Description of the female of *Melanonaclia luctuosa* (OBERTHÜR, 1911) (Lepidoptera: Arctiidae)

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Received: 5 June 2005 Accepted: 20 August 2005

PRZYBYŁOWICZ Ł. 2005. Description of the female of *Melanonaclia luctuosa* (OBER-THÜR, 1911) (Lepidoptera: Arctiidae). *Acta zoologica cracoviensia*, **48B**(1-2): 53-55.

Abstract. The female of *Melanonaclia luctuosa* (OBERTHÜR, 1911) is described on two specimens collected in northern part of Madagascar. The female is similar to the male in size and wing pattern. The female genitalia of this species can be separated from those of all other known *Melanonaclia* by having two similar, plate-like sclerites at the opening of the ductus seminalis, each of which armed with two prominent, "horn-like", sharp, outwards directed processes.

Key words: Lepidoptera, Arctiidae, Melanonaclia luctuosa, female, Madagascar.

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Melanonaclia GRIVEAUD, 1964 comprises 6 endemic species from Madagascar (GRIVEAUD 1964, VIETTE 1990). *Melanonaclia luctuosa* was described by OBERTHÜR (1911) from material collected in Fenerive [17°22'S 49°25'E]. The description was based on one male, the female was unknown at that time. Detailed redescription of the male with colour illustration of its habitus and genitalia drawings were published by GRIVEAUD (1964). During the survey of the collection of Museum and Institute of Zoology, Warsaw, 1 male and 2 females of *M. luctuosa* were found. A description of the female and a comparison with the closely related species is given below.

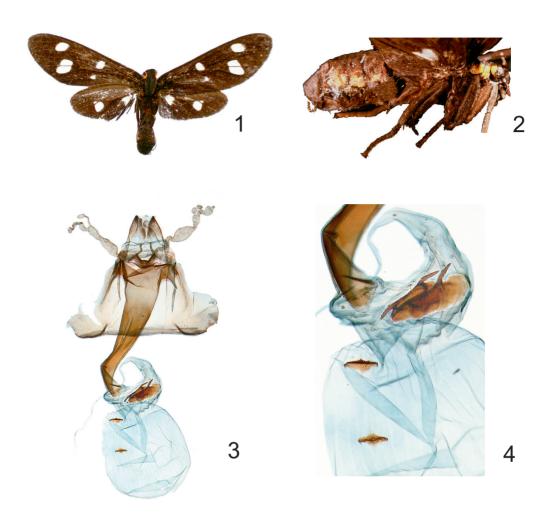
A c k n o w l e d g e m e n t s. The author is greatly grateful to Dr. Tomasz HUFLEJT, Museum and Institute of Zoology, Warsaw for loan of the material for study. I thank Ugo DALL'ASTA (Musée Royal de l'Afrique Centrale, Tervuren) for critically reading the manuscript and revising the language. I also thank Mr. Marek KOPEĆ, Kraków for help in preparing the illustrations.

Melanonaclia luctuosa (OBERTHÜR, 1911)

(Figs 1-4)

M a t e r i a l e x a m i n e d (2 females): Madagascar Borealis, Ambinanitelo ad Maroantsetra, 18.03.1939., ad lucem, leg. B. KRECZMAR; Madagascar Borealis, Ambinanitelo ad Maroantsetra, 13.03.1939., leg. B. KRECZMAR [15°24'S 49°37'E].

D i a g n o s i s. Female resembling *M. lugens* (OBERTHÜR, 1893) and *M. toulgoeti* (GRIVEAUD, 1964) but with orange yellow blotches on the basal part of the tegulae (absent in *M.*



Figs 1-4. *Melanonaclia luctuosa* (OBERTHUR, 1911), female: 1 – habitus; 2 – lateral projection; 3 – genitalia; 4 – enlarged area of originating of ductus seminalis.

lugens) and entirely brownish black venter of abdomen (in *M. toulgoeti* with orange blotch). In the genitalia it differs from the above mentioned species by the presence of two similar, plate-like sclerites at the opening of ductus seminalis, each of them armed with two prominent, "horn-like", sharp, outwards directed processes.

D e s c r i p t i o n. Female (Figs 1-2). Length of forewing: 15.5 mm. Head brownish black; genae orange yellow; eyes small, oval; proboscis well developed; labial palpi of moderate length, straight. Thorax brownish black except two orange yellow blotches on ventral part of patagia and basal part of tegulae. Yellow markings on head and thorax form distinct stripe from gena to base of forewing. Legs unicolorous, brownish black. Forewing ground colour brownish black; four small, semitransparent, white blotches: in the middle of discoidal cell, below base of Cu₂, between R_4 - M_1 , and the largest between M_2 -Cu₁; cilia brownish black. Hindwing concolorous with forewing, costal area somewhat lighter; two small, semitransparent, white blotches: one in dorso-basal area between

cell and An, second, larger, between M₃-Cu₁; cilia brownish black. Abdomen brownish black; tergites 4-6 with rounded, orange yellow blotches laterally, distal blotch most prominent, proximal one minute.

Genitalia (Figs 3-4). Anal papillae moderate, setose; sterigma moderate, provided with shallow antero-lateral depressions; posterior apophyses long, slender, same length as anterior apophyses; ventral pheromone glands absent; dorsal pheromone glands deep, slender, pouch-like, with a short lobe-like processes distally; antrum long, stout, heavily sclerotized; ductus bursae reduced; ductus seminalis starts from base of corpus bursae, wide then gradually narrowed with two similar, plate-like sclerites armed with two prominent, "horn-like", sharp, outwards directed processes; corpus bursae oval, membraneous, two signa.

R e m a r k s. The second female differs in lacking the minute, lateral, orange yellow blotch on the 4 tergite.

REFERENCES

GRIVEAUD P. 1964. Insectes Lepidopteres, Amatidae. Faune de Madagascar, 17: 1-147.

OBERTHÜR Ch. 1911. Lepidopteres Heteroceres nouveaux ou peu connus de l'Afrique tropicale. Annales de la Société Entomologique de France, **79**: 467-472.

VIETTE D. 1990. Liste recapitulative des Lepidopteres Heteroceres de Madagascar. Faune de Madagascar, supplement 1: 1-263.