

# *Agrotis endogaea punica* Pinker, 1980 a new Noctuidae for Malta, including an updated Noctuoidea checklist for the Maltese Islands (Lepidoptera: Noctuidae)

Jonathan Agius

## Abstract

*Agrotis endogaea punica* Pinker, 1980 is reported for the first time from Europe and the Maltese Islands. Notes on the distribution and habitat of the adult are included. A Maltese name is proposed for this new record.

**Keywords:** Lepidoptera, Noctuidae, Noctuinae, *Agrotis endogaea punica*, new record, Maltese Islands.

*Agrotis endogaea punica* Pinker, 1980 un nuevo Noctuidae para Malta, incluyendo una lista actualizada de Noctuoidea para Malta (Lepidoptera: Noctuidae)

## Resumen

*Agrotis endogaea punica* Pinker, 1980 se cita por primera vez en Europa y en Malta. Se incluyen notas sobre la distribución y el hábitat del adulto. Se propone un nombre maltés para este nuevo registro.

**Palabras clave:** Lepidoptera, Noctuidae, Noctuinae, *Agrotis endogaea punica*, nuevo registro, Malta.

## Introduction

The genus *Agrotis* Ochsenheimer, 1816 exhibits a global distribution spanning all biogeographical regions with 80 species recorded from the Palearctic region (Fibiger, 1990), 32 of which being present in Europe (Fibiger, 1990). In the Maltese Islands a total of 10 *Agrotis* species have been recorded so far with *Agrotis obesa* (Boisduval, 1829) and *Agrotis exclamationis* (Linnaeus, 1758) have been mentioned but not officially recorded (Sammut, 2000) leading to the assumption that these mentions were likely due to a mix-up with *Agrotis lata* Treitschke, 1835 and *Agrotis trux* (Hübner, [1824]) respectively owing to their striking similarities. Additionally, a specimen of *Euxoa canariensis mauretanicus* (Bang-Haas, 1910) has been inaccurately recorded by the author as *Agrotis desertorum* Boisduval, 1840.

Typically, *Agrotis* species are characterized by a strongly or moderately bipectinate antennae in males and their capability to cover long distances during flight. In common parlance, the larvae of *Agrotis* species are often referred to as cutworms because some of these species are significant agricultural pests. Their larvae have a habit of concealing themselves during daylight hours and emerging at night to feed. The name “cutworm” alludes to the larvae’s tendency to cut down and partially consume garden and crop plants, as noted by Smit in 1964.

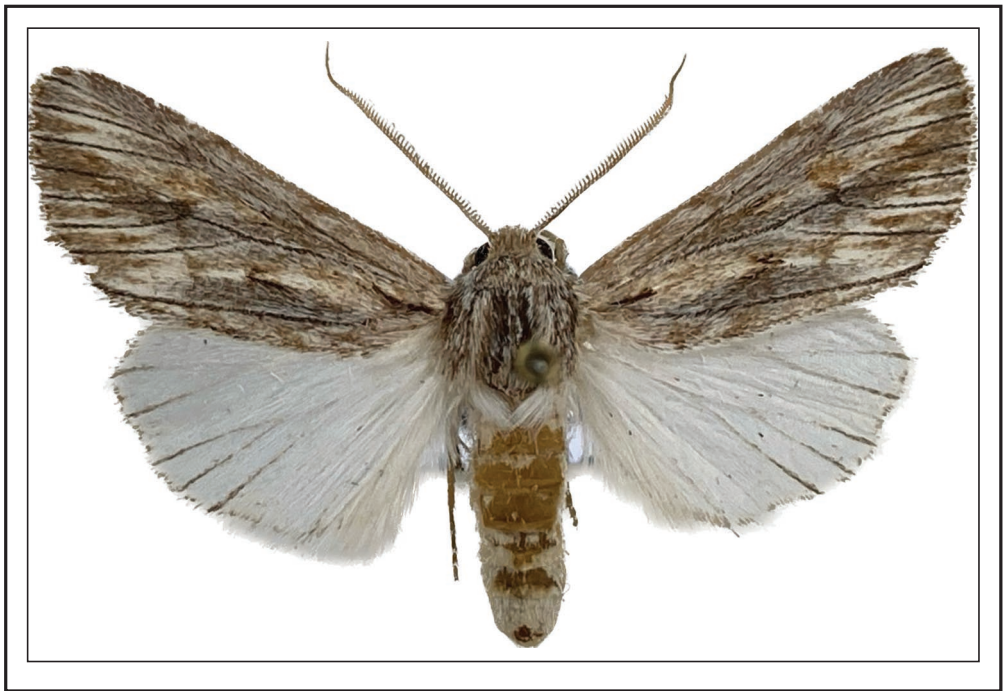
The larvae of *Agrotis endogaea punica* Pinker, 1980, have been observed feeding on *Genista* and *Melandrum* sp. in Tunisia. As for the adult moths, they are typically in flight from September to

October, with occasional sightings in May. Their preferred habitat consists of sandhills with sparse vegetation.

The nominate subspecies is distributed throughout Corsica and Sardegna whilst *A. e. graeca* Fibiger, 1997 is found in Greece. *Agrotis endogaea punica* Pinker, 1980 appears to be confined to Tunisia (Fibiger, 1990) however on the 12-IX-2002, a male specimen was recorded from Pachino in Sicily (Bella & Fibiger, 2009) which is in the southernmost tip of the island and consequently, there is a valid basis to assume that this specimen belongs to *Agrotis endogaea punica* Pinker, 1980. Outside the Mediterranean region, this species can also be found in the Canary Islands.

### Material Studied

MALTA, Zurrieq, 1 ♂, 17-XI-2022 at 250W MV light, coll & leg. J. Agius.



### Discussion

The arrival of North African species during mid-autumn is always associated with southern winds (Agius, 2022). In fact, over the years some interesting North African species have been recorded together such as *Euxoa capsensis* Chrétien, 1911, *Scythocentropus inquinata* (Mabille, 1888), *Cucullia biskrana* (Oberthür, 1918), *Cucullia syrtana* (Mabille, 1888), *Agrotis catalaunensis* (Millière, 1873), *Agrotis haifae* Staudinger, 1897 and *Agrotis herzogi* Rebel, 1911 amongst others.

With the addition of *Agrotis endogaea punica* Pinker, 1980 to the Maltese lepidoptero fauna, the total Noctuoidea Latreille, 1809 species correctly recorded from Malta as at the 30-X-2023 are 178 species.

The 178 confirmed Noctuoidea Latreille, 1809 species sorted by the phylogenetic relationships among the noctuid lineages confirmed from the Maltese Islands are as follows:

Superfamily Noctuoidea Latreille, 1809

Family Nolidae Bruand, 184

Subfamily Nolinae Bruand, 1847

*Nola chlamitulalis* (Hübner, [1813])

Subfamily Chloephorinae Stainton, 1859

*Earias insulana* (Boisduval, 1833)

*Garella nilotica* (Rogenhofer, 1882)

*Xanthodes albago* (Fabricius, 1794)

Family Erebidae Leach, 1815

Subfamily Rivulinae Grote, 1895

*Zebeeba falsalis* (Herrich-Schäffer, 1839)

Subfamily Hypeninae Herrich-Schäffer, [1851]

*Hypena lividalis* (Hübner, 1790)

*Hypena obsitalis* (Hübner, [1813])

Subfamily Lymantriinae Hampson, 1893

*Casama innotata* (Walker, 1855)

*Euproctis chrysorrhoea* (Linnaeus, 1758)

*Lymantria dispar* (Linnaeus, 1758)

*Ocneria atlantica* (Rambur, 1837)

*Orgyia trigotephras* Boisduval, [1828]

Subfamily Arctiinae Leach, 1815

*Arctia konewkaii* (Freyer, [1831])

*Cymbalophora pudica* (Esper, [1785])

*Dysauxes famula* (Freyer, [1836])

*Eilema caniola* (Hübner, [1808])

*Eilema marcida* (Mann, 1859)

*Eilema rungsi* (Toulgöet, 1960)

*Hyphantria cunea* (Drury, 1773)

*Lithosia quadra* (Linnaeus, 1758)

*Phragmatobia fuliginosa melitensis* Bang-Haas, 1927

*Utetheisa pulchella* (Linnaeus, 1758)

Subfamily Herminiinae Leach, [1815]

*Nodaria nodosalis* (Herrich-Schäffer, [1851])

*Polypogon plumigeralis* (Hübner, [1825])

Subfamily Toxocampinae Guenée, 1852

*Anumeta hilgerti* (Rothschild, 1909)

*Autophila dilucida* (Hübner, [1808])

*Autophila maura* (Staudinger, 1888)

*Autophila rosea* (Staudinger, 1888)

*Tathorhynchus exsiccata* (Lederer, 1855)

Subfamily Hypenodinae Forbes, 1954

*Schranksia costaeistrigalis* (Stephens, 1834)

Subfamily Boletobiinae Guenée, [1858]

*Araeopteron ephaea* (Hampson, 1914)

*Eublemma cochylioides* (Guenée, 1852)

*Eublemma deleta* (Staudinger, 1901)

*Eublemma deserta* (Staudinger, 1900)

*Eublemma ostrina* (Hübner, [1808])

*Eublemma parva* (Hübner, [1808])

*Eublemma scitula* (Rambur, 1833)

*Metachrostis velocior* (Staudinger, 1892)

- Metachrostis velox* (Hübner,  
*Odice pergrata* (Rambur, 1858)  
*Odice suava* (Hübner, [1813])  
Subfamily Erebiinae Leach, [1815]  
*Drasteria philippina* (Austaut, 1880)  
*Pandesma robusta* (Walker, [1858])  
Subfamily Catocalinae Boisduval, 1828  
*Catocala coniuncta* (Esper, [1787])  
*Catocala elocata* (Esper, [1787])  
*Catocala nymphaea* (Esper, [1787])  
*Catocala nymphagoga* (Esper, [1787])  
*Cerocala algeriae* Oberthür, 1876  
*Clytie illunaris* (Hübner, [1813])  
*Clytie sancta* (Staudinger, 1898)  
*Dysgonia algira* (Linnaeus, 1767)  
*Dysgonia torrida* (Guenée, 1852)  
*Grammodes bifasciata* (Petagna, 1786)  
*Grammodes stolidia* (Fabricius, 1775)  
*Heteropalpia acrosticta* (Püngeler, 1904)  
*Ophiusa tirhaca* (Cramer, [1777])  
Family Euteliidae Grote, 1882  
Subfamily Euteliinae Grote, 1882  
*Eutelia adulatrix* (Hübner, [1813])  
Family Noctuidae Latreille, 1809  
Subfamily Plusiinae Boisduval, 1829  
*Abrostola triplasia* (Linnaeus, 1758)  
*Autographa gamma* (Linnaeus, 1758)  
*Chrysodeixis chalcites* (Esper, 1789)  
*Cornutiplusia circumflexa* (Linnaeus, 1758)  
*Ctenoplusia accentifera* (Lefèbvre, 1827)  
*Thysanoplusia circumscripta* (Freyer, 1831)  
*Thysanoplusia daubei* (Boisduval, 1840)  
*Thysanoplusia orichalcea* (Fabricius, 1775)  
*Trichoplusia ni* (Hübner, [1803])  
Subfamily Pantheinae Smith, 1898  
*Chloantha hyperici* ([Denis & Schiffermüller], 1775)  
Subfamily Dilobinae Aurivillius, 1889  
*Diloba caeruleocephala* (Linnaeus, 1758)  
Subfamily Metoponiinae Herrich-Schäffer, 1851  
*Aegle semicana* (Esper, [1798])  
*Synthymia fixa* (Fabricius, 1787)  
*Tyta luctuosa* ([Denis & Schiffermüller], 1775)  
Subfamily Eustrotiinae Grote, 1882  
*Pseudozarba bipartita* (Herrich-Schäffer, [1850])  
Subfamily Acontiinae Guenée, 1841  
*Acontia lucida* (Hufnagel, 1766)  
*Acontia trabealis* (Scopoli, 1763)  
*Aedia leucomelas* (Linnaeus, 1758)  
Subfamily Cuculliinae Herrich-Schäffer, 1850  
*Cucullia biskrana* (Oberthür, 1918)  
*Cucullia calendulae* (Treitschke, 1835)

- Cucullia lychnitis* (Rambur, 1833)  
*Cucullia syrtana* (Mabille, 1888)  
*Cucullia thapsiphaga* Treitschke, 1826  
*Cucullia verbasci* (Linnaeus, 1758)
- Subfamily Oncocnemidinae Forbes & Franclemont, 1954  
*Calophasia platyptera* (Esper, 1788)  
*Cleonymia chabordis* (Oberthür, 1876)  
*Rhabinopteryx subtilis* (Mabille, 1888)
- Subfamily Amphipyriinae Guenée, 1838  
*Amphipyra tragopoginis* (Clerck, 1759)
- Subfamily Psaphidinae Grote, 1896  
*Valeria oleagina* ([Denis & Schiffermüller], 1775)
- Subfamily Heliothinae Boisduval, 1829  
*Helicoverpa armigera* (Hübner, [1808])  
*Heliothis nubigera* Herrich-Schäffer, [1851]  
*Heliothis peltigera* (Denis & Schiffermüller, 1775)  
*Protoschinia scutosa* ([Denis & Schiffermüller], 1775)
- Subfamily Condicinae Poole, 1995  
*Condica viscosa* (Freyer, [1831])
- Subfamily Eriopinae Herrich-Schäffer, 1851  
*Callopietria latreillei* (Duponchel, [1828])
- Subfamily Bryophilinae Guenée, 1852  
*Bryophila raptricula* ([Denis & Schiffermüller], 1775)  
*Bryopsis segunai* (Fibiger, Steiner & Ronkay, 2009)  
*Cryphia algae* (Fabricius, 1775)  
*Cryphia pallida* (Bethune-Baker, 1894)
- Subfamily Xyleninae Guenée, 1852  
*Agrochola lychnidis* ([Denis & Schiffermüller], 1775)  
*Agrochola ruticilla* (Esper, 1791)  
*Aporophyla canescens* (Duponchel, [1827])  
*Aporophyla chioleuca sammuti* Fibiger, Yela, Zilli & Ronkay, 2010  
*Aporophyla nigra* (Haworth, 1809)  
*Aporophyla nigra cinerea* (Staudinger, 1901)  
*Athetis hospes* (Freyer, [1831])  
*Caradrina clavipalpis* (Scopoli, 1763)  
*Caradrina flava* Oberthür, 1876  
*Caradrina flavirena* Guenée, 1852  
*Caradrina germainii* (Duponchel, 1835)  
*Caradrina proxima* Rambur, 1837  
*Caradrina selini djebli* Rungs, 1972  
*Caradrina vicina castrensis* Berio, 1981  
*Denticucullus pygmina* (Haworth, 1809)  
*Dryobotodes tenebrosa* (Esper, 1789)  
*Episema grueneri* Boisduval, 1837  
*Eremohadena roseonitens* (Oberthür, 1887)  
*Eremopola lenis magnifica* (Rothschild, 1914)  
*Gortyna xanthenes* (Germer, 1842)  
*Hoplodrina ambigua* ([Denis & Schiffermüller], 1775)  
*Luperina dumerilii* (Duponchel, [1827])  
*Mesapamea secalella* Remm, 1983  
*Mniotype deluccai* (Berio, 1976)

- Mormo maura* (Linnaeus, 1758)  
*Nonagria typhae* (Thunberg, 1784)  
*Oria musculosa* (Hübner, [1808])  
*Phlogophora meticulosa* (Linnaeus, 1758)  
*Scythocentropus inquinata* (Mabille, 1888)  
*Sesamia cretica* Lederer, 1857  
*Sesamia nonagrioides* (Lefèbvre, 1827)  
*Spodoptera cilium* Guenée, 1852  
*Spodoptera exigua* (Hübner, [1808])  
*Spodoptera littoralis* (Boisduval, 1833)  
*Thalophila vitalba* (Freyer, [1834])  
*Xylena exsoleta maltensis* Fibiger, Sammut, Seguna & Catania, 2006
- Subfamily Hadeninae Guenée, 1837
- Anarta deserticola* (Hampson, 1905)  
*Anarta sabulorum pulverata* (Bang-Haas, 1907)  
*Anarta trifolii* (Hufnagel, 1766)  
*Brithys crini* (Fabricius, 1775)  
*Hadena capsincola* ([Denis & Schiffermüller], 1775)  
*Hadena sancta trisagittata* (Rothschild, 1914)  
*Hecatera weissii* (Draudt, 1934)  
*Lacanobia oleracea* (Linnaeus, 1758)  
*Leucania loreyi* (Duponchel, 1827)  
*Leucania punctosa* (Treitschke, 1825)  
*Leucania putrescens vallettai* Boursin 1952  
*Leucania zaeae* (Duponchel, [1828])  
*Luteohadena luteago* ([Denis & Schiffermüller], 1775)  
*Mamestra brassicae* (Linnaeus, 1758)  
*Mythimna albipuncta* ([Denis & Schiffermüller], 1775)  
*Mythimna l-album* (Linnaeus, 1767)  
*Mythimna languida* (Walker, 1858)  
*Mythimna prominens* (Walker, 1856)  
*Mythimna sicula* (Treitschke, 1835)  
*Mythimna umbriger* (Saalmüller, 1891)  
*Mythimna unipuncta* (Haworth, 1809)  
*Mythimna vitellina* (Hübner, [1808])
- Subfamily Noctuinae Latreille, 1809
- Agrotis catalaunensis* (Millière, 1873)  
*Agrotis endogaea punica* Pinker, 1980  
*Agrotis haifae* Staudinger, 1897  
*Agrotis herzogi* Rebel, 1911  
*Agrotis ipsilon* (Hufnagel, 1766)  
*Agrotis lasserrei* (Oberthür, 1881)  
*Agrotis lata* Treitschke, 1835  
*Agrotis puta* (Hübner, [1803])  
*Agrotis segetum* ([Denis & Schiffermüller], 1775)  
*Agrotis spinifera* (Hübner, [1808])  
*Agrotis trux* (Hübner, [1824])  
*Axylia putris* (Linnaeus, 1761)  
*Cerastis faceta* (Treitschke, 1835)  
*Euxoa canariensis mauretanic* (Bang-Haas, 1910)  
*Euxoa capsensis* Chrétien, 1911

*Euxoa distinguenda* (Lederer, 1857)  
*Noctua comes* Hübner, [1813]  
*Noctua janthe* (Borkhausen, 1792)  
*Noctua pronuba* (Linnaeus, 1758)  
*Noctua tirrenica* Biebinger, Speidel & Hanigk, 1983  
*Ochropleura leucogaster* (Freyer, [1831])  
*Peridroma saucia* (Hübner, [1808])  
*Xestia c-nigrum* (Linnaeus, 1758)  
*Xestia xanthographa* ([Denis & Schiffermüller], 1775)

## Conclusion

The species is new to the Maltese lepidopteroфаuna. The author proposes the Maltese name *Agrotis tat-Tuneżija*, after the country from where the female holotype to describe the subspecies was collected.

## Acknowledgments

The author is grateful to Dr. László Ronkay and Dr. Gábor Ronkay from the Hungarian Natural History Museum (Hungary) for identifying the species and for providing images of *Agrotis endogaea punica* Pinker, 1980 material bred by Pinker. Also, special thanks go to Mr. Mark Gauci and Mr. Justin Formosa for reviewing the paper and to Dr. Antonio Vives for the Spanish abstract.

## References

- Agius, J. (2018b). *Agrotis desertorum* Boisduval, 1840 new to the Maltese Islands. *SHILAP Revista de lepidopterología*, 46(183), 501-503. <https://doi.org/10.57065/shilap.801>
- Agius, J. (2022). Dispersal of Heterocera species from North Africa to the Maltese Islands (Insecta: Lepidoptera). *SHILAP Revista de lepidopterología*, 50(200), 659-663. <https://doi.org/10.57065/shilap.254>
- Bella, S. & Fibiger, M. (2009). Contribution to the Knowledge of Noctuoidea in Sicily. *Naturalista siciliano*, (4) 33(1-2), 167-176.
- Fibiger, M. (1990). Noctuidae I. *Noctuidae Europaeae* (Vol. 1). Entomological Press.
- Sammut, P. (2000). *Il-Lepidoptera - Kullana Kulturali*, 12, X + 245, 24 pls. Publikazzjonijiet Indipendenza, Msida.

Jonathan Agius  
166 'Infinity'  
Vjal ix-Xarolla  
MT-Zurrieq, ZRQ1617  
MALTA / MALTA  
E-mail: jonagius@msn.com  
<https://orcid.org/0000-0003-4875-0524>

(Recibido para publicación / *Received for publication* 1-I-2024)

(Revisado y aceptado / *Revised and accepted* 5-III-2024)

(Publicado / *Published* 30-IX-2024)

**Derechos de autor:** El autor(es). Este es un artículo de acceso abierto distribuido bajo los términos de la Licencia de Reconocimiento 4.0 Internacional de Creative Commons (CC BY 4.0), que permite el uso, distribución y reproducción sin restricciones en cualquier medio, siempre que se cite al autor original y la fuente. / **Copyright:** The author(s). This is an open access article distributed under the terms of the Creative Commons Attribution 4.0 International License (CC BY 4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.