

Tube-dwelling nematodes: tube-construction and possible ecological effects on the sediment-water interfaces

Stefan Nehring¹, Preben Jensen², Sievert Lorenzen³

¹Institut für Meereskunde an der Universität Kiel, Abteilung Meeresbotanik, Düsternbrooker Weg 20, D-2300 Kiel, FRG.

²Sonderforschungsbereich 313 der Universität Kiel, Olshausenstraße 40-60, D-2300 Kiel, FRG.

³Zoologisches Institut der Universität Kiel, Olshausenstraße 40-60, D-2300 Kiel, FRG.

[Nehring, S., Jensen, P. & Lorenzen, S. (1990): Tube-dwelling nematodes: Tube construction and possible ecological effects on the sediment-water interfaces. – Mar. Ecol. Prog. Ser 64: 123-128]

ABSTRACT

Free-living marine nematodes belonging to the genus *Ptycholaimellus* build membranous tubes from detritus bound by released mucus. The mucus is produced by a ventral gland cell opening close to the lips and probably also from hypodermal gland cells along the body wall. The tubes are about 50 µm in diameter, sinusoid and situated vertically down to 1 cm depth; they open at the sediment-water interface. These findings suggest that the nematodes may play a significant role by increasing pore water exchange, and stabilizing newly sedimented detritus with excreted mucus.

A reprint of the paper can be obtained as pdf by giving the title in an email to info@StefanNehring.de