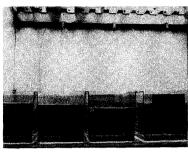
Mucous filaments development under controlled conditions : some detected organisms

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Sea water samples under controlled conditions

During July 1991 surface sea water samples (50 liters) were collected in the Gulf of Trieste.

10 liters of water was directly placed in plastic tanks, 40 liters were filtered through different meshes (10 1 through 150 μm mesh, 10 1 through 20 μm mesh, 10 1 through 10 μm mesh and 10 1 through 1.2 μm filter).

The tanks were placed under controlled conditions: 12 cool-white fluorescent lights on a light-dark cycle of 16:8 at 20°C.



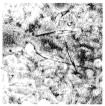
Mucous filaments developing inthe tanks. (——= 6 cm)

After eight days the formation of some mucous filaments in the not filtered water occurred.

Two days later, mucous aggregates were detected also in 150 µm filtered water.

The filaments were observed under light microscope and SEM.

The most representative organisms were measured and photographed.



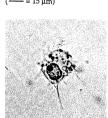
Mucous filament observed under inverted microscope. ($---=25 \mu m$)



Nitzschia closterium (Ehr.) W.Sm. (—— = 15 μm)



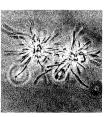
Heliozoan. (——= 20 μm)



Ameboid form. (——= 30 μm)



Coccoid and filamentous bacteria. (----= 8 \mum)



Unidentified not photosynthetic form. (——= 100 µm)