

# *Epicallima icterinella* (Mann, 1867) new to Italy (Lepidoptera: Oecophoridae)

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## Abstract

*Epicallima icterinella* (Mann, 1867), an interesting Oecophoridae species, present only in the Balkan Peninsula and in the islands of Cyprus and Crete, was found for the first time in Italy in Basilicata.

KEY WORDS: Lepidoptera, Oecophoridae, *Epicallima icterinella*, Italy.

## *Epicallima icterinella* (Mann, 1867) nueva para Italia (Lepidoptera: Oecophoridae)

## Resumen

*Epicallima icterinella* (Mann, 1867), una interesante especie de la familia Oecophoridae, sólo presente en la Península de los Balcanes y en las islas de Chipre y Creta, se encontró por primera vez en Italia en Basilicata.

PALABRAS CLAVE: Lepidoptera, Oecophoridae, *Epicallima icterinella*, Italia.

## Introduction

In the context of an ongoing study on Lepidoptera fauna in Latium, research has been carried out for many years and showed how much the fauna (PINZARI, 2016a; PINZARI, 2018b; PINZARI & PINZARI, 2019a, 2019b, 2019c) and biology (PINZARI & SBORDONI, 2013; PINZARI, 2016b, 2019; PINZARI *et al.*, 2017, 2018a, 2019a, 2019b) of Lepidoptera in central Italy are still scarcely known.

The genus *Epicallima* included six species in Europe (VAN NIEUKERKEN & KARSHOLT, 2019): *E. bruandella* (Ragonot, 1889) in central Europe from France to Romania; *E. formosella* ([Denis & Schiffermüller], 1775) an Holarctic species, present almost everywhere in Europe, Caucasus, Egypt, Israel, central Asia, USA (LVOVSKY *et al.*, 2016); *E. gerasimovi* (Lvovsky, 1984) in Russia and eastern palearctic; *E. icterinella* (Mann, 1867) in Bulgaria, Croatia, former Yugoslavia, Cyprus, Greek mainland, Kriti and Near East (LVOVSKY *et al.*, 2016); *E. mercedella* (Staudinger, 1859) in Portugal and Spain; *E. mikkolai* (Lvovsky, 1995) in Spain and North Africa (VIVES MORENO, 2003).

In Italy two species are present: *E. formosella*, quoted generically in the North, in the South, in Sardinia and in Sicily (BALDIZZONE *et al.*, 1995) and also recorded in Sila in Calabria (LEONETTI *et al.*, 2018); *E. bruandella* in Alto Adige (South Tyrol), Piemonte and Emilia Romagna (TOKAR *et al.*, 2005; BALDIZZONE *et al.*, 2013).

In recent times, research activity has also been extended to the South of Italy and to the Islands with results (PINZARI & PINZARI, 2019) which lead to a further attention. This paper illustrates a first result of the survey campaign carried out in Basilicata in July 2019: the finding of *Epicallima icterinella* (Mann, 1867).

## Materials and methods

Collecting site: The survey on Lepidoptera fauna in South of Italy was carried out on 8-14 July 2019 at Marina di Pisticci (MT) both on the coastal dune and in the cultivated areas in the surrounding of Masseria Macchia Relais San Pio & Marina. Moths were light-trapped by Mixed Light 160 W lamp mounted in fixed sites with electricity available.

Species identification: The moth species was identified by external *habitus* using the taxonomic characters reported by PARENTI (2000) and TOKAR *et al.* (2005).

## Results

*Epicallima icterinella* (Mann, 1867)

Record: ITALY, Basilicata, Marina di Pisticci (MT), at sea level, 1 ♂, 6-VII-2019, Manuela and Mario Pinzari leg.

Notes: The specimen is a male with a fresh appearance (fig. 1). It was attracted by lux at 10 P. M. within an area mainly cultivated with citrus groves some kilometres away from the coastal dune.

Biology: Larvae probably feed under the bark of old trees from summer to spring of the following year, with hibernation (SPULER, 1910; TOKAR *et al.*, 2005; LVOVSKY *et al.*, 2016). Adults are on the wing from mid-May until August.

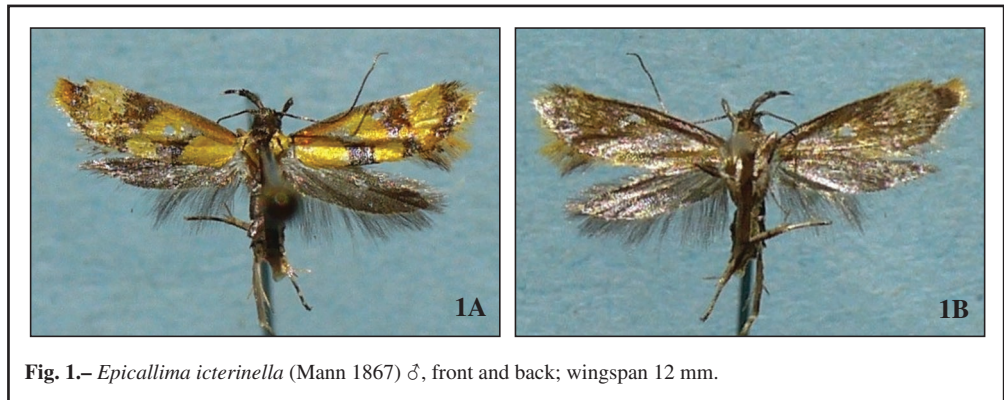


Fig. 1.— *Epicallima icterinella* (Mann 1867) ♂, front and back; wingspan 12 mm.

## Remarks

The *habitus* of *E. icterinella* allows a certain distinction with respect to *E. formosella* and *E. bruandella* (TOKAR *et al.*, 2005), both present in Italy. Comparing *icterinella* with other European species the species determination is based on the following features: *E. mercedella* has a very similar wing pattern, but the wing drawing is margined by white colour, and also the head and *prothorax* are white; on the contrary, in *icterinella* the head and *prothorax* are brown; *E. gerasimovi* has a similar wing pattern but different at the basal area on upper surface of the forewings (LVOVSKY, 1984); *E. mikkolai* has a wing pattern substantially different from *E. icterinella* (VIVES MORENO, 2003).

## Conclusion

The collecting site of *E. icterinella* represents the westernmost finding of the species. The freshness of the specimen let us think that it emerged locally and not came from Greece or the east-Mediterranean islands but we cannot exclude this possibility. The microlepidoptera fauna of the South

of Italy and especially Basilicata are still relatively little known, except for some sites, mainly in the mountains, where research has also been focused in the past, especially on macrolepidoptera. More recent research conducted by Scalercio and others has been showed or confirmed in the South of Italy the occurrence of species present in the Balkan peninsula and in the near east. For example, *Phycita imperialella* (Ragonot, 1887) was recorded at Mt Pollino (SCALERCIO *et al.*, 2016) confirming its presence in Italy previously reported in Lazio with a single specimen by PINZARI *et al.* (2010); *Pempelia amoenella* (Zeller, 1848) at the Ionian coast of Calabria (SCALERCIO *et al.*, 2014); and, *Wegneria panchalcella* (Staudinger, 1871) in Basilicata (BASSI & NEL, 2015) and at the Fiumara Amendolea mouth in Calabria (BALDIZZONE & SCALERCIO, 2018). From the coastal areas but not only, we expect new surprises: dedicated investigations would be needed.

## Acknowledgments

Thanks to Masseria Macchia Relais San Pio & Marina for having allowed the display of the lamp and Mario Pinzari for his support during the sampling.

## BIBLIOGRAPHY

- BALDIZZONE, G., CABELLA, C., FIORI, F., VARALDA, P. G., 2013.– I Lepidotteri del Parco Naturale delle Capanne di Marcarolo (Italia, Piemonte, Appennino ligure-piemontese).– *Memorie dell'Associazione Naturalistica Piemontese*, **12**: 1-349.
- BALDIZZONE, G., GOZMÁNY, L., HUEMER, P., KARSHOLT, O., LVOVSKY, A., PARENTI, U., PASSERIN D'ENTRÈVES, P., RIEDL, T., VARALDA, P. G. & ZANGHERI, S., 1995.– Lepidoptera Gelechioidea: famiglia Oecophoridae, pp. 21-24.– In A. MINELLI, S. RUFFO, S. LA POSTA (eds). *Checklist delle specie della fauna italiana*, **83**: 41 pp. Calderini, Bologna.
- BALDIZZONE, G. & SCALERCIO, S., 2018.– Contributo alla conoscenza dei microlepidotteri dell'Aspromonte (Lepidoptera).– *Bollettino della Società Entomologica Italiana*, **150**(2): 55-79.
- BASSI, G., NEL, J., 2015.– Due microlepidotteri nuovi per la fauna d'Italia (Lepidoptera: Glyphipterigidae, Acrolepiinae; Tineidae, Hieroxestinae).– *Bollettino della Società entomologica Italiana*, **147**(3): 135-136.
- LEONETTI, F. L., GRECO, S., INFUSINO, M. & SCALERCIO, S., 2018.– Contributo alla conoscenza dei Gelechioidea dell'Italia meridionale con particolare riferimento ad ambienti forestali (Lepidoptera Chimabachidae, Elachistidae, Oecophoridae, Peleopodidae, Stathmopodidae).– *Bollettino Società Entomologica Italiana*, **150**(2): 81-85.
- LVOVSKY, A. L., 1984.– New species of the broad-winged moths (Lepidoptera, Oecophoridae) of the fauna of the USSR.– *Proceedings of the Zoological Institute of the Academy of Sciences of the USSR*, **122**: 87-93.
- LVOVSKY, A. L., 1995.– New and little known genera and species of the broad-winged moths (Lepidoptera: Oecophoridae, Depressariidae) of Palaearctic fauna.– *Entomologicheskoe Obozrenie*, **74**(1): 138-152.
- LVOVSKY, A. L., SINEV, S. Y., KRAVCHENKO, V. D. & MÜLLER, G. C., 2016.– A contribution to the Israeli fauna of Microlepidoptera: Oecophoridae, Autostichidae, Depressariidae, Cryptolechiidae and Lecithoceridae with ecological and zoogeographical remarks (Lepidoptera: Gelechioidea).– *SHILAP Revista de lepidopterologia*, **44**(173): 97-113.
- MANN, J., 1867.– Zehn neue Schmetterlingsarten.– *Verhandlungen der zoologisch-botanischen Gesellschaft Wien*, **17**: 845-852.
- PARENTI, U., 2000.– *A guide to the Microlepidoptera of Europe*: 426 pp. Museo Regionale di Scienze Naturali, Torino.
- PINZARI, M., PINZARI, M. & ZILLI, A., 2010.– Deep lepidopterological exploration of Mt Cagno and surroundings (Central Italy), a restricted mountain Massif and hotspot for butterfly and moth diversity.– *Bollettino dell'Associazione Romana di Entomologia*, **65**(1-4): 3-383.
- PINZARI, M. & SBORDONI, V., 2013.– Species and mate recognition in two sympatric Grayling butterflies: *Hipparchia fagi* and *H. hermione genava* (Lepidoptera).– *Ethology Ecology & Evolution*, **25**: 28-51.
- PINZARI, M., 2016a.– *Scythris clavella* (Zeller, 1855) in Italy (Lepidoptera, Gelechioidea, Scythrididae).– *Journal of Entomological and Acarological Research*, **48**: 301-303.
- PINZARI, M., 2016b.– *Deraeocoris schach*, a new predator of *Euphydryas aurinia* and other heteropteran feeding

- habits on caterpillar web (Heteroptera: Miridae; Lepidoptera: Nymphalidae).– *Fragmenta entomologica*, **48**(1): 77-81.
- PINZARI, M., PINZARI, M. & SBORDONI, V., 2017.– Notes on Life-History of *Erycia furibunda* (Diptera: Tachinidae), A parasitoid of *Euphydryas aurinia provincialis* (Lepidoptera: Nymphalidae).– *Redia*, **100**: 81-87.
- PINZARI, M., SANTONICO, M., PENNAZZA, G., MARTINELLI, E., CAPUANO, R. M., PAOLESSE, R., DI RAO, M., D'AMICO, A., CESARONI, D., SBORDONI, V. & DI NATALE, C., 2018a.– Chemically mediated species recognition in two sympatric Grayling butterflies: *Hipparchia fagi* and *Hipparchia hermione* (Lepidoptera: Nymphalidae, Satyrinae).– *PLoS ONE*, **13**(6): e0199997.
- PINZARI, M., ZERUNIAN, Z. & PINZARI, M., 2018.– Is the alien species *Clepsis peritana* (Lepidoptera: Tortricidae) settling in Italy?– *Journal of Entomological and Acarological Research*, **50**(7551): 1-3.
- PINZARI, M., 2019.– *Phylloneta sisypthia* (Araneae: Theridiidae), a predator of larvae of *Euphydryas aurinia* (Lepidoptera: Nymphalidae) and its parasitoid *Erycia furibunda* (Diptera: Tachinidae).– *Acta Zoologica Bulgarica*, **71**(2): 195-200.
- PINZARI, M., PINZARI, M. & SBORDONI, V., 2019a.– Make it simple: mating behaviour of *Euphydryas aurinia provincialis* (Lepidoptera: Nymphalidae).– *The European Zoological Journal*, **86**(1): 220-232.
- PINZARI, M., CIANFERONI, F., FABIANI, A. & DIOLI, P., 2019b.– Predation by nymphs of *Picromerus bidens* (Heteroptera: Pentatomidae, Asopinae) on caterpillars of *Euphydryas aurinia provincialis* (Lepidoptera: Nymphalidae) in Italy.– *Redia*, **102**: Accepted on 7th March 2019.
- PINZARI, M. & PINZARI, M., 2019a.– Genus *Pempeliella* Caradja, 1916 and *P. bayassensis* Leraut, 2001 (Lepidoptera, Pyralidae) in Italy.– *ZooKeys*, **854**: 131-144.
- PINZARI, M. & PINZARI, M., 2019b.– Genus *Delplanqueia* Leraut, 2001 and *D. inscriptella* (Duponchel, 1836) (Lepidoptera: Pyralidae) in Italy.– *Journal of Entomological and Acarological Research*, **51**(8168): 60-68.
- PINZARI, M. & PINZARI, M., 2019c.– Contribution to knowledge of Lampedusa Lepidopterans *Bifascioides leucomelanella* (Rebel, 1917) and *Ceutholopha isidis* (Zeller, 1867) (Lepidoptera) new for Italy.– *Journal of Entomological and Acarological Research*, **51**(3): 77-81.
- SCALERCIO, S., LUZZI, G. & INFUSINO, M., 2014.– First record of *Pempelia amoenella* (Zeller, 1848) for Western Europe (Lepidoptera Pyralidae).– *Biodiversity Journal*, **5**(2): 217-220.
- SCALERCIO, S., GRECO, S. & INFUSINO, M., 2016.– First Record of *Phycita imperialella* (Ragonot, 1887) from Western Europe (Pyralidae).– *The Journal of the Lepidopterists' Society*, **70**(1):75-76.
- SPULER, A., 1910.– *Die Schmetterlinge Europas*, **2**: 523 pp. E. Schweizerbart'sche Verlagsbuchhanlung, Stuttgart.
- STAUDINGER, O., 1859.– Diagnose nebst kurzen Beschreibungen neuer andalusischer Lepidopteren.– *Entomologische Zeitung*, **20**(7-9): 211-259.
- TOKAR, Z., LVOVSKY, A. & HUEMER, P., 2005.– *Die Oecophoridae s. l. (Lepidoptera) Mitteleuropas. Bestimmung, Verbreitung, Habitat, Bionomie*: 120 pp. F. Slamka, Bratislava.
- VAN NIEUKERKEN, E. & KARSHOLT, O., 2019.– Fauna Europaea: Oecophoridae.– *In Fauna Europaea, Moths* (O. KARSHOLT & E. VAN NIEUKERKEN Eds.). Version 2.6. Available form <http://www.fauna-eu.org>. (accessed 13 January 2019)
- VIVES MORENO, A., 2003.– Una tribu, ocho géneros, y dieciocho especies nuevos par la fauna española. *Ypsolopha cajaliella* Vives, sp. n., para la Ciencia en España (Insecta: Lepidoptera).– *SHILAP Revista de lepidopterología*, **31**(121): 93-110.

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(Recibido para publicación / Received for publication 18-IX-2019)

(Revisado y aceptado / Revised and accepted 19-X-2019)

(Publicado / Published 30-XII-2019)