

Characterization of cultivable microbes associated with three marine animals in the rocky intertidal shore

In order to understand how an organism functions, it is necessary to determine if there are bacterial associations that affect that organism. The first step in determining how and if bacteria associate with various other organisms is bacterial characterization. In this study, bacteria were cultivated from the common periwinkle, *Buccinum undatum*, the rock crab, *Cancer irroratus*, and the common sand dollar, *Echinarachnius parma* both internally and externally. The various bacteria from each animal were then characterized using sulfide, indole, motility analysis, catalase testing, gram staining, and morphology to determine the presence of various enzymes, the structure of the bacterial cell wall, the bacterial colony structure, and the ability to move throughout a media. It was determined that a majority of the tested bacteria were gram-negative, motile, and had entire edges.

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