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Some White Sea Locations for *Coryphella nobilis* Verrill (Nudibranchia, Coryphellidae).

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Coryphella nobilis Verrill 1880 (*Coryphella* sp.(anonyma) Bergh, 1899; *Coryphella sarsi* Friele, 1902) is widely distributed throughout the north Atlantic and Arctic waters (Odhner, 1929, 1939; Lemche 1938, 1941; Kuzirian, 1977.) This species has also been reported from the White Sea as well (Derjugin, 1928 (as *Coryphella sarsi*) - collections made by the research vessel "Murman" in August 1922). These White Sea findings of *C. nobilis* were sometimes mentioned in subsequent Russian publications (e.g. Filatova and Zatsepin, 1948; Roginskaya, 1987), but, as far as I know, never in the works of outside Russia researchers. Though, according to my data, *C. nobilis* appears to be relatively widespread in the deeper waters of the White Sea (between 50-250 meters depth) (Roginskaya, 1987).

The samples described here were collected by the two successive White Sea expeditions of the State University of Moscow's research vessel "C x C -2032" in summer months of 1974 and 1975.

C. nobilis were found at one station in Dvinsky Bay (cruise no. 6) and at five stations in Kandalaksha Bay (cruise no. 7). All material was preserved in 70 percent alcohol.



Fig. 1. Normally denticulated lateral tooth of the radula of *C. nobilis* (Station 193//detail)

The annotated list of these White Sea samplings of *C. nobilis* is as follows:

- (1) 1 ex., 30.07.1974, Dvinsky Bay, Station 126, depth 64m, 65°06.5'N, 39°06.0'E. Body length (L) = 12.0mm, 23 rows in the radular ribbon.
- (2) 1 ex., 20.07.1975, Kandalaksha Bay, Station 193, depth 250m, 66°07.2'N, 34°55.5'E, water salinity (S) = 29.56%, bottom temperature (T) = - 1.52°C; L = 14.0mm, 21 rows in the radular ribbon.

- (3) 1 ex., 21.07.1975, Kandalaksha Bay, Station 199, depth 50m, 66°23.2'N, 36°20.0'E, S = 27.38%, T = +1.75°C; L (much contracted) = 8.0mm; radular teeth typical for the species, number of rows not counted.

- (4) 1 ex., 25.07.1975, Kandalaksha Bay, Station 238, depth 75m, 66°34.5'N, 33°45.2'E, S = 28.37%, T = +0.75°C. The specimen was much damaged, body length could not be measured; more than 16 rows were left in the radula.

- (5) 1 ex., 25.07.1975, Kandalaksha Bay, Station 239, depth 125m, 66°32.9'N, 33°42.7'E, L = 15.5mm, 20 rows in the radula.

- (6) 1 ex., 26.07.1975, Kandalaksha Bay, Station 243, depth 50m, 66°28.6'N, 33°38.5'E, S = 28.06% L = 8.8mm, 17 rows in the radula.

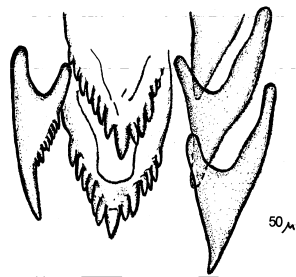


Fig. 2. Radular teeth of the specimen from Station 126, showing anomalous, smooth laterals.

The external morphology of six specimens examined demonstrated usual characters of *C. nobilis*: broad, rather high body,

with overhanging dorsal margins, numerous non-clustered cerata, characteristic "warty" rhinophores etc. The shape of radular teeth of five specimens was also characteristic for *C. nobilis* (the central teeth with 6-9 denticles on either side of the low central cusp, laterals large, triangular, denticulated (see Fig. 1), with long posterior projection). And only in the radula of a single specimen from station 126 (Dvinsky Bay, depth 64m) all the lateral teeth on one side from the central tooth were quite smooth, without distinct denticles on the inner edge, whereas on the opposite side they were normally denticulated (see Fig. 2). The fact that this one-sided lack of denticulation remained along the whole radular length / 23 rows /, indicates that it could not be the result of mechanical abrasion of teeth while feeding. More probably the deformity reflects some defects in functioning of odontoblasts. It is possible, that this anomaly from time to time springs up in this species. The adenticulate laterals of the radula of type specimen of *C. nobilis* from Cape Cod (Verrill, 1880 and 1882 (Plate 42, Fig. 15)) may represent the extreme degree of this phenomenon.

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INFORMATION EXCHANGE

From Michael Miller: The ATMNET server for whatever reason is not responding to Slug Site access requests. Until this situation is corrected, a temporary mirror site has been set up at:

http://siolibrary.ucsd.edu/slugsite/atmnet/frame_s.htm

This construction was rather hasty and not all links may work, but it will have to do while I am in the Philippines 20 April to 03 May. - mdmiller@cts.com

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EDITOR'S NOTES

After many discussions with subscribers and other opisthobranch people I am going to move in the direction of an all-electronic ON. For the present time I will be getting the copy onto the internet frequently and following up with the subscriber hardcopies later. Eventually the electronic copies will be the only copies.