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CHECK-LIST OF GNATHOSTOMULIDS FROM THE CANARY ARCHIPELAGO (NE ATLANTIC OCEAN)

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RESUMEN

Un total de cinco especies de gnatostomúlidos han sido citadas para el archipiélago canario. Las especies son: *Haplognathia rosea* (Sterrer, 1969), *H. ruberrima* (Sterrer, 1966), *Paragnathiella trifoliceps* Sterrer, 1997, *Labidognathia longicollis* Riedl, 1970 y *Austrognathia clavigera* Sterrer, 1997. Dos especies son endémicas (*Paragnathiella trifoliceps* y *Austrognathia clavigera*) y únicamente han sido recolectadas en su localidad tipo. El resto de especies se caracterizaron por presentar una distribución anfiatlántica (*L. longicollis*) y cosmopolita (*H. rosea* y *H. ruberrima*).

Palabras clave: Gnathostomulida, intersticial, sedimento, submareal, islas Canarias, Océano Atlántico

ABSTRACT

Five species of gnathostomulids have been recorded from the Canary archipelago. These species are *Haplognathia rosea* (Sterrer, 1969), *H. ruberrima* (Sterrer, 1966), *Paragnathiella trifoliceps* Sterrer, 1997, *Labidognathia longicollis* Riedl, 1970 and *Austrognathia clavigera* Sterrer, 1997. Two species are endemisms, only recorded in type locality (*P. trifoliceps* and *A. clavigera*). The remaining taxa are amphiatlantic (*L. longicollis*) and cosmopolitan (*H. rosea* and *H. ruberrima*).

Key words: Gnathostomulida, interstitial, sediment, subtidal, Canary Islands, Atlantic Ocean.

INTRODUCTION

Gnathostomulids are interstitial organisms, with an average length of 1.5 mm and a diameter ranging from 0.045 to 0.065 mm. Most of gnathostomulids live in marine anoxic sandy sediments, being common inhabitants of the RPD layer (REISE [4]). Up to now, almost 100 species of this taxonomic group has been described worldwide (STERRER [12]).

In Canary Islands, STERRER [11] found several gnathostomulid species in Las Canteras beach (Gran Canaria) in February 1996, even he discovered two new species (*Paragnathiella trifoliceps* and *Austrognathia clavigera*), one of them belonging to a new genus (*Paragnathiella*). Posteriorly, during a pilot study prior of one-year study basis conducted in Los Cristianos beach, several specimens belonging to two gnathostomulid species were recorded. A taxonomic detailed study revealed that they correspond to previously collected species by STERRER [11] in Gran Canaria: *Haplognathia rosea* and *H. ruberrima*.

MATERIAL AND METHODS

Sediment samples were collected by hand and snorkelling, and extracted following methodology explained in STERRER [9, 10]. Samples from shallow subtidal seabeds of Los Cristianos beach were taken following methods described in detail by RIERA [6].

SYSTEMATICS

PHYLUM GNATHOSTOMULIDA Ax, 1956
Order FILOSPERMOIDEA Sterrer, 1972
Family Haplognathiidae Sterrer, 1972
Genus ***Haplognathia*** Sterrer, 1970
Haplognathia rosea (Sterrer, 1969)

Pterognathia rosea STERRER [8]
Haplognathia rosea STERRER [11]: 186, Figs 1A, 2A.

Studied material.- Los Cristianos bay (Tenerife), coordinates (28º02'67"N, 16º42'64"W), 4 m depth, fine sands with very sparse *Cymodocea nodosa* patches, April 2000, 2 ind.

Distribution.- Cosmopolitan, collected in North Sea (STERRER [8]), Atlantic Ocean (STERRER [11]) and Pacific Ocean (STERRER [10]). This species was recorded in two sites in Las Canteras beach in shallow seabeds (2-3 m depth) with sparse *C. nodosa* patches and. rhyzomes (STERRER [11]).

Haplognathia ruberrima (Sterrer, 1966)

Pterognathia ruberrima STERRER [7]
Pterognathia grandis KIRSTEUER [3]
Haplognathia ruberrima STERRER [11]: 186, Figs: 1B-G, 2B-C; Table 2.

Studied material.- Los Cristianos bay (Tenerife), coordinates (28º02'67"N, 16º42'64"W), 4 m depth, fine sands with very sparse *Cymodocea nodosa* patches, April 2000, 2 ind.

Distribution.- Cosmopolitan. North Sea (STERRER [8]), Atlantic Ocean (STERRER [11]) and Pacific Ocean (STERRER [10]). This species was recorded in Las Canteras beach, at shallow seabed (2-3 m depth) fine sands with sparse *C. nodosa* (STERRER [11]).

Order BURSOVAGINOIDEA Sterrer, 1972
Suborder Scleroperalia Sterrer, 1972
Family Agnathiellidae Sterrer, 1972
Genus ***Paragnathiella*** Sterrer, 1997
Paragnathiella trifoliceps Sterrer, 1997

Paragnathiella trifoliceps STERRER [11]: 189, Figs. 3A-L, 4A-E; Table 3.

Distribution.- Canary Islands. The type locality is Las Canteras beach, in fine sands with sparse *Cymodocea nodosa* at 2-3 m depth (STERRER [11]).

Family Mesognathariidae Sterrer, 1972
Genus ***Labidognathia*** Riedl, 1970
Labidognathia longicollis Riedl, 1970

Labidognathia longicollis RIEDL [5]: 229, fig. 1; STERRER [11]: 193, Figs. 5A-E, 6A-B; Table 4.

Distribution.- Amphiatlantic (RIEDL [5], STERRER [11]). This species has been recorded at Las Canteras beach, in fine sands with sparse *Cymodocea nodosa* at 2-3 m depth (STERRER [11]).

Suborder CONOPHORALIA Sterrer, 1972
Family Austrognathiidae Sterrer, 1971
Genus ***Austrognathia*** Sterrer, 1965
Austrognathia clavigera Sterrer, 1997

Austrognathia clavigera STERRER [11]: 194, Figs. 7A-O, 8A-C, Table 5.

Distribution.- Canary Islands. The type locality is Las Canteras beach, in fine sands with sparse *Cymodocea nodosa* at 2-3 m depth (STERRER [11]).

DISCUSSION

Most of taxonomic groups from interstitial fauna, commonly known as meiofauna, remains scarcely known in the Canary archipelago and have not been extensively studied, such as, gastrotrichs, turbellarians, harpacticoid copepods, acari, oligochaetes, priapulids, kinorrhynchs, among others. Though several taxonomic works on free-living marine nematodes and polychaetes has been published from two sampling locations on the south coast of Tenerife (Los Abrigos del Porís and Los Cristianos) in the last decade (RIERA [6]) and several seagrass meadows throughout the Canary archipelago (BRITO-CASTRO [2]), as well as, taxonomic studies carried out in the benthos laboratory of the University of La Laguna (Department of Animal Biology) coordinated by Dr. Jorge Núñez, most of the meiofaunal groups have only recorded in a limited number of sampling stations conducted by taxonomists during non-intensive field surveys. Hence, taxonomic extensive studies are necessary to carry out in order to increase the knowledge of canarian marine biodiversity.

Gnathostomulids are one of the interstitial taxonomic groups that still remain overlooked in the Canary archipelago. An increase number of gnathostomulids records is expected

in the next years, though specific sampling campaigns are necessary to be conducted because of ecologic requirements of this group (e.g. hypoxic or anoxic sandy sediments) (REISE [4]).

Current assemblages of gnathostomulid endemisms (*Paragnathiella trifoliceps* and *Austrognathia clavigera*) could be considered endangered, since they were recorded solely in the sparse *Cymodocea nodosa* seagrass meadow at Las Canteras beach (Gran Canaria). In the last years, a dramatic reduction of *C. nodosa* meadow has been observed; even demonstrated by genetic analyses that confirmed higher fragmentation and smaller meadow size in this location (ALBERTO *et al.* [1]).

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