



## ***Heterolepidoderma caudosquamatum* (Gastrotricha: Chaetonotida), a new species from brackish waters of Denmark**

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### **Abstract**

A new species of Gastrotricha Chaetonotida was found in Denmark: it is the first gastrotrich finding from Danish brackish waters. The diagnostic scales at the dorsal posterior end account for the proposed name *Heterolepidoderma caudosquamatum*. The morphological affinity of the new species with marine species of the genus supports its marine origin.

**Key words:** brackish waters; meiofauna; Gastrotricha; Chaetonotida; Danish fauna; new species; *Heterolepidoderma caudosquamatum*

### **Introduction**

Faunistic knowledge of Gastrotricha Chaetonotida from Denmark is very poor. Only two freshwater species, *Chaetonotus larus* (Müller, 1773) and *Ichthydium podura* (Müller, 1773) have been originally described from Denmark (Müller 1773). Ten marine species [*Aspidiophorus mediterraneus* Remane, 1927; *Chaetonotus atrox* Wilke, 1954; *Chaetonotus somniculosus* Mock, 1979; *Draculiciteria tessellata* (Renaud-Mornant, 1968); *Halichaetonotus aculifer* (Gerlach, 1953); *Halichaetonotus pleuracanthus* (Remane, 1927); *Heteroxenotrichula affinis* (Remane, 1934); *Heteroxenotrichula squamosa* Wilke, 1954; *Xenotrichula intermedia* Remane, 1934; *Xenotrichula velox* Remane, 1927] are known from Danish coast (Mock, 1979) and another, *Diuronotus rupperti* Todaro, Balsamo & Kristensen, 2005, has been recently described from Læsø island (Todaro *et al.* 2005).

A faunistic research aimed to improve the knowledge of Danish Gastrotricha was undertaken in June 2008 at a few sites in the island of Seeland (Copenhagen-area), and is still in progress. First observations have evidenced the presence of a new species of Gastrotricha Chaetonotida which is described in the present paper. The complete results of the faunistic study on gastrotrichs from Denmark will be published separately.

### **Materials and methods**

Sampling was carried out in June 2008 at a small coastal pond, located about 8–10 m from the sea coast in Copenhagen's docklands area (55°43.241' N, 12°37.019' E; Figure 1). The pond showed clear brackish waters (12‰ salinity), sandy sediment and abundant shore vegetation.

Sediment samples were taken at 0.50 m depth from several sites along the pond shore by gently scraping the surface layer of the substratum using a nylon net (mesh 60 µm). To collect periphytic species, the shore vegetation at the collection sites was carefully and repeatedly washed into the net. Living specimens were