

OCCURRENCE OF CLAVELLODES RUGOSA (COPEPODA: LERNAEOPODIDAE) ON THE OCEAN POUT, MACROZOARCES AMERICANUS IN THE NORTHWEST ATLANTIC OCEAN

Clavellodes rugosa (Kroyer 1837) was first described as *Anchorella rugosa* from the gills of *Anarhichas* sp. in the Northeastern Atlantic. Wilson (1915) recognized the uniqueness of this copepod and erected the new genus *Clavellodes* for it. *Clavellodes rugosa* is a common, widespread parasite of three species of marine wolffishes of the genus *Anarhichas* (*A. denticulatus* Kroyer, 1884; *A. lupus* L. and *A. minor* Olafsen, 1774). It is recorded from all of these hosts in most regions of the North Atlantic Ocean. This note records the occurrence of *C. rugosa* on the gills of the zoarcid eel, *Macrozoarces americanus* (Bloch and Schneider, 1804) collected off the Scotian Shelf. This parasite is previously unreported from this host and locality.

The single host (male, 46.3 cm fork length) was collected October 1983 in a bottom trawl (Western IIA) in 108 m of water at the edge of the continental slope of the Scotian Shelf adjacent to St. Pierres Bank. The host was fixed whole in buffered 10% formalin and later examined in the laboratory. The cephalothorax of two female specimens, and one whole male of *C. rugosa* was dehydrated in 100% ethanol and cleared in methyl salicylate to reveal details of appendage structure. Figures were drawn with the aid of a drawing tube.

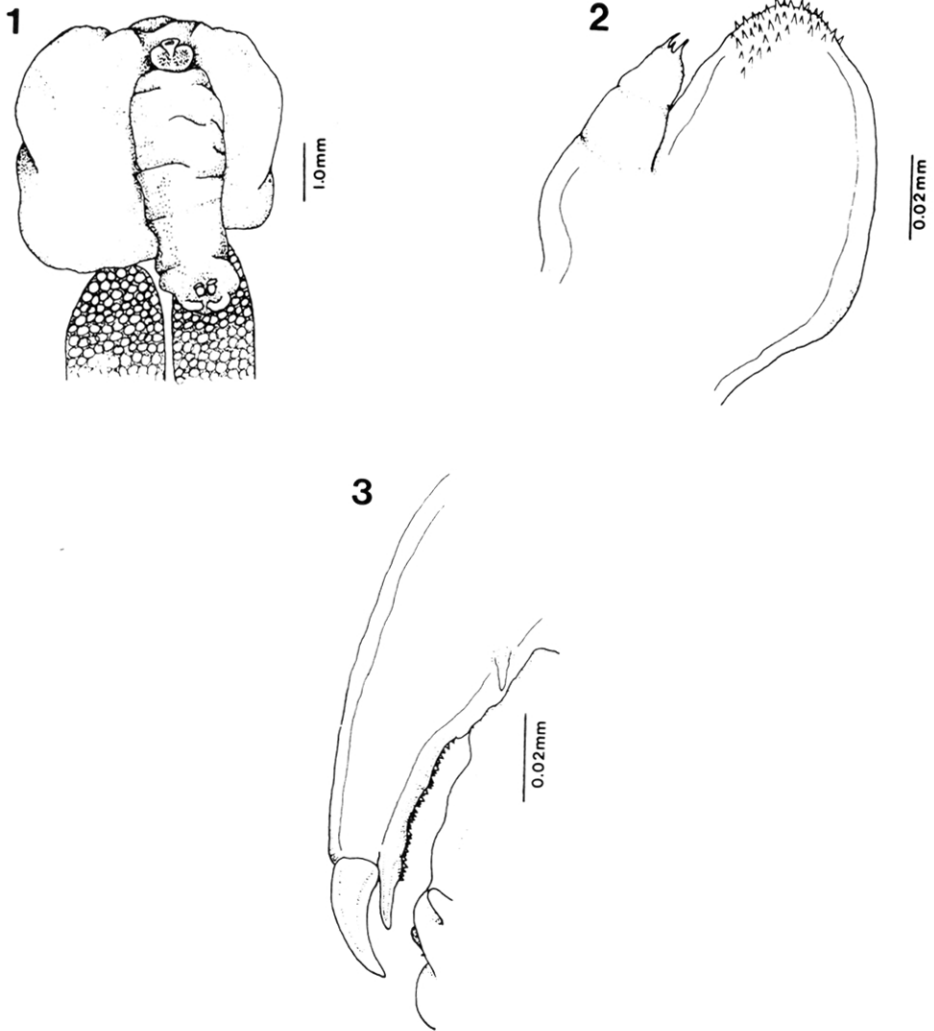
Eight adult females of *C. rugosa* (Fig. 1) were recovered from the upper gill arch of the host. Two males were also recovered, each attached to the outside lateral margin of the cephalothorax of a female. Female specimens exhibited the following distinguishing features listed by Wilson (1915): a second antennal exopod armed with numerous small denticles (Fig. 2) and a maxilliped with accessory claw and denticulated inner margin (Fig. 3). We did find a slight variation in the size of the endopod. Kabata (1979) lists the endopod as small (less than 50 μ). Our specimens showed slightly larger endopods of from 70 - 85 μ long. Kabata (1979) records the mandibular dental formula of the male as P2, S1, P1, B3, and notes that some variation could occur in this formula. We found the same dentition in our examination of the mandible of one male.

The present find is a new record as it is probably not an accidental infection. Both males and females of *C. rugosa* were found, indicating potential reproduction on the host. The zoarcid eels and anarhichid wolffishes are closely related (Leim & Scott 1966) and occupy similar depth ranges and habitats. Like some other lernaepodid copepods (ex. *Calvella adunca*) *C. rugosa* may be capable of parasitizing several species of benthic fishes. The paucity of data on parasitic copepods of non-exploited benthic fishes from the Northwest Atlantic is likely responsible for our lack of information on the host-specificity of the parasites. Baird (1850) recorded *C. rugosa* from *Gadus callorius* in the Northeastern Atlantic; this record has been deemed accidental by Scott and Scott (1913) and Kabata (1979). The present record suggests the report of Baird (1850) may be valid.

Specimens of *Clavellodes rugosa* are deposited in the museum of the Canada Department of Fisheries and Oceans, Biological Station, St. Andrews, N.B. EOG 2X0, Catalogue no. 2642-83.

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- Fig. 1. *Clavellodes rugosa* (Kroyer, 1837), cephalothorax ventral, trunk dorsal (egg sacs partially figured).
 Fig. 2. Tip of the second antenna, ventral.
 Fig. 3. Detail of the claw of the maxilliped, ventral.

References

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