

## ***Carraroenia ruthae* gen. et sp. nov. (Copepoda, Harpacticoida, Laophontidae) from maerl substrates of the Irish west coast**

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### **Abstract**

*Carraroenia ruthae* gen. et sp. nov. is described from maerl beds at An Dóilín, Carraroe, County Galway, Ireland. This genus is considered to be closely related to the genus group comprising *Psammplatypus*, *Coullia*, *Phycolaophonte*, *Hemilaophonte* and *Robustunguis*, which had been linked based on the reduced P2 endopod and the primitive setation of the male P5 baseopod. *Carraroenia* is regarded as the most primitive genus of this lineage, as evidenced by the 3-segmented male P3 endopod, the lack of reduction in the P3–P4 endopods, the retention of the inner seta on P2–P4 exp-2 and the presence of 2 inner setae in P4 enp-2.

**Key words:** Copepoda, Harpacticoida, *Carraroenia* gen. nov., maerl, Ireland.

### **Introduction**

Maerl beds in the northeast Atlantic are concentrated on the westernmost coasts of Europe. In Irish waters, they occur along the southwest and west coasts, most notably Bantry Bay, County Cork and Galway Bay (Maggs 1983). Maerl beds are made up of slow-growing, free-living, unsegmented coralline algae. The maerl beds of Brittany and the Mediterranean have long been recognised as communities with a particularly high diversity of plant and animal species. The branching of maerl thalli provides a three dimensional structure for small plant and animal species, and the communities in the maerl deposits are much richer than those on gravel or shell bottoms of an equivalent granulometry (Cabioch 1969). The macrofauna of Irish maerl beds have been extensively studied (Keegan 1974; Bosence 1979; Könnecker & Keegan 1983; O'Connor *et al.*, 1993; De Grave 1999) but the meiofauna remains unknown. Frequent use of large mesh sizes (>0.5 mm) for sieving of samples typically results in the absence of meiofauna from benthic community studies. During a study of the harpacticoid copepods of the maerl beds