Antifouling Activities against Colonizer Marine Bacteria of Extracts from Marine Invertebrates Collected in the Colombian Caribbean Sea and on the Brazilian Coast (Santa Catarina)

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- Z. Naturforsch. 66 c, 515-526 (2011); received December 10, 2010/June 28, 2011

The growth inhibition of 12 native marine bacteria isolated from *Aplysina* sponge surfaces, the shell of a bivalve, and PhytagelTM immersed for 48 h in sea water were used as indicator of the antifouling activity of the extracts of 39 marine organisms (octocorals, sponges, algae, and zoanthid) collected in the Colombian Caribbean Sea and on the Brazilian coast (Santa Catarina). Gram-negative bacteria represented 75% of the isolates; identified strains belonged to *Oceanobacillus iheyensis*, *Ochrobactrum pseudogrignonense*, *Vibrio campbellii*, *Vibrio harveyi*, and *Bacillus megaterium* species and seven strains were classified at genus level by the 16S rRNA sequencing method. The extracts of the octocorals *Pseudopterogorgia elisabethae*, four *Eunicea* octocorals, and the sponges *Topsentia ophiraphidites*, *Agelas citrina*, *Neopetrosia carbonaria*, *Monanchora arbuscula*, *Cliona tenuis*, *Iotrochota imminuta*, and *Ptilocaulis walpersii* were the most active, thus suggesting those species as antifoulant producers. This is the first study of natural antifoulants from marine organisms collected on the Colombian and Brazilian coasts.

Key words: Antifouling Activity, Antibacterial Activity, Marine Invertebrate-Associated Bacteria, 16S rRNA Gene Analysis