

NOTA / NOTE

Artheneis foveolata Spinola, 1837 (Hemiptera: Artheneidae)
rediscovered in Portugal, more than 60 years
after its first record

José Manuel Grosso-Silva¹ & Thijs Valkenburg²

¹ Museu de História Natural e da Ciência da Universidade do Porto (MHNC-UP) / PRISC, Praça Gomes Teixeira, 4099-002 Porto (PORTUGAL). e-mail: jmgrossosilva@mhnc.up.pt

² Associação Vita Nativa, Conservação do Ambiente. Sítio Pinheiros de Marim, 247A, 8700-225 Olhão, Portugal. e-mail: thijsvalkenburg@vitanativa.org

Abstract: The seed bug *Artheneis foveolata* Spinola, 1837 (Hemiptera: Artheneidae) is recorded from mainland Portugal for the second time, following a single record from 1959. An overview of the Iberian distribution of the species is presented and mapped.

Key words: Hemiptera, Artheneidae, *Artheneis foveolata*, second record, Portugal.

Resumen: Redescubrimiento de *Artheneis foveolata* Spinola, 1837 (Hemiptera: Artheneidae) en Portugal, más de 60 años después de su primer registro. Se cita el chinche *Artheneis foveolata* Spinola, 1837 (Hemiptera: Artheneidae) por segunda vez de Portugal continental, después de un único registro de 1959. Se presenta una síntesis y un mapa de la distribución ibérica de la especie.

Palabras clave: Hemiptera, Artheneidae, *Artheneis foveolata*, segundo registro, Portugal.

Recibido: 30 de junio de 2022

Publicado on-line: 11 de agosto de 2022

Aceptado: 14 de julio de 2022

Introduction

Artheneis foveolata Spinola, 1837 (Hemiptera: Artheneidae) is a seed bug described from Sardinia (SPINOLA, 1837). According to the *Catalogue of the Heteroptera of the Palaearctic Region*, the global distribution of *A. foveolata* includes Europe (Bosnia and Herzegovina, Croatia, France, Greece, Italy, Spain and the former Yugoslavia) and northern Africa (Algeria, Morocco, and Tunisia), plus Egypt, Asian Turkey, and Cyprus, which are marked as doubtful (PÉRICART, 2001). However, as regards Europe, this list is incomplete as the species was previously collected in Portugal in 1959 (LINDBERG, 1962), a fact reflected in the *World Catalogue of Lygaeidae* (SLATER, 1964) but missed in the aforementioned catalogue by PÉRICART (2001) and also in the first volume dealing with Lygaeidae in the *Faune de France* series (PÉRICART, 1999).

First recorded from Iberia (from several localities in the Spanish province of Zaragoza) by TORRE BUENO (1911), the known Iberian distribution of *A. foveolata* includes the following Spanish provinces (Map 1): Zaragoza (TORRE BUENO, 1911), Cádiz (RIBES, 1974), Alicante (RIBES & SAULEDA, 1979), Almería, Badajoz, Barcelona, Córdoba, Girona, Huesca, Madrid, Tarragona, and Valencia (PÉRICART, 1999). The species is also known from the Balearic Isles: Mallorca (GRAVESTAIN, 1978).

In this contribution, *A. foveolata* is recorded from Portugal for the second time, more than sixty years after being collected by Håkan Lindberg, who found it in Faro in 1959 (LINDBERG, 1962).

The new records, based on specimens collected/observed in 2021 and 2022 as detailed below, in all cases on *Tamarix* sp., confirm the presence of the species in the country and significantly expand the known range of the species to the west while extending it to three new municipalities (Olhão, Silves, and Vila Real de Santo António) (Map 1). Furthermore, the records presented are the first for one natural park (PNRF, Parque Natural da Ria Formosa), one nature reserve (RNSCM, Reserva Natural do Sapal de Castro Marim e Vila Real de Santo António) and two Natura 2000 sites (PTCON0013 Ria Formosa/Castro Marim; PTCON0052 Arade/Odelouca).

Material examined

Faro district:

- Olhão municipality: Three sites in Quinta de Marim (Quelfes) (PNRF and PTCON0013), all in MGRS 29SPA0599:
 - Site 1 (37.033100, -7.816713), 21/03/2021, 1 specimen photographed by Thijs Valkenburg (<https://www.biodiversity4all.org/observations/71784487>);
 - Site 2 (37.031986, -7.816586), 13/03/2022, 3 specimens photographed by Thijs Valkenburg (<https://www.biodiversity4all.org/observations/108537396> and <https://www.biodiversity4all.org/observations/108537379>);
 - Site 3 (37.033094 -7.817882), 15/05/2022, 1 specimen photographed by Thijs Valkenburg (<https://www.biodiversity4all.org/observations/117632796> and <https://www.biodiversity4all.org/observations/117632788>), 06/06/2022, 1 female, Thijs Valkenburg leg. (MHNCUP/ART/41019).
- Silves municipality:
 - On the left bank of the river Arade, near Arrochela (37.180204 -8.457043; MGRS: 29SNB4815) (PTCON0052), 29/05/2022, 1 female, Thijs Valkenburg leg. (MHNCUP/ART/41013) (photographed by Thijs Valkenburg: <https://www.biodiversity4all.org/observations/119495628>).
- Vila Real de Santo António municipality:
 - Near the water treatment station (37.206343 -7.419743; MGRS: 29SPB4018) (RNSCM and PTCON0013), 25/05/2022, 3 males and 2 females, Thijs Valkenburg leg. (MHNCUP/ART/41014 to MHNCUP/ART/41018) (one of the specimens was photographed by Thijs Valkenburg: <https://www.biodiversity4all.org/observations/118693156>).

Acknowledgments

We wish to thank Nicolas Orliac, Konstantin Grebennikov, and Fabien Piednoir, who contributed to the identification of the earliest record uploaded by the second author.

References

GRAVESTSTEIN, W.H. 1978. Hemiptera Heteroptera new to the Balears, in particular to the Island of Mallorca. *Entomologische Berichten*, **38**: 37-38.

LINDBERG, H. 1962. Zur Kenntnis der Heteropteranfauna von Portugal (*sic!*). *Notulae Entomologicae*, **XLII**(1): 20-23.

PÉRICART, J. 1999 (1998). *Hémiptères Lygaeidae euro-méditerranéens. Volume 1. Généralités. Systématique: Première Partie.* Faune de France: France et régions limitrophes, 84 A. Fédération Française des Sociétés de Sciences Naturelles, Paris. XX + 468 pp.

PÉRICART, J. 2001. Family LYGAEIDAE Schilling, 1829 - Seed-bugs, pp. 35-220. In: AUKEMA, B. & RIEGER, C. (eds.). *Catalogue of the Heteroptera of the Palaearctic Region. Volume 4. Pentatomomorpha I.* The Netherlands Entomological Society, Amsterdam. 346 pp.

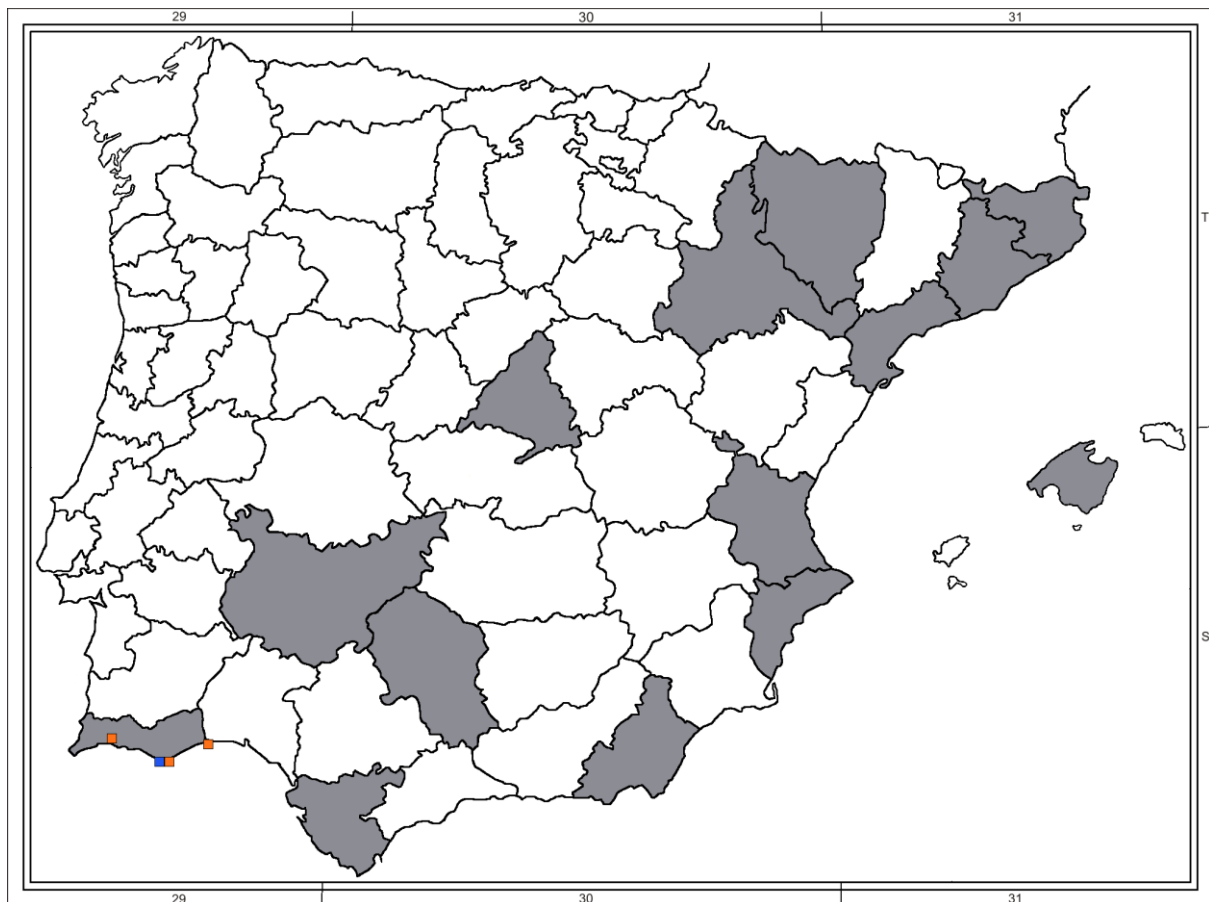
RIBES, J. 1974. Hemípteros de la zona de Algeciras (Cádiz). III. *Miscelánea Zoológica*, 3(4): 11-19.

RIBES, J. & SAULEDA, N. 1979. Heterópteros de Alicante y zonas adyacentes. *Mediterránea*, 3: 123-158.

SLATER, J.A. 1964. *A Catalogue of the Lygaeidae of the World.* University of Connecticut, Storrs. XVIII + 1668 pp.

SPINOLA, M. 1837. *Essai sur les genres d'insectes appartenants à l'ordre des Hémiptères, Lin. ou Rhyngotes, Fab. et à la section des Hétéroptères Dufour.* Y. Gravier, Gènes. 383 pp.

TORRE BUENO, J.R. 1911. Algunos Hemípteros Heterópteros de España (conclusión). *Boletín de la Sociedad Aragonesa de Ciencias Naturales*, 10: 195-203.



Map 1. - Iberian distribution of *Artheneis foveolata* Spinola, 1837, with the previously known Spanish provinces and Portuguese districts in grey, and the previously known (in blue) and new (in orange) Portuguese MGRS 100 km² squares.