

***Neoleria maritima* (VILLENEUVE, 1921) (Diptera: Heleomyzidae) – a new species to the fauna of Netherlands and Portugal**

***Neoleria maritima* (VILLENEUVE, 1921) (Diptera: Heleomyzidae) – nowy gatunek dla fauny Holandii i Portugalii**

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ABSTRACT. *Neoleria maritima* (VILLENEUVE 1921) is a heleomyzid fly species recorded only in few localities in Western Europe. The paper presents informations on the first record of *N. maritima* from Netherland and Portugal. The species was reported from Sint Pietersberg, Netherland and from the seashore in Apúlia, northern part of Portugal.

KEY WORDS: Diptera, Heleomyzidae, distribution, new records, Europe, Netherland, Portugal

INTRODUCTION

The genus *Neoleria* MALLOCH, 1919 is a typical representative of the tribe Heleomyzini Bezzi, 1911 and comprises 14 species distributed in the Holarctic Region only. *Neoleria flavicornis* (LOEW, 1862) and *Neoleria maritima* (VILLENEUVE, 1921) forms a separate species-group among all known species, with typical setulose postsutural anepisternal area. The imagines of *N. maritima* and *N. flavivornis* (LOEW) could be found near larval habitats (carcasses, carrion, decaying fungi) while larvae are sapro- and necrophagous.

Neoleria maritima (VILLENEUVE, 1921)

Leria maritima VILLENEUVE, 1921: 158 (description - ♂♀, Luc-sur-mer and Tatihou, France).
Neoleria maritima: CZERNY, 1924: 54 (new combination).

N. maritima was described by VILLENEUVE (1921) basing on specimens collected from dunes of Luc-sur-mer (Calvados) and Tatihou (Morbihan), France and included into the genus *Leria* R.-D. CZERNY (1924) was the first author who placed it into the genus *Neoleria* MALLOCH, 1919. Though the species is also known from Belgium, Great Britain, France, Spain (WOŹNICA 2004) and Ireland (O'CONNOR & SPEIGHT 2002), it has not been hitherto found in Netherland and Portugal. During taxonomic studies the senior author found a single female of *N. maritima* among unidentified heleomyzid material from Zoological Museum of Amsterdam, and finally in November of 2008 the junior author collected four further

specimens (using glass bottles) in grasses and other vegetations in the dunes of Apúlia, Portugal. The specimen from Netherland was collected in Sint Pietersberg, in October in 1984, by B. VAN AARTSEN.



Figs 1a-b. - A general view on Apúlia sea-shore (1a) and maritime grassland area (1b) where *N. maritima* (VILL.) was collected (photo R. ANDRADE).

With reference to all known records the specimens seem to have been collected in a coastal environments which is a typical habitat for *N. maritima*. The small eye and high gena is with all probability a typical ecological adaptation to the rather windy and saline habitat.

Apúlia where the Portuguese specimens have been collected, belongs to the Esposende Litoral Protected Area, where the following species of plants are most visible: *Hydrocotyle bonariensis*, *Euphorbia paralias*, *Carpobrotus edulis* (an exotic pest), *Helichrysum italicum*, *Calystegia soldanella*, *Medicago marina*, *Artemisia crithmifolia* and *Pancreatium maritimum* (GOMES, PEDRO T. et AL. 2002) At this stage it's not possible to say if *N. maritima* shares a close association with one or more of these species of plants.



Fig. 2. *Neoleria maritima* - a couple in copulo (♀ under the ♂) (photo R. ANDRADE).

The new localities of this species leads to a supposition that the zoogeographical range of *N. maritima* could be wider and include coastal habitats of the Mediterranean and East Atlantic zones.

In terms of morphology *N. maritima* is closely related to *N. flavicornis*. The main differences include the shape of eye and height of gena (in *N. flavicornis* eyes are bigger and round and the cheek-eye is ca or less than 0.6x, while in *N. maritima* eye are smaller, more elliptical and the cheek eye ratio is ca 1.0x or more). The abdomen is more greyish then in *N. flavicornis*.

MATERIAL EXAMINED. NETHERLANDS. Sint Pietersberg L., 1 ♀, 15.10.1984, leg. B. VAN AARTSEN (Zoological Museum of Amsterdam, Netherlands); PORTUGAL. Apulia, 2♀♀, 2♂♂, 09.11.2008., leg. R. Andrade (coll. Department of Zoology & Ecology of Wroclaw University of Life & Environmental Sciences, Poland).

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