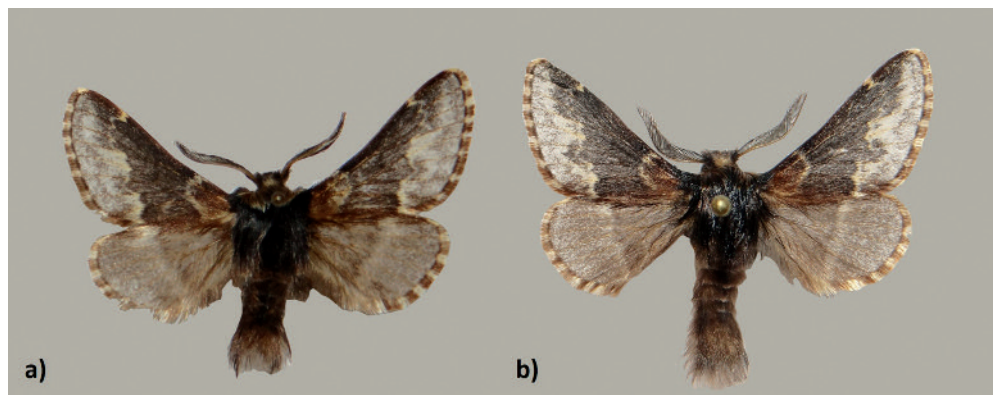
Here we present the first records of the 21<sup>st</sup> species for the fauna of Croatia, *Poecilocampa alpina* (Frey & Wulschlegel, 1874).

## Materials and methods

Specimens were collected using two different methods. One was a 6 W 12 V Portable Heath Moth Trap powered by a 12 V battery and left on the locality during the whole night and then checked in the morning. The second was light tent consisting of a white sheet and a 300 W mercury lamp connected to a Honda 1000 W aggregate. Voucher specimens are deposited in the Croatian Natural History Museum in Zagreb (CNHM) under the collection Kučinić as well in the private Lepidopterological collection Koren.

## Results and discussion

In 2019 a single *Poecilocampa* sp. specimen was collected near Pobrežje, southern Croatia. The specimen was immediately identified as *P. alpina* and deemed to



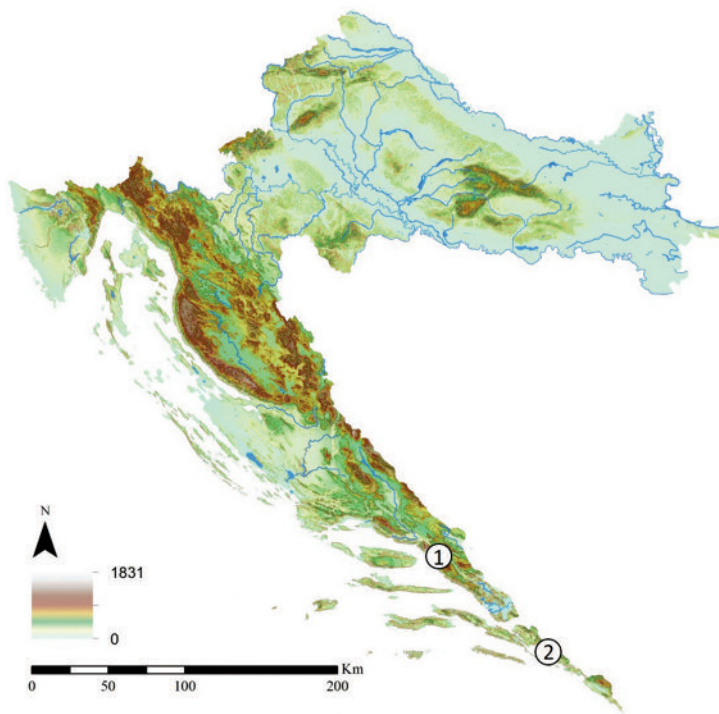
**Fig. 1:** Specimens of *Poecilocampa alpina canensis* from Croatia. a) Biokovo, “Kapelica”, 29.XI.1995, b) Pobrežje, 29.XII.2019. Photo: T. Koren.

represent a new species in the Croatian moth fauna according to Koren (2012). In the communication with the third author, it was revealed that he also collected this species at Mt. Biokovo in 1995 (Fig. 1), but the results were not yet published. The localities (Fig. 2) on which the specimens were collected are (coordinates are given in WGS84 coordinate system):

Splitsko-dalmatinska county, Nature park Biokovo, Mt. Biokovo, near the chapel ("Kod Kapelice" on the label on the specimens), pastures and grasslands, 43°15'33.6" N 17°06'18.9"E, 865 m a.s.l., 29.XI.1995., 3 males, leg. M. Kučinić, collected with light tents.

Dubrovačko-neretvanska county, Pobrežje, deciduous forest fragments surrounded by karstic grasslands (Fig. 3), 42°41'22.5"N 18°04'39.9"E; 368 m a.s.l. 29.XII.2019., 1 male, leg. M. Martinović, collected with a Portable Heath Moth Trap.

Accordingly, this species is now known from two localities in Croatia. The Lasiocampidae family is one of only several families in Croatia with an existing checklist (Koren, 2012), aside from Arctiinae, Crambidae & Pyralidae (Kučinić *et al.* 1997, 2014; Gumhalter 2019). While the checklist was published ten years ago, in the published literature no additional records of *P. alpina* for Croatia were found. Accordingly, this is the 21<sup>st</sup> Lasiocampidae species recorded in the country.



**Fig. 2:** Distribution of *Poecilocampa alpina canensis* in Croatia. 1. Mt. Biokovo, 2. Pobrežje.

The species/subspecies status of this taxon is still not solved. Leraut (2006) revised the genus and placed *P. alpina* to be a subspecies of *Poecilocampa populi* (Linnaeus, 1758); *P. populi alpina* Frey & Wulschlegel, 1874. Leraut (2006) also treated the Italian and Balkan populations as a separate species, *Poecilocampa canensis* (Millière, 1876). This is however not widely accepted and the populations from western Europe are usually attributed to as *Poecilocampa alpina canensis* (Millière, 1876) (Beshkov & Nahirnić 2016, 2019) which is also accepted in this work. A revision based on the genetic of this species group would be needed. We tried to DNA barcode the specimen from Pobrežje, but unfortunately, we were not successful in obtaining viable DNA. In the future the status of this taxon may additionally change after DNA analysis and attribute the populations from the Balkan peninsula to *P. alpina* or *P. populi*, but for now the taxon reported here is threatened as *Poecilocampa alpina canensis* (Millière, 1876) based on the external morphology as is the case in other recent works (Beshkov & Nahirnić 2016, 2019).

*Poecilocampa alpina canensis* is distributed across France, Italy, and the Balkan peninsula (Leraut 2006; Beshkov & Nahirnić 2016, 2019). Still, the distribution is not well known, especially in the western part of the Balkan peninsula. The species is known from Slovenia from Alpine and Primorska regions (Carnelutti 1992). No



**Fig. 3.** Habitat of *Poecilocampa alpina canensis* from Pobrežje. Photo: M. Martinović.



records could be found for Bosnia & Herzegovina (Rebel 1904; Lelo 2004) while a single record exists for Montenegro (Vasić *et al.* 1990). It is known from Serbia from new surveys and some questionable historical records (see Beshkov & Nahirnić 2016). Recently this species was recorded for the first time in Albania (Beshkov & Nahirnić 2019, 2020).

*Poecilocampa alpina canensis* inhabits montane areas, but it can be recorded also at lower altitudes, e.g. at 665 m in Albania Qafa e Mollës, (Beshkov & Nahirnić 2019). The record from Pobrežje is even lower, located at around 368 m a.s.l. which is rather unusual for this species. However, the area around Dubrovnik is rather interesting as even some other, usually montane species like *Dasyptolia ferdinandi* Rühl, 1892 have been recorded in the area (Mladinov 1975).

The records of *P. alpina canensis* from Croatia indicate that the species is more widely distributed, but insufficiently known. Probably the reason for the limited number of records is the late flight season of the species which is active usually in late autumn and winter, from October to January, in the time of the year when not a lot of fieldwork is usually done, especially at the higher altitudes. In any case, the findings of this species can be expected at some other sites in Croatia, but also in Bosnia and Herzegovina, although according to our research, especially in the area of Biokovo *P. alpina canensis* belongs to a rare species. As for all other members of the Lasiocampidae family, Croatian names were proposed (Koren 2012), we propose a name also for this species. Due to its time of occurrence, mostly winter, we propose the name to be “zimski kvočka”, meaning winter egger.

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*Received / Prejeto:* 12. 2. 2022