Infurcitinea maura Petersen, 1962 new to Spain and Europe (Lepidoptera: Tineidae)

eISSN: 2340-4078 ISSN: 0300-5267

D. Grundy & T. S. T. Muus

Abstract

Infurcitinea maura Petersen, 1962 was recorded new to Europe. On 20-III-2020 a male specimen was trapped at the International Centre on Bird Migration (CIMA), Tarifa (Cádiz, Spain).

KEY WORDS: Lepidoptera, Tineidae, *Infurcitinea maura*, first record, Spain, Europe.

Infurcitinea maura Petersen, 1962 nueva para España y Europa (Lepidoptera: Tineidae)

Resumen

Infurcitinea maura Petersen, 1962 se registra como nueva para Europa. El 20-III-2020 se capturó un ejemplar macho en el Centro Internacional de Migración de Aves (CIMA), Tarifa (Cádiz, España).

PALABRAS CLAVE: Lepidoptera, Tineidae, *Infurcitinea maura*, primer registro, España, Europa.

Introduction

In the last ten years various new species of microlepidoptera have been described or discovered in the Iberian Peninsula. The occurrence of various species in both the North African region and Spain suggests an even higher number of species are possible in this area.

A single male specimen of *Infurcitinea maura* Petersen, 1962, was recorded by the first author at a light trap near Tarifa (Cádiz, Spain) in a small sheltered coastal valley in Mediterranean coastal scrub habitat with *Pistacia lentiscus* L., *Olea europea* L. and *Eucalyptus sp.* trees and bushes. This moth was recorded as an unknown Tineidae species at first, so, as a result it was sent to the second author for identification.

The first author has recorded Lepidoptera (both macro-moths and micro-moths) in Andalusia annually since 2013 and for over 100 nights per year since 2018. The main aim of this recording has been to enthuse local recorders living in the region and particularly to the study of micro-moths (which are less well studied). Particular aims of study have been to look at the moth fauna of the humid cork oak forests in the "Parque Natural de los Alcornocales" and of drier coastal Mediterranean scrub and sand dune habitats in the "Parque Natural del Estrecho". CIMA, located at (36STE68; latitude 36.016388°, longitude -5.587290°, 53 m), is a particularly valuable coastal location as it is an environmental research station with accommodation and land that encourages survey. Interestingly this moth was actually recorded during covid restrictions in Spain when the first author was not able to

survey moths away from the site. Andalusia in general and CIMA in particular are situated at the edge of Europe, very close to North Africa and an excellent area for studying possible new colonist and migrant species affected by climate change.

Material and methods

This species was recorded on a cloudy night with heavy rain and winds changing from East to West as a weather front arrived during the night. Studies of moths in this area are not well researched yet, but this weather front appeared to bring in some potential migrant species of moth such as 31 *Plutella xylostella* (Linnaeus, 1758), *Trichoplusia ni* (Hübner, [1803]), *Heliothis peltigera* ([Denis & Schiffermüller], 1775) and *Spodoptera cilium* Guenée, 1852 not recorded on previous or following nights. The moths trapped on this night were attracted using 6 wooden Skinner style moth traps using a mixture of 125 watt Mercury Vapour, 15 watt Actinic and 2 watt LED lights, running from dusk to dawn.

Material examined

Infurcitinea maura Petersen, 1968

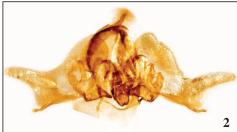
Infurcitinea maura Petersen, 1968. Ann. Mag. Nat. Hist., (13) 4: 559

Material examined: SPAIN, CADIZ, "CIMA", Tarifa [in gelatine capsule], 20-III-2020, leg D. Grundy, Genitalia slide TM1242 (coll. T. Muus).

Description: Wingspan 7-8 mm. Frons light brownish; antennae brownish grey, annulated with white. Forewing dark greyish brown with white or pale ochreous markings; fringe indistinct and irregularly chequered. The female has not been described.

Genitalia (δ) (Fig 2): Characterized by a valva that is dorsally supported by a u-shaped apodeme with small spines. Basal half of the valva is broad, dorsally convex and towards apex more pointed, curved and blunt with a costal protrusion. The latter seems to be a variable feature, as it shows a very slender protrusion in the type specimen where it is quite broad in our specimen. Likewise, saccus rounded (present material) to curved inwards (PETERSEN, 1962) Uncus rounded and hyaline with thin bristles. Aedeagus indistinct; anellus simple. *I. toechophila* (Walsingham, 1908), is a more distinctly marked species, that might be confused with *I. maura*. The male genitalia of *I. toechophila* has the valva broad with a straight costal edge, strongly sclerotized and basally with two thin apically bristled processes but it lacks the costal protrusion in the apical area.





Figures 1-2.– 1. *Infurcitinea maura* (Petersen), male in light trap, CIMA, Tarifa, Spain, 20-III-20, D. Grundy. 2. Male genitalia Gen. prep. TM1242 & T. Muus.

Discussion

The species has been described from Tangier, Morocco. A total of fifteen male specimens were collected by Walsingham in the first half of 1902, from April till the first half of June (PETERSEN,

1962). GAEDIKE (2009) reported a male specimen in the Zoological Museum, Copenhagen (Denmark), collected in Forêt de Mamora, near Rabat around 25-26 April 1989 (note that Tangier is usually visible across the Straits from CIMA and is only 32 kms away, while the nearest Moroccan coast is only 14 kms away.). The species has not been listed as part of the European fauna (GAEDIKE, 2015). The present record is now considered the first for Europe.

Acknowledgments

We would like to thank Reinhard Gaedike for the collegial inquiries. Many thanks go to Fundacion Migres who manages the CIMA research station, and to the Junta de Andalucía Environmental Authority for granting the licence to trap moths.

BIBLIOGRAPHY

GAEDIKE, R., 2009.— New or poorly known Tineidae from Mauretania, Morocco, Algeria, and Tunisia (Lepidoptera).— Beiträge zur Entomologie, **59**(2): 489-512.

GAEDIKE, R., 2015.— Tineidae I (Dryadaulinae, Hapsiferinae, Euplocaminae, Scardiinae, Nemapogoninae and Meessiinae).— *In M. NUSS*, O. KARSHOLT & P. HUEMER. *Microlepidoptera of Europe*, **7**: 308 pp., 6 pls. Brill, Leiden, Boston.

PETERSEN, G., 1962.— New and rare Tineids (Lepidoptera: Tineidae) in the Collections of the British Museum (Nat. Hist.).— Annals and Magazine of Natural History, (13) 4: 529-539.

*D. G.
5, Melrose Avenue
Woodfield Road, Sparkbrook
GB-Birmingham, B12 8TG
GRAN BRETAÑA / GREAT BRITAIN
E-mail: dgcountryside@btinternet.com
https://orcid.org/0000-0001-8575-0895

T. S. T. M. K. J. Blokstraat, 47 NL-8384 EV Wilhelminaoord PAÍSES BAJOS / *THE NETHERLANDS* E-mail: tst.muus@gmail.com https://orcidorg/0000-0002-9545-6881

(Recibido para publicación / Received for publication 17-VI-2021) (Revisado y aceptado / Revised and accepted 21-VII-2021) (Publicado / Published 30-XII-2021)

^{*}Autor para la correspondencia / Corresponding author