

NOTA / NOTE

Macrophya (Macrophya) militaris (Klug, 1817) (Hymenoptera, Symphyta, Tenthredinidae), new species for PortugalDaniel Ferreira^{1,2}, Mário Santos^{1,3} & José Manuel Grosso-Silva⁴

¹Laboratory of Applied Ecology, CITAB - Centre for the Research and Technology of Agro-Environment and Biological Sciences, Institute for Innovation, Capacity Building and Sustainability of Agri-food Production (Inov4Agro), University of Trás-os-Montes e Alto Douro, 5000-911, Vila Real, Portugal. e-mail: ferreira_952@hotmail.com

²Laboratório da Paisagem, Rua da Ponte Romana, 4935-095, Guimarães, Portugal.

³Laboratory of Ecology and Conservation, Federal Institute of Education, Science and Technology of Maranhão, R. Dep. Gastão Vieira, 1000, 65393-000 Buriticupu, MA, Brazil

⁴Museu 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 sawfly *Macrophya (Macrophya) militaris* (Klug, 1817) (Hymenoptera, Symphyta, Tenthredinidae) is reported from Portugal for the first time, with a record from the northern region (Guimarães).

Key words: Hymenoptera, Symphyta, Tenthredinidae, Tenthredininae, *Macrophya militaris*, first record, Portugal.

Resumen: *Macrophya (Macrophya) militaris* (Klug, 1817) (Hymenoptera, Symphyta, Tenthredinidae), nueva especie para Portugal. Se cita *Macrophya (Macrophya) militaris* (Klug, 1817) (Hymenoptera, Symphyta, Tenthredinidae) por primera vez de Portugal, con un registro de la región septentrional (Guimarães).

Palabras clave: Hymenoptera, Symphyta, Tenthredinidae, Tenthredininae, *Macrophya militaris*, primera cita, Portugal.

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Introduction

The suborder Symphyta Gerstacker, 1867 (Insecta: Hymenoptera), commonly known as "sawflies", includes 8,065 extant species in 14 families (AGUIAR et al., 2013). Most of the sawflies have phytophagous larvae (Orussidae excepted) and the biggest part of the group's diversity is found in the Northern Hemisphere (ASARO, 2008).

The first list of the Symphyta of Portugal was published 89 years ago and contained 30 species (DUSMET ALONSO, 1932). Twenty-seven years later, DINIZ (1959) listed 47 species and, in the following year, raised the recorded diversity to 79 species (DINIZ, 1960). Several decades elapsed until the next catalogue with a retrievable Portuguese Symphyta list was published - the "Compendium of European Sawflies" (LISTON, 1995) - referencing 81 species from mainland Portugal. The most recent list includes 93 species (TAEGER et al., 2006). Since the latter publication, the knowledge about the Portuguese Symphyta has experienced a boost, with the addition of at least 14 species to the list in the studies of LISTON (2016), PROUS et al. (2016, 2019, 2021), LISTON et al. (2019a, b, c), and LISTON & PROUS (2020).

The Tenthredinidae Latreille, 1803 are the largest family of sawflies, comprising approximately 66% of the known Symphytan species, with 400 genera and 5,500 species (AGUIAR *et al.*, 2013). The exclusively herbivorous larvae of Tenthredinidae are mostly simple external feeders that feed on a wide variety of leaves (JERVIS & VILHELMSSEN, 2000). Some tenthredinids are forest defoliators on both deciduous and resinous trees. They may represent orchard pests feeding on apple, plum, pear, red currant, and gooseberry. Some tenthredinids may also feed on rose and columbine as ornamental-plant pests (GOULET & HUBERT, 1993; BOEVÉ, 2008).

The tenthredinid *Macrophya (Macrophya) militaris* (Klug, 1817) is reported here from Portugal for the first time, based on a female specimen photographed by the first author on 2 June 2020 on the edge of the Guimarães urban city park (41.44767, -8.275347; Braga district, Guimarães municipality). The photos (Figs. 1-2) were uploaded to the citizen science online platform iNaturalist.org (<https://www.biodiversity4all.org/observations/48231611>), where the identification was provided by Andreas Taeger (Senckenberg German Entomological Institute, Müncheberg).

Macrophya (M.) militaris is a mostly dark large sawfly with an elongated third pair of legs. The females' first and second pairs of legs are whitish with black posterior surfaces. The abdomen presents a red stripe in the middle (segments III to V), while tergites VI and VII have a white spot on each side and tergite IX is almost entirely white. The head is black while the clypeus, labrum and part of the mandibles are whitish. The eyes are converging downwards. The antennae are black and slightly enlarged in the middle (BERLAND, 1947). The male is very rare and has an entirely black abdomen, with the pro- and mesotibias white with black markings at the apex (BERLAND, 1947).

The last instar of *M. (M.) militaris* larva is similar to the larvae of both *Macrophya (Macrophya) montana* (Scopoli, 1763) and *Macrophya (Macrophya) rufipes* (Linnaeus, 1758) but easily distinguished by the enlarged longitudinal dark stripe on the dorsum and by the lunular parietal macula, which is not confluent with the black neck spot (ZIRNGIEBEL, 1940; LORENZ & KRAUS, 1957). *Rosa* and *Origanum* have been listed as potential food plants for *M. (M.) militaris* larvae (TAEGER *et al.*, 1998), although larvae in the study conducted by MACEK (2012) did not accept *Origanum*. Furthermore, larvae were collected on *Fragaria vesca* L. and *Fragaria viridis* Duchesne, while in captivity they also have been found to accept *Potentilla reptans* L. and various *Rubus* species (MACEK, 2012).

The distribution range of *M. (M.) militaris* comprises most of Europe: Albania, Andorra, Austria, Belgium, Bulgaria, Croatia, Czech Republic, France (mainland and Corsica), Germany, Hungary, Italy (mainland), Macedonia, Moldova, Romania, Russia, Slovakia, Spain (mainland), Switzerland, The Netherlands, and Ukraine (TAEGER *et al.*, 2006).

The specimen reported here was found in the immediate vicinity of the Penha Biodiversity Route, a recently established 3.5 km interpretive path that combines open meadows, deciduous woodland and riparian zones. In addition to this record, two other tenthredinids were observed in the same area, namely *Tenthredo (Cephalodo) bifasciata* (O.F. Müller, 1766) and *M. (M.) montana*. The sighting of *M. (M.) militaris* reported in this note is especially significant as it extends the species' distribution range almost to the western limit of continental Europe, showing that further work is needed to assess its complete distribution range.

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Figs. 1-2.- Two views of the specimen of *Macrophya (Macrophya) militaris* (Klug, 1817) from Guimarães (Portugal).