

## *Nothria maremontana*, a new onuphid species off the Portuguese coast

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**Abstract :** *Nothria maremontana* sp. nov. is described. Three specimens were collected at 250-450 m depth on sea mounts off the coast of Portugal. It appears most closely related to *N. britannica* (McIntosh, 1903) and *N. occidentalis* Fauchald, 1968.

**Résumé :** *Nothria maremontana* sp. nov. est décrit. Trois individus ont été collectés à 250-450 m de profondeur sur des bancs situés entre Iberia et Madeira. Cette nouvelle espèce semble proche de *N. britannica* (McIntosh, 1903) et *N. occidentalis* Fauchald, 1968.

### INTRODUCTION

During the expedition Seamount I with R/V Noroit, three specimens of an undescribed species of *Nothria* Malmgren, 1866 were obtained. The animals were collected from 250-450 m of depth on the sea mounts Seine and Josephine, situated between Madeira and the Iberian coast.

*Nothria* has generally been regarded a junior synonym to *Onuphis* Audouin & Milne Edwards, 1833 (e.g. Fauvel, 1923), or a subgenus of *Onuphis* (Hartmann-Schröder, 1971; George & Hartmann-Schröder, 1985), but was emended to generic level by Pettibone (1970). The genera *Onuphis* Audouin & Milne Edwards, 1833, *Nothria* and *Paradiopatra* Ehlers, 1887 have recently been revised by Fauchald (1982) and the family Onuphidae by Paxton (1986). The genus *Nothria* has a world wide distribution and, including the one described here, comprises 15 species (Paxton, 1986).

Abbreviations used in text : National Museum of Wales, Cardiff : NMW; Swedish Museum of Natural History, Stockholm : SMNH.

### SYSTEMATICS

*Nothria maremontana* sp. nov.  
(Figures 1-3)

### MATERIAL

Holotype : SMNH type collection no 3948, Seine Seamount, 33°48'2"N, 14°24'2"W, 10<sup>th</sup> October 1987, depth 450-455 m, rectangular dredge. Paratypes :

SMNH type collection no 3949 (1 specimen together with dissected jaws and parapodia mounted on slides from this specimen), NMW.Z. 1988.099.1. (1 specimen), Josephine Seamount, 36°42'0"N, 14°17'7"W, 4<sup>th</sup> October 1987, 255-270 m, epibenthic dredge.

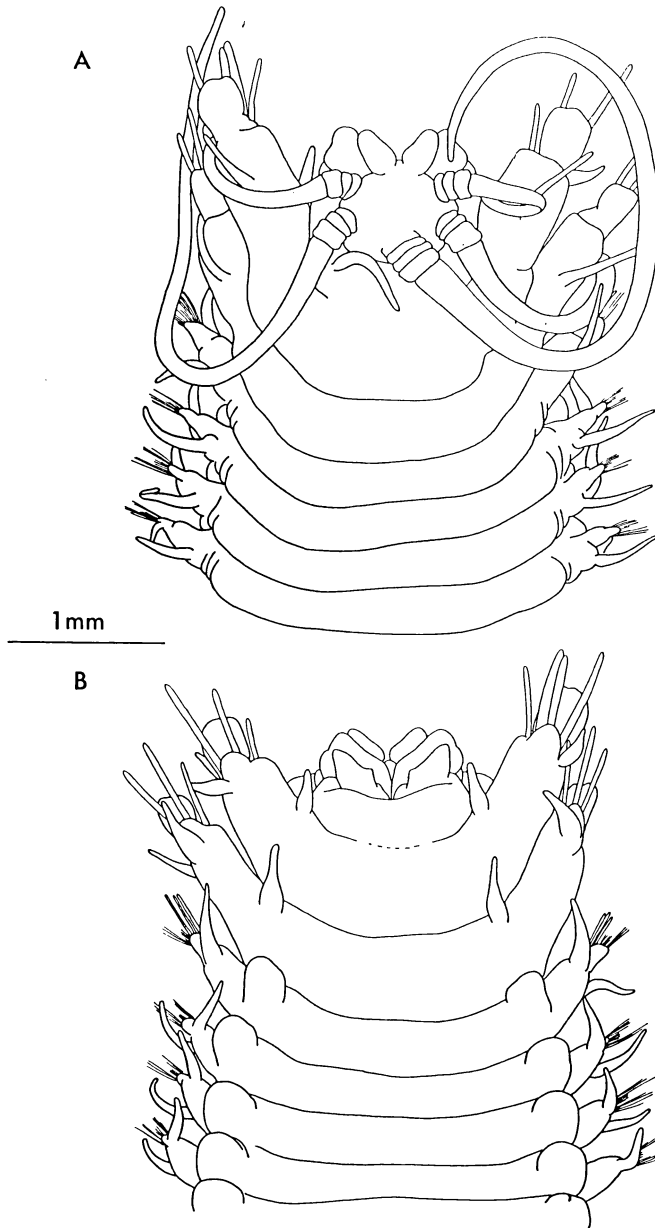


Fig. 1. *Nothria maremontana* sp. nov., holotype. A. Anterior end, dorsal view. B. Anterior end, ventral view.

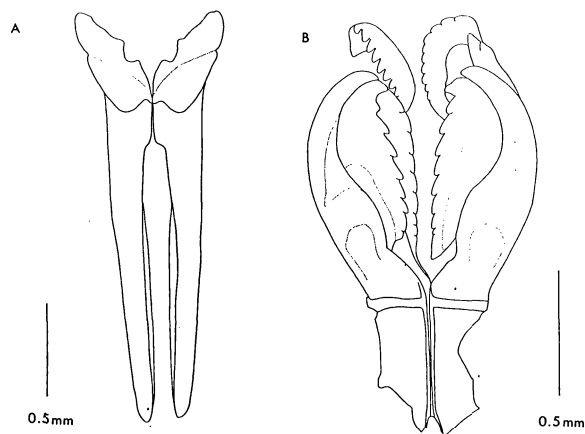


Fig. 2 - *Nothria maremontana* sp. nov., paratype. A. Mandibles. B. Maxillae.

#### DESCRIPTION

*Measurements.* See Table 1.

*Colour.* Preserved specimen whitish with small brown spots present anteriorly and behind inner lateral antennae on prostomium, anteriorly and ventrally to tentacular cirri on segment 1, and dorsally on parapodia 1-3. Ventrally some brown pigment on segment 1 medially.

*Morphology.* Body rather short and broad, posteriorly tapering.

Frontal palps rounded, almost twice as long as broad. Labial palps short and rounded, ovoid, with a median section. Outer lateral antenna reaching boundary line between setigers 1 and 2, inner laterals reaching about setiger 11, and median one reaching setigers 12-14. Ceratophores of lateral antennae with 3 distinct rings, median one with 4. Nuchal grooves visible as dark bands posteriorly on prostomium.

Tentacular cirri medially inserted on segment 1.

Anterior 3 pairs of parapodia modified. Setiger 1 largest, with large auricular presetal lobes and cirriform postsetal lobes. Parapodia of setiger 2 similar but slightly smaller and with longer dorsal cirri and postsetal lobes. Parapodia of setiger 3 only slightly larger than following ones. Ventral cirri of setigers 1 and 2 cirriform, rounded on following segments. Auricular lobes largest on setiger 1, afterwards slowly diminishing in size. Branchiae single strap-like filaments, present from setiger 10. Pygidium with 2 very long and thin pygidial cirri, ventrally inserted.

Hooks of setiger 1 and 2 pseudocompound (articulation hardly visible), bidentate (Fig. 3A, B). Four aciculae and 1-2 internal, probably regenerating, hooks also present (Fig. 3A, C). A few of the hooks with hoods, possibly falling off after some

time of usage. Parapodia of setiger 3 with 3 bidentate hooded hooks (Fig. 3D), much smaller than preceding ones. This segment also provided with scoop-shaped pectinate and limbate setae. Pectinate setae with about 16-17 teeth (Fig. 3F). Subacicular bidentate hooks present from setigers 11-12 (Fig. 3E).

Dental formula for maxillary plates (according to Pettibone, 1970): Mx 1 = 1 + 1; Mx 2 = 8+9; Mx 3 = 8+0; Mx 4 = 9+10; Mx 5 = ?+1 (left Mx 5 was lost during dissection, and due to scarcity of material, further specimens were not dissected).

*Tube*: Dorso-ventrally flattened, slightly longer than animal, consisting of translucent parchment with shells of *Limopsis* sp. attached. On the localities where *Nothria maremontana* was found, *Limopsis* was extremely common, the use of these shells in tube-building thus not necessarily indicating high selectivity.

TABLE 1

Summary characters for *Nothria maremontana*.

Character	Holotype	Paratype 1	Paratype 2
<i>Number of segments</i> :	50	46	45*
<i>Length mm</i> :	22	20	23*
<i>Width mm setiger 1</i> :	1.9	1.6	2.0
<i>Occipital antennae</i> :			
Outer lateral reach setiger	1	1	1
Inner lateral reach setiger	11	11	11
Median reach setiger	14	11	14
<i>Number of rings on ceratophores</i> :			
Lateral	3	3	3
Median	4	4	4
<i>Branchiae</i> :			
First present from setiger	10	10	10
<i>Pseudocompound hooks</i> :			
Present on setigers	1-3	1-3	1-3
<i>Subacicular hooks</i> :			
Present from setiger	11	11	12

\* Exact number of segments and length could not be measured since the posterior most part was missing.

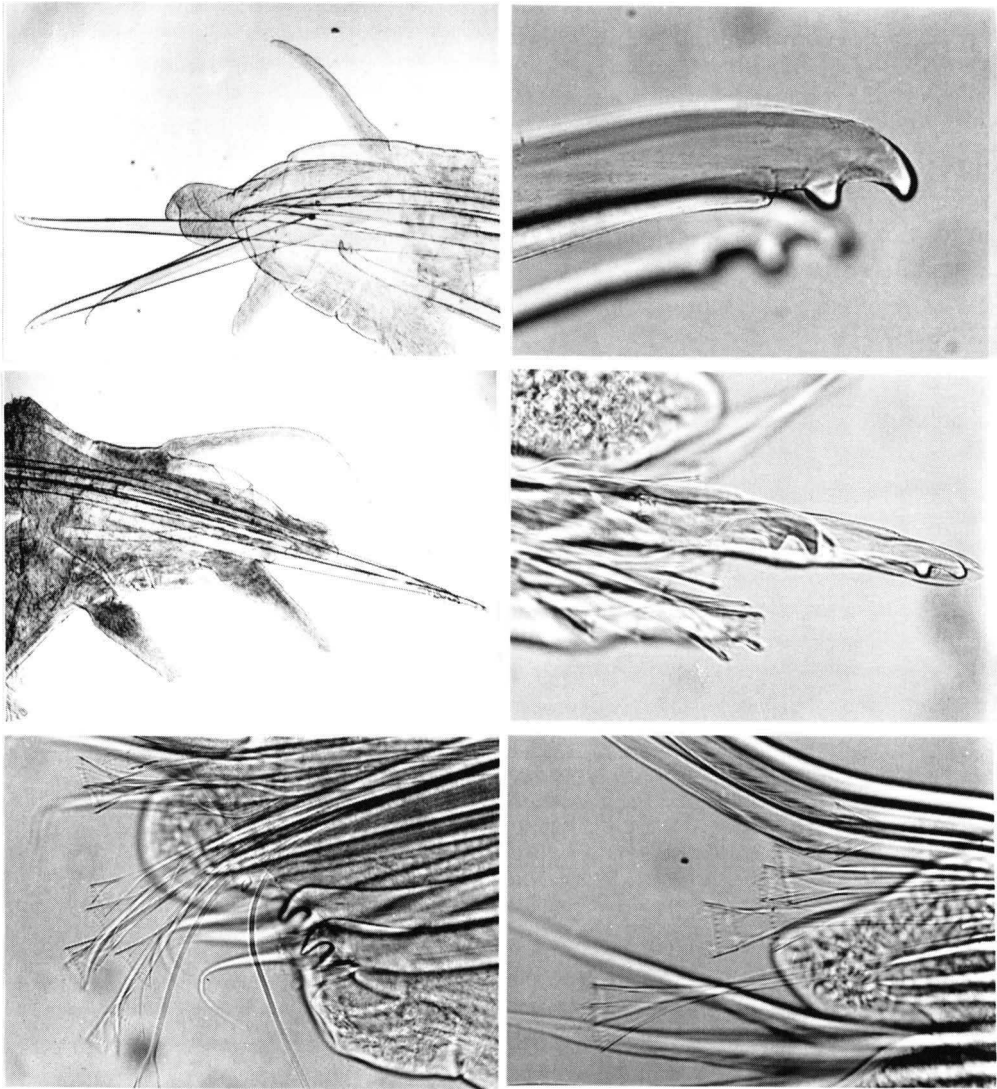


Fig. 3 - *Nothria maremontana* sp. nov., paratype. A. Setiger 1, right side ; x 761. B. Pseudocompound hooks, setiger 1, left side ; x 761. C. Setiger 2, left side ; x 52. D. Setiger 3, left side ; x 537. E. Setiger 15, left side ; x 542. F. Setiger 5, left side ; x 456.

## DISCUSSION

Following Fauchald's (1982, p. 89) cladogram. *N. maremontana* appears most closely related to *N. occidentalis* Fauchald, 1968 and *N. britannica* (McIntosh, 1903), being provided with branchiae, 2 pairs of cirriform ventral cirri and pseudocompound hooks on setigers 1-3. The absence of eyes is probably an apomorphic feature, the presence of eyes being the rule in all related groups (i.e. by outgroup comparison). This character is shared by *N. anocolata* Orensanz 1974, which however differs in having 3 pairs of cirriform ventral cirri, pectinate setae with less number of teeth, and a smaller number of maxillary teeth (Mx 1 = 1 + 1; Mx 2 = 7-8+9; Mx 3 = 7+0; Mx 4 = 7+9). Reduction of eyes may thus have occurred several times in the genus.

*N. maremontana* differs from *N. occidentalis* in having branchiae from setiger 10 instead of setiger 8, no eyes and pectinate setae from segment 3 instead of segment 2. It differs from *N. britannica* in the absence of eyes, the longer antennae and the presence of pectinate setae from segment 3 instead of segment 2.

## ACKNOWLEDGEMENTS

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