

The dot underwing *Eudocima materna* (Linnaeus, 1767) (Lepidoptera, Noctuidae) in Seychelles

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The dot underwing *Eudocima materna* (Linnaeus, 1767) has had a highly unstable taxonomic history. At various times it has been placed in the subfamilies Ophiderinae and Catocalinae of the Noctuidae and in the genera *Ophideres* (Fryer 1912; Legrand 1966), *Othreis* (Pinhey 1975) and *Elygea* (Viette 1990). Here we prefer to retain the generic placement that occurs most often in recent literature. The species was first recorded in Seychelles by Fryer (1912), who, in his account of the Lepidoptera collected during the second Percy Sladen Trust Expedition to Seychelles in 1908-1909, reported that “a single specimen flew on board the schooner ‘Charlotte’ when some 40 miles south-west of Platte Island, with a light wind from the north-west after 10 days’ calm”*. There are apparently no further records of *E. materna* (Legrand 1966) until 1984 and 2001, when specimens were collected on Aldabra atoll and one of the granitic islands respectively.

Recent records

The Aldabra specimen was a male collected by John Collie on the 14th of April 1984 in the dining room of the research station on Picard island (data with specimen in Aldabra insect collection). A second male was collected by James Millett in the research house on Cousin island on the 20th October 2001 (Millett, pers. comm.).

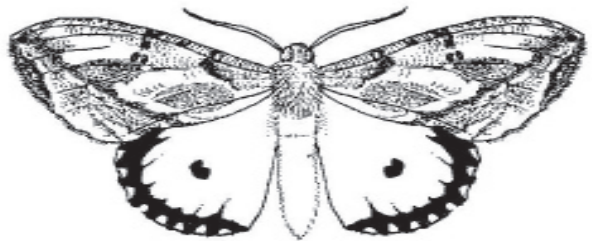


Fig. 1 *Eudocima materna*

* The ‘Charlotte’ appears to have been a schooner that plied between Mahé and the outer islands, judging from the following extracts from the diary of Hugh Scott, entomologist of the second Percy Sladen Trust Expedition, which also indicate possible dates when the specimen was captured: “November 19, 1908: The sailing-ship “Charlotte” (Captain Parcou) returned from Aldabra two or three days ago, bringing letter from Fryer, which I got today...
February 12, 1909: The schooner “Charlotte” returned from Aldabra bringing Fryer.” (Scott, unpublished).

Description

The adult is large (wingspan c. 85mm) and relatively colourful. Forewings are patterned brown, grey and buff; hindwings and abdomen predominantly clear yellow-orange. Hindwings have a 2-10mm black margin, white marginal spots, and a 3mm central black spot, hence the name 'dot underwing' (Pinhey 1975). Females (not yet encountered in Seychelles) differ from malea in having a prominent white diagonal streak on the forewing.

Discussion

Larval foodplants of *E. materna* are Menispermaceae lianas. In Australia larvae feed on *Tinospora smilacina* (Fay 1996) and *Legnephora moorei* (Common 1990; Herbison-Evans & Crossley 2003), and on *Dioscoreophyllum cumminsii*, *Rhigiocarya racemifera* and *Tiliacora* sp. (Forsyth 1966) in Ghana. The only Seychelles Menispermaceae *Cissampelos pareira* Linnaeus, probably introduced and known only from early 20th century records from Assumption (Fosberg & Renvoize 1980; Friedmann 1994). Unrecorded Menispermaceae may occur in gardens on Mahé, but successful breeding of *E materna* seems unlikely. Instead, it is probable that all Seychelles specimens were wind-dispersed or ship-assisted vagrants. There are many potential sources for vagrants; the species is widespread in the tropics, from India (Kalyanam 1967) to Indonesia (Fryer 1912), Australia and the Pacific (Fay 1996), throughout the Afro-tropics (Forsyth 1966; Pinhey 1975) and the Neotropics from Florida and Texas (Pogue 1999) to Brazil (Zagatti *et al* 2001). The nearest breeding population may be in Madagascar where both the moth (Viette 1990) and Menispermaceae (Dumetz 1999) occur.

In parts of its range there have been attempts to control *E. materna* (Waite 2002) as it is regarded as a crop pest: the adults pierce citrus fruits, carambola and mangoes with their barbed proboscis to feed on the juice, creating entry points for fungi and bacteria.

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