

## Phylum Loricifera

22 species described; up to 100 more collected and yet to be described

first described in 1983 from sediment off the coast of France

very small: .1 -.5 mm long

strictly marine and found at all depths

seem to be extremely abundant in areas of the seafloor with **methane seeps**

may be used in future as indicators of methane deposits for commercial exploitation

### meiofauna

→ live in spaces between gravel & sand grains

produce protective case = **lorica**

body with distinct **cuticle**

retractable **head (=introvert)**

resembles front end of kinorhynchs

with recurved spines for sensory and movement (burrowing)

probably feed by puncturing cells with stylets and sucking out the contents

complete digestive tract

may feed on bacteria

dioecious

distinct larval stage (Higgins larva)

larvae swim with propeller like "toes"

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a new species of loriciferan has recently (2010) been discovered living in salt brines on the floor of the Mediterranean Sea

it is the first an **ONLY** animal that does NOT do aerobic respiration;

ie. it lives completely without oxygen

it has no mitochondria and uses anaerobic respiration for energy