

NOTA / NOTE

Dictyophara (Chanithus) pannonica (Germar, 1830) (Hemiptera, Fulgoromorpha, Dictyopharidae), new species for PortugalFernando Pires¹ & José Manuel Grosso-Silva²¹ Rua Dorita Castel-Branco, 12 - 2º esquerdo, 2635-461 Rio de Mouro, Portugal. e-mail: zarkovtradutor@gmail.com² 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

Abstract: The planthopper *Dictyophara (Chanithus) pannonica* (Germar, 1830) (Hemiptera, Fulgoromorpha, Dictyopharidae) is reported from Portugal for the first time, with a record from a coastal area in the district of Setúbal.

Key words: Hemiptera, Fulgoromorpha, Dictyopharidae, Dictyopharinae, *Dictyophara pannonica*, first record, Portugal.

Resumen: *Dictyophara (Chanithus) pannonica* (Germar, 1830) (Hemiptera, Fulgoromorpha), nueva especie para Portugal. Se cita *Dictyophara (Chanithus) pannonica* (Germar, 1830) (Hemiptera, Fulgoromorpha, Dictyopharidae) por primera vez de Portugal, con un registro de un área costera del distrito de Setúbal.

Palabras clave: Hemiptera, Fulgoromorpha, Dictyopharidae, Dictyopharinae, *Dictyophara pannonica*, primera cita, Portugal.

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The Dictyopharidae Spinola, 1839 are a family of fulgoromorph hemipterans with a worldwide distribution that includes 688 species in 143 genera (BARTLETT *et al.*, 2018). Dictyopharid planthoppers are characteristically long-legged due to their upright feeding posture (BARTLETT *et al.*, 2018) and bear elongated and tapering heads which they share with their sister-family Fulgoridae as well as with other fulgoromorphs (SONG *et al.*, 2018).

The Iberian dictyopharid planthopper fauna comprises 29 species in five genera (PÉREZ-HIDALGO *et al.*, 2015). The dictyopharid fauna recorded from mainland Portugal consists of eight species, two of which originally described from Portugal (Table 1). Two additional species, namely *Dictyophara (Chanithus) longirostris* Walker, 1851 and *Dictyophara (Chanithus) validicornis* (Stål, 1859), were listed as occurring in Portugal in the catalogue by METCALF (1946). This was, however, based on older catalogues (PUTON, 1886, 1899; OSHANIN, 1912), in which the Iberian Peninsula was treated as a unit ["E. Espagne et Portugal." by PUTON and "P. = Pyrenäische Halbinsel (Spanien und Portugal)" by OSHANIN] without actually detailing if the records pertained to Portugal, Spain, or both countries. As a result, and in the absence of any traceable primary Portuguese records for either species, we treat them as not occurring in the country. The same applies to *Almana longipes* (Dufour, 1849), *Bursinia (Bursinia) genei* (Dufour, 1849), and *Parorgerioides (Gyrorgerius) perezii* (Bolívar & Chicote, 1879), listed for Portugal by METCALF (1946) based on HORVÁTH (1910) (the former two species) and PUTON (1886, 1899) and OSHANIN (1912) (the latter species) and whose actual first Portuguese records are listed in Table 1.

Here we record *Dictyophara (Chanithus) pannonica* (Germar, 1830) from Portugal for the first time, based on a specimen photographed by the first author on 21 July 2018 at Praia do Carvalhal (38.303400, -8.777288; 15 m above sea level; Setúbal district, Grândola municipality). The photos (Figs. 1-2) were uploaded to the citizen science online platform *Biodiversidad Virtual*, where the identification was confirmed by André Burgers:

- <https://www.biodiversidadvirtual.org/insectarium/Dictyophara-pannonica-img1020325.html>
- <https://www.biodiversidadvirtual.org/insectarium/Dictyophara-pannonica-img1020326.html>

The distribution of *Dictyophara (Chanithus) pannonica* (Germar, 1830) extends from northwestern China to central and southern Europe, including Asian Turkey (SONG & LIANG, 2008).

The specimen photographed at Praia do Carvalhal was found in a nonconsolidated secondary dune habitat where a second addition to the Portuguese fauna was found: the asilid fly *Cerdistus zelleri* Schiner, 1862 (FIDALGO *et al.*, 2019). Unfortunately, this habitat is being severely threatened by touristic enterprises and sand dune sports, with unknown impacts on this habitats' biodiversity.

The sighting of *D. (C.) pannonica* reported in this study is especially significant as it extends the species' distribution range all the way to the western limit of continental Europe, showing that further work is needed to assess its complete distribution range.

Table 1.- Catalogue of the Dictyopharidae recorded from mainland Portugal with the oldest primary record traced for each species. Species described from Portugal are marked with an asterisk (*).

Subfamily	Species	Oldest record from mainland Portugal
Dictyopharinae Spinola, 1839	<i>Dictyophara (Chanithus) pannonica</i> (Germar, 1830)	This study
	<i>Dictyophara (Dictyophara) europaea</i> (Linnaeus, 1767)	LETHIERRY (1877)
	* <i>Dictyophara (Dictyophara) seladonica</i> Melichar, 1912	MELICHAR (1912)
	<i>Dictyophara (Euthremma) multireticulata</i> Mulsant & Rey, 1855	NOBRE (1899)
Orgeriinae Fieber, 1872	<i>Almana longipes</i> (Dufour, 1849)	SEABRA (1941)
	* <i>Bursinia (Bursinia) galaxia</i> Emeljanov & Drosopoulos, 2004	EMELJANOV & DROSOPOULOS (2004)
	<i>Bursinia (Bursinia) genei</i> (Dufour, 1849)	LALLEMAND (1929)
	<i>Parorgerioides (Gyrorgerioides) perezii</i> (Bolívar & Chicote, 1879)	EMELJANOV (2003)
	<i>Ranissus discrepans</i> Fieber, 1866	SEABRA (1941)

References

BARTLETT, C.R.; DEITZ, L.L.; DMITRIEV, D.A.; SANBORN, A.F.; SOULIER-PERKINS, A. & WALLACE, M.S. 2018. *The diversity of the true hoppers (Hemiptera: Auchenorrhyncha)*, pp. 501-590. In: FOOTIT, R.G. & ADLER, P.H. (eds.). *Insect Biodiversity: Science and Society*. Volume II, First Edition. John Wiley & Sons Ltd., Hoboken. 987 pp.

EMELJANOV, A.F. 2003 (2002). New taxa and new data on distribution of the subfamily Orgeriinae in the Mediterranean (Homoptera: Dictyopharidae). *Zoosystematica Rossica*, **11**(2): 311-319.

EMELJANOV, A.F. & DROSOPOULOS, S. 2004. A new species of the genus *Bursinia* A. Costa (Homoptera, Dictyopharidae) from Southern Portugal. *Entomologicheskoe Obozrenie*, **83**(3): 521-522.

FIDALGO, P.A.; van den BROEK, R. & PIRES, F. 2019. A new contribution to the knowledge of the distribution of the asilids of Spain and Portugal (Diptera: Asilidae), including a new species for the Iberian Peninsula. *Boletín de la Sociedad Entomológica Aragonesa*, **65**: 45-52.

- HORVÁTH, G. 1910. Ad cognitionem Dictyopharinarum regionis palaearticae. *Annales Historico-Naturales Musei Nationalis Hungarici*, **VIII**: 175-184.
- LALLEMAND, V. 1929. 2.º Liste d'Homoptères du Portugal recueillis par M. de Seabra. *Memórias e Estudos do Museu Zoológico da Universidade de Coimbra*, **39**: 1-8.
- LETHIERRY, L. 1877. Relevé des Hemiptères recueillis en Portugal et en Espagne par M. C. van Volxem en mai et juin 1871. *Annales de la Société Entomologique de Belgique*, **XX**: 34-43.
- MELICHAR, L. 1912. Monographie der Dictyophorinen (Homoptera). *Abhandlungen der Kaiserlich-Königlichen Zoologisch-botanischen Gesellschaft in Wien*, **VII**(1): 1-221.
- METCALF, Z.P. 1946. *General catalogue of the Homoptera. Fascicle IV Fulgoroidea. Part 8. Dictyopharidae*. Smith College, Northampton, USA. 246 pp.
- NOBRE, A. 1899. Catálogo do Gabinete de Zoologia 1898-1899. *Anuario da Academia Polytechnica do Porto*, **22**: 106-140.
- OSHANIN, B. 1912. *Katalog der paläarktischen Hemipteren (Heteroptera, Homoptera-Auchenorrhyncha und Psylloideae)*. Verlag von R. Friedländer & Sohn, Berlin. 187 pp.
- PÉREZ-HIDALGO, N.; MIER-DURANTE, M.P. & UMARAN, Á. 2015. Orden Hemiptera: Subórdenes Cicadomorpha, Fulgoromorpha y Sternorrhyncha. *Revista IDE@ - SEA*, **54**: 1-18.
- PUTON, A. 1886. *Catalogue des Hémiptères (Hétéroptères, Cicadines et Psyllides) de la faune paléarctique*. Troisième Édition. Imprimerie La Blanc-Hardel. 99 pp.
- PUTON, A. 1899. *Catalogue des Hémiptères (Hétéroptères, Cicadines et Psyllides) de la faune paléarctique*. Quatrième Édition. Bureau de la Société Française d'Entomologie, Caen. 121 pp.
- SEABRA, A.F. 1941. Contribuições para o inventário da fauna lusitânica. Insecta. Homoptera (Cicadoideae e Fulgoroideae). *Memórias e Estudos do Museu Zoológico da Universidade de Coimbra*, **121**: 1-14.
- SONG, Z.-S. & LIANG, A.-P. 2008. The Palaeartic planthopper genus *Dictyophara* Germar, 1833 (Hemiptera: Fulgoroidea: Dictyopharidae) in China. *Annales Zoologici*, **58**(3): 537-549.
- SONG, Z.-S.; BARTLETT, C.R.; O'BRIEN, L.B.; LIANG, A.-P. & BOURGOIN, T. 2018. Morphological phylogeny of Dictyopharidae (Hemiptera: Fulgoromorpha). *Systematic Entomology*, **43**(4): 637-658.



Figs. 1-2.- Two views of the specimen of *Dictyophara (Chanithus) pannonica* (Germar, 1830) from Praia do Carvalho (Grândola, Portugal).