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A NEW TARPHIUS (COLEOPTERA, COLYDIIDAE) FROM MADEIRA ISLAND

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With 2 figures

ABSTRACT. A new species of the genus Tarphius, collected on the Atlantic island of Madeira, is described and illustrated.

RESUMO. O autor descreve uma nova espécie do género Tarphius, encontrada na Ilha da Madeira.

INTRODUCTION

The Coleoptera of the Atlantic island of Madeira have been studied for over a century. The first collector to visit the island was the celebrated English naturalist T. V. WOLLASTON (1822-1878). He visited the island for the first time in 1847, for reasons of health, and began to collect beetles as a hobby. He returned in November of the following year, now with the intention of accumulating material for publication. In May 1850 he made a third visit to the island. The results of this fieldwork were published in his book

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Insecta Maderensia (1854), which included the description of 14 new species of the genus Tarphius ERICHSON. In his next book, Catalogue of the Coleopterous Insects of Madeira (1857), he described three more species of Tarphius, and in subsequent papers (1862, 1871) a further three species, giving a total of 20 new species. In his book Coleoptera Atlantidum (1865) he dealt with all the known species of Coleoptera from the Atlantic islands but no further Tarphius were described from Madeira.

REITTER (1922) gave an incomplete key to the species of *Tarphius*, but only listed 9 species from Madeira. FRANZ (1968) also gave a key and a redescription of some little known species from Madeira. Finally, DAJOZ (1977) has given a key with redescriptions of all the species known from Madeira.

Although many collectors have visited the island since WOLLASTON'S time, no new species of *Tarphius* have been found. This is strange, as so many new species have been described from the other Atlantic islands. One reason may be that the natural environment has changed so greatly since WOLLASTON'S day. The native forest has largely been felled and the habitats suitable for many species have disappeared. The best habitats are now probably located at high altitude, where the native forest still survives, but these areas are often of difficult access and rarely visited by collectors.

Because of its small size and rather flat body without nodules, the new species seems to be closely related to *angustulus* WOLLASTON, the only other species on Madeira with this general appearance. As the eyes are almost completely reduced, this may indicate that it has a subterranean way of life and may be why it has escaped discovery until now.

Tarphius zerchei sp. n.

Type-locality: Madeira, Rabaçal, 1000 m above sea-level.

Type-material: Holotype ♂, Madeira, Rabaçal, 23.iii.1996, leg. L. Zerche, in Deutsches Entomologisches Institut (DEI).

Paratype 19, same data as holotype, in coll. G. GILLERFORS.

Derivation of the name: Named in honour of the collector, L. Zerche.

Diagnosis: Characterised by its small size, rather flat body without nodules and reduced granules, very fine hairs and bristles, and very reduced eyes (see Fig. 1).

DESCRIPTION

Body length 1.2 mm, width 0.9 mm. Colour. Uniformly ferrugineous.

Head. Anterior margin evenly rounded. Sides slightly raised laterally, with a small pit anteriorly. Granules hardly raised, flat, slightly oval with fine hairs bent forwards. Eyes almost completely reduced. Antennae short: segments I-III of equal length (0.1 mm), IV about 2/3 of III, V as long as broad, VI-IX shorter than broad.

Pronotum. Sides moderately convex, not curved inwards behind and slightly crenulated. Anterior corner pointed, posterior corner sharp. Hind margin straight just inside the corners, middle portion moderately sinuous posteriorly. Upper surface moderately convex, laterally weakly flattened without a longitudinal furrow along middle. Hind margin with an indistinctly perceptible impression. Surface with rather large, flat and weakly raised granules, with fine hairs bent forwards. On the sides the granules smaller and slightly more raised.

Elytra. As broad as pronotum. Length/width = 1.33. Sides slightly broadened posteriorly, almost subparallel, apex somewhat pointed. Margin weakly crenulated. Surface moderately convex, without nodules, slightly wrinkled. Granules absent on disc, weakly visible only at sides, a little more obvious anteriorly, and with large shallow punctures in indistinct rows and with very fine, semi-erect, backwardly-bent bristles.

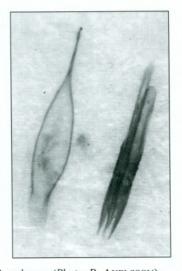
Aedeagus. Figs 2. Apex of parameres sharply pointed and bent upwards.

Bionomics. Sifted from under moss and under layers of dead leaves and twigs beneath a dead laurel tree. The ground was very wet following heavy rain.

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Figs 1-2 - Tarphius zerchei sp. n.: 1. habitus, 2. aedeagus (Photo: R. AXELSSON).

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