



## On the distinction of *Harmothoe globifera* (G.O. Sars, 1873) and some other easily confused polynoids in the NE Atlantic, with the description of a new species of *Acanthicolepis* Norman in McIntosh, 1900 (Polychaeta, Polynoidae)

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### Abstract

In the Northeast Atlantic several polynoid species have been confused in the past due to similarities in their elytral characters: *Harmothoe globifera* (G.O.Sars, 1873), *Eunoe nodosa* (M. Sars, 1861), *Eunoe oerstedii* Malmgren, 1866, *Leucia nivea* (M. Sars, 1863), and *Acanthicolepis zibrowii* n. sp., a new species from deep cold-water corals. The five species are redescribed and figured based on type and additional material. An identification key allowing also the identification of juveniles and anterior fragments and a synoptic table listing the major distinguishing characters of the species covered are provided.

**Key words:** Taxonomy, new species, identification key, deep water, cold-water corals

### Introduction

Among the polynoids occurring in the Northeast Atlantic five species belonging to the genera *Harmothoe* Kinberg, 1856, *Eunoe* Malmgren, 1866, *Leucia* Malmgren, 1867, and *Acanthicolepis* Norman in McIntosh, 1900 could be confused. Although their generic characters leave no doubt about their taxonomic affiliation, they show some similarities in their elytral characters which could lead to misidentifications.

The synonymy and the generic placement of *Harmothoe globifera* (G.O. Sars, 1873) have been controversially discussed in the past and only the recent examination of numerous specimens convinced us that this species belongs to *Harmothoe*. It is here compared among other species with *Eunoe nodosa* (M. Sars, 1861) which shows superficially similar elytral macrotubercles. Although the differences between *E. nodosa* and *E. oerstedii* Malmgren, 1866 have been clarified by Pettibone (1954), these species are still confused today. Our descriptions and figures should simplify the distinction among them. In this context two additional polynoids need to be considered, *Leucia nivea* (M. Sars, 1863) and *Acanthicolepis zibrowii* n. sp., a new species recently collected from deep cold-water corals in the Bay of Biscay.

In order to facilitate the distinction of the species mentioned above, we present an identification key which allows also the identification of juveniles and anterior fragments and a synoptic table showing the major distinctive characters (Tab. 1).

### Material and methods

The type and additional specimens investigated here are deposited at the Senckenberg Museum Frankfurt (SMF), Germany, or have been loaned from Akvaplan-Niva, Tromsø (Norway), the Natural History Museum (BMNH), London (Great Britain), the Vitenskapsmuseet (VM), Norwegian University of Science and Technology, Trondheim (Norway) and the Natural History Museum Oslo (ZMO), University of Oslo (Norway).