



Metalampra caucasica Lvovsky, 1995 (Lepidoptera, Oecophoridae) – a new species for Europe

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Abstract: *Metalampra caucasica* Lvovsky, 1995 was recorded in Europe for the first time. Three specimens of both sexes were collected in southern Moravia (Czechia) in 2024 and 2025. The adults and genitalia of both sexes are illustrated.

Key words: DNA barcoding, Palaearctic region, Czechia, faunistics

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Introduction

Metalampra Toll, 1956 is a species-poor genus of Oecophoridae. The genus comprises three species with a Western Palaearctic distribution: *M. cinnamomea* (Zeller, 1839), *M. italica* Baldizzone, 1977 and *M. caucasica* Lvovsky, 1995 (Lvovsky 2006, Savella 2024).

In 2024, two specimens of a *Metalampra* species, previously unknown in Czechia, were recorded in southern Moravia. At first, it seemed that it could belong to a new, yet undescribed species. However, a detailed comparison of habitus and the genitalia of Czech specimens with the drawings of habitus and the genitalia of *M. caucasica* in Lvovsky (1995) revealed a complete match.

Material and methods

The three Czech specimens of *Metalampra caucasica* were netted at day by swarming around old trunks of *Quercus robur*. One specimen of them was barcoded at the Canadian Centre for DNA Barcoding (CCDB, Biodiversity Institute of Ontario, University of Guelph). Conventional primers (described by deWaard *et al.* 2008) were used. Reliable results of the mitochondrial COI gene were obtained for the record NMPC-LEP-1920 (658[0n]). The result is available in

the Barcode of Life Data System (BOLD, Ratnasingham & Hebert 2007, Ratnasingham 2018). The group mean distance was constructed using MEGA11 (Tamura et al. 2021) under the Kimura 2 parameter model for nucleotide substitutions.

Abbreviations

NMPC – National Museum Prague of the Czech Republic

Result

Metalampra caucasica Lvovsky, 1995 (Figs 1, 2)

Metalampra caucasica Lvovsky, 1995: Entomological Review 74 (1): 142–144 (original description).

Material examined. Czechia, Moravia, Lanžhot env., Soutok Lanscape Protected Area, near Drahošova chata [cottage], 48.7075700N, 16.9287950E, 10.vi.2024, 2 ♂♂, gen. prep. G. Elsner, gen. prep. J. Šumpich 25024, DNA Barcode NMPC-Lep-1920 (658[0n]), 14.vi.2025, 1 ♀, gen. prep. J. Šumpich 25120, all J. Liška leg. (NMPC).

Molecular data. BIN: BOLD:AGY2720. The intraspecific average distance of the barcode region is 0.00% (n = 2). The minimum distance to the nearest neighbour, an unidentified Gelechiidae species (BIN: BOLD:AFX2430), is 8.17% (p-dist). Within the genus, there are relatively large distances between individual species in the COI gene, with the species *M. caucasica* being somewhat closer to *M. italica* – 10.7% (p-dist) (Tab. 1, fig. 3).



Fig. 1. Voucher specimens of *Metalampra caucasica* Lvovsky, 1995. A. Male. B. Female.

Species	n	<i>M. italica</i>	<i>M. cinnamomea</i>
<i>Metalampra italica</i>	28		
<i>Metalampra cinnamomea</i>	26	0,0616	
<i>Metalampra caucasica</i>	2	0,1070	0,1120

Tab. 1. The mean intergroup genetic distance of *Metalampra* species created from public records in BOLD (n = number of sequences specimens)

Distribution. Azerbaijan, Russia (Dagestan) (Lvovsky 1995, 2006, 2008), Czechia (this paper).

Biology. Early stages unknown. The specimens were collected in the early evening in a net near the trunk of a large solitary oak tree in mid-June in a floodplain forest at an altitude of

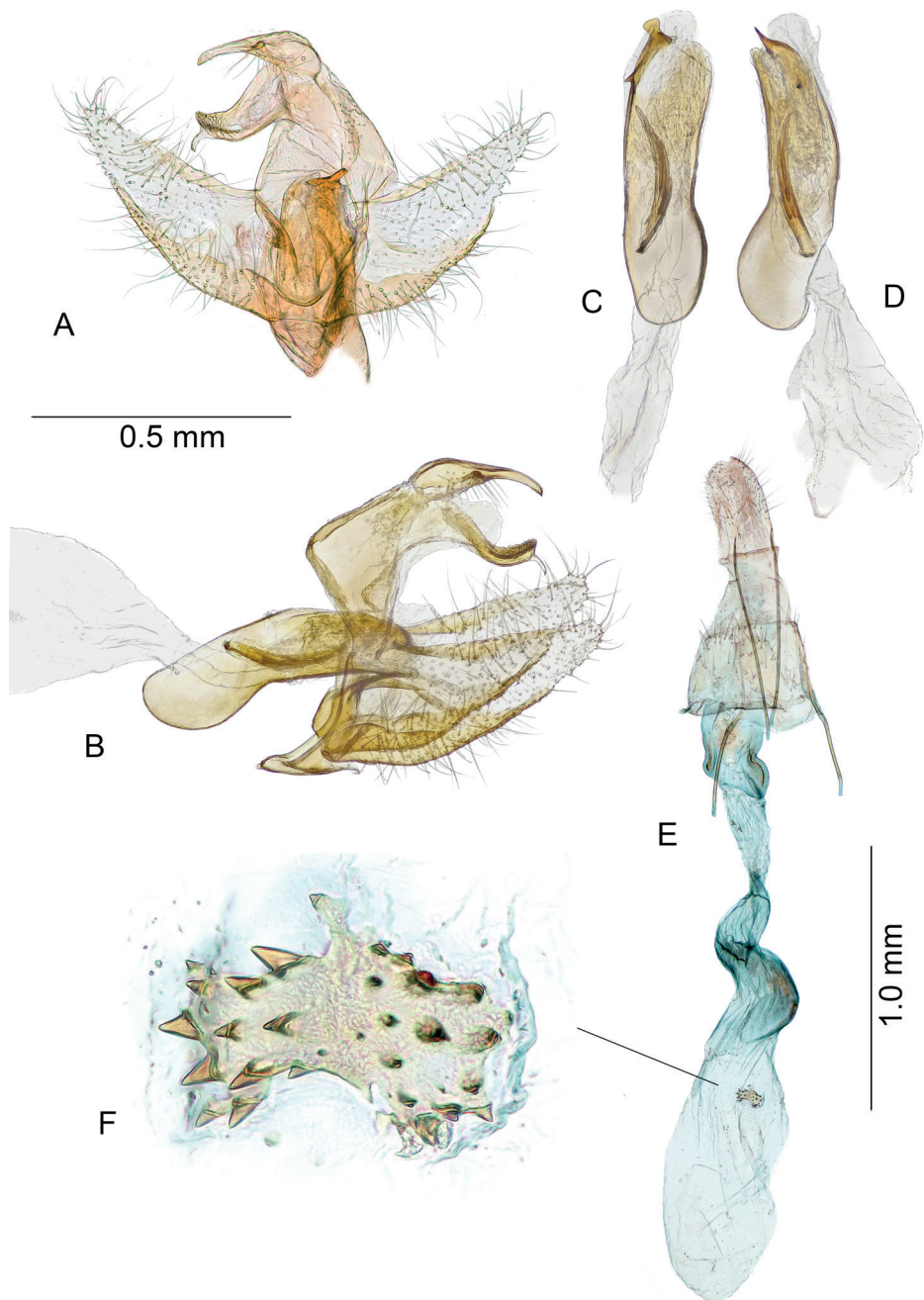


Fig. 2. Male and female genitalia of *Metalampra caucasica* Lvovsky, 1995. A. Open view (with non-separated aedeagus). B. Lateral view (with non-separated aedeagus). C. Aedeagus from dorsal view. D. Aedeagus from lateral view. E. Female genitalia. F. Detail of signum.

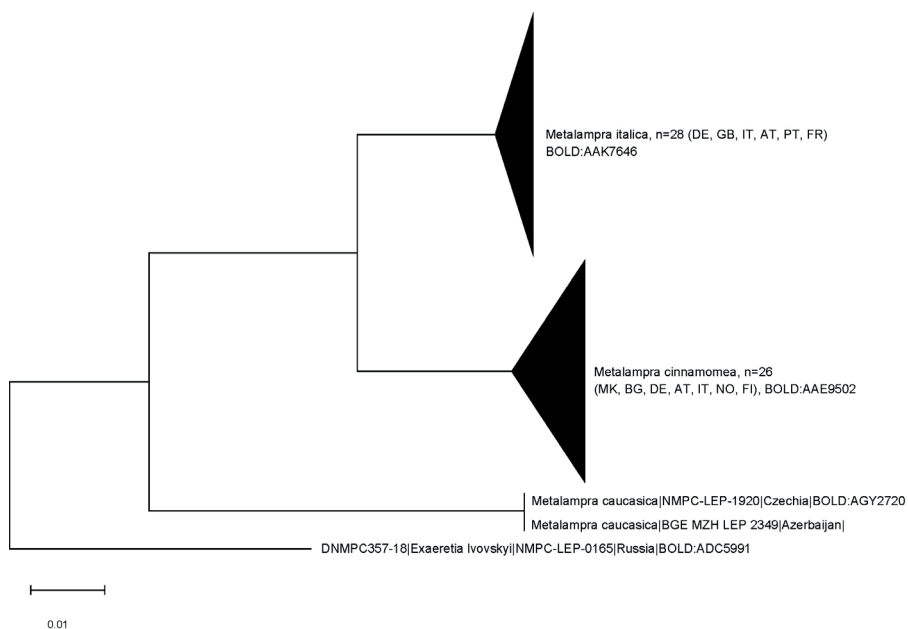


Fig. 4. Unrooted Neighbor-Joining tree of public records of *Metalampra* spp. in BOLD with *Exaeretia lvoovskyi* Buchner, Junnilainen & Nupponen, 2019 as outgroup (Kimura 2-parameter, built with MEGA11 (Kumar et al. 2016)); Source: DNA Barcode data from BOLD (Barcode of Life Database; Ratnasingham 2018).

200 m (Fig. 4). All specimens were caught flying during the day (at the same place, a light trap was used to attract moths during the night but no specimen of *M. caucasica* was recorded). According to Lvovsky (1994), the moths are active from June to early August, flying at dusk and at night and resting on tree trunks during the day.

Remark. *Metalampra caucasica* was fully described in 1995 (Lvovsky 1995), but a year earlier this species was listed and shortly characterized in the overview of species of the subfamily Oecophorinae of Russia and neighbouring countries (Lvovsky 1994). The reason might be that Lvovsky supposed that the description would be published in one of the issues of this journal a year earlier (S. Sinev, pers. comm.).

Discussion

Metalampra caucasica was described from a habitat near Kusarchay village in the Khachmaz district of Azerbaijan (Lvovsky 1995). According to Lvovsky (2006), it occurs locally, but sometimes is not uncommon.

Interestingly, the species has escaped attention in southern Moravia for so long as this area has been studied quite intensively by lepidopterologists in recent decades (Laštůvka et al. 2022). On the other hand, several similarly interesting records originating from places far from the traditional occurrence or description, have recently appeared in central Europe, e.g. *Tebenna chingana* (Danilevsky, 1969) in southern Moravia in 1993 (Laštůvka et al. 1994), *Epermenia sinjovi* Gaedike, 1993 in Austria and Germany (Huemer et al. 2023) or *Paradasycera insignis* (Christoph, 1882) in Slovakia in 2015 (Tokár et al. 2024).



Fig. 5. Habitat of *Metalampra caucasica* Lvovsky, 1995 in Czechia. A. Low undergrowth with old dry oak tree surrounded by deciduous trees and shrubs. B. Old dry oak tree where *M. caucasica* has been repeatedly recorded.

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