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NEW AND RARE COLEOPTERA FROM MADEIRA

By DIETER ERBER ¹ & A. M. FRANQUINHO AGUIAR ²

ABSTRACT. Ten new and three quite rare species of the coleopterous fauna of Madeira are listed and discussed.

RESUMO. Referem-se e discutem-se dez espécies novas e outras três bastante raras para a fauna de coleópteros da Madeira.

INTRODUCTION

Since our last publication (ERBER & AGUIAR, 1996) some additional coleopterous species have been newly detected on Madeira; they should be added to the coleopterous fauna of Madeira, although we will have to wait to see whether they will establish on the Island. Some of the species found are known as very rare on the Island.

¹ Institut für Biologiedidaktik, Justus-Liebig-Universität Giessen, Karl-Glöckner-Str. 21, D-35394 Giessen, Germany. E-mail: dieter.erber@t-online.de

² Laboratório Agrícola da Madeira, Estrada Engenheiro Abel Vieira, 9135-260 Camacha, Madeira, Portugal. E-mail: antonio.aguiar@srafp.pt

Abbreviations used for collections where the specimens are preserved.

DEI	= Deutsches Institut für Entomologie, Eberswalde, Germany
MHNG	= Museum d'Histoire Naturelle, Genève, Switzerland
cAgu	= Private collection A. M. FRANQUINHO AGUIAR, Funchal, Madeira, Portugal
cBaé	= Private collection MARCOS BÁEZ, La Laguna, Canary Islands, Spain
cErb	= Private collection DIETER ERBER, Giessen, Germany
cLom	= Private collection ARVED LOMPE, Nienburg, Germany
cWra	= Private collection DAVID WRASE, Berlin, Germany

RECORDS

Fam.: Carabidae

Thalassophilus caecus Jeannel, 1938

Extremely rare on Madeira proper.

Madeira: Near the road from Ribeira da Janela to Fanal about 800 m west of Cabêço da Esmoutada 900 m, western exposed *Laurus* mixed forest, 31.III.1993, 1 male, collected by sieving and washing up deeper layers of leaf litter, together with *Geostiba occulta* Assing & Wunderle, 1996 and *G. lauricola* Assing & Wunderle, 1996, *leg.* V. Assing (pWra); Madeira: Rabaçal, east, 1000 m, near crossing of Ribeira do Risco and Levada das Vinte e Cinco Fontes, 1 male, collected by washing up Hepaticae, possibly rinsed out from deeper ground layers by water after several violent rain days, 30.III.1996, *leg.* A. Lompe (pLom).

This particular specimen is illustrated together with its genitalia by A. LOMPE (2000) in a key where *T. caecus* is distinguished from the other two species existing in Madeira, *T. whitei* Woll. and *T. pieperi* Erber.

JEANNEL (1938) has given the first record of this species. He found 1 female at Rabaçal under a stone. Regarding the circumstances at which the few specimens were collected, as well as the fact that they have very small eyes and only light pigmentation (see ERBER, 1990:5) we can be sure that the species is living in hollow spaces in the ground. This certainly is the reason for the species rarity.

Fam.: Nitidulidae

Carpophilus fumatus Boheman, 1851

New to the Madeira Archipelago.

Madeira: Fazendinha, Gaula, 30.IX.1996, 1 specimen on fruit of *Prunus persica*, *leg.* A. M. F. Aguiar, *det.* P. Audisio (cAgu).

This species, originating from South Africa, has been already recorded from the **Azores** (ISRAELSON, 1984; GILLERFORS, 1986) and Cape Verde Islands (GEISTHARDT, 1988), not yet, however, from the Canary Islands (MACHADO & OROMI, 2000).

Distribution: Tropical Africa, Madagascar, sporadically introduced to Central America till Florida, Caribbean, Morocco, Portugal, Venice (AUDISIO, 1993); Azores; Madeira; Cape Verde Islands.

Epuraea (Haptoncus) ocularis Fairmaire, 1849

New to the Madeira Archipelago.

Madeira: Machico: Banda d'Além, 19.XI.1996, 1 male, 1 female from *Mangifera indica*, leg. A. M. F. Aguiar, det. P. Audisio (cAgu).

This species has been introduced only recently into Europe, probably from Eastern Asia. JELINEK (1997) has recorded it from the Canary Islands.

Distribution: "Palaeotropics, Far East northwards to China, Korea and Japan (Honshu), Micronesia, Polynesia and Australia" (JELINEK, 1997: 125); Canary Islands; Madeira.

Fam.: Tenebrionidae

Nesotes futilis (Wollaston, 1854)

This is the third record from the western part of Madeira proper.

Madeira: Serra de Água, 523 m, 7.I.1999, in dead trunk of *Castanea sativa*, 1 specimen leg. A. M. F. Aguiar, det. W. Schawaller (cAgu).

Whereas the species has been recorded mostly from the eastern part of Madeira proper, Deserta Grande, Bugio (WOLLASTON, 1854; 1865) and Porto Santo (ERBER, 1990), records from the western part of the main island are very rare. The first find of one specimen in Serra de Água at IV.1959 by LINDBERG has been recorded by ARDOIN (1963); two specimens were collected near Porto Moniz in a dead *Euphorbia* at XI.1997 by LANGE (not yet published, cLan).

Fam.: Coccinellidae

Nephus includens Kirsch, 1870

New to the Madeira Archipelago.

Madeira: Funchal, Amparo, 25.I.1996, 1 specimen from rotten fruit of *Pisidium guajava*, leg. A. M. F. Aguiar, det. H. Ziegler (cAgu).

Distribution: Mediterranean Region; Canary Islands (MACHADO & OROMI, 2000); Cape Verde Islands (GEISTHARDT, 1988); Madeira.

Fam.: Corylophidae

***Corylophus tectiformis* Wollaston, 1854**

Extremely rare on Madeira proper.

Madeira: Ribeiro Frio, 900 m, 6.I.1996, 2 specimens brushed from grassy mounds, *leg.* D. Erber (cErb); Ribeiro Frio, Botanical Garden, 900 m, 29.III.1996, 1 specimen in Laurisilva, *leg.* L. Zerche (DEI); Seixal, Ribeiro do Seixal, 500 m, 31.III.1996, 1 specimen in Laurisilva, *leg.* L. Zerche (cErb).

There are only a few records in the literature: WOLLASTON (1854) recorded Lombo das Vacas, June 1850 on moist fern, Lombo dos Pessegueiros, July (1850 ?) and Ribeiro Frio, August (1850 ?) at the damp walls of the levada. As all records show the species prefers damp areas in dense vegetation. The species has also been “taken by Dr. Bewicke near Funchal” (WOLLASTON, 1864).

Distribution: Madeira proper, not yet on any other Atlantic Archipelago (BORGES, 1990; GEISTHARDT, 1988; MACHADO & OROMI, 2000).

Fam.: Latridiidae

***Metopthalmus ferrugineus* Wollaston, 1865**

New to the Madeira Archipelago.

Madeira: Ribeira Brava, 200 m, 27.III.1995, 1 specimen sifted from grass and compost, *leg.* L. Zerche (DEI); Rabaçal, Levada das Vinte e Cinco Fontes, 900 m, 7.I.1996, 2 specimens sift from leaf-mould in *Laurus/Erica*-forest, *leg.* D. Erber, *det.* W. H. Rücker (cErb); between Caramujo and Levada do Norte, 1100 m, 25.VIII.1996, 2 specimens in lichen on *Laurus*, *leg.* U. Kirschbaum (cErb).

Probably this species established itself on the Island, especially in its western part.

Distribution: Canary Islands, all islands (MACHADO & OROMI, 2000), already recorded from Hierro by WOLLASTON (1865); Madeira. Hitherto not known from the other Atlantic Archipelagos (GEISTHARDT, 1988; BORGES, 1990).

***Enicmus histrio* Joy & Tomlin, 1910**

New to the Madeira Archipelago.

Madeira: Seixal, Chão da Ribeira, 450 m, 31.III.1996, 1 specimen found in heap of grass, *leg.* L. Zerche, *det.* W. H. Rücker (DEI).

Hitherto the only specimen from the Archipelago. WOLLASTON (1854), however, recorded *E. transversus* (Ol.) - which possibly may have been taken for this species - as widely spread on the Island.

Distribution: Europe, Madeira. Hitherto not recorded from anyone of the other Atlantic Archipelagos (BORGES, 1990; GEISTHARDT, 1988; MACHADO & OROMI, 2000).

Fam.: Colydiidae

Tarphius lowei Wollaston, 1854

Very rare on Madeira proper.

Madeira: Levada do Caniço, between Camacha and Assomada, 400 m, 5.X.1993, 1 specimen in lichen on soil, *leg.* U. KIRSCHBAUM, *det.* G. GILLERFORS (cErb); Levada da Serra do Faial, south of Lamaçeiros, 800 m, 6.X.1993, 1 specimen in lichen from *Quercus*, *leg.* U. Kirschbaum, *det.* G. Gillerfors (cErb); Porto Santo: Pico do Facho, northern slope, 500 m, N33° 04' W16° 19', *leg.* Zerche (DEI).

This endemic species is very common on Porto Santo, where it is the most abundant *Tarphius* species; WOLLASTON (1854) found it on lichens, in the rocks or in stumps of trees. On Madeira proper, however, only a few records are given in the literature: Ribeiro Frio, Fanal (on the highest branches of trees) and Lombo dos Pessegueiros in July 1850 (WOLLASTON, 1854); Ribeiro do Inferno, 10.VIII.1935, under bark, *leg.* Lundblad (JANSSON, 1940). This species seems to prefer living in lichens.

Fam.: Lucanidae

Dorcus parallelopipedus (Linné, 1758)

New to the Madeira Archipelago.

Madeira: Jardim da Serra, 800 m, summer 1996, 1 specimen at bark of a tree, *leg.* Báez (cBáez).

This is the first record of this family in any Atlantic Island. Since this is also the only recorded specimen, hitherto, one has to wait to see whether this species will establish on the Island.

Distribution: Europe; Madeira; hitherto not known from any other Atlantic Archipelago (BORGES, 1990; GEISTHARDT, 1988; MACHADO & OROMI, 2000).

Fam.: Chrysomelidae

Chrysolina quadrigemina Suffrian, 1851

New to the Madeira Archipelago.

Madeira: Rabaçal, 5.VIII.1963, 1 specimen, *leg.* E. Weinreich (cErb)^x; Paul da Serra, Estanquinhos, 1500 m, 23.III.1982, 1 specimen, *leg.* D. Erber (cErb)^x; Poiso, 1000

m, 1.II.1973, 1 male under a stone, *leg.* W. Hinterseher (cErb); Santo da Serra, 28.III.1975, 14 specimens, *leg.* S. Vit (MNHG); Paúl da Serra, Estanquinhos, 1550 m, 17.IX.1985, 3 specimens, *leg.* D. Erber (cErb); Achada do Teixeira, 1620 m, 5.IX.1988, 1 female under bark, *leg.* C. Lange (cErb); Ribeiro Frio, 800 m, 20.X.1989, 1 male on the wings, *leg.* H. Maul (cErb); half way between Curral das Freiras and Boca dos Namorados, 690 m, 18.III.1990, 1 specimen, *leg.* A. M. F. Aguiar (cAgu: No 502); Gaula, 400 m, 8.V.1994, 1 male, *leg.* F. Hieke & H. Wendt (cErb); all *det.* H. Kippenberg.

In the literature (JANSSON, 1940; LUNDBLAD, 1958; LINDBERG, 1963; ERBER, 1986) *Chrysolina hyperici* Forster, 1771 had been recorded from Madeira. UYTENBOOGAARD (1947) recorded 1 specimen of *C. quadrigemina* Suffrian, 1851 from Rabaçal, May 1938, he was, however, not quite sure in his determination. We may assume that all records of *C. hyperici* have been misidentifications, so that this species has to be deleted from the coleopterous fauna of Madeira.

Distribution: Nearly worldwide (KIPPENBERG, *in litt.*); Madeira: not yet recorded from any other Atlantic Archipelago.

^{x)} Already recorded as *C. hyperici* in ERBER, 1986.

Fam.: Curculionidae

Otiorhynchus sulcatus Fabricius, 1775

New to the Madeira Archipelago.

Madeira: Santa Cruz, Airport, 13.III.1997, 1 specimen inside building, *leg.* A. M. F. Aguiar (cAgu).

Since only one specimen has been found in the building of the airport, it may have been just imported. It seems improbable that it is already a real member of the coleopterous fauna of Madeira. The larvae of this species are pests on roots of cultivated plants, *e. g.* on roses, and in greenhouses.

Distribution: Europe; wide spread, even to North America; Azores (BORGES, 1990); Madeira (?); not yet known from the Canary Islands (MACHADO & OROMI, 2000) and the Cape Verde Islands (GEISTHARDT, 1988).

Curculio glandium Marsham, 1802

New to the Madeira Archipelago.

Madeira: Jardim da Serra, 800 m, III.1997, 2 specimens, *leg.* Báez (cErb).

Since there are no more records, it is uncertain, whether the species has established on the Island.

Distribution: Europe; Caucasus, North Africa; Madeira; hitherto not known from any other Atlantic Archipelago (BORGES, 1990; GEISTHARDT, 1988; MACHADO & OROMI, 2000).

Rhynchaenus fagi (Linné, 1758)

New to the Madeira Archipelago.

Madeira: Paúl da Serra, Estanquinhos, 860 m, 12.IX.1992, 1 specimen, *leg.* D. Erber, *det.* L. Behne (cErb).

Distribution: Central Europe; Madeira (?); hitherto not known from any other Atlantic Archipelago (BORGES, 1990; GEISTHARDT, 1988; MACHADO & OROMI, 2000).

Torneuma caecum Wollaston, 1860

Syn: *T. (Pseudotyphloporus) brincki* Roudier, 1965.

Very rare on Madeira.

Madeira: Ponta do Garajau, 6 km east of Funchal, 2 specimens on dead roots of *Echium* spec. [most probably *E. nervosum*], 6.IX.-31.X.1988, *leg.* R. Schuh, *det.* G. Osella (cErb).

There are few records of this species in the literature: WOLLASTON, (1860: 455) found 1 specimen in Curral das Freiras (or Curral das Romeiras? (WOLLASTON, 1865: 284)), “adhering of the trunk of a felled cherry-tree, which was lying on the damp ground”; 1 specimen Ravine near Ribeira das Cales (ROUDIER, 1965: description of *T. brincki*); 2 specimens near Funchal and 2 specimens in the Curral (das Freiras?) under leaf mould of *Castanea* (OSELLA, 1976). OSELLA & ZUPPA (1998) gives a key to distinguish *T. caecum* and the new species *T. desilvai* Osella.

Distribution: Madeira proper.

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