

Thysanoplusia orichalcea (FABRICIUS, 1775) (Lepidoptera, Noctuidae, Plusiinae) found again in Romania after more than 150 years

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Summary: *Thysanoplusia orichalcea* (FABRICIUS, 1775) is recorded in the Romanian fauna based on a specimen collected at Enisala Fortress (northern Dobrogea, Tulcea County). This specimen represents the first record in the country in over 150 years. Some aspects regarding the presence of this species in Romania are clarified.

Rezumat: *Thysanoplusia orichalcea* (FABRICIUS, 1775) este semnalată în fauna României pe baza unui exemplar colectat la Cetatea Enisala (nordul Dobrogei, județul Tulcea). Acesta reprezintă prima semnalare din țară în peste 150 de ani. Sunt clarificate unele aspecte privind prezența acestei specii în România.

Key words: Dobrogea, Romania, *Thysanoplusia orichalcea*.

Introduction

Thysanoplusia orichalcea (FABRICIUS, 1775) is a paleotropical species that is usually common in Indochina, India and Africa, but also occurs across vast areas of Pacific Asia and reaches Papua New Guinea, Australia and New Zealand (HILL *et al.* 1987, GOATER *et al.* 2003, BEHOUNEK *et al.* 2010). In Europe, it is a regular migrant in southern (Mediterranean) areas, but a very rare occurrence further north (GOATER *et al.* 2003, BEHOUNEK *et al.* 2010). It has occasionally been recorded as far north as southern England, southern Ireland and The Netherlands (KARLSHOLT

and RAZOWSKI 1997, GOATER *et al.* 2003).

In certain parts of its range, *T. orichalcea* can become a considerable pest on legumes, in particular soybean (e.g. TAYLOR and KUNJEKU 1983, COMMON 1990), but larvae can infest a variety of other crops such as parsley, lucerne, cabbage, carrot etc. (e.g. HILL *et al.* 1987).

Results

Material: 1♀, 24.VII.2020, Romania, Dobrogea, Tulcea county, Enisala Fortress, 88 m (44.8833°N, 28.8355°E) (leg. L. Székely and V. Dincă) (Fig. 1).



Fig. 1. *Thysanoplusia orichalcea*, Enisala Fortress, Tulcea county, northern Dobrogea, 24.VII.2020. Scale bar is 10 mm. (Photo: L. Székely)



Fig. 2. Enisala Fortress, Tulcea county, northern Dobrogea, 25.VII.2020. (Photo: L. Székely)

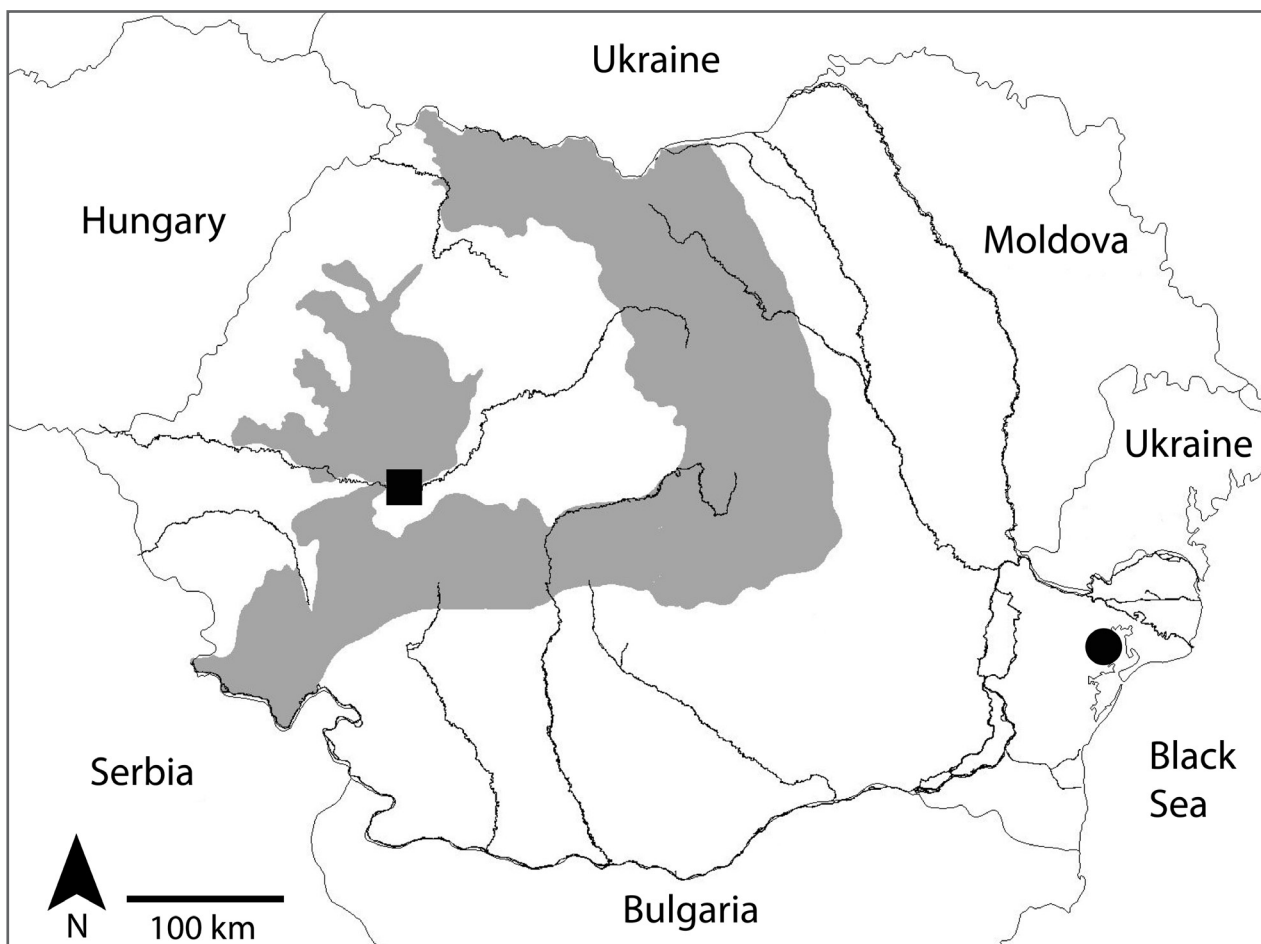


Fig. 3. Records of *Thysanoplusia orichalcea* in Romania. Black square: nineteenth century record from Săcărâmb, Hunedoara county (FUSS 1850); black dot: current record from Enisala Fortress, Tulcea county.

The material was collected using a light trap with a 16W UV tube, on the limestone slopes surrounding Enisala Fortress (Figs. 2, 3). The material captured with the same trap during that night included other species such as *Chelis maculosa* (GERNING, 1780), *Odice suava* (HÜBNER, 1813), *Hecatera cappa* (HÜBNER, [1809]), *Lacanobia blenna* (HÜBNER, 1824) etc.

Discussion

Thysanoplusia orichalcea was reported only twice from Romania: from Săcărâmb / Nagyág (today in Hunedoara county) (FUSS 1850, taken over by various authors such as CZEKELIUS 1897, RÁKOSY 1996, RÁKOSY *et al.* 2003); and from Tulcea (northern Dobrogea) (RÁKOSY *et al.* 2003 citing MANN 1866).

To our knowledge, the record from Săcărâmb (FUSS 1850) is not backed by any specimen preserved in museum or private collections.

We do not confirm the record from Tulcea (RÁKOSY *et al.* 2003) since *T. orichalcea* is not mentioned in the paper by MANN (1866), neither as such, or using its synonyms *chrysitina* MARTYN, 1897 and *aurifera* HÜBNER, [1813] (GOATER *et al.* 2003).

Therefore, the specimen from Enisala Fortress represents the only record documented with a sampled specimen in Romania, and the first record since the mid-nineteenth century (Fig. 3). The limestone steppe (Fig. 2) from Enisala Fortress represents the habitat

for several species with very restricted distribution in Romania and/or Europe such as *Ocnogyna parasita* (HÜBNER 1790), *Scopula orientalis* (ALPHÉRAKY, 1876), *Eublemma porphyria* (FREYER, 1845), *Cucullia santonici* (HÜBNER, [1813]), *Dichagyris melanura* (KOLLAR, 1846), *Chersotis laeta macini* RÁKOSY, STANGELMAIER & WIESER, 1996 etc. (SZÉKELY 2016a, 2016b, DINCĂ and SZÉKELY 2018).

In countries neighbouring Romania, *T. orichalcea* is known as very sporadic from Bulgaria (ABADJIEV and BESHKOV 2007) and Serbia (STOJANOVIĆ and ČURČIĆ 2011).

It remains to be seen whether the frequency of this species in Romania will increase in the future, or if it will remain an exceptionally rare migrant. Possibly as a result of climate change, during the last two decades, certain other subtropical-tropical species have entered or have apparently become noticeably more common in south-eastern Romania, such as *Grammodes bifasciata* (PETAGNA, 1787), *Aedia leucomelas* (LINNAEUS, 1758), *Chrysodeixis chalcites* (ESPER, 1789), *Mythimna unipuncta* (HAWORTH, 1809) etc.

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