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NEW RECORDS OF NOCTUIDAE (LEPIDOPTERA) FROM THE MALTESE ISLANDS

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ABSTRACT

Six species of Noctuidae (Lepidoptera) are reported for the first time from the Maltese Islands. These are *Heteropalpia acrosticta* (Pungeler, 1903), *Araeopteron ecphaea* (Hampson, 1914), *Chilodes maritima* (Tauscher, 1806), *Mormo maura* (Linnaeus, 1758), *Spudea ruticilla* (Esper, [1791]) and *Aporophila australis* Boisduval, 1829. Distribution, habits of adults and larval host plant are included. A Maltese name is proposed for each of the six species.

INTRODUCTION

In the family Noctuidae more than 25,000 species have been described worldwide. In Europe this family is represented by 23 subfamilies, over 200 genera and about 1,250 species (Nowacki & Fibiger, 1996). In the Maltese Islands, the Noctuidae represents the largest family of Lepidoptera, being represented by 19 subfamilies, 81 genera and 144 species (Sammut, 2000). New species of Noctuidae are being described continuously or discovered in countries where they had not been previously recorded. This work is intended to record six species new to the Maltese lepidopterous fauna.

MATERIAL AND METHODS

Material has been collected "at light" or in "light traps" and on "wine ropes". In the case of "at light", a 125W mercury vapour lamp run off a 650W petrol generator, was placed in front of a vertically held white linen sheet. Moths were then hand picked off the sheet. In "light traps", the source of light was a 15W Actinic light. Moths attracted to this light hit a vertical perspex vane and eventually fall in the trap consisting of a large cylindrical container lined on the inside with sheets of egg-packing cardboard which greatly increases the surface on which the moths can roost without damaging themselves. Light traps were usually left running all night. In the morning the trap was opened and the desired specimens were hand picked. Unwanted specimens were tipped amongst tall foliage to reduce predation by birds.

Sugaring, consisting of painting vertical strips, about one metre long and 10 cms wide, on to tree trunks with a brew of boiled beer, treacle and molasses was used, with some success, in the 1950's by Dr. Carmelo Delucca, Anthony Valletta and H.M.Darlow, especially to attract *Catocala elocata* Esper. The first author has used the same sugaring method but with little success. Recently Mr. Ernst Selling from Sweden introduced us to "wine ropes". These consist of short pieces of rope, each about one metre long, dipped in a solution of boiled wine and sugar and hung on to tree trunks.

The material collected at light or on "wine ropes" was killed by placing it in a domestic freezer for about 12 hours, relaxed, pinned, prepared and left to dry for a minimum of seven days.

The following abbreviations have been used in the text:

CAC – private collection, Aldo Catania (Zebbug, Malta);

CAS – private collection, Anthony Seguna (Naxxar, Malta):

CJA – private collection, Jonathan Agius (Zabbar, Malta);

CPS – private collection, Paul Sammut (Rabat, Malta);

CDM - private collection, Denis Magro (Orendi, Malta).

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ANNOTATED SPECIES LIST

Subfamily: Catocalinae

Heteropalpia acrosticta (Pungeler, 1903) Fig. 1

Material examined:

MALTA (19) Zurrieq, Blue Grotto-Wied Babu, 6.vi.2002, leg. A. Magro. (CDM).

The species is new not just for the Maltese Islands but for the whole of Europe (M. Honey, *pers. comm.*). It is known to occur in India, Afghanistan, Sudan, Saudi Arabia, Syria and Algeria. (Seitz, 1914; Wiltshire 1990). The larva is known to feed on species of *Acacia* (Wiltshire, 1990).

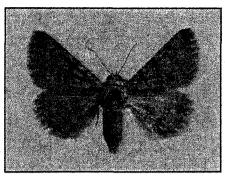


Fig.1: Heteropalpia acrosticta

For this species we propose the Maltese name "Bahrija ta' l-Akacja" after the name of the food plant of its larva.

Subfamily: Acontiinae

Araeopteron ecphaea (Hampson, 1914) Fig. 2

Material examined:

MALTA, (1 σ) Buskett, Wied il-Luq 6.vii.2001 leg. P. Sammut. (CPS); (2 $\sigma\sigma$,1 φ), same data, leg. A. Seguna. (CAS); (1 φ) Dingli Cliffs 13.vii.2001 leg. P. Sammut. (CPS); (1 φ) Wied tal-Bahrija 15.viii.2001 leg. A. Seguna. (CAS); (1 φ) Wied ta l-Isqof (limits of Rabat) 16.vii.2002 leg. A. Catania leg. (CAC); (1 φ) Wied il-Qlejgha (limits of Rabat) 9. vii.2003 leg. J.Agius. (CJA); (1 φ) Buskett, Wied il-Luq 10.vii.2003 leg. P. Sammut. (CPS); (2 $\sigma\sigma$) Buskett, Wied il-Luq, 17.vii.2003 leg. P. Sammut. (CPS); (2 φ φ) Wied tal-Bahrija 5.viii.2003 leg. P.Sammut. (CPS).

All the material cited above was taken at light.

Araeopteron ecphaea is a small acontiine moth which barely exceeds a wingspan of 10mm. The way in which it hold its wings while resting is more reminiscent of a small geometrid than a noctuid.

This Ethiopian species, originally described by Hampson from Baro, Nigeria is now known also from Congo, Malawi and Namibia. From the East Palaearctic it is known from Turkey and the Arabian Peninsula while from the West Palaearctic it is known from Greece, mainland Spain and Mallorca (Fibiger & Agassiz, 2001; Requena, 2002). It has also been recently discovered in Sicily and Calabria, Italy (M. Fibiger, *pers. comm.*).

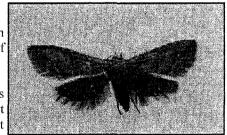


Fig.2: Araeopteron ecphaea (wingspan: 12mm)

Little is known about the biology and early stages of this species. It appears to be multiple brooded. Locally it flies between June and August but on the continent it has been recorded also in May and September. It appears to prefer habitats situated in or close to moist areas. Locally all specimens except the record from Dingli Cliffs, were recorded close to "widien" (small water courses). The species is attracted to light. Locally both 15W actinic light and 125W mercury vapour lamps were used to collect this species.

For this new record we propose the Maltese name "Bahrija tal-Widien"

Subfamily: Hadeninae

Chilodes maritima (Tauscher, 1806) Fig. 3

Material Examined:

MALTA, (19) Bahrija 15.v.1999 leg. A. Seguna. (CPS).

Chilodes maritima (Tauscher) is known from all over Europe except Portugal, Corsica, Sardegna and Sicily. Outside Europe it is also known from Turkey (Nowacki & Fibiger, 1996). The species is single brooded and on the wing from mid-June to mid-August, inhabiting inland and coastal reed-beds (Skinner, 1986). The larva is ochreous with fine dark and light longitudinal lines. The head and

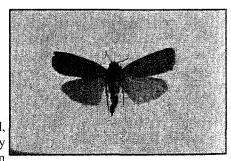


Fig. 3: Chilodes maritima

thoracic plate are brown. It is said to feed on vegetable matter and on larvae and insects which creep into reed-hollows (Seitz, 1914). In captivity the larva is known to feed on meat fat (Skinner, 1986).

For this species we propose the vernacular Maltese name "Bahrija tal-Qasba Irqiqa".

Mormo maura (Linnaeus, 1758) Fig. 4

Material Examined:

MALTA, (19) Buskett, Wied il-Luq 24.vi.2003, at sugar, leg. P. Sammut, A. Seguna & J. J. Borg. (CPS).

The species is known from practically all of Europe and Turkey (Nowacki & Fibiger, 1996). It is also known from Armenia, Asia Minor, Palestine and W. Turkestan (Seitz, 1914). It is single brooded and on the continent it flies from July till September. It is generally associated with shaded and damp river banks and stream beds. The upper part of Wied il-Lug where the species was taken fits exactly the habitat description of this large and beautiful noctuid. It is not attracted to light but readily comes to "sugar". During the day it is said to hide in crevices, old houses and damp caves (Skinner, 1986).

The Wied il-Lug specimen was attracted to "wine ropes" and it was discovered on the "rope" at about 10.30 pm. The larvae are known to feed from September till May on a variety of plants such as blackthorn, hawthorn, elm, sallow and birch. Although some of these plants occur at Buskett, the local larval foodplant has not been identified.

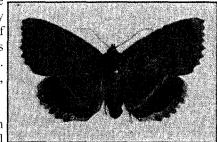


Fig.4: Mormo maura (wingspan: 73mm)

We propose the Maltese name "L-Ghagusa" for this species, after its English equivalent "The Old Lady .

Spudea ruticilla (Esper, [1791]) Fig. 5

Material Examined:

MALTA, (18) Rabat, 12.iii.2000 leg. A. Sammut. (CPS).

The species is univoltine and its flight period is usually March till April. It is known to be attracted to both light and sugar. The species is characteristic of Mediterranean and sub-Mediterranean oak forests and xerotheric, warm mixed oakwoods. It occurs along the western Mediterranean from the Atlas mountains to the Balkans, becoming rarer in north Europe. Outside Europe, it is known only from Morocco and Algeria. (Ronkay et al., 2001).

The caterpillar is known to feed on Ouercus and overwinters as a pupa. The local larval food plant is not known, but is most likely Quercus ilex.

For this species we propose the Maltese name "Bahrija tal-Pil Ahmar" after the transliteration of the species name ruticilla.

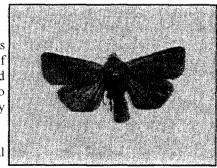


Fig.5: Spudea ruticilla (wingspan: 28mm)

Aporophila australis Boisduval, 1829 Fig. 6

Material Examined:

MALTA, (1 °) Zebbug, 2.xi.2000, at light, leg. A. Catania. (CAC).

Three species in the genus Aporophila, had been previously recorded from Malta: Aporophila nigra (Haworth, 1809) and Aporophila canescens (Duponchel, 1826) both quite common and widely distributed locally, and Aporophila chioleuca (Herrich-Schäffer, 1848) considered to be rare and with a locally restricted distribution (Sammut, 2000). Aporophila australis Boisduval, 1829, is the fourth species from the genus to be recorded locally.

This Mediterranean-Asiatic species is known from the Netherland, England, Ireland, Belgium, France, Spain, the islands of Sicily, Sardegna and Corsica, mainland Italy, Yugoslavia, Bulgaria, Romania, Albania, Greece, Crete and

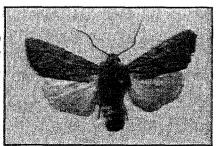


Fig. 6: Aporophila australis (wingspan: 33mm)

Turkey. It is also recorded from Morocco, Asia Minor and Syria (Nowacki & Fibiger, 1996).

The species is single brooded and flies from August till November. It is attracted to both light and sugar. The larva feeds from October till May on Cichorium, Poa annua, Silene maritima, Geranium and other plants (Ronkay et al., 2001). Locally the larval host plant has not been determined.

For this species we propose the Maltese name "Aporofila tan-Nofsinhar".

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