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## **THE PRESENCE OF *ERYONEICUS PURITANII* IN WATERS OFF THE CANARY ISLANDS (DECAPODA, REPTANTIA, POLYCHELIDAE)**

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With 1 figure

**ABSTRACT.** *Eryoneicus puritanii* LO BIANCO, 1903 (Decapoda, Reptantia, Polychelidae) is mentioned for the first time in coastal waters off the Canary Islands. Two specimens (exuviae) were caught by hauls (1000 m-surface) off Fuerteventura island (eastern area) and La Palma island (western area). The *Eryoneicus*-larvae are crustaceans very rare in the plankton hauls and the publications about them are scarce.

**RESUMO.** *Eryoneicus puritanii* LO BIANCO, 1903 (Decapoda, Reptantia, Polychelidae) é referido, pela primeira vez, para as águas costeiras das Ilhas Canárias. Durante uma campanha de arrastos de plâncton, foram colhidos dois espécimes ao largo de Fuerteventura e La Palma. São raros os registos da presença de larvas de *Eryoneicus* em arrastos de plâncton, assim como na literatura científica.

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## INTRODUCTION

The species of the genus *Eryoneicus* resemble those of the fossil genus *Eryon* and they were considered as larvae of Polychelidae already by SELBIE (1914), SUND (1915), CALMAN (1925) and BALSS (1925) (see TIEFENBACHER, 1995). GONZÁLEZ PÉREZ (1995) points out in his publication on the decapod crustaceans of the Canary Islands only two of these species, *Eryoneicus faxoni* BOUVIER, 1905 and *Eryoneicus richardi* BOUVIER, 1915. *Eryoneicus faxoni* was caught off the Canaries for the first time in 1873 by H.M.S. "Challenger" (27° 58'N/17° 39'W; depth 1620 fathoms) and described by BATE (1888) as *Eryoneicus caecus*, but it was not found in the area once again. The second one was captured for the first time about 200 sm NW off Cape Finisterre (45° 02'N/13° 05'W) by a haul from 0-3500 m by the yachts "Hirondelle" and "Princesse Alice" in 1912 and described by BOUVIER in 1915 (BOUVIER, 1922). BERNARD (1953) mentioned *Eryoneicus richardi* off the Canary Islands captured during the "DANA" expeditions (date: 03/27/1930; station 4017; location: 29° 11'N/14° 14'W). ZARIQUIEY ÁLVAREZ (1968), referred to this place, too. Recently TIEFENBACHER (1982, 1995) published some specimens of Polychelidae (*Eryoneicus* - larvae and adults) from the Atlantic ocean.

The existence of two specimens of the genus *Eryoneicus* in plankton samples South of the island of Fuerteventura and Southwest of La Palma (HERNÁNDEZ Y JIMÉNEZ, 1994, 1996), is the cause for this short information on these animals.

## MATERIAL AND METHOD

The specimens (registration BMZP/00028 and BMZP/00035 of the Museum collection) were captured by vertical hauls (1000 meters-surface) as well in the campaign TFMCBM/95 (Morrojaable, Fuerteventura) as in TFMCBM/93 (Tazacorte, La Palma), both organized for the Museum of Natural History of Tenerife within their global study of the plankton of the whole archipelago (see figure 1). The net used was a triple WP-2 (200 µ). The samples were fixed in neutralized formalin and transferred to alcoholic solutions. The sampling stations with more than 2500 m (bottom of stony-sandy type), were:

off Fuerteventura	28° 00' 44" N
	14° 23' 53" W
off La Palma	28° 40' 47" N
	18° 01' 01" W

The specimens were determined according BOUVIER (1922) and BERNARD (1953) by the second author.

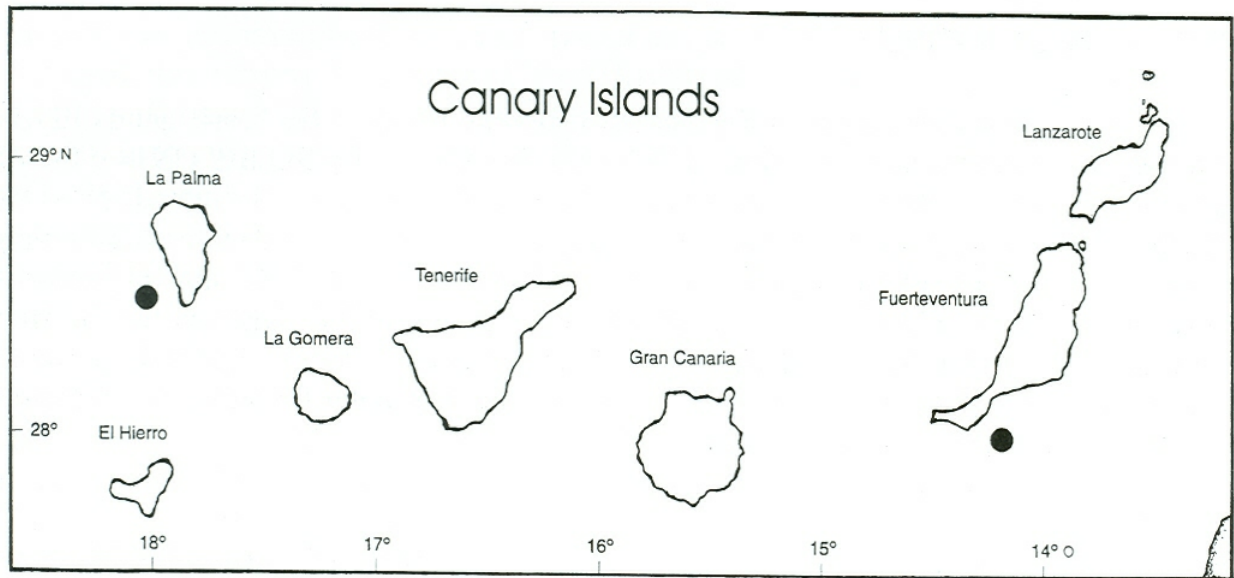


Fig. 1 - Sampling stations.

#### Family Polychelidae

#### *Eryoneicus puritanii* LO BIANCO, 1903.

The *Eryoneicus*-larvae are mesopelagic or bathypelagic juveniles of Polychelidae, but in some cases specific links between these pelagic stages and the adults living on the bottom are uncertain or unknown. These pelagic stages show an inflated, in dorsal view pear-shaped carapax covered mostly with numerous spines.

In *Eryoneicus puritanii* the marginal spines are strong, but less numerous. The rostrum is simple, not paired. The formula of the dorso-median spines of the carapax is: 1.1.1.2.p- 2.2.p.2 (p=pillar without point). The edges of the great internal orbital angles are not dentate.

BOUVIER (1917) gives us an excellent drawing of the dorsal view of this species. He mentioned a male of 30 mm total length caught near the Azores. (Among the *Eryoneicus puritanii* listed by BERNARD (1953) the largest specimen found off Liberia measures 28 mm). BOUVIER's drawing shows a large part of the carapax, the sides of the abdomen, the pereopods and distal parts of uropods colourless or weakly yellowish. Only near the middle of the cervical groove and of the cardiac region of the carapax, and on the proximal parts of the uropods as well as of the telson we find small strong red, yellow skirted areas. The abdominal tergites are pale rosy coloured.

The specimens, respectively exuviae, from near Fuerteventura and La Palma Island measuring about 10 mm of total length agree with these descriptions of *Eryoneicus puritanii*, but of course any colour is lacking.

*Eryoneicus puritanii* has been recognized as a larva of *Polycheles typhlops* Heller,

1862 (BOUVIER, 1940). These larvae are known from the Mediterranean Sea and the Eastern and Western Atlantic (see BERNARD, 1953) but not off, respectively between, the Canary Islands. The next known localities (fide BERNARD (1935) and BEAUBRUN (1979)) are SW of the Canaries ( $25^{\circ} 11'N/20^{\circ} 57'W$ ) and off Dakhla (Western Sahara) ( $24^{\circ} 36'N/17^{\circ} 27'W$ ) named in the reports of DANA-expedition 1921 and 1930. The adults of *Polycheles typhlos* seem to be scarce in the region of the Canaries although plenty of benthic habitats with muddy and rocky bottoms can be found around Tenerife (BARQUÍN *et al.*, 1982,1983), N of Lanzarote and La Graciosa (LOZANO *et al.*, 1992), S off La Gomera, SW off Tenerife (LÓPEZ ABELLÁN *et al.*, 1992, 1994), S off Tenerife and W off Gran Canaria (“campaign Taliarte 9401”), corresponding to the first mention to BARQUÍN *et al.* 1982, 1983.

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