

Mucous filaments development under controlled conditions :
ultrastructure observations

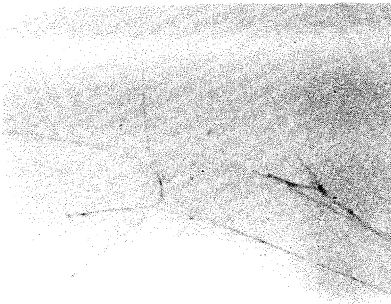
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Sea water, collected in the Gulf of Trieste on July 1991, was placed in 10 liters plastic tanks. After eight days in controlled conditions some mucous filaments occurred.

For thin sectioning the filaments were fixed in glutaraldehyde 2.5 % and postfixed for 4 h in 2.5 % OsO₄.

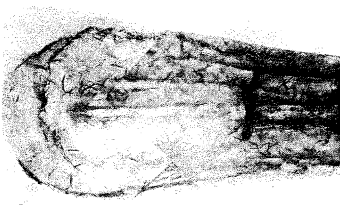
After washing the filaments were dehydrated in alcohol series and embedded in Spurr's medium. The thin sections were cut with glass knives and stained with uranyl acetate and lead citrate. A Philips 201 microscope was used for examination.



Mucous filaments developed in the tanks.

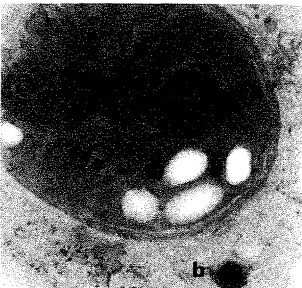
(— = 6 μ m)

Nitzschia closterium (Ehr.) W. Sm. and marine bacteria were the most representative organisms found into mucous filaments.



Electron micrograph of *Nitzschia closterium* apex.

(— = 0.3 μ m)

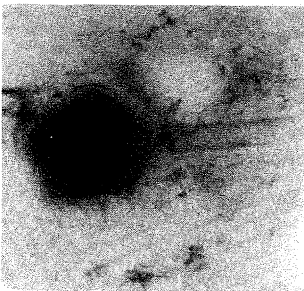


Electron micrograph of a bacterium and bacteriophage.

a. particle classified as bacteriophage according to size and morphology.

b. bacteriophage.

(— = 0.35 μ m)



Electron micrograph of a bacteriophage showing head and tail component.

(— = 0.1 μ m)