

Spodoptera frugiperda (Smith, 1797), an unwelcome visitor reaches the Maltese Islands (Lepidoptera: Noctuidae, Xyleninae)

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Abstract

Spodoptera frugiperda (Smith, 1797) is recorded from the Maltese Islands for the first time.

Keywords: Lepidoptera, Noctuidae, Xyleninae, *Spodoptera frugiperda*, new record, Maltese Islands.

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Resumen

Spodoptera frugiperda (Smith, 1797) se registra por primera vez en Malta.

Palabras clave: Lepidoptera, Noctuidae, Xyleninae, *Spodoptera frugiperda*, nuevo registro, Malta.

Introduction

During the month of September of this year (2023), one of us (PS) operated his moth trap running on two 16-inch actinic light in Rabat for a total of 18 nights, from 20.00h to about 06.00h. The number of Lepidoptera species recorded amounted to 68 for a total of 547 specimens. Of these, 346 specimens belonging to 29 different species belonged to the Noctuidae. The two commonest noctuid species were *Spodoptera exigua* (Hübner, [1808]) with 72 specimens and *Acontia trabealis* (Scopoli, 1763), with 50 specimens. Three specimens of newly recorded *Spodoptera frugiperda* were recorded, a male on the 10th, a female on the 12th and another male on the 17th.

During the same period the first author (AS) put up a similar moth trap at tas-Sghajtar area in Naxxar for a total of 23 nights. The total number of moths recorded amounted to 694 specimens consisting of 72 different species. Of these 433 specimens were Noctuidae. The number of different species of Noctuidae was 42, and the two commonest species were *Spodoptera exigua* (Hübner, [1808]) with 97 specimens and *Autographa gamma* (Linnaeus, 1758) with 74 specimens. Two specimens of *Spodoptera frugiperda* were recorded, a male on the 14th and a female on the 16th.

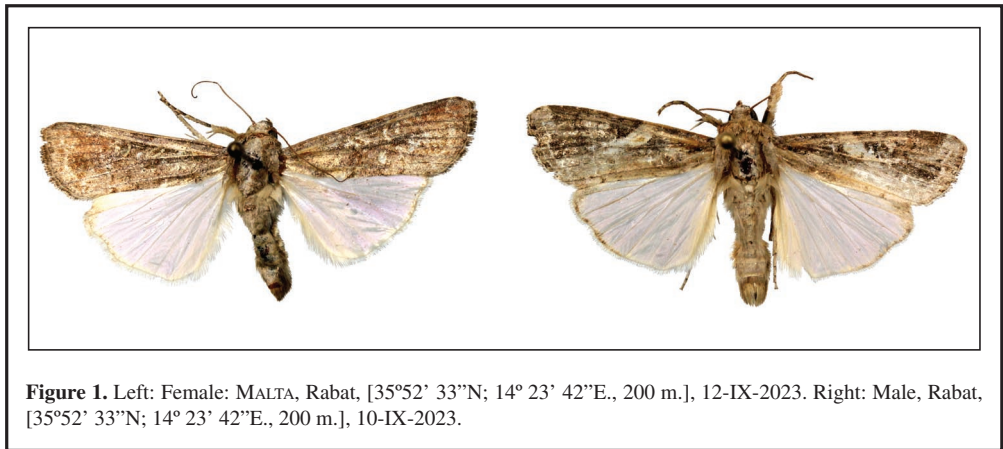
The atmospheric conditions during the nights between the 10th and the 17th, when *Spodoptera frugiperda* was recorded were as follows. Temperature varied between 21°C and 25°C, the wind was quite variable with a speed varying from as low as 2 km per hour to 15 km per hour. On the 10th the wind direction was from N to NW, on the 12th it was from NW to W, on the 14th it was variable, and on the 16th and 17th it was mainly S. The moon was in its last quarter, nearing new moon.

Spodoptera frugiperda was originally described from specimens collected from Georgia in southeastern United States (Smith, 1797, p. 191). Today its distribution extends to nearly all of

America, south to central America through Brazil to Bolivia and Paraguay and further south to Argentina and Chile. It reached sub-Saharan Africa in 2016, India in 2018, China, Japan, Indonesia, and Malaysia in 2019, Papua New Guinea and Australia in 2020. By January of 2021 the moth reached the Canary Islands (Vives Moreno & Gaston, 2020, p. 724) and in December 2022 Cyprus (LEPIFORUM, 2022).

The species is known to feed on more than 350 host plants, including some of the most economically important crops worldwide, such as maize, rice, soybean sorghum, wheat, barley, cotton, and sugar cane. (De Freitas Bruno et al. 2021)

Material Examined: MALTA, Rabat, [35°52' 33"N; 14° 23' 42"E., 200 m.], 1 ♂, 10-IX-2023; 1 ♀, 12-IX-2023; 1 ♀, 17-IX-2023 [taken at light]. P. Sammut leg; Naxxar, Tas-Sghajtar, [35° 54' 35.3"N.14° 26' 29.4"E., 108 m], 1 ♂, 9-IV-2022; 1 ♂, 14-IX-2023; 1 ♀, 16-IX-2023 [taken at light], A. Seguna leg.



Note: The specimen recorded during April of 2022 was found after a closer examination of the *S.littoralis* (Boisduval, 1833) material in the Seguna collection.

Conclusion

There is much literature on this species available on the internet, mainly on its destructive habits to some of the more important plant products cultivated on a large scale worldwide, and on the vigilance towards the spread of this species and its immediate eradication.

For this species we propose the Maltese name Malvizza Qerrieda.

Acknowledgements

The authors would like to thank László and Gabor Ronkay for their help in identifying our material, and to Dr Antonio Vives for providing the Spanish translation in this text.

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(Recibido para publicación / *Received for publication* 13-XII-2023)

(Revisado y aceptado / *Revised and accepted* 18-II-2024)

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

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