

## NOTA / NOTE

## Review of *Eurydema* Laporte, 1832 species from Macaronesia and new record of *Eurydema ventralis* Kolenati, 1846 (Hemiptera: Pentatomidae) in Madeira (Portugal)

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**Abstract:** In Macaronesia, *Eurydema oleracea* (Linnaeus, 1758) (Hemiptera: Pentatomidae) is only present in the Azores. *Eurydema lundbladi* Lindberg, 1960 and *Eurydema ornata* (Linnaeus, 1758) are present in the Canary Islands. No *Eurydema* Laporte, 1832 species has been found in the Cape Verde Islands. *Eurydema ventralis* Kolenati, 1846 is observed for the first time on the island of Madeira and in Macaronesia, bringing the number of *Eurydema* species present on Madeira to four, with *Eurydema herbacea* (Herrich-Schaeffer, 1834), *E. lundbladi* and *E. ornata*, and to five in Macaronesia.

**Key words:** Hemiptera, Pentatomidae, Strachiini, *Eurydema ventralis*, new record, distribution, Madeira, Portugal, Macaronesia.

**Resumen:** Revisión de especies de *Eurydema* Laporte, 1832 de la Macaronesia y nueva cita de *Eurydema ventralis* Kolenati, 1846 (Hemiptera: Pentatomidae) en Madeira (Portugal). En la Macaronesia, *Eurydema oleracea* (Linnaeus, 1758) (Hemiptera: Pentatomidae) sólo está presente en las Azores. *Eurydema lundbladi* Lindberg, 1960 y *Eurydema ornata* (Linnaeus, 1758) están presentes en las Islas Canarias. No se ha encontrado ninguna especie de *Eurydema* Laporte, 1832 en las islas de Cabo Verde. *Eurydema ventralis* Kolenati, 1846 se observa por primera vez en la isla de Madeira y en la Macaronesia, elevando a cuatro el número de especies de *Eurydema* presentes en Madeira, junto con *Eurydema herbacea* (Herrich-Schaeffer, 1834), *E. lundbladi* y *E. ornata*, y a cinco en la Macaronesia.

**Palabras clave:** Hemiptera, Pentatomidae, Strachiini, *Eurydema ventralis*, nueva cita, distribución, Madeira, Portugal, Macaronesia.

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### Introduction

Macaronesia is defined as all the archipelagos present in the Atlantic Ocean off the European and West African coasts. Macaronesia includes from north to south the archipelagos of the Azores (2333 km<sup>2</sup>), Madeira (801 km<sup>2</sup>), the Canaries (7447 km<sup>2</sup>), and Cape Verde (4033 km<sup>2</sup>). Inventories of the entomological fauna of all these islands have been carried out recently (ARECHA VALETA *et al.*, 2005; RIBES & BORGES, 2005; RIBES & HEISS, 2008; ROCA-CUSACHS *et al.*, 2020).

The genus *Eurydema* Laporte, 1832 (Hemiptera: Pentatomidae) includes 23 species in the west-Palaearctic region (DERJANSCHI & PÉRICART, 2005). This genus is part of the tribe Strachiini Mulsant & Rey, 1866, characterised by a general variegated colouring with metallic reflections, generally black/green and red, or black and red/orange or white. The genus *Eurydema* is characterised in this tribe by hemelytra longer than the scutellum, and a densely punctuated head. The colouring of *Eurydema* is aposematic, which means it warns predators of the toxicity of these species that

sequester and concentrate in their body glucosinolates, toxic molecules recovered from the Brassicaceae on which they feed.

On the Azores archipelago, RIBES & BORGES (2005) mention *Eurydema oleracea* (Linnaeus, 1758) only on Ilha Terceira, one of the eight islands of the archipelago, and only in a small area of 3 to 4 km around the city of Angra do Heroísmo.

On the Madeira archipelago, RIBES & HEISS (2008) mention the presence of three species of the genus *Eurydema*: *Eurydema ornata* (Linnaeus, 1758) on the islands of Madeira, Porto Santo, and Desertas, and *Eurydema herbacea* (Herrich-Schaeffer, 1834) and *Eurydema lundbladi* Lindberg, 1960 on the islands of Madeira and Porto Santo.

On the Canary Islands, ROCA-CUSACHS *et al.* (2020) mention *E. ornata* on the islands of El Hierro, La Palma, La Gomera, Tenerife, and Gran Canaria, and *E. lundbladi* on Tenerife and La Palma. The presence of *Eurydema ventralis* Kolenati, 1846 is mentioned there, but reported as doubtful without specifying a location island. Recently, VAN DER HEYDEN (2023) added Gran Canaria to the list of the distribution of *E. lundbladi* on the archipelago.

The genus *Eurydema* is not mentioned on the Cape Verde archipelago (ARECHAVALETA *et al.*, 2005). It should be noted that apart from *Eurydema*, no other genus of the tribe Strachiini (notably the genera *Bagrada* Stål, 1862, *Stenozygum* Fieber, 1861 or *Trochiscocoris* Reuter, 1890) has been reported in Macaronesia.

## Material

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***Eurydema ventralis*** Kolenati, 1846: Ribeira Brava, Madeira, Portugal, 22.05.2024, on cabbage, phot. Domingos Rafael Sousa Fernandes (Fig. 1). Observation published on iNaturalist (see [here](#)).

*Eurydema ventralis* is distinguished from *E. ornata* by a red or orange exocoria with a rectangular black spot in the middle. In *E. ornata* we observe a dark or faded area behind this spot. In *E. herbacea* and *E. lundbladi*, the exocoria is red in the basal third and black at the apex, and the spots on the scutellum are not confluent and do not form a Y, like in the two previous species. *Eurydema oleracea* has a single light spot on each mesocoria, a metallic dark green body, pronotum with a light midline and borders on the lateral edges (LUPOLI & DUSOULIER, 2015).

## Conclusions

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This observation of *E. ventralis* is the first verified observation in Macaronesia. It brings to four the number of species of *Eurydema* and Strachiini observed in Madeira so far. That is twice as much as in the island of Tenerife, whose surface area is 2.7 times larger.

## Acknowledgements

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Fig. 1.- Specimen of *Eurydema ventralis* Kolenati, 1846 (Hemiptera: Pentatomidae), Ribeira Brava, Madeira, Portugal. (Photo: Domingos Rafael Sousa Fernandes).