

NOTA / NOTE

The genus *Acrosternum* Fieber, 1861 (Hemiptera, Pentatomidae)
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Abstract: This paper reviews the knowledge on the genus *Acrosternum* Fieber, 1861 (Hemiptera, Pentatomidae) in Portugal, through a compilation of literature records complemented with new data obtained since the mid-1990s. The presence of *Acrosternum millierei* (Mulsant & Rey, 1866) in Portugal is confirmed. Iberian distribution maps are included for both species present in the Iberian Peninsula.

Key words: Hemiptera, Pentatomidae, *Acrosternum*, chorology, Portugal.

Resumen: El género *Acrosternum* Fieber, 1861 (Hemiptera, Pentatomidae) en Portugal. En esta nota se presenta una revisión del conocimiento sobre el género *Acrosternum* Fieber, 1861 (Hemiptera, Pentatomidae) en Portugal, recopilándose los datos bibliográficos ibéricos y presentándose nuevas citas portuguesas obtenidas desde mediados de los noventa. Se confirma la presencia de *Acrosternum millierei* (Mulsant & Rey, 1866) en Portugal. Se incluyen mapas de la distribución ibérica de las dos especies presentes en la Península Ibérica.

Palabras clave: Hemiptera, Pentatomidae, *Acrosternum*, corología, Portugal.

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Introduction

The shieldbug genus *Acrosternum* Fieber, 1861 (Hemiptera, Pentatomidae) includes fourteen species distributed in the Afrotropical, Palaearctic, and Oriental Regions (KÁROLYI & RÉDEI, 2017). The Euro-Mediterranean fauna of the genus comprises eight species (RIBES & PAGOLA-CARTE, 2013), two of which occur in the Iberian Peninsula: *Acrosternum heegeri* Fieber, 1861 and *Acrosternum millierei* (Mulsant & Rey, 1866). Both Iberian species have been recorded from Portugal, but in very different circumstances: the former was first reported in the last decade of the 19th century (OLIVEIRA, 1895), and was collected a few more times, while the latter was only recorded once without any geographical details (JOSIFOV & HEISS, 1989).

The purpose of this contribution is to improve the knowledge about the Portuguese fauna of the genus *Acrosternum*, compiling the available bibliographic information and presenting new records derived from the examination of the following collections: Museu de História Natural e da Ciência da

Universidade do Porto [MHNC-UP], Tagis - Centro de Conservação das Borboletas de Portugal [Tagis] and the Grosso-Silva collection [GS]. Furthermore, as indicated in the material examined sections, the new data also includes three records derived from photographs and a record from the Algarve communicated by J. Pérez Valcárcel.

The maps presented summarize the known Portuguese (district level) and Spanish (province level) distribution ranges, in the latter case exclusively from literature compilation. In the material examined sections, the coordinates are in the Military Grid Reference System (MGRS) and the new districts for each species are marked with an asterisk (*).

Results and discussion

Acrosternum heegeri Fieber, 1861

Material examined:

Faro district: Albufeira municipality: Cortelhas-Guia (29SNB6110), 15/07/2012 (1 ♂, Grosso-Silva leg., GS col.). Lagoa municipality: Caramujeira (29SNB5206), 18/05/2018 (2 ♀♀, Fernando Prieto leg., Javier Pérez Valcárcel det., 1 ♀ Javier Pérez Valcárcel col., 1 ♀ Marcos Roca-Cusachs col.).

***Portalegre district:** Elvas municipality: Caia (29SPD6216), 01/05/2019 (1 ♀, Rui Félix leg., Tagis col.).

***Santarém district:** Rio Maior municipality: Casais dos Silvas (29SND0351), 28/06/2009 (1 specimen photographed by Grosso-Silva: Fig. 1).

Setúbal district: Alcácer do Sal municipality: Pego do Altar (29SNC5354), 05/05/2019 (1 ♂, Francisco Barros leg., Tagis col.).

***Vila Real district:** Vila Real municipality: Near Sabroso (29TPF0667), 29/06/2019 (1 specimen photographed by Darinka González and José Agostinho Pinto Fernandes).

The Spanish known distribution range of *Acrosternum heegeri* includes the provinces of Murcia (LETHIERRY, 1886); the Balearic Isles (MORAGUES DE MANZANOS, 1894); Girona (TORRE BUENO, 1912); Valencia (MORÓDER, 1920); Tarragona (GULDE & CODINA, 1925); Cádiz (J. RIBES, 1967); Huelva, Madrid, Seville, Zaragoza (FUENTE, 1973); Barcelona (J. RIBES & GOULA, 1995); and Navarre (VALCÁRCCEL & PRIETO, 2006) (Map 1).

In Portugal the species was recorded from three districts, namely Beja (OLIVEIRA, 1895: Beja), Setúbal (SEABRA, 1926: Alfeite), and Faro (PISSARRO, 1951: Várzea da Orada and Serra de Monchique). The new records are the first in the country in over 50 years and include three new districts (Portalegre, Santarém, and Vila Real) that expand the known range to the north, as shown in Map 1.

Acrosternum millierei (Mulsant & Rey, 1866)

Material examined:

***Bragança district:** Vila Flor municipality: Senhora da Assunção (29TPF5179), 13/02/1999 (1 ♂, Grosso-Silva leg., GS col.).

***Faro district:** Albufeira municipality: Cortelhas-Guia (29SNB6110), 15/07/2012 (1 ♂ and 1 ♀, Grosso-Silva leg., GS col.). São Brás de Alportel municipality: Quinta do Peral (Environmental Interpretation Centre) (29SPB0209), 15/10/2019 (1 ♀, Albano Soares leg., Tagis col.).

***Guarda district:** Figueira de Castelo Rodrigo municipality: Escalhão (29TPF7435), 12/07/2019 (1 specimen photographed by Amílcar Jorge: Fig. 2). Vila Nova de Foz Côa municipality: Near the former Almendra train station, on the left bank of the river Douro (29TPF6744), 23/07/1995 (1 ♀, Grosso-Silva leg., GS col.); Almendra (29TPF6340), 17/08/1996 (1 ♂ and 2 ♀♀, Grosso-Silva leg., GS col.), 23/11/1997 [1 ♂ and 2 ♀♀, Grosso-Silva leg., MHNC-UP col.: MHNCUP/ART/37642 (♂), MHNCUP/ART/37643 (♀) and MHNCUP/ART/37644 (♀)].

In Spain, the known distribution range of *Acrosternum millierei* comprises the provinces of Murcia (LETHIERRY, 1884); the Balearic Isles (MORAGUES DE MANZANOS, 1894); Ciudad Real (FUENTE, 1920); Valencia (MORÓDER, 1920); Alicante (J. RIBES & SAULEDA, 1979); Barcelona, Zaragoza (J. RIBES *et al.*, 1997); and Tarragona (JIMÉNEZ *et al.*, 2003) (Map 2).

The only previous Portuguese record of this species was published by JOSIFOV & HEISS (1989), through an illustration of the male genitalia of a specimen collected in "Portugal". As a result, the occurrence of the species in the country is now confirmed and a first approach to its national distribution is presented, which currently includes the three districts shown in Map 2.

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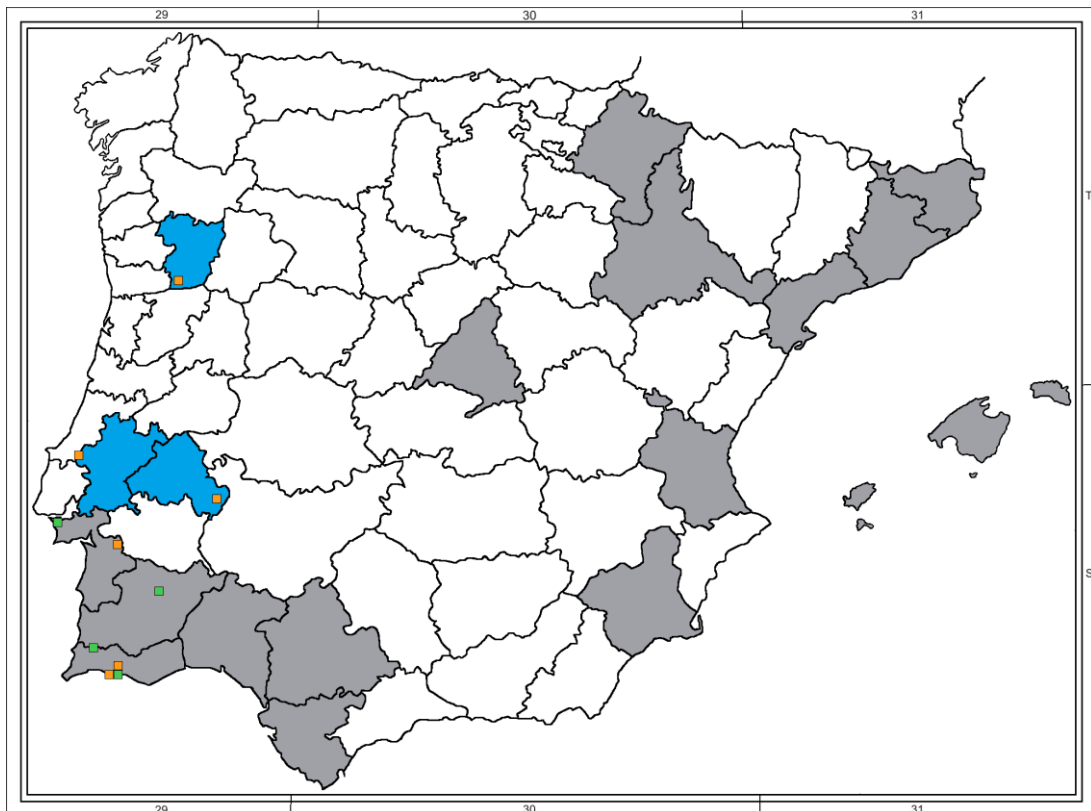
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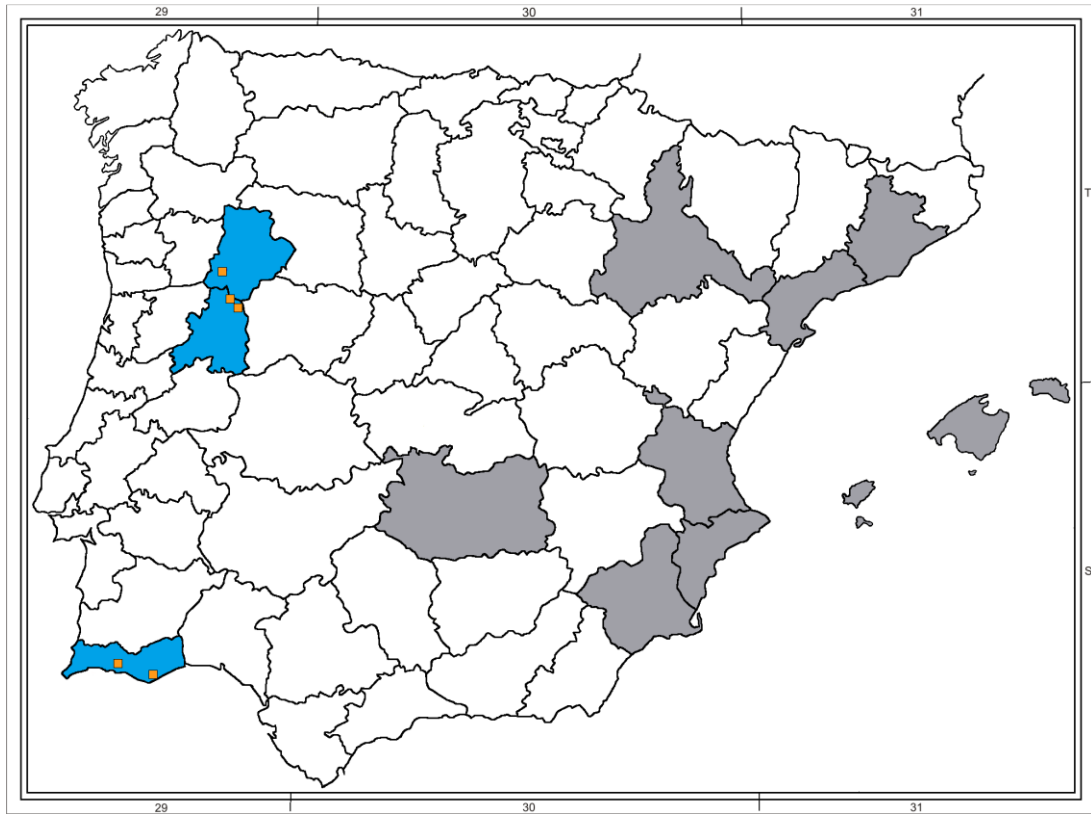
Fig. 1. - Specimen of *Acrosternum heegeri* Fieber, 1861 observed in Casais dos Silvas (Rio Maior, Portugal). ©J.M. Grosso-Silva.



Fig. 2. - Specimen of *Acrosternum millierei* (Mulsant & Rey, 1866) photographed in Escalhão (Figueira de Castelo Rodrigo, Portugal). ©Amílcar Jorge.



Map 1.- Iberian distribution of *Acrosternum heegeri* Fieber, 1861, with the previously known Portuguese districts and Spanish provinces (in grey), the new Portuguese districts (in blue), and the MGRS 10x10 km squares of the collecting sites in Portugal (new sites in orange, literature sites in green).



Map 2. - Iberian distribution of *Acrosternum millierei* (Mulsant & Rey, 1866), with the Spanish provinces (in grey), the new Portuguese districts (in blue), and the MGRS 10x10 km squares of the collecting sites in Portugal (new sites in orange).