

Pest species *Cydalima perspectalis* (Walker, 1859) new to the Maltese Islands (Lepidoptera: Crambidae)

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Abstract

Cydalima perspectalis (Walker, 1859) is reported for the first time from the Maltese Islands. Distribution, habits of the adult and larval host plant are included. A Maltese name is proposed for this new record.
KEY WORDS: Lepidoptera, Crambidae, *Cydalima*, *Cydalima perspectalis*, Malta.

Cydalima perspectalis (Walker, 1859) especie plaga, nueva para Malta
(Lepidoptera: Crambidae)

Resumen

Se registra por primera vez, para Malta, a *Cydalima perspectalis* (Walker, 1859). Se incluye la distribución, hábitat del adulto y planta nutricia. Se propone un nombre maltés, para el nuevo registro.
KEY WORDS: Lepidoptera, Crambidae, *Cydalima*, *Cydalima perspectalis*, Malta.

Introduction

The superfamily Pyraloidea is composed of about 16,000 described species worldwide (HEPPNER, 1991) with 914 species recorded from Europe (NUSS *et al.*, 2004). On the Maltese Islands around 140 species have been recorded so far with the latest addition being *Bocchoris bleusei* (Oberthür, 1887) (CATANIA, 2018)

Material

MALTA: 1 ♂, Zurrieq, 5-V-2018, at light, leg. J. Agius.

Distribution

The genus *Cydalima* Lederer, 1863 is represented by 9 species all native to Asia. *Cydalima perspectalis* (Walker, 1859) is native to India, China, Korea, Japan and the Russian Far East. It was recorded for the first time in Europe from Germany during 2006. Following this discovery, it was further recorded in Switzerland and the Netherlands during 2007 (MALLY & NUSS, 2010). In 2008, it was recorded from Great Britain, France and Austria (KENIS *et al.*, 2013) and by 2018 it has spread throughout Europe, from Spain to Turkey and Russia.



Cydalima perspectalis (Walker, 1859), MALTA, Zurrieq.

Discussion

In normal jargon *C. perspectalis* is referred to as the Box Tree Moth as the larvae are notorious pests of Box trees from the genus *Buxus*. This species is so invasive on *Buxus* trees that certain countries such as the United Kingdom have developed an online recording scheme to monitor its distribution (available from <https://www.ebts.org/2016/05/box-tree-moths-plague>).

One of the major problems with eradicating this species is that the larvae are toxic to most European predators hence *C. perspectalis* cannot be easily controlled. Observed larval parasitism was less than 1% and represented by a single tachinid parasitoid, *Pseudoperichaeta nigrolineata* (Walker, 1853) while no egg or pupal parasitoids were found (KENIS *et al.*, 2013). However, pheromone traps and insecticides are commonly used in *Buxus* infested areas to control the invasion.

In Malta, several species of alien organisms have been established during the last decade and the Lepidoptera is no exception. Even though in Malta there are no native *Buxus* trees, it is in actual fact a common imported ornamental genera so there is a high possibility that this species establishes itself in Malta as well. Considering that *C. perspectalis* is not a strong flier, it is being assumed that the presence of this species in Malta is the result of *Buxus* importation. In fact, it was confirmed that a garden centre in Qormi had just imported fresh Box trees whilst another garden centre at Burmarrad confirmed that during the week starting 14th May 2018 they were expecting fresh consignments. Worst still, it has been noted that in Georgia, apart from *Buxus* trees, *C. perspectalis* attacks *Rubus* sp. as well (MATSIKHA, 2016). In Malta *Rubus ulmifolius* Schott 1818 is native and quite widespread so it will not come as a surprise if more specimens of *C. perspectalis* are recorded in the future.

With a wingspan of 42mm, *C. perspectalis* qualifies as the largest Pyraloidea species recorded from the Maltese Islands so far. The species is new to the Maltese lepidopterofauna. I propose the Maltese name *Sidalima tal-Buxus*, after its hostplant.

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BIBLIOGRAPHY

- ASSELBERGS, J. E. F., SEGUNA, A. A. & SAMMUT, P., 2008.– Recent records of Pyraloidea species new to Malta, including two species new to the European fauna.– *SHILAP Revista de lepidopterología*, **36**(144): 465-471.
- CATANIA, A., 2018.– *Bocchoris bleusei* (Oberthür, 1887) - a new species for the Maltese Islands (Lepidoptera: Crambidae).– *SHILAP Revista de lepidopterología*, **46**(181): 173-175.
- HEPPNER, J. B., 1991.– Faunal regions and diversity of Lepidoptera.– *Tropical Lepidoptera*, **2** (supplement. 1): 1-85.
- KENIS, M., NACAMBO, S., LEUTHARDT, F. L. G., DI DOMENICO, F. & HAYE, T., 2013.– The box tree moth, *Cydalima perspectalis*, in Europe: horticultural pest or environmental disaster?– *Alien*, **33**: 38-41.
- MALLY, R. & NUSS, M., 2010.– Phylogeny and nomenclature of the box tree moth, *Cydalima perspectalis* (Walker, 1859) comb. n., which was recently introduced into Europe (Lepidoptera: Pyraloidea: Crambidae: Spilomelinae).– *European Journal Entomology*, **107**: 393-400.
- MATSIAKH, I., 2016.– Assessment of Forest Pests and Diseases in Native Boxwood Forests of Georgia. Available from <http://www.enpi-fleg.org> (accessed 7th May 2018).
- NUSS, M., SEGERER, A. & SPEIDEL, W., 2004.– Crambidae, Pyralidae, Thyrididae.– In O. KARSHOLT & E. J. VAN NIEUKURKEN. Fauna Europaea: Lepidoptera, Moths. *Fauna Europaea version 1.1*. Available from <http://www.faunaeur.org>.
- SAMMUT, P., 2000.– Kullana Kulturali. 12 - *Il-Lepidoptera*: X + 246 pp. Publikazzjonijiet Indipendenza, Malta.

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