

NOTA / NOTE

The pine cone bug, *Gastrodes grossipes grossipes* (De Geer, 1773) (Hemiptera: Rhyparochromidae), in PortugalJosé Manuel Grosso-Silva¹ & Luís P. da Silva^{2,3}

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Abstract: *Gastrodes grossipes grossipes* (De Geer, 1773) (Hemiptera: Rhyparochromidae: Rhyparochrominae: Drymini) is recorded from a new Portuguese district (Porto) after more than 80 years without records in the country. An overview of its Iberian distribution is presented, including a distribution map featuring Andorra, the Portuguese districts and the Spanish provinces where the species has previously been recorded.

Key words: Hemiptera, Rhyparochromidae, *Gastrodes grossipes grossipes*, Portugal, new district, Porto, Iberian distribution, map.

Resumen: *Gastrodes grossipes grossipes* (De Geer, 1773) (Hemiptera: Rhyparochromidae: Rhyparochrominae: Drymini) en Portugal. Se registra *Gastrodes grossipes grossipes* (De Geer, 1773) (Hemiptera: Rhyparochromidae: Rhyparochrominae: Drymini) de un nuevo distrito portugués (Porto) tras más de 80 años sin registros en el país. Se presenta una síntesis de su distribución ibérica, incluyendo un mapa de distribución con Andorra, los distritos portugueses y las provincias españolas de donde ha sido citada previamente.

Palabras clave: Hemiptera, Rhyparochromidae, *Gastrodes grossipes grossipes*, Portugal, nuevo distrito, Porto, distribución ibérica, mapa.

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Introduction

The pine cone bug, *Gastrodes grossipes* (De Geer, 1773) (Hemiptera: Rhyparochromidae), is a seed bug associated with Pinaceae of the genus *Pinus* (PÉRICART, 1999). The species, described from Sweden as *Cimex grossipes* by DE GEER (1773), had previously been described by LINNAEUS (1767) as *Cimex ferrugineus*, a junior primary homonym of *Cimex ferrugineus* Scopoli, 1763. *Gastrodes grossipes* has a very wide Euro-Siberian distribution encompassing most of Europe (from the Iberian Peninsula to Russia, reaching the United Kingdom and Scandinavia to the north) and Asia (attaining Japan and the Russian far east) (PÉRICART, 1999, 2001). It has also been first recorded from northern Africa, from Egypt (GADALLA, 2004), after the publication of the volume of the Catalogue of Heteroptera of the Palaearctic Region dealing with seed bugs (PÉRICART, 2001). In Macaronesia, RIBES & BORGES (2005) reported its presence for the first time, as an introduced species, in the Azorean island of Terceira.

In the Iberian Peninsula, the earliest records of *G. grossipes grossipes* date back to the 19th century in both Portugal and Spain, while in Andorra the first record found is from the 1980's (ROCHE,

1984). In Spain, it was recorded from the provinces of Segovia (BOLÍVAR & CHICOTE, 1879), Barcelona (CUNÍ MARTORELL, 1889), Lleida (TORRE BUENO, 1911), Málaga (VELA & BASTAZO, 1986), Ávila, Girona, Guadalajara, Madrid, Navarra, Soria, Tarragona, and Teruel (PÉRICART, 1999), and Alicante (MATA, 2013). In mainland Portugal, despite the suspicion of a wide distribution (SEABRA, 1926), *G. grossipes grossipes* is only known (recorded as *Gastrodes ferrugineus* in all instances) from six localities in four districts (Map 1) (only the earliest record for each locality is presented):

- **Aveiro**: Praia de Espinho (OLIVEIRA, 1896);
- **Leiria**: S. Pedro de Moel (SEABRA, 1926) and Mata de Leiria (SEABRA, 1930);
- **Lisboa**: Lisboa (SEABRA, 1926) and Serra de Sintra (SEABRA, 1939);
- **Vila Real**: S. Martinho de Anta (SEABRA, 1926).

It must be noted that the record from the district of Aveiro was misinterpreted as pertaining to Porto by PÉRICART (1999) and, likely due to that, by MATA (2013). As a result, the records presented herein, derived from the study of one specimen deposited in Museu de História Natural e da Ciência da Universidade do Porto (MHNC-UP) and one photographic record uploaded to the online database iNaturalist, are the first for the district of Porto.

Material examined

Porto district:

- Maia municipality:
 - Parque de Avioso - S. Pedro (Maia) (41.291096, -8.613508; MGRS: 29TNF3271; 153 m a.s.l.), 24/12/2022 (1 ♀, Diogo Vieira da Silva leg., MHNC-UP col.: MHNCUP/ART/41079) (live picture in Fig. 1).
- Vila do Conde municipality:
 - Silvares (41.329458, -8.729006; 29TNF2275; 26 m a.s.l.), 08/12/2021 (1 specimen photographed by Luís P. da Silva, <https://www.inaturalist.org/observations/102719902>).

Discussion

The new records of *G. grossipes grossipes* presented herein are the first from Portugal in more than 80 years, since the last publication featuring original records from the country dates back to the late 1930's (SEABRA, 1939). Furthermore, as shown in Map 1, the number of Portuguese districts with recorded presence of *G. grossipes* is raised to five with the addition of Porto.

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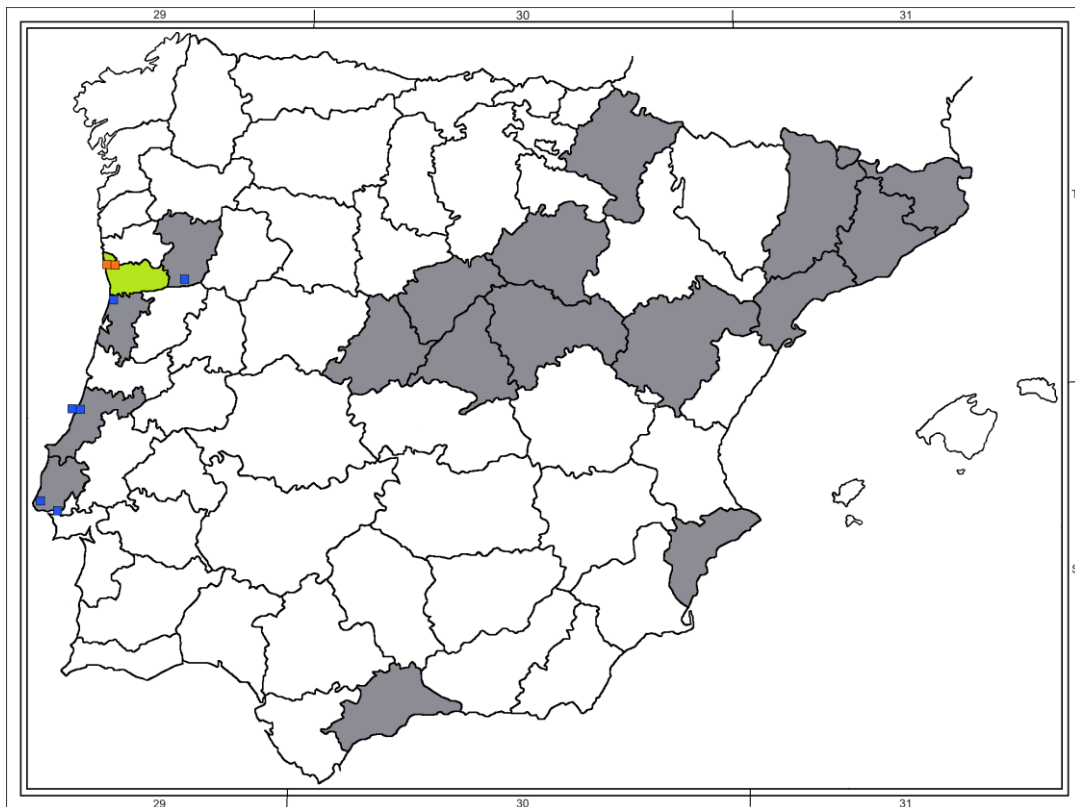
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Fig. 1. - Female specimen of *Gastrodes grossipes grossipes* (De Geer, 1773) collected in Parque de Avioso - S. Pedro (Maia, Portugal) on 24/12/2022 (MHNCUP/ART/41079)



Map 1. - Iberian distribution of *Gastrodes grossipes grossipes* (De Geer, 1773), with Andorra and the previously known Portuguese districts and Spanish provinces in grey, the new Portuguese district in green, the previously known Portuguese MGRS 100 km² squares in blue and the new Portuguese MGRS 100 km² square in orange.