A revision of Portuguese records of the genus *Gymnancyla* Zeller, 1848 (Pyralidae: Phycitinae)

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Introduction

The Portuguese checklist (Corley, 2015) was a synthesis of published information on the Portuguese Lepidoptera fauna together with the results of examination of recent and historical collections, all subject to critical evaluation. Some of the province records were unpublished, but many of these were later made available on GBIF (Corley & Afonso, 2021).

Knowledge of the Lepidoptera of southern Europe has always lagged behind that of more northern parts of the continent, so it was inevitable that a work of this sort would be found to contain errors. Most often these result from poor understanding of particular species or genera at the time of publication. Improved knowledge of many species results from new papers clarifying the taxonomy of difficult groups or from the results of DNA barcoding, but also from collection of new specimens. When such new information becomes available it can present an opportunity for a revision updating knowledge of particular species or genera. In this paper the genus *Gymnancyla Zeller*, 1848 in Portugal is re-examined.

According to GlobIZ (2003–2025) the genus *Gymnancyla* has 28 known species, and occurs in Europe, North Africa and Asia extending east to India and China and south to South Africa. Gastón & Vives (2018) give five species for the Iberian Peninsula. The species are mainly found in saline habitats, those with known larvae feeding on Chenopodiaceae such as *Atriplex* L., *Chenopodium* L., *Salsola* L. and *Salicornia* L. (Leraut, 2014).

Corley (2015) listed only two species, *G. ruscinonella* (Ragonot, 1888) and *G. canella* (Denis & Schiffermüller, 1775) but two others have been reported since, *G. hornigii* (Lederer, 1852) (Corley *et al*., 2018) and *G. sfakesella* Chrétien, 1911 (Corley et al., 2024). The discovery of the last species in Portugal prompted a review of all the previous records of the genus. The excellent figures of male and female genitalia of the five Iberian species in Gaston & Vives (2018) have made this review possible.

Gymnancyla canella (Denis & Schiffermüller, 1775)

Recorded by Monteiro (1962). He examined a male specimen from Moledo do Minho (Caminha, NG13) collected by Maria Amélia da Silva Cruz in August 1947. His paper has a drawing of the genitalia of this specimen which leaves no doubt that it is *G. canella*. His preparation has not been re-examined.

In Monteiro (1964) he lists *G. canella* from Azurara (Vila do Conde, 29TNF27) in August 1961. No further details are given, but it is probable that this is indeed G. canella.

There is a further record of *G. canella* from Algarve (Corley *et al*., 2009), but this is a misidentification of *G. ruscinonella*, see below.

In Portugal *G. canella* flies in August and is recorded from Minho and Douro Litoral only.

Gymnancyla ruscinonella (Ragonot, 1888)

Recorded from Ilha da Culatra (Olhão, PA09) (Corley *et al*., 2009). Pedro Pires and Eduardo Marabuto stayed briefly with the late João Pedro Cardoso who had a hut on the island where he spent his August holidays. Pedro Pires sent me specimens dated 18.viii.2008 from which I made preparations (GP 3171 male, GP 3201 female).

In 2007 I had received material from Cardoso himself from the same locality. This came to me as several envelopes each containing all the microlepidoptera trapped on a single night. Sorting through the material from 20.viii.2007, not all in good condition, I detected one male *Gymnancyla* (GP 2950) which I identified at the time as *G. canella*. This was also published in Corley *et al*. (2009). Re-examination of this shows that it is also *G. ruscinonella*.

In Portugal *G. ruscinonella* flies in August and is recorded only from this one locality in Algarve.

Gymnancyla sfakesella Chrétien, 1911

This species was recently published as new for Portugal in Corley *et al*. (2024) from Trafaria (Almada, MC77), 18.viii.2023, collected by José Luís Fabião (Fabião gen. prep. 100-3763 female). Specimen in collection of João Nunes. José Fabião (pers. comm.) has additional gen. preps 100-3993 male, 100-8728 male and 100-3952 female. In 2023 he recorded 15 individuals between 18.viii and 23.ix. In 2024 he recorded 19 between 16.viii and 28.ix. These were trapped in an area containing a mosaic of more or less abandoned open ground, hedges, olive and other fruit trees< vines and pine trees, probably with some ruderal Chenopodiaceae present. Around 500 metres to the north-west is a very small area of salt marsh, but he thinks it is improbable that so many moths come from the salt marsh.

Two earlier records have been found in the course of this review of the genus:

Praia da Mareta, Sagres (Vila do Bispo, NA09), 5.ix.2017, P. Pires (Corley GP 5501 female), recorded in Corley et al. (2018) as *G. hornigii* (Lederer, 1852).

Sapais de Castro Marim (Castro Marim, PB32), 2.x.2018, M. Corley and S. Ferreira (Corley GP 5643 female).

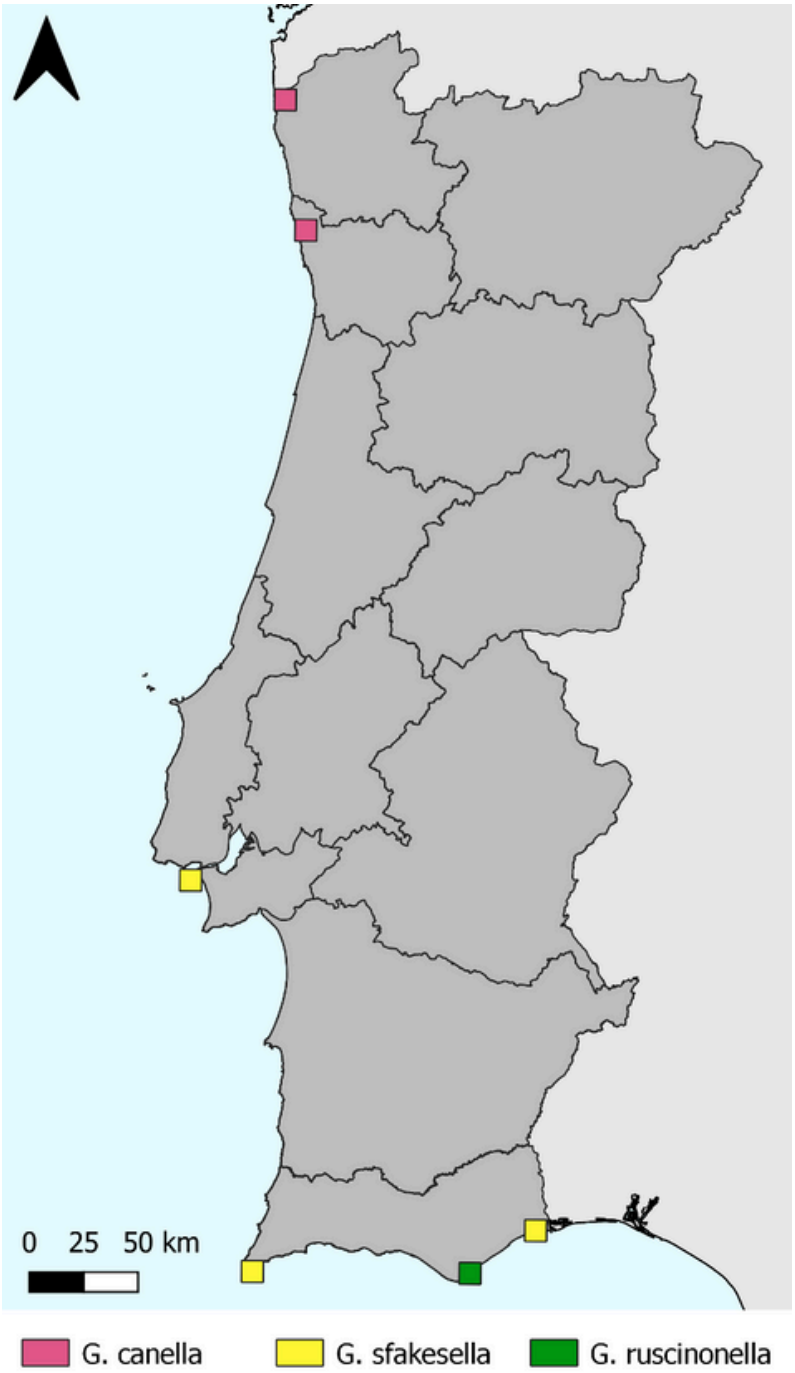
In Portugal *G. sfakesella* flies from August to October and is recorded from two localities in Algarve and one in Estremadura.

Gymnancyla hornigii (Lederer, 1852)

The only Portuguese record (Corley *et al*., 2018) has been re-examined and found to belong to *G. sfakesella*.

G. hornigii must therefore be deleted from the Portuguese list.

Distribution of *Gymnancyla* species in Portugal



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