

## WEB-SPINNERS (*EMBIOPTERA*) OF THE ARCHIPELAGO OF MADEIRA

By Christian Lange \*

With 1 figure

ABSTRACT. Two species of *EMBIOPTERA* were found in Madeira, one of which, *Oligotoma nigra*, is new to the Archipelago of Madeira, having been found on the main island, while the other species, *Haploembia solieri* was also found on Porto Santo and the Deserta Grande.

RESUMO. *EMBIOPTERA* DO ARQUIPÉLAGO DA MADEIRA. Duas espécies de *EMBIOPTERA* foram encontradas na Madeira, uma das quais, *Oligotoma nigra*, é nova para o Arquipélago, tendo sido encontrada na ilha principal ao passo que a outra, *Haploembia solieri*, foi encontrada também no Porto Santo e na Deserta Grande.

Up to the present no faunistic survey on the *EMBIOPTERA* of Madeira has been published, possibly due to the fact that little attention has been paid to this order of insects during collecting activities. Only ROSS (1966) mentions a record of *Haploembia solieri* from Porto Santo. The present report is based on material collected by Dr. H. PIEPER and by myself during various visits to the islands.

The material contains two species: *Haploembia solieri* (in the parthenogenetic form) and *Oligotoma nigra*. Both species have been spread over many parts of the world in earth adhering to plants for instance. Thus in the case of Madeira, we are not dealing with autochthonous faunistic elements.

### *Haploembia solieri* (RAMBUR, 1842)

*H. solieri* is widely distributed in the Mediterranean region and occurs particularly on islands in the parthenogenetic form.

STEFANI (1955): Balearic Islands, Sardinia, Corsica, Elba, Pinosa, Capri, Sicilia and Crete. ROSS (1966) also mentioned the Canary Islands. According to STEFANI in ROSS (1966) the parthenogenetic form might have evolved due to complete sterility of the males, caused by the gregarina *Diplocystis clerici*.

---

\*Institut für Zoologie, Lehrstuhl II, Staudstrasse 5, D-8520 Erlangen, Germany

Distribution: Porto Santo, Deserta Grande (new), Madeira proper (new)

Detailed Data: Porto Santo: Calheta, NW, 10-20 m. alt., 1 male, under cow-dung; 20.IX.1988. Porto Santo western part, 50 m. alt. 24 females, under cow-dung; 19.IX.1988. Deserta Grande: Castanheira, 250 m. alt. Deserta Grande: 3 females, under stones; 23.IX.1988. Deserta Grande: V - Valley, 250-300 m. alt., 11 females, under stones; 24.IX.1988. Deserta Grande: Castanheira, 250 m. alt., 8 females, under stones; 24.IX.1988. Deserta Grande: V- Valley, N, 220 m.alt., 1 female, under stones; 25.IX.1988. Madeira: Prainha, 80 m. alt., 1 female: 14.IX.1979, PIEPER leg.

*Oligotoma nigra* (HAGEN, 1866)

This species is new to the archipelago. Originally an endemic of North-India, it is now increasingly widely spread by man, over Arabia, Israel, Egypt and the southern Mediterranean to the west.

A comparison with specimens in the collection of the British Museum (Natural History) and with fig.19 in ROSS (1966) shows that the process of the hemitergite of the tenth segment (10 LP) is in the material nearly twice as broad and the epiproct (EP) distinctly narrower and more acute. Furthermore, the left cercus-basipodite (LCB) of the Madeiran specimens is more pear-shaped and slender (fig. 1). In spite of these insignificant differences in the male genital apparatus there is no doubt that the Madeiran specimens belong to the above species, as STEFANI confirmed after revising the material.

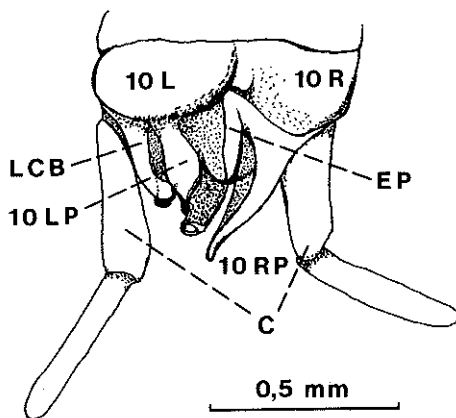


Fig. 1 - *Oligotoma nigra*: dorsal terminalia. c=cercus; EP=epiproct; 10L and 10R=left and right Hemitergite of tenth segment; 10LP=process of 10L; 10RP=process of 10R; LCB=left cercus-basipodite.

In view of the above recorded, it is to be expected that further reports also from the Canaries and from North Africa will follow.

Distribution: Porto Santo, Deserta Grande (new).

Detailed data: Caniço de Baixo, 3 males; 23.IX.1979, PIEPER *leg.* Caniço de Baixo, 4 females; 13-19.IV.1982, PIEPER *leg.* Caniço de Baixo, 2 females, in light trap; 22.IX.1986, PIEPER *leg.*

#### LITERATURE

ROSS, E.S. :

1966. The Embioptera of Europe and the Mediterranean Region. *Bull. Brit. Mus. (Nat. Hist.), Entomol.* 17(7): 275-326

STEFANI, R. :

1955. Revisione del genere *Haploembia* Ver. e descrizione di una nuova specie (*Haploembia palani* n.sp.) (Embioptera, Oligotomidae). *Bol.Soc.Ent.Ital.*, 85: 110-120.

---

Received 6th May 1989