

## *Technomyrmex vexatus* (SANTSCHI, 1919) from Gibraltar (Hymenoptera: Formicidae): a new ant species for Europe and genus for Iberia

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### Abstract

The ant species *Technomyrmex vexatus* (SANTSCHI, 1919) (Formicidae: Dolichoderinae) is recorded from Gibraltar on the Iberian Peninsula. This comprises the first record of the species in Europe and of the genus *Technomyrmex* MAYR, 1872 in Iberia. The species was found on the Rock of Gibraltar, where it is apparently common in thick maquis vegetation.

**Key words:** *Technomyrmex vexatus*, Dolichoderinae, Europe, Iberia, Gibraltar.

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### Introduction

The ant genus *Technomyrmex* MAYR, 1872 (Dolichoderinae: Dolichoderini) are generalist ants found primarily in the tropics and subtropics of the Old World. There are now 90 valid species, up from the 59 recorded in BOLTON's (1995) catalogue. However, the genus includes some tramp species that are widespread in distribution (BOLTON 2007). Some of these tramp species have been recorded in Europe, within Austria (STEINER & al. 2002), the Czech Republic (ŠEFROVÁ & LAŠTŮVKA 2005) and Madeira (WETTERER & al. 2007). DONISTHORPE (1927) lists the *Technomyrmex* species recorded from British hothouses.

Only one species is native to the Western Palaearctic: *T. vexatus* (SANTSCHI, 1919), which is found in Morocco (SANTSCHI 1919, CAGNIANT & ESPADALER 1993). The species was originally described as *Tapinoma vexatum* by SANTSCHI (1919) based on males captured in Tangier, but was placed within the genus *Technomyrmex* by CAGNIANT & ESPADALER (1993) following examination of workers. Tangier lies in northern Morocco on the southern shore of the Strait of Gibraltar, a sea crossing of some 14 km at its narrowest (Fig. 1). Furthermore, a "*Technomyrmex* sp." was recorded from Ceuta (Sebta) – which lies directly opposite Gibraltar in North Africa – by CAGNIANT & ESPADALER (1993) and this has been confirmed as *T. vexatus* (B. Bolton, pers. comm.).

Until the present, the genus *Technomyrmex* was not known from Iberia (GOMEZ & ESPADALER 2007). The British Territory of Gibraltar lies at the southernmost tip of the Iberian Peninsula (36° 08' N, 5° 21' W), neighbouring Cádiz Province in Andalucía, Spain. With this paper we provide the first records of *Technomyrmex vexatus* for Europe, from the Rock of Gibraltar.

Fig. 1: Map of the Strait of Gibraltar showing the location of Gibraltar (1), Ceuta (2), and Tangier (3). The location of the Strait is shown in reference to the Iberian Peninsula (inset). →

### Material and methods

General surveying of ants took place on the Rock of Gibraltar from May to October 2007. A variety of methods were used: ants were searched for on the ground and on vegetation, nests were located within trees and shrubs, in the ground and under rocks and stones, and vegetation was beaten. In addition, a Rothamsted light trap was operated on a nightly basis. A number of habitats were surveyed: rocky slopes with garigue vegetation, open pseudosteppe, tall thickets of maquis (or matorral), gardens and wooded areas, sand dunes and sand slopes with littoral habitat. These surveys produced a series of an ant species belonging to the subfamily Dolichoderinae FOREL, 1878. This ant was found to belong to the genus *Technomyrmex* using keys in HÖLLDOBLER & WILSON (1990) and BOLTON (1994). The species was kindly identified by Mr. Barry Bolton.

### Results

The genus *Technomyrmex* is similar to the closely-related dolichoderine genus *Tapinoma* FOERSTER, 1850. The two genera can be distinguished by the following features: five gastral tergites are visible when *Technomyrmex* is ex-

