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An annotated catalogue of the Lepidoptera collection of Guido Lanfranco at the National Museum of Natural History in Malta

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ABSTRACT. An annotated list of the lepidoptera in the Lanfranco collection donated to the National Museum of Natural History of Mdina in Malta is included. Where relevant, comments on particular species or specimens are provided.

KEY WORDS. Lepidoptera collection, Guido Lanfranco, National Museum of Natural History, Malta.

PREAMBLE

The entomological collection of Mr Guido Lanfranco was acquired by the National Museum of Natural History as a bequest by Mr G. Lanfranco himself. Most of the insect orders occurring in Malta are represented in the Lanfranco collection. Initially Mr Lanfranco had donated the entomological collection to Dr Louis Cassar who, on acquiring the material contacted the senior author who, in turn, suggested that such a collection should be deposited in an appropriate institution instead of it being dismembered amongst a number of private collections. The formal presentation of the collection to the museum was carried out on April 3, 2006, in the presence of Mr and Ms G. Lanfranco, Dr Mario Tabone, Ms Cecilia Xuereb, Dr L. Cassar and the authors.

INTRODUCTION

In Guido Lanfranco's collection, the Lepidoptera are represented by 716 specimens belonging to 99 different species. Except for one species of Geometridae, one of Papilionidae and seven of Saturniidae (in all 13 specimens), all the other material has been ascertained by the collector to be of local origin. Unfortunately, 255 specimens (just over 35.6%) have no data label and in this category, a specimen of *Euchloe ausonia* (Hübner, 1804), a species possibly new to the lepidopterofauna of Malta is present. Another 43 specimens have only a number on the data label. This brings the number of specimens without data to 298 (just over 41.6%). However, unless otherwise stated by the present authors, much of the material is of local origin (Lanfranco, G. *pers. comm.*).

THE COLLECTION

The collection is very rich in the butterfly species. All the indigenous and migratory species are well represented. None of the erratic migratory species are represented. The larger moths, such as Sphingidae, Lasiocampidae and Arctiidae are also well represented.

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Geometridae are poorly represented by only six species. The collection is very poor as regards the microlepidoptera. There is only one specimen of each from Tineidae, Depressariidae, Oecophoridae and Sesiidae. From the Pyralidae (*sensu lato*) there are only 23 specimens belonging to 8 species.

The collection may have little aesthetic value but its scientific value is important. Of the butterflies, *Maniola jurtina hyperhispulla* (Thomson, 1972), *Aricia agestis* (Denis & Schiffermüller, 1775) and *Lycaena phlaeas* (Linnaeus, 1758) and of the moths, *Brythis crini* (Fabricius, 1775) appear to have been common during the time the collection was assembled. The four specimens of *Celastrina argiolus* (Linnaeus, 1758), dated 1962 are amongst the earliest known from the Maltese Islands. Areas which appear to have harboured a rich entomofauna, such as Wied il-Kbir and Wied Mejxu both in St. Julian's area have completely disappeared and even the locality names are no longer traceable on modern maps.

Most of the material in this collection has been assembled during the years 1951 to 1953 and again from 1964 to 1966. The oldest specimen is a Meadow Brown (*Maniola jurtina hyperhispulla*) collected in June of 1949 while the most recent is a Large White (*Pieris brassicae* Linnaeus, 1758) collected from Ta' Giorni on July 15, 1969. A bred specimen of a hybrid between two papilionid species bears a later date, July 9, 1976. The original entomological collection was housed in 19 wooden boxes of different sizes and specimens pinned on both sides of the boxes on polystyrene. Boxes housing the lepidoptera contained also specimens from the others orders of insects. In at least one of the boxes a setting board was present. This entomological collection is now housed at the National Museum of Natural History in Malta in a separate cabinet labelled as 'Lanfranco Collection'.

Very few specimens carry identification labels. From the material which was attributed to local origin, whether with data or without (700 specimens), only 37 specimens are determined. Of the determined specimens only a specimen of *Dysgonia torrida* (Guenée, 1852) was incorrectly determined as *Ophiusa algira* (Linnaeus, 1767). Another species, identified as *Crino solieri* (Boisduval, 1829) (a correct name for the taxon at that time) is currently known as *Mniotype deluccai* (Berio, 1976).

The country name Malta appears on the data label of only one specimen, an *Aricia agestis* (Denis & Schiffermüller, 1775) taken from San Anton Gardens. On the majority of the data labels, it is clear that the country name (Malta) is intended but not written. The locality name appears on most of the labels, sometimes in the old orthography such as Kaliet (Qaliet) and Wied il-Luk (Luq). This is followed by the date, the month represented in arabic numbers, and the year abbreviated to the last two of the four digit figure. If the specimen has been bred, terms like "exlarva", "bred" or "reared" have been included on the data label. None of the data labels bears the collector's name.

A variety of media has been used to write the data labels. All data labels of the material which we deem are of local origin are all in manuscript by Mr Lanfranco himself (Lanfranco, G., *pers. comm.*). Labels are written in black, violet or blue ink, black, blue, red and green biro ink and in graphite pencil. Very ordinary paper was used for labels and very rarely was the label trimmed and squared. Labels on which just a number appear are slightly thicker. These are circular and according to Mr Lanfranco these have been cut out by a puncher. These numbers correspond to an entry in a notebook, which however, to date could not be traced. Such data labels and numbers

are not confined only to Lepidoptera and are found on specimens from other orders of insects. The non-Maltese geometrid species carry a part printed and part manuscript data label while the data label on the foreign Saturniids is typewritten in blue or black ink.

Most of the specimens have been mounted on Continental 35mm black-coated brass pins. Some were mounted on ordinary "Lill' pins. Micropins used to mount microlepidoptera were used on only a handful of specimens.

INTERVENTION ON THE COLLECTION

It was decided that where it was possible and without risking damaging the specimen, that the original pin will be removed and substituted by a standard entomological, 40mm steel pin. A small numbers of specimens where placed in a relaxing box for over 24 hours after which, if the pin was loose on the specimen, this was removed. If the pin was not loose enough it was returned to the relaxing box for a further 24 hours. The new pin was introduced in the hole left by the old one. In a number of instances where the specimen was too loose on the new pin, a drop of fast drying, acetone-based glue was applied from the underside to fix the pin. Where removal of the pin was not possible and it was considered too unsightly, it was cut down to as near the thorax as possible from the dorsal and ventral side. A new, size 0 pin was then introduced as near to the original pin as possible. In other instances, after trimming down the pin, the specimen was staged on plastozote strip. Some specimens were deliberately left on their original pin, either because of the importance of the specimen or because removal of the pin would have caused damage to the specimens. During this intervention no specimens were damaged or lost, although a few legs got detached and lost in the process. No resetting was attempted. All original data labels, even blank labels were returned on the respective specimen. It was thought fit to scissor-trim the roughly hand-cut data labels.

Finally, to each specimen two new labels were added, one, with the following information "G. Lanfranco Bequest – 2005", and a determination label. The latter including the taxon name, the authority and publication date along with the person who identified the species. These two labels were printed in black, ink-jet ink on glossy paper, font size 6 and font type New Times Roman.

ANNOTATED CATALOGUE

In the annotated list which follows, species sequence follows that of SAMMUT (2000), except for the Noctuoidea for which the recent work of FIBIGER & HACKER (2004) was followed and the Saturniidae where HEPPNER (1991) was followed in the arrangement of the subfamilies. All identifications were carried out by the senior author. After each species entry, any details on the data label are included. Text in square brackets '[]' does not appear on the original data labels. Where a question mark is included, this denotes an illegible writing on the original label. Collection dates are transcribed as on the original labels. In cases where neither a data label nor a number is present with the specimen, this is specifically noted as '[no data label]'. In cases where two labels are present on the same insect (or series of insects pinned together) this is denoted by the slash symbol '/'. The semicolon ';' denotes a new entry of a specimen or series of specimens having the same data.

TINEOIDEA TINEIDAE

Trichophaga tapetzella (Linnaeus, 1758) [MALTA], Sliema, 10.11.68, 1 ex.

GELECHIOIDEA DEPRESSARIIDAE

Agonopterix thapsiella (Zeller, 1847) [MALTA], 27.4.53, 1 ex., reared. **Remarks:** This specimen carries an identification label reading *Agonopteryx thapsella* [*sic*].

OECOPHORIDAE

Esperia sulphurella (Fabricius, 1775) [MALTA], W[ied] Encita, 26.5.53, 1 ex.

SESIOIDEA SESIIDAE

Synanthedon myopaeformis cruentata (Mann, 1859) [MALTA], Sliema, 12.6.63, 1 ex. **Remarks:** This specimen is labelled *Sesia cruentata*. The taxon *cruentata* has now been lowered to subspecies rank and associated with the species *myopaeformis* (Borkhausen, 1789).

PYRALOIDEA PYRALIDAE

Lamoria anella (Denis & Schiffermüller, 1775) [MALTA], 3.7.52, 4 exs., reared; 1 ex. [no data label].

Pyralis farinalis (Linnaeus, 1758) [MALTA], Sliema, 3.6.61, 1 ex.; 3 exs. [no data label]. **Remarks:** The specimen from Sliema carries a determination label reading *Pyralis farinalis*.

Aglossa caprealis (Hübner, 1809) [MALTA], Sliema, 26.4.52, 1 ex.; 1 ex. [No.] 31; 1 ex. [no data label].

Euchromius ocellea (Haworth, 1811) [MALTA], 1 ex. [no data label].

Evergestis isatidalis (Duponchel, 1833) [MALTA], 2 exs. [no data label].

Pleuropyta ruralis (Scopoli, 1768) [MALTA], Sliema, 29.2.64, 2 exs., ex-larva on Stapelia minima.

Duponchelia fovealis (Zeller, 1847) [MALTA], 20.9.51, 1 ex. / [No.] 267.

Nomophila noctuella (Denis & Schiffermüller, 1775) [MALTA], Sliema, 30.10.65, 1 ex., resting; W[ied] Mexju, 6.10.51, 1 ex. / [No.] 289; 3 exs. [no data label].

Remarks: The specimen from Wied Mejxu bears a determination label reading *Nomophyla noctuella* [*sic*].

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LASIOCAMPOIDEA LASIOCAMPIDAE

Lasiocampa trifolii (Denis & Schiffermüller, 1775) [MALTA], Sliema, 4.10.64, 1 ex., ex-larva; 2 exs. [no data label].

Remarks: The specimen from Sliema carries a determination label reading Lasiocampa trifolii.

Gastropacha quercifolia (Linnaeus, 1758) [MALTA], 19.11.52, 1 ex.; 9.[??].52, 1 ex., ex-larva; 3.11.53, 2 exs., ex-larva; 3.11.53, 1 ex. / [No.] 5; 7.11.53, 2 exs., ex-larva; 9.11.53, 2 exs., ex-larva; 12.11.53, 1 ex., ex-larva; 16.11.53, 2 exs., ex-larva; 25.11.53, 1 ex., ex-larva; 28.11.53, 1 ex., ex-larva; 1.12.53, 1 ex., ex-larva; 1 ex. [No.] 2; 4 exs. [no data label].

Remarks: The two ex-larva specimens dated 3.xi.1953 also bear data labels indicating that they have mated together.

BOMBYCOIDEA BOMBYCIDAE

Bombyx mori (Linnaeus, 1758) 1 ex. [no data label].

Remarks: This species, the silk-worm moth, does not occur in the wild in Malta and represents breeding experiments. The specimen is in a very poor state. There are also two empty silk cocoons, also without data.

SATURNIIDAE

Automeris io (Fabricius, 1775) AMERICA, 1 ex.

Remarks: The data label bears also the vernacular name "Bull's Eyes" and the female symbol.

Aglia japonica Leech, [1889] 1 ex. [no data label].

Remarks: This species is endemic to Japan.

Actias luna (Linnaeus, 1758) AMERICA, 1 ex.

Remarks: The specimen bears a determination label: *A*[*ctias*] *luna*, and the vernacular name "Moon moth".

Antheraea paphia (Linnaeus, 1758) INDIA, 1 ex.

Remarks: The specimen bears a determination label: *A. mylitta,* and the vernacular name "Tussor silk-moth".

Antheraea pernyi Guérin-Menéville, 1855 1 ex. [no data label].

Remarks: The specimen bears a determination label: *A. pernyi*. The species originates from China.

Antheraea polyphemus (Cramer, [1775]) AMERICA, 1 ex.

Remarks: The specimen bears a determination label: *T. polyphemus*, and the vernacular name "Oak Silk Moth".

Attacus atlas (Linnaeus, 1758) 1 ex. [no data label].

Remarks: The specimen bears a determination label: *A*[*ttacus*] *atlas*. Atlas moths are found only in Southeast Asia.

Callosamia promothea (Drury, 1773) AMERICA, 1 ex.; 1 ex. [no data label]. **Remarks:** The specimen labelled "America" also bears the male symbol.

Samia cynthia (Drury, [1773]) U.S.A., 1 ex. **Remarks:** The vernacular name "Ailanthus moths" is also included on the data label.

SPHINGOIDEA SPHINGIDAE

Agrius convolvuli (Linnaeus, 1758) [MALTA], [?]Buharrat, 7.10.52, 1 ex.; Ghadira, 19.9.65, 1 ex., resting on *Pancratium*; 2 exs. [no data label].

Acherontia atropos (Linnaeus, 1758) [MALTA], Sliema, May 52, 1 ex. / [No.] 438; 5 exs. [no data label].

Macroglossum stellatarum (Linnaeus, 1758) [MALTA], W[ied] Encita, 10.10.[??], 1 ex.; 3 exs. [no data label].

Hyles sammuti Eitschberger, Danner & Surholt, 1998 [MALTA], W[ied] [il-]Kbir, 1.11.64, 1 ex.; W[ied] [il-]Kbir, 3.11.64, 1 ex., ex-larva; 10.10.53, 1 ex., ex-larva; 26.6.54, 2 exs., ex-larva; 14.7.54, 1 ex., ex-larva; 7.8.54, 1 ex., ex-larva; 9.[??].54, 1 ex., ex-larva; 2.9.54, 1 ex., ex-larva; 4.9.54, 2 exs., ex-larva; 6.9.54, 1 ex., ex-larva; 11.9.54, 1 ex.; 26.4.5[?], 1 ex.; 2 exs. [data label undecipherable]; 4 exs. [no data label].

Remarks: At the time that the collection was assembled, the Maltese population of this taxon was known as *Hyles euphorbiae* (Linnaeus, 1758).

Hyles livornica (Esper, 1779) [MALTA], Sliema, 10.4.64, 1 ex.

Hippotion celerio (Linnaeus, 1758) [MALTA], 26.2.53, 1 ex., reared emerged; [place name undecipherable], 8.11.66, 1 ex.; 1 ex. [No.] 346; 2 exs. [no data label].

Remarks: The specimen collected on 8.xi.1966 bears a determination label reading *Deilephila celerio*.

HESPERIOIDEA HESPERIIDAE

Gegenes pumilio (Hoffmannsegg, 1804) [MALTA], W[ied] Encita, 10.10.53, 4 exs.; W[ied] Encita, 24.9.65, 2 exs.; 1 ex. [No.] 379; 1 ex. [No.] 413; 1 ex. [data label undecipherable].

PAPILIONOIDEA PAPILIONIDAE

Papilio machaon melitensis Eller, 1936 [MALTA], Floriana, 1.10.53, 1 ex.; Floriana, 2.10.53, 1 ex.; 9.9.52, 1 ex., reared; W[ied] Encita, 4.10.53, 1 ex.; 16.10.59, 1 ex., ex-larva; Żabbar, 23.5.76, 1 ex.; 29.9.52, 1 ex., reared; [?]24.9.52, 1 ex., reared; 3 exs. [no data label].

Remarks: There are also two dry pupae and one dry larva, all without data.

Papilio polyxenes asterius (Stoll, 1782) x Papilio machaon [MALTA], Żabbar, 9.7.76, 1 ex.

Remarks: This specimen represents a hybrid between the North American *Papilio polyxenes asterius* and a subspecies of the European *Papilio machaon* (Linnaeus, 1758), very probably our *melitensis*. This breeding experiment has been carried out by Mr Noel Camilleri. The information

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on the data label of this specimen probably refers to where breeding and eclosion of the adult took place.

PIERIDAE

Euchloe ausonia (Hübner, 1804) 1 ex. [no data label].

Remarks: There is a possibility that this specimen is of local origin. However since it bears no data whatsoever it is considered inappropriate to add this species to the list of Maltese lepidopterofauna. In Lanfranco's collection this specimen was placed with the series of *Pontia daplidice* (Linnaeus, 1758). *Euchloe ausonia* was also reported by VALLETTA (1974a, 1974b) as having been collected by Flt. Lt. Harrison during his three day stay in Malta in July of 1953. However, this species, together with three others, the pierid, *Catopsilia florella* Fabricius, 1775, and two lycaenids, *Tarucus theophrastus* Fabricus, 1793 and *Pseudophilotes baton* Bergstrasser, 1779, all reported by VALLETTA (1974a, 1974b) as new records for Malta, were actually collected by Harrison in Cyprus, and not Malta (Harrison, *pers. comm.*). This error was communicated by Harrison to Valletta soon after the latter's publication appeared in *'The Entomologist'*, but has to date not been rectified.

Pieris brassicae (Linnaeus, 1758) [MALTA], Kaliet, 13.3.56, 1 ex.; Ta Giorni, 15.7.69, 1 ex.; W[ied] Encita, 3.4.53, 2 exs.; 3.11.53, 2 exs., ex-larva; 4.11.53, 1 ex., ex-larva; 1 ex. [No.] 148; 7 exs. [no data label]. **Remarks:** There is also a dry pupa without data.

Pieris rapae (Linnaeus, 1758) [MALTA], Sliema, 31.7.53, 1 ex.; W[ied] Encita, 3.4.53, 1 ex.; 26.3.64, 1 ex., ex-larva; 2 exs. [No.] 146; 1 ex. [no data label].

Pontia daplidice (Linnaeus, 1758) [MALTA], Floriana, 2.5.52, 1 ex.; Floriana, 3.5.52, 1 ex.; Floriana, 29.4.52, 1 ex.; W[ied] [il-] Kbir, 10.10.64, 5 exs.; W[ied] [il-] Kbir, 2.11.64, 3 exs.; 1 ex. [No.] 122; 1 ex. [No.] 228; 2 exs. [no data label].

Colias croceus (Fourcroy, 1785) [MALTA], Floriana, 3.4.54, 1 ex.; Kaliet, 30.3.52, 1 ex.; W[ied] Encita, 3.10.53, 1 ex.; W[ied] Encita, 4.10.53, 1 ex.; W[ied] Encita, 10.10.53, 4 exs.; W[ied] Encita, 3.4.54, 1 ex.; W[ied] Mejxu, 13.3.52, 1 ex.; W[ied] Mejxu, 27.4.52, 1 ex.; W[ied] Mejxu, 10.6.52, 1 ex.; W[ied] [is-] Sewda, 16.4.51, 1 ex.; W[ied] [is-] Sewda, 10.4.52, 1 ex.; W[ied] [is-] Sewda, 16.4.52, 1 ex.; W[ied] [is-] Sewda, 10.4.52, 1 ex.; W[ied] [is-] Sewda, 16.4.51, 1.0.10.64, 1 ex.; 1 ex. [No.] 140; 1 ex. [No.] 142; 1 ex. [No.] 144; 1 ex. [No.] 145; 4 exs. [no data label]. Remarks: Six specimens from the above cited material belong to the form *helice* Hübner, 1803.

Gonepteryx cleopatra (Linnaeus, 1767) [MALTA], [Balzan] S[an] Anton [Gardens], 4.6.52, 1 ex.; [Floriana], Argotti Gardens, 7.10.53, 1 ex.; Kaliet, 11.5.52, 1 ex.; Vittoriosa, 5.10.64, 1 ex.; W[ied] Encita, 24.5.52, 4 exs.; W[ied] Encita, 10.6.54, 2 exs.; 4 exs. [no data label].

LYCAENOIDEA LYCAENIDAE

Lycaena phlaeas (Linnaeus, 1758) [MALTA], [Balzan], S[an] Anton [Gardens], 24.9.65, 1 ex.; Boskett, 17.10.51, 1 ex.; Buskett, 14.6.52, 2 exs.; Buskett, 2.7.52, 2 exs.; W[ied] Babu, 21.4.52, 1 ex.; W[ied] Encita, 18.5.52, 1 ex.; W[ied] Encita, 21.3.53, 1 ex.; W[ied] Encita, 2.3.54, 1 ex.; W[ied] Encita, 24.9.65, 2 exs.; W[ied] Mejxu, 9.4.52, 1 ex.; W[ied] Mejxu, 27.4.52, 1 ex.; W[ied] Mejxu, 8.8.52, 1 ex.; W[ied] Mejxu, 12.4.53, 1 ex.; 1 ex. [No.] 51; 1 ex. [No.] 53; 1 ex. [No.] 54; 6 exs. [no data label].

Lampides boeticus (Linnaeus, 1758) [MALTA], [Balzan], S[an] Anton [Gardens], 24.9.65, 2 exs.; Kaliet, 12.6.52, 1 ex.; W[ied] Encita, 10.10.52, 1 ex.; W[ied] Mejxu, 10.6.52, 1 ex.; W[ied] Mejxu, 12.6.52, 2 exs.; 1 ex. [No.] 57.

Leptotes pirithous (Linnaeus, 1758) [MALTA], Sliema, 26.6.52, 1 ex.; W[ied] Encita, 24.9.65, 6 exs.; W[ied] [il-] Kbir, 10.10.64, 1 ex.; 1 ex. [No.] 58; 1 ex. [No.] 59; 1 ex. [No.] 60; 1 ex. [No.] 278; 1 ex. [No.] 333; 4 exs. [no data label].

Celastrina argiolus (Linnaeus, 1758) [MALTA], 2.4.62, 4 exs.; 1 ex. [no data label].

Remarks: The four specimens collected on 2.iv.1962 had only one data label and one determination label between them. These were placed on one of the specimens and to the other three we have added an additional black, ink-jet printed data label bearing: 2.4.62, Lanfranco Coll. At least the four specimens bearing the date of collection are important because they represent very early records for this species. The first records for this species from Malta are those of VALLETTA (1961a, 1961b) from two male specimens collected from Buskett on March 23, 1961.

Aricia agestis (Denis & Schiffermüller, 1775) MALTA, [Balzan], San Anton [Gardens], 23.9.65, 1 ex.; [Balzan], S[an] Anton [Gardens], 24.9.65, 1 ex.; Gnejna, 15.5.52, 1 ex.; W[ied] Babu, 21.4.52, 1 ex.; W[ied] Encita, 4.10.53, 2 exs.; W[ied] [il-] Kbir, 10.10.64, 2 exs.; W[ied] Mejxu, 27.4.52, 2 exs.; W[ied] [is-]Sewda, 18.5.52, 1 ex.; W[ied] [is-]Sewda, 19.9.52, 1 ex.; 1 ex. [No.] 42; 1 ex. [No.] 45; 1 ex. [No.] 46; 1 ex. [data label blank]; 4 exs. [no data label].

Remarks: In recent times this species has become quite rare.

Polyommatus icarus (Rottemburg, 1775) [MALTA], Buskett, 14.6.52, 3 exs.; Ghajn Tuffieha, 14.4.52, 1 ex.; W[ied] Babu, 21.4.52, 1 ex.; W[ied] Encita, 12.4.52, 1 ex.; W[ied] Encita, 16.4.52, 2 exs.; W[ied] Encita, 4.10.53, 4 exs.; W[ied] Encita, 19.9.54, 3 exs.; W[ied] Encita, 24.9.65, 1 ex.; W[ied] Mejxu, 13.3.52, 2 exs.; W[ied] Mejxu, 15.3.52, 3 exs.; W[ied] Mejxu, 9.4.52, 1 ex.; W[ied] Mejxu, 27.4.52, 2 exs.; W[ied] Mejxu, 11.5.52, 1 ex.; W[ied] Mejxu, 12.4.53, 1 ex.; 1 ex. [No.] 63; 1 ex. [No.] 64; 1 ex. [No.] 66; 1 ex. [data label blank]; 6 exs. [no data label].

NYMPHALOIDEA NYMPHALIDAE

Vanessa atalanta (Linnaeus, 1758) [MALTA], Floriana, 3.4.52, 1 ex.; Kaliet, 14.3.54, 1 ex.; W[ied] Mejxu, 30.3.52, 1 ex.; 1 ex. [No.] 387; 3 exs. [no data label].

Vanessa cardui (Linnaeus, 1758) [MALTA], Sliema, 28.9.64, 2 exs., ex-larva; Sliema, 1.10.64, 1 ex., ex-larva; St. George's [Bay], 15.3.54, 1 ex.; W[ied] Encita, 10.10.53, 2 exs., ex-larva; W[ied] [is-] Sewda, 10.4.52, 1 ex.; W[ied] [is-] Sewda, 16.4.52, 1 ex.; W[ied] [is-] Sewda, [date undecipherable], 1 ex.; 21.9.64, 2 exs., ex-larva; 29.9.64, 1 ex., ex-larva; 30.9.64, 6 exs., ex-larva; 1.10.64, 1 ex., ex-larva; 1 ex. [no data label].

Remarks: On the verso of the data label of the specimen collected from Wied is-Sewda and in which the date is undecipherable, we have written in ms. Blue ink - "Wied is-Sewda - P. Sammut".

Lasiommata megera (Linnaeus, 1767) [MALTA], Kaliet, 14.3.54, 1 ex.; W[ied] Encita, 3.10.53, 1 ex.; W[ied] Encita, 2.3.54, 1 ex.; W[ied] Mejxu, 15.3.52, 1 ex.; 3 exs. [no data label].

Pararge aegeria (Linnaeus, 1758) [MALTA], W[ied] Encita, 27.2.54, 1 ex.; W[ied] [is-] Sewda, [date undeciperable], 1 ex.; W[ied] [ta'l-] Isperanza, 19.3.52, 1 ex.; 1 ex. [No.] 332; 8 exs. [no data label].

Coenonympha pamphilus (Linnaeus, 1758) [MALTA], Buskett, 14.6.52, 1 ex.; W[ied] Mejxu, 13.3.52, 1 ex.; 1 ex. [no data label].

Maniola jurtina hyperhispulla Thomson, 1972 [MALTA], Buskett, 14.6.52, 3 exs.; Buskett, 17.5.52, 4 exs.; Kaliet, 6.5.52, 1 ex.; Kaliet, 11.5.52, 1 ex.; Kaliet, 12.5.52, 1 ex.; Floriana, 29.4.52, 1 ex.; Floriana, 1.10.53, 1

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ex.; St.George's [Bay], 11.5.52, 1 ex.; W[ied] Encita, 25.5.52, 1 ex.; W[ied] Encita, 27.5.52, 2 exs.; W[ied] Encita, 13.6.53, 1 ex.; W[ied] Encita, 4.10.53, 1 ex.; W[ied] Encita, 10.6.54, 2 exs.; W[ied] Encita, 2.3.57, 1 ex.; W[ied] Encita, 24.9.65, 1 ex.; W[ied] [il-] Kbir, 20.5.54, 2 exs.; W[ied] [il-] Kbir, 24.5.54, 2 exs.; W[ied] Mejxu, 6.5.52, 2 exs.; W[ied] Mejxu, 8.5.52, 1 ex.; W[ied] Mejxu, 11.5.52, 5 exs.; W[ied] Mejxu, 12.6.52, 1 ex.; W[ied] Mejxu, 18.6.52, 2 exs.; W[ied] Mejxu, 29.6.52, 2 exs.; W[ied] Mejxu, 14.5.53, 1 ex.; W[ied] Mejxu, 27.5.54, 2 exs.; W[ied] Iii-] Sewda, 18.5.52, 4 exs.; Jun[e] 49, 1 ex.; Jun[y] 51, 1 ex.; 1 ex. [No.] 125; 1 ex. [No.] 128.

Remarks: This formerly very common species is now rare, having almost completely disappeared from Malta but still existing in small populations on the island of Gozo.

GEOMETROIDEA GEOMETRIDAE

Scopula imitaria (Hübner, [1799]) [MALTA], 4 exs. [no data label].

Rhodometra sacraria (Linnaeus, 1767) [MALTA], 3 exs. [no data label].

Xanthorrhoe disjunctaria (La Harpe, 1860) [MALTA], 1 ex. [no data label].

Larentia clavaria (Haworth, 1809) [MALTA], 8 exs. [no data label].

Larentia malvata (Rambur, 1832) [MALTA], Blata I-Bajda, School, 1.12.65, 1 ex.; 2 exs. [no data label].

Anaitis efformata (Guenée, 1857) [MALTA], Buskett, 10.11.51, 1 ex.; 1 ex. [no data label].

Spargania luctuata (Denis & Schiffermüller, 1775) [GERMANY], Frank[fur]t [-a-] Main, [?] Solochberg, 15.6.50, leg. Wunderlich.

Remarks: The specimen bears a partly printed and partly manuscript label.

NOCTUOIDEA ARCTIIDAE

Phragmatobia fuliginosa melitensis (O.Bang-Haas, 1927) [MALTA], 2 exs. [no data label].

Cymbalophora pudica (Esper, [1785]) [MALTA], Floriana, 27.10.53, 3 exs.; 1 ex. [No.] 353; 8 exs. [no data label].

Remarks: One of the Floriana specimens bears a determination label reading Euprepia pudica.

Utetheisa pulchella (Linnaeus, 1758) [MALTA], [Birżebbuģia], Ghar Dalam, 13.10.64, 2 exs.; Kaliet, 17.10.53, 1 ex.; Vittoriosa, 11.10.64, 1 ex.; W[ied] Encita, 10.10.53, 1 ex.; W[ied] [il-] Kbir, 10.10.64, 2 exs.; W[ied] [il-] Kbir, 28.10.64, 2 exs., ex-larva; W[ied] [il-] Kbir, 29.10.64, 1 ex., ex-larva; W[ied] [il-] Kbir, 31.10.64, 5 exs., ex-larva; W[ied] [il-] Kbir, 11.164, 1 ex., ex-larva; W[ied] [il-] Kbir, 2.11.64, 2 exs.; W[ied] [il-] Kbir, 31.10.64, 2 exs., ex-larva; W[ied] [il-] Kbir, 11.164, 1 ex., ex-larva; W[ied] [il-] Kbir, 5.11.64, 2 exs., ex-larva; W[ied] [il-] Kbir, 7.11.64, 1 ex., ex-larva; W[ied] [il-] Kbir, 5.11.64, 2 exs., ex-larva; W[ied] [il-] Kbir, 7.11.64, 1 ex., ex-larva; W[ied] [il-] Kbir, 5.11.64, 2 exs., ex-larva; W[ied] [il-] Kbir, 7.11.64, 1 ex., ex-larva; W[ied] [il-] Kbir, 5.11.64, 2 exs., ex-larva; W[ied] [il-] Kbir, 7.11.64, 1 ex., ex-larva; W[ied] [il-] Kbir, 7.11.64, 1 ex., ex-larva; W[ied] [il-] Kbir, 5.11.64, 2 exs., ex-larva; W[ied] [il-] Kbir, 7.11.64, 1 ex., ex-larva; W[ied] [il-] Kbir, 5.11.64, 2 exs., ex-larva; W[ied] [il-] Kbir, 7.11.64, 1 ex., ex-larva; 1 ex. [No.] 359; 4 exs. [No data labe]].

Remarks: With this series there is an additional data label to cover material collected from Wied il-Kbir, and reads "*U. pulchella* dated Oct. & Nov. 1964 were all collected from W. Kbir during exc[ursion] of NHSM [Natural History Society of Malta] of Oct. 1964" Additionally the two specimens collected from Wied il-Kbir on 3.xi.1964 have the word "Sliema" next to the words, "ex-larva".

EREBIDAE

Eublemma ostrina (Hübner, [1808]) [MALTA], W[ied] [il-] Ghasel, 16.10.65, 1 ex., by beating; W[ied] Mejxu, 12.4.53, 1 ex.

Nodaria nodosalis (Herrich-Schäffer, [1851]) [MALTA], W[ied] Encita, 18.5.52, 1 ex. / [No.] 419; W[ied] [is-] Sewda, 19.4.52, 1 ex.; 1 ex. [No.] 8; 3 exs. [no data label].

Remarks: The specimen from Wied Encita carry a determination label, *Metaporia nodosalis*. Specimen with data label [No.] 8 is determined as *Herminia nodosalis*.

Hypena lividalis (Hübner, 1796) [MALTA], Sliema, 28.7.53, 1 ex.; Sliema, 21.9. 53, 1 ex.; Sliema, 18.8.[??], 1 ex.; 1 ex. [no data label].

Clytie illunaris (Hübner, [1813]) [MALTA], Sliema, 5.9.55, 1 ex.; 3 exs. [no data label].

Dysgonia torrida (Guenée, 1852) [MALTA], [No.] 284; 1 ex. [no data label]. Remarks: The specimen numbered 284 bears an incorrect determination label reading *Ophiusa algira*.

Dysgonia algira (Linnaeus, 1767) [MALTA], 1 ex. [no data label].

Cataocala elocata (Esper, 1787) [MALTA], Buskett, Wied [il-] Luk, 1.8.60, 1 ex.; 2 exs. [no data label].

NOCTUIDAE

Abrostola triplasia (Linnaeus, 1758) [MALTA], [??].[??].57, 1 ex.

Trichoplusia ni (Hübner, [1803]) [MALTA], Vittoriosa, 27.9.64, 1 ex., at light; Vitt[oriosa], 10.11.64, 1 ex.; 5 exs. [no data label].

Thysanoplusia orichalcea (Fabricius, 1775) [MALTA], W[ied] Encita, 24.11.51, 1 ex. / [No.] 366. **Remarks:** This specimen carries two determination labels reading *Plusia oricalcea* [*sic*].

Chrysodeixis chalcites (Esper, 1789) [MALTA], Buskett, 24.11.51, 1 ex.; Sliema, 10.9.53, 1 ex., ex-larva on Capsicum; Sliema, 1.10.64, 1 ex.; [data label undecipherable], 1 ex.; 1 ex. [No.] 358; 1 ex. [no data label]. **Remarks:** The specimen from Buskett bears a determination label reading: *Plusia chalcites*.

Autographa gamma (Linnaeus, 1758) [MALTA], [?] Buskett, 17.8.52, 1 ex.; Vittoriosa, 27.9.64, 1 ex.; W[ied] Encita, 10.10.52, 1 ex.; W[ied] Mejxu, 13.3.52, 1 ex.; W[ied] Mejxu, 1.4.53, 1 ex.; 13.3.51, 1 ex.; 1 ex. [No.] 318; 7 exs. [no data label].

Emmelia trabealis (Scopoli, 1763) [MALTA], 1 ex. [no data label].

Diloba caeruleocephala (Linnaeus, 1758) [MALTA], St. George[es] [Bay], Nov. 51, 1 ex.; 11.11.52, 1 ex.; 16.11.52, 1 ex.; 11.11.53, 1 ex.; 15.11.53, 1 ex.; 1 ex. [No.] 357. **Remarks:** The specimen collected from St. George's bay bears a determination label reading *Episima caeruleocephala* [*sic*].

Synthymia fixa (Fabricius, 1787) [MALTA], W[ied] Mejxu, 9.4.52, 1 ex. / [No.] 427. **Remarks:** This specimens carries a determination label reading: *Monogramma fixa*, and an additional data label reading 9. April 1952. *Tyta luctuosa* (Denis & Schiffermüller, 1775) [MALTA], St. George's B[ay], 6.5.51, 1 ex. / [No.] 5; W[ied] Mejxu, 29.7.52, 1 ex.; W[ied] Mejxu, 27.9.52, 1 ex.; [data undecipherable], 2 exs.; 1 ex. [no data label]. **Remarks:** The specimen from St. George's Bay bears also a determination label reading: *A. luctuosa*. The specimen collected from Wied Mejxu on 29.vii.1952 bears a determination label reading: *Acontia luctuosa*.

Cucullia (Cucullia) calendulae (Treitschke, 1833) [MALTA], Sliema, 21.1.66, 1 ex.

Cucullia (Shargacucullia) verbasci (Linnaeus, 1758) [MALTA], 5.5.64, 2 exs., ex-larva. **Remarks:** Both specimens carry a determination label reading *Cucullia verbasci*.

Heliothis peltigera (Denis & Schiffermüller, 1775) [MALTA], Kaliet, 12.6.52, 3 exs.; Vittoriosa, 27.9.64, 1 ex., at light; W[ied] Mejxu, 12.6.52, 2 exs.; 14.7.52, 1 ex., reared; 4 exs. [no data label].

Helicoverpa armigera (Hübner, [1808]) [MALTA], 23.5.52, 1 ex., reared / [No.] 431. **Remarks:** The specimen carries two determination labels, reading *Cloride armigera* [*sic*].

Spodoptera exigua (Hübner, [1808]) [MALTA], Vittoriosa, 27.9.64, 2 exs.; Vittoriosa, 8.11.64, 3 exs., at light; Vittoriosa, 10.11.64, 1 ex.; W[ied] [il-] Kbir, 10.10.64, 1 ex.; 1 ex. [No.] 365; 8 exs. [no data label].

Spodoptera littoralis (Boisduval, 1833) [MALTA], Sliema, 4.10.64, 1 ex., at rest; Vittoriosa, 8.11.64, 2 exs.; Vittoriosa, 10.11.64, 1 ex.; Vittoriosa, 19.11.64, 1 ex.; W[ied] [il-] Kbir, 10.10.64, 1 ex.; 18.11.67, 1 ex., on *Alisma*.

Phlogophora meticulosa (Linnaeus, 1758) [MALTA], 1 ex. [No.] 10; 1 ex. [no data label].

Agrochola lychnidis (Denis & Schiffermüller, 1775) [MALTA], Ta' Giorni, Nov. 66, 1 ex.; 1 ex. [No.] 352; 19 exs. [no data label].

Remarks: One of the specimens without data label carries a determination label reading: *Orthosia pistacina* ?. The taxon *pistacina* Denis & Schiffermüller, 1775 is only a colour morph and is a synonym of *lychnidis*.

Xylena exsoleta (Linnaeus, 1758) [MALTA], Floriana, 13.12.51, 1 ex.; 1 ex. [No.] 382. **Remarks:** The population from Malta of this species is today referred to as ssp. *maltensis* Fibiger *et al.*, 2006 (Fibiger *et al.*, 2006).

Aporophila nigra (Haworth, [1809]) [MALTA], 1 ex. [No.] 376; 2 exs. [no data label].

Aporophila canescens (Duponchel, 1826) [MALTA], 24.11.51, 2 exs.; 9.10.53, 1 ex., 3x-larva; 13.10.53, 1 ex., ex-larva; 17.10.53, 1 ex., ex-larva; 24.10.53, 2 exs., ex-larva; 27.10.53, 1 ex., ex-larva; 29.10.53, 1 ex., ex-larva; 29.10.53, 1 ex., ex-larva; 21.1.53, 1 ex., ex-larva; 2 exs. [no data label].

Remarks: The specimens dated 24.xi.1951 each bear a determination label reading *Polia canescens* and an additional data label, on one reading [No.] 362 and on the other reading [No.] 364.

Mniotype deluccai (Berio, 1976) [MALTA], Buskett, Nov[ember], 51, 1 ex.; Sliema, 3.11.52, 1 ex.; Vittoriosa, 26.10.64, 1 ex.; 1 ex. [No.] 356; 1 ex. [No.] 442; 28 exs. [no data label].

Remarks: The specimen from Buskett and the one numbered 356, each bear a determination label reading *Crino solieri*.

Anarta (Calocestra) trifolii (Hufnagel, 1766) [MALTA], 1 ex. [no data label].

Mythimna unipuncta (Haworth, 1809) [MALTA], Floriana, 24.3.53, 1 ex.

Brithys crini (Fabricius, 1775) [MALTA], Mellieha, 8.10.65, 5 exs., on *Pancratium*; 9.10.65, 10 exs.; 22.2.65, 1 ex.

Remarks: The full data with specimens collected from Mellieha on 8.x.1965 reads: "larva 20.9.65 imago 8.10.65" and the verso, "on *Pancratium*, Mellieha Malta". The full data on the specimens bearing date 9.x.1965 reads "larva 22.9.65 imago 9.10.65".

Peridroma saucia (Hübner, [1808]) [MALTA], Floriana, 30.5.52, 1 ex. / [No.] 452; 3 exs. [no data label].

Agrotis lata (Treitschke, 1835) [MALTA], Vittoriosa, 27.9.64, 1 ex., at light; 2 exs. [no data label].

Agrotis puta (Hübner, [1803]) [MALTA], 12 exs. [no data label].

Agrotis trux (Hübner, [1824]) [MALTA], Floriana, 6.10.53, 1 ex.; 4 exs. [no data label].

Agrotis ipsilon (Hufnagel, 1766) [MALTA], Floriana, 1.9.53, 1 ex.; Vittoriosa, 24.10.64, 1 ex., at light; Zurrieq, Blue Grotto, 28.9.69, 1 ex.; 1 ex. [No.] 354; 1 ex. [No.] 385.

Remarks: The specimen numbered 354 carries a determination label reading *Apamea ypsilon* [*sic*] while that from Floriana carries a determination label reading *Agrotis ypsilon* [*sic*].

Noctua pronuba (Linnaeus, 1758) [MALTA], 3 exs. [no data label].

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