

Tintinnids of the Eastern coast of Middle Adriatic

by

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Abstract

This paper provides preliminary data on the tintinnids from the littoral and the island area of the Middle Adriatic.

Résumé

Les recherches sont effectuées dans la région côtière et insulaire de la Dalmatie moyenne au cours de quatre saisons. Ici on donne les résultats qualitative et quantitative des tintinnides. La quantité des tintinnides a été toujours plus grande dans le Baie de Kaštela, que dans la zone littorale et insulaire, ce que prouve leurs grande importance.

Only tintinnids of the Northern part of Adriatic were mentioned by ENTZ jun., (1904), LAACKMANN (1913), ISSEL (1922) and TEODORO (1922). The samples for this study were taken during the four seasons' cruises, by the M/V "Baldo Kosić" at 17 stations. The samples were taken by the vertical tows of the net, diameter 0,45 m, mesh opening 53 microns.

1st cruise (July 9-12, 1973). Out of 14 species in total, only Favella ehrenbergii, Favella brevis, Tintinnopsis beroidea, Tintinnopsis bütschlii, Tintinnopsis campanula have been found in Kaštela Bay and averaged 468 ind./m³ or 70 percent of the total number of tintinnids of the whole area.

2nd cruise (November 11-16, 1973). From the 33 tintinnid species, only seven were present in Kaštela Bay, where Codonellopsis schabi was represented in the greatest number and reached 119.640 ind./m³, participating with 97 percent in the total tintinnid population in this bay. The mentioned values significantly decrease toward the outer locations, and even fall to 290 ind./m³.

3rd cruise (February 1-8, 1974). In the total 13 species were found in Kaštela Bay with an average quantity of 4.760 ind./m³ and at the other stations 26 species were found averaging 695 ind./m³. The dominant species Favella serata was represented with an average of 4.000 ind./m³ in Kaštela Bay, and the neighbouring bays Saldun and Marina with 280 ind./m³. while it was very rare at the other stations.

4th cruise (May 11-14, 1974). At all locations 12 species were found, with an average 300 ind./m³, and 8 species in Kaštela Bay averaging 900 ind./m³. All the species are equally represented with exception of

Tintinnopsis radix, which is predominant in Kaštela Bay.

It is important to note that the samples with the plankton net and 5 litres Van Dorn bottle were simultaneously taken. The last ones were treated by method of sedimentation and have given higher quantity values, especially for the bay areas. In Kaštela Bay tintinnids were always present in larger number, than in the other area. All of this points out the great value of tintinnids within the neritic ecosystem, as the important organisms in the food chain, which connect particular organic matter, bacteria, and other smallest unicellular organisms.

Références

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