Review of the Genus *Orygocera* Walsingham, 1897 from the Mascarenes with description of a new species (Lepidoptera: Depressariidae, Stenomatinae)

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Abstract

The species of the genus *Orygocera* Walsingham, 1897 in the Mascarene islands are reviewed. One new species *Orygocera albanix* Bippus, sp. n. is described. One subspecies, *Orygocera amphitricha reunionensis* Viette, 1991 is found to be a junior synonym of the nominal species *Orygocera amphitricha amphitricha* (Meyrick, 1910). Hostplants are recorded for one species and larval stages are illustrated for the first time of this genus. KEY WORDS: Lepidoptera, Depressariidae, Stenomatinae, *Orygocera*, Mascarenes, Réunion, Mauritius, France.

Revisión del género *Orygocera* Walsingham, 1897 de las Mascareñas con descripción de una nueva especie (Lepidoptera: Depressariidae, Stenomatinae)

Resumen

Se revisan las especies del género *Orygocera* Walsingham, 1897 en las islas Mascareñas. Se describe una nueva especie *Orygocera albanix* Bippus, sp. n.. Una subspecies, *Orygocera amphitricha reunionensis* Viette, 1991 es encontrada como nueva sinonimia de la especie nominal *Orygocera amphitricha amphitricha* (Meyrick, 1910). Se registra por primera vez, la planta nutricia para una de las especie y la larva se ilustra por primera vez de este género. PALABRAS CLAVE: Lepidoptera, Depressariidae, Stenomatinae, *Orygocera*, Mascareñas, Reunión, Mauricio, Francia.

Introduction

The species of the genus *Orygocera* Walsingham, 1897 in the Mascarene islands are reviewed. One new species *Orygocera albanix* Bippus, sp. n. is described. One subspecies, *Orygocera amphitricha reunionensis* Viette, 1991 is found to be a junior synonym of the nominal species *Orygocera amphitricha amphitricha* (Meyrick, 1910) and the hostplants are recorded for one species and larval stages are illustrated for the first time for this genus.

Systematic part

Orygocera albanix Bippus, sp. n. (Figs 1-3)

Holotype: \$\delta\$, Réunion, La Possession, alt. 400 m (20° 55' 37"S/ 55° 21' 45"E), 06-II-2016 in Naturalis Biodiversity Center, RMNH.INS 1108923. Paratype: 3 \$\delta\$\$\delta\$\$, same locality, 03-II-2014 (gen. prep. RE-1205, Fig. 3) (Naturalis Biodiversity Center), 03-VII-2017 (coll. M. Bippus) and 23-IV-2018 (Naturalis Biodiversity Center).

Description: Wing length: 9.0-9.5 mm, wing span: 20-21mm. Head, shoulders light pinkish-brownish. Antennae and abdomen creamish brownish-grey. Palpi whitish-ochreous irrorated crimson-purplish. Forewings elongate, rather broad, costa gently arched, apex obtuse, termen straight, snow-white, costa suffused light violet-crimson near base, dorsum crimson-purplish at base, two connected triangular blotches of the same colour at 1/2 and 3/4 not reaching 1/3, an obliqe snow-white fascia near termen.

Male genitalia: Broad tegumen with a small, hooked uncus. Valvae narrowed at base, distally delated and bilobed. Short and broad saccus. Aedeagus curved, without cornuti, little about half length of the genitalia.

Biology: unknown. Distribution: Réunion.

Etymology: I use to attribute a nickname to unnamed or unrecognized species and this species received the German nickname "Schneewittchen", meaning "snow-white" in English and *albanix* in Latin.

Orygocera amphitricha (Meyrick, 1910) (Figs 4-9)

Epiphractis amphitricha Meyrick, 1910. Trans. Ent. Soc. London, 78(2): 373

LT: Les Mares, Mauritius

Orygocera amphitricha reunionensis Viette, 1988, syn. n.

Orvgocera amphitricha reunionensis Viette, 1988. L'Entomologiste, 44(3): 175

LT: Reunion

Description: Wingspan: 22 mm. Forewings pinky-brownish to dark-crimson brownish.

Examined material: 16 specimens ex-larvae, 33 specimens collected at light, mostly in La Possession, alt. 400 m, 20° 55' 37"S/55° 21' 45"E in the months of I, II, III, IV, VI, VII, IX, X, XI, XII but some additional specimens on light also in Sainte-Suzanne, alt. 700 m, 17-VI-2014, 21-XI-2015, 22-XII-2015, St. Philippe, alt. 250 m, 20-XI-2014, 13-VI-2015 and Takamaka, 09-I-2016. Twelve specimens were added to the collections of the BMNH, six specimens in Naturalis Biodiverity Centre, Leiden.

Viette described this subspecies *reunionensis* from a female taken in Sainte-Suzanne, 15-III-1986 (leg. Ch. Guillermet) based only on differences in colouration compared to a series of specimens he had captured in the forest of Macchabée (Macabé), Mauritius in II-1964 in the company of J. Vinson and R. Mamet (GUILLERMET, 2011). He stated that the specimen from Réunion had a clearer, more rosy colouration while the Mauritian specimens are reddish-brown.

Actually I find both colourations also in Réunion and the darker, brownish-crimson colouration is even more frequent (85-90%) than the lighter coloured specimens (10-15%) that I find in months and places with high humidity levels.

I consider this difference as a normal variability of the nominal species and therefore consider the subspecies *Oyrgocera amphitricha reunionensis* Viette, 1988 as a junior synonym of *Orygocera amphitricha amphitricha* (Meyrick, 1910).

Biology: A total of 16 specimens were bred from larvae that were collected on *Syzygium cymosum* (Lam.) DC. and *Syzygium cumini* (L.) Skeels (Myrtaceae). The larvae stick two opposite leaves together and feed inside their hide. Although most were found on fresh, green leaves, they also can feed on older, brownish leaves as long as these stay humid. The larvae are very agil and try to escape in lateral movements when their hide is opened. Months of eclosure: 2014: IV, V, XI, XII and 2015: I, II, IX, XII. Pupal stage: 12-14 days. Hostplants: *Syzygium cymosum* (Lam.) DC. and *Syzygium cumini* (L.) Skeels (Myrtaceae).

Distribution: Mauritius and Réunion. Localities of collection: La Montagne, alt. 800 m (*Syzygium cymosum*) and La Possession, Rav. Malheur, alt. 400 to 550 m (*Syzygium cumini*).

Orygocera tryphoxantha (Meyrick, 1930) (Figs 10-12)
Epiphractis tryphoxantha Meyrick, 1930. Trans. Ent. Soc. London, 78: 318
LT: Mauritius

This species was described by MEYRICK (1930) after a female of 20 mm wingspan. His description is perfect, I have nothing to add to his words.

Citation of MEYRICK (1930): "Female, 20 mm. Head, palpi, thorax crimson-grey, face tinged whitish. Fore-wings elongate, rather dilated, costa gently arched, apex obtuse, termen nearly straight, somewhat oblique, yellow; costa suffused crimson-grey towards base, then narrowly white to apex; dorsum slenderly crimson-fuscous towards base, remainder occupied by two connected triangular fuscous-crimson blotches not reaching half across wing, first including some whitish suffusion: cilia rosy-whitish. Hindwings grey-whitish, becoming light grey towards apex; cilia grey-whitish. 1 ex."

Examined material: 1 ♂, Réunion, Possession, alt. 400 m, 20° 55' 37"S/ 55° 21' 45"E, 09-XII-2015, gen.prep. RE-2290 in coll. M. Bippus.

Biology: unknown

Distribution: Mauritus and Réunion.

Remarks: No images of *Orygocera tryphoxantha* Meyrick, 1930 had been published but Meyrick's description fits to my specimen at all points. He is actually the only entomologist whose descriptions are almost perfect and from which I can recongnize some species.

The holotype is housed in the MNHN, Musée National d'Histoire Naturelle, Paris (VIETTE, 1951).

There seems to exist another junior synonym of this species described from Réunion *Orygocera* anderesi Viette, 1991. It is not the first time that I noticed that Viette did not take account of the species described earlier by Meyrick, even if the types are housed in the MNHN. Unfortunately, the MNHN also did not reply to my e-mail requests from 2014, January 2017 and December 2017 if a picture of the type of *O. tryphoxantha* is available, or not.

I consider *Orygocera anderesi* Viette, 1991 as a junior synonym of *Orygocera tryphoxantha* (Meyrick, 1930) but I am not in the position to place it under synonymy as I have not seen the holotypes.

Orygocera lenobapta Meyrick, 1924 (Figs 13-14)

Orygocera lenobapta Meyrick, 1924. Trans. Ent. Soc. London, 78(2): 553

LT: Rodriguez Island

MEYRICK (1924) described this species as follows: "Orygocera lenobapta, n. sp. male/female 18-22 (mm). Head whitish-ochreous, in male more or less tinged or suffused fuscous-purplish. Palpi whitish-ochreous irroratod crimson-purplish, terminal joint 2/3-4/5. Thorax pale ochreous, often tinged or suffused ferruginous or fuscous-purplish. Fore-wings apex obtuse, termen rather obliquely rounded; 9 curved and approximated at base to 8; pale ochreous, in female tinged whitish and variably sprinkled ferruginous, in male wholle suffused fuscous-purplish or purple-brown; markings cloudy, indistinct or sometimes little apparent, in female ferruginous or red-brown, in male dark purple-fuscous, indicating when well-developed a streak along dorsum, enclosing a short pale basal streak, and small subtriangular pale antemedian and praetornal spots, and oblique streaks crossing disc at 1/3 and 2/3, latter bent in beneath to touch apex of praetornal spot: cilia in female reddish-brown, in male fuscous-purpblish. Hind-wings in male grey, in female ochreous-whitish posteriorly suffused dull rosy; cilia male grey, female ochreous-whitish. 22 ex."

The types in BMNH are labelled, Male: *Orygocera lenobapta* Meyr. ♂, Type + Paratypes; NHMUK010304537. Female: *Orygocera lenobapta* Meyr. ♀, Type + Paratypes; NHMUK010304538. The additional labels are the same for both specimens, reading: pres. by Cambridge University Museum B.M. 1924-238; Rodriguez Id., VIII-XI-1918, H. P. Thomasset and H. J. Shell Coll. (Note: Both types are labelled: "H.T.").

Distribution: Rodrigues

Remarks

Following species of other genera and families had been recorded in Réunion, I will try to illustrate some in future publications during revisions of their respective families:

Blastobasidae: Blastobasis inana (Butler, 1881) (new for Africa).

Choreutidae: Brenthia leptocosma Meyrick, 1916 (also in Mauritius).

Euteliidae: Atacira mima (Prout, 1925).

Gelechiidae: Anarsia citromitra Meyrick, 1921 (also in Mauritius); Stegasta variana Meyrick, 1904; Thiotricha tenuis (Walsingham, 1891) (also in Mauritius).

Glyphipterigidae: Glyphipterix madagascariensis Viette, 1951.

Gracillariidae: Acrocercops macrochalca Meyrick, 1910; Caloptilia xanthochiria Vari, 1961; Dialectica pyramidota (Meyrick, 1918).

Momphidae: *Ithome lassula* Hodges, 1962 (new for Africa, also in Mauritius); *Gisilia sclerodes* (Meyrick, 1909) (also in Mauritius).

Oecophoridae: Cenarchis vesana Meyrick, 1924 (also in Mauritius); Metachanda astrapias (Meyrick, 1887).

Phycitinae: Balinskyia monstrosa (Balinsky, 1994).

Tineidae: Amphixystis fragosa (Meyrick, 1910).

Tortricidae: *Brachiolia amblopis* (Meyrick, 1911); *Cosmetra spiculifera* (Meyrick, 1913) (also in Mauritus); *Cosmorrhyncha acrocosma* (Meyrick, 1908) (also in Mauritius); *Leguminivora anthracotis* (Meyrick, 1913) (also in Mauritius and Madagascar).

New for the fauna of Mauritius was recorded:

Gelechiidae: Dichomeris hortulana (Meyrick, 1918) (also in Mayotte).

Oecophoridae: Metachanda thaleropis Meyrick, 1911

Acknowledgements

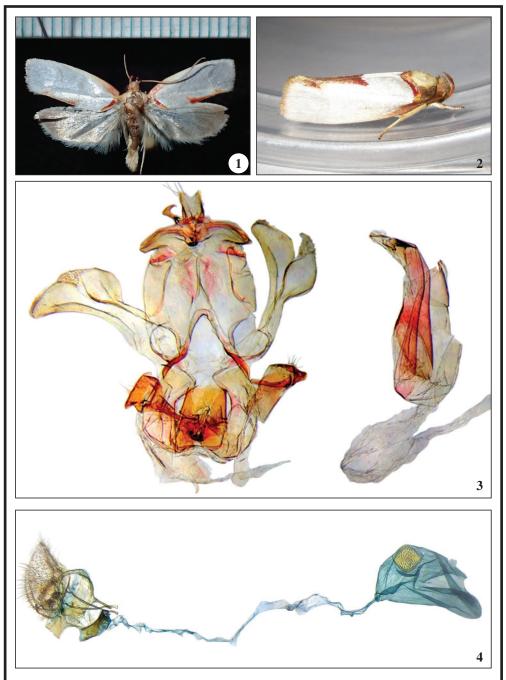
I am grateful to Dr. David Lees of BMNH for providing the images of the types of *Orygocera lenobapta* and for giving his permission to publish these and to the referees of this article.

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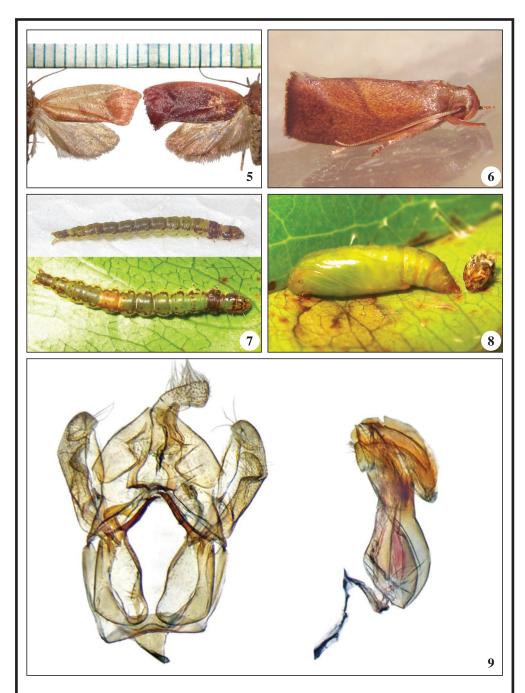
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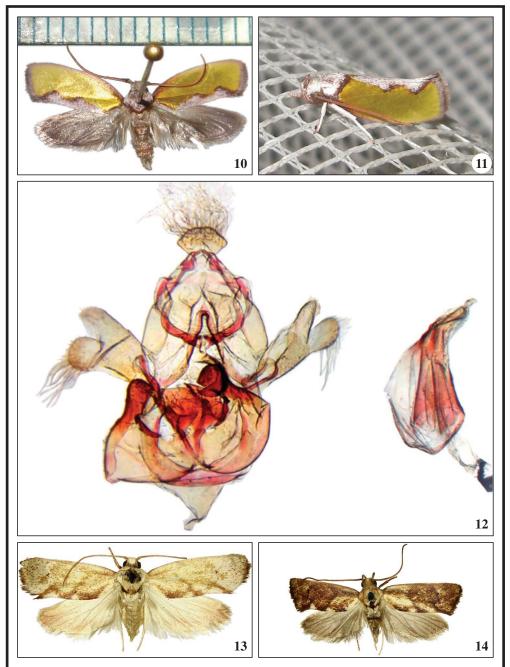
(Recibido para publicación / Received for publication 22-II-2020) (Revisado y aceptado / Revised and accepted 10-III-2020) (Publicado / Published 30-IX-2020)



Figs 1-4.– 1. Orygocera albanix. 2. Orygocera albanix. 3. Orygocera albanix, male genitalia. 4. Orygocera amphitricha, female genialia.



Figs 5-9.— 5. Orygocera amphitricha. 6. Orygocera amphitricha. 7. Orygocera amphitricha, larvae. 8. Orygocera amphitricha, pupae. 9. Orygocera amphitricha, male genitalia.



Figs 10-14.- *Orygocera tryphoxantha.* **11.** *Orygocera tryphoxantha.* **12.** *Orygocera tryphoxantha*, male genitalia. **13.** *Orygocera lenobapta*, female type. **14.** *Orygocera lenobapta*, male type (Figures 13 and14 David Lees, BMNH, London).