

# New species of *Meharia* Chrétien, 1915 from Morocco (Lepidoptera: Cossidae)

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## Abstract

The article describes *Meharia ouanou* Sobczyk & Yakovlev, sp. nov., distributed in Morocco. The article has two illustrations.

**Keywords:** Lepidoptera, Cossidae, *Meharia*, biodiversity, species richness, taxonomy, new species, Morocco.

Nueva especie de *Meharia* Chrétien, 1915 de Marruecos  
(Lepidoptera: Cossidae)

## Resumen

El artículo describe *Meharia ouanou* Sobczyk & Yakovlev, sp. nov., distribuida en Marruecos. El artículo tiene dos ilustraciones.

**Palabras clave:** Lepidoptera, Cossidae, *Meharia*, biodiversidad, riqueza de especies, taxonomía, nueva especie, Marruecos.

## Introduction

The genus *Meharia* Chrétien, 1915 (Lepidoptera, Cossidae) includes 18 species, distributed in the arid regions of Western Palaearctic (up to Southern Volga region in the East), the Arabian peninsula and Africa (to Zambia and Zimbabwe in the South) (Wiltshire, 1990; Hacker, 1999, 2016; Yakovlev, 2011, 2014, 2018; Yakovlev et al. 2013, 2015; Yakovlev & Dubatolov, 2013; Yakovlev & Witt, 2015, 2016; Seizmar, 2018; Alipanah et al. 2021; De Prins & De Prins, 2022). In the collection of Microlepidoptera from Morocco, the first author of this article found a female specimen of a species new to science. Its description is given below.

## Material and methods

The female genitalia were mounted in euparal on slides following Lafontaine & Mikkola (1987). The slides and adult specimen were photographed using a Canon EOS 600D with Canon macro photo lens MP-E 65, 1:2.8, 1-5x. The images were processed using PhotoScape software.

## Taxonomical part

### *Meharia ouanou* Sobczyk & Yakovlev, sp. nov. (Figures 1-2)

Type Holotype (Figure 1): Female, MOROCCO, “Morocco, Tata, 700 m, 18-X-2016, leg. R. Bläsius”. Deposited in the Zoologische Staatssammlung München, Germany (ZSM).

Description Female: Medium-sized moth with evenly densely scaled wings. Wingspan 17.0 mm, body length 7.0 mm, fore wing length 8.0 mm, maximum 2.5 mm wide, antennae length 4.5 mm.

Antenna with 39 segments, scapus and pedicellus with pale brownish scales. The other segments except for the distal segment with double pecten, densely covered with dark brownish scales. Length of pecten process 4 times longer than antenna stem diameter. Head and vertex covered with long, pale brown scales, frons with short, broad, whitish scales. Labial palps reduced, two-segmented, distal segment very short, both segments checked covered laterally with brown and pale scales, medially with whitish scales. Legs covered with brown scales, tibia and tarsal segments distally with a narrow ring of paler scales. Anterior tibia with a short, narrow epiphysis. Middle legs with one pair, hind legs with two pairs of spurs. Abdomen covered with brownish scales, distally somewhat darker. Forewing narrow, parallel-sided. Apex gradually rounded. Wing pale brown with slightly developed pale pattern consisting of light spots with irregular border. The wings are somewhat darker in the distal half. Fringe long, pale brown. Hind wing dark, brownish grey, patternless, fringes paler. Frenulum consisting of a cluster of 6 bristles, two of them on a separate basal bump.

Genitalia (Figure 2): (23-2021, Sobczyk) Papillae anales pyramidal-conical, covered by long setae, posterior apophyses long, pointed to apex; pore of ostium bursae broad, cup-like; ductus broad with thick sides; bursa sac-like, without signum.

Male: Unknown.

Habitat: The type locality is a semi-desert close to a settlement, which is characterized urban. The area is covered with some acacia and date palm trees (Figure 3).

Remark: The type locality is originally reproduced in the description. On inquire, the type location is a little south and is a district of Tata. The place name is shown differently on maps and online as Tigzmert (also Tighmert, Tigezmirt or Tiguezmert): 29°42'48.7"N 7°57'60.0"W.

Etymology: The name "ouanou" means a well in the Berber language Taschelhit. Near the type locality there the hotel "Oasis Dar Ouanou" which also refers to it.

## Diagnosis

The new species is one of the smallest in the genus (according to the existing specimen - the smallest one). In the poorly modified pattern and very small size, it resembles *Meharia breithaupti* Yakovlev, 2014 (type locality: UAE, Ras Al Khaimah, Esfai garbage dump), from which it differs in a series of characters:

- length of the fore wing - 8 mm (that of the female *M. breithaupti* - 10 mm)
- absence of white spots on the fore wing (in *M. breithaupti*, there are white spots of an irregular shape on the fore wing, on the costal margin between the border of the basal and medium third and apically, in medio-basal area and along the anal margin)
- fringe on wings grey (in *M. breithaupti*, the fringe on the fore wing is grey at veins and white between veins, on the hind wing there are grey fringe scales interspersed with light scales in the fringe closer to the anal angle)
- posterior apophyses long, thin (in *M. breithaupti* - the posterior apophyses are twice shorter and thicker, lanceolate).

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## References

- Alipanah, H., Yakovlev, R., Falsafi, H., Witt, Th., & Saldaitis, A. (2021). Cossidae (Lepidoptera) of Iran: a review with description of two new species. *Zootaxa*, 5062, 1-100.

- De Prins, J., & De Prins, W. (2022). *Afromoths, online database of Afrotropical moth species (Lepidoptera)*. <http://www.afromoths.net>
- Hacker, H. H. (1999). Systematic List of the Lepidoptera of the Arabian Peninsula with a survey of the spread with special reference to the fauna of Yemen. *Esperiana*, 7, 15-237.
- Hacker, H. H. (2016). Systematic and Illustrated Catalogue of the Macroheterocera and Superfamilies Coccoidea Leach, [1815], Zygaenoidea Latreille, 1809, Thyridoidea Herrich-Schaffer, 1846 and Hyblaeoidea Hampson, 1903 of the Arabian Peninsula, with a survey of their distribution (Lepidoptera). *Esperiana*, 20, 7-742.
- Lafontaine, J. D., & Mikkola, K. (1987). Lock-and-key system in the inner genitalia of Noctuidae (Lepidoptera) as taxonomic character. *Entomologiske Meddelelser*, 55, 161-167.
- Seizmar, M. (2018). Eine neue Art der Gattung *Meharia* Chretien, 1915 aus Dhofar (Oman) *Meharia interrupta* spec. nov. (Lepidoptera, Cossidae). *Atalanta*, 49(1-4), 204-205.
- Wiltshire, E. P. (1990). An illustrated annotated catalogue of the Macro-Heterocera of Saudi Arabia. *Fauna of Saudi Arabia*, 11, 91-250.
- Yakovlev, R. V. (2011). Catalogue of the Family Cossidae of the Old World. *Neue Entomologische Nachrichten*, 66, 1-129.
- Yakovlev, R. V. (2014). A new species of *Meharia* Chrétien, 1915 (Lepidoptera, Cossidae) from the United Arab Emirates, with a world catalogue of the genus. *Zootaxa*, 3895(3), 401-410. <https://doi.org/10.11646/zootaxa.3895.3.4>
- Yakovlev, R. V. (2018). A New Species and New Records of the Genus *Meharia* Chretien, 1915 (Lepidoptera, Cossidae) from the Middle East and Central Asia. *Entomological Review*, 98(8), 1142-1146.
- Yakovlev, R. V., & Dubatolov, V. V. (2013). Distribution of Carpenter-Moths (Lepidoptera, Cossidae) in Palaearctic Deserts. *Zoologichesky Zhurnal*, 92(6), 682-694. [in Russian] <https://doi.org/10.7868/S0044513413040193>
- Yakovlev, R., Ivinskis, P., Rimsaite, J., & Saldaitis, A. (2013). Description of two new species of *Meharia* Chrétien, 1915 (Lepidoptera: Cossidae) from East Africa. *Zootaxa*, 3635(5), 587-590. <https://doi.org/10.11646/zootaxa.3635.5.9>
- Yakovlev, R. V., Pljutsch, I. G., Skrylnik, Yu., Pak, O., & Witt, Th. (2015). The Cossidae (Lepidoptera) of Afghanistan with description of three new species and special notes on the fauna of Band-e-Amir National Park. *Zootaxa*, 3990(1), 41-72. <https://doi.org/10.11646/zootaxa.3990.1.3>
- Yakovlev, R. V., & Witt, Th. (2015). *Meharia ganslmeieri* sp. nov.-a New Cossidae Species from Zambia (Lepidoptera). *Zootaxa*, 4032(3), 319-321.
- Yakovlev, R. V., & Witt, Th. J. (2016). Cossidae (Lepidoptera) of Pakistan. *Biological Bulletin of Bogdan Chmelni茨kiy Melitopol State Pedagogical University*, 6(2), 67-76.

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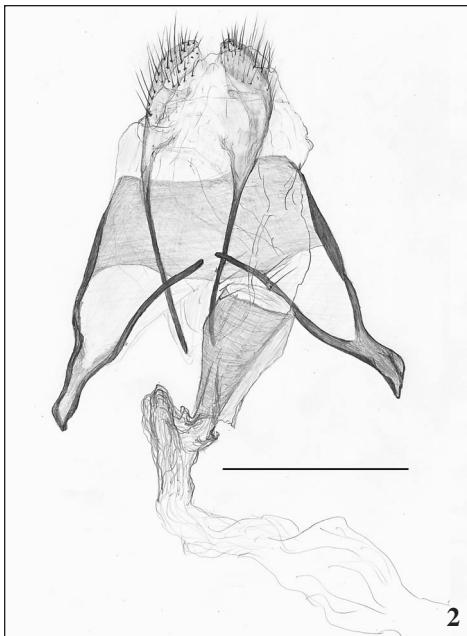
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**Figures 1-2.** 1. *Meheria ouanou* Sobczyk & Yakovlev, sp. nov., holotype female. 2. *Meheria ouanou* Sobczyk & Yakovlev, sp. nov., female genitalia. 3. Type locality, Morocco, Tata, 28-VII-2011 (photo R. Bläsius).