Growth, survival, and superoxide dismutase activity in juvenile Crassostrea corteziensis (Hertlein, 1951) treated with probiotics

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Abstract
Juvenile seed of the Cortés oyster Crassostrea corteziensis were exposed to Lactobacillus sp. isolated from Nodipecten subnodosus, a mix of Pseudomonas sp. and Burkholderia cepacia, a marine yeast strain, a commercial probiotic (Epicin®), and oxytetracycline to determine their effect on growth, survival, SOD activity, and protein content. Probiotics at the test dose of 50,000 cells • ml⁻¹, Epicin and oxytetracycline at 7 mg • l⁻¹ were evaluated during 30 days of culture. Results showed that growth of C. corteziensis was significantly improved by Lactobacillus sp. and the bacilli mix significantly enhanced survival and SOD activity at the test dose. Protein content did not significantly increase by the treatments used. This study demonstrated the potential use of marine microbiota to improve cultivation of C. corteziensis.