

First record of the genus *Kuwaita* (Annelida: Lumbrineridae) in Europe with the description of a new species and new ultramorphological data for the genus

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Abstract

A new species of the genus *Kuwaita* Mohammad, 1973, collected intertidally from a northern Spain estuary (Bay of Biscay), is described. *Kuwaita hanneloreae* sp. nov. constitutes the first evidence of this genus in European waters and is characterised by: prostomium with three small antennae protruding from nuchal fold, lack of eyes; simple multidentate hooded hooks with long hood in anterior chaetigers, and short hood in posterior ones with well defined proximal and distal teeth with several teeth between them; posterior chaetigers with very small nephridial papillae; branchiae reduced to little knobs in posterior parapodia; maxillary apparatus with five pairs of maxillae, MIII bidentate with distal tooth bigger than proximal one. We present brief notes on its ecology and remarks on the presence and ultrastructure of a notopodial sense organ newly recorded for the genus. Furthermore, an updated key of the genus *Kuwaita* is included.

Key words: Polychaetes, Eunicida, taxonomy, estuaries, Cantabrian Sea, Bay of Biscay, intertidal area, biodiversity

Introduction

Members of the polychaete family Lumbrineridae Schmarda are mostly burrowers in soft sediments, although they can be found on rocky bottoms, algal holdfasts and in symbiotic relationships with other invertebrates (Carrera-Parra 2006a). They have a simple body shape with reduced external morphological features. Thus, the most important diagnostic characters for lumbrinerids are found in the maxillary structures (Orensanz 1990; Hilbig 1995; Carrera-Parra 2001; 2004; 2006a, b; Carrera-Parra & Orensanz 2002); others are related to type and morphology of parapodial and chaetal structures. The Iberian lumbrinerids have recently been revised, recognising 23 species belonging to nine genera: *Abyssoninoe* Orensanz, *Augeneria* Monro, *Gallardoneras* Carrera-Parra, *Hilbigneris* Carrera-Parra, *Lumbricalus* Frame, *Lumbrineris* de Blainville, *Lumbrinerides* Orensanz, *Ninoe* Kinberg and *Scoletoma* de Blainville (Martins *et al.*, 2012).

Here, we document the presence of the genus *Kuwaita* Mohammad, 1973 in the Bay of Biscay with the description of a new species within this genus from northern Spain, constituting the first record of the genus in Atlantic waters and increasing to ten the number of European genera of Lumbrineridae. The genus *Kuwaita* was emended by Carrera-Parra & Orensanz (2002) and was characterised by having maxillae II shorter than maxillae I, with wide strongly sclerotised connecting plates; three small antennae; well developed notopodia; nephridial papillae on posterior chaetigers; branchiae in posterior parapodia and simple multidentate hooded hooks.

Until now, the genus *Kuwaita* had only been recorded from the Indo-Pacific region, South Africa, Japan, and tropical eastern Pacific, including four described species and another undescribed one (Carrera-Parra & Orensanz 2002).

The aim of the present paper is to describe the new species, accompanied by detailed illustrations including scanning electron micrographs (SEM) and photographs of living specimens and brief notes on its ecology at the type locality. Furthermore, an updated key to the genus of *Kuwaita* is included.

assistance with SEM microscopy and José S. Gómez Morales (ECOSUR) for providing an important reference for this research. A. Arias is supported by a Severo Ochoa fellowship from the FICYT foundation (Principado de Asturias).

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