Ajustes electrolíticos y relación ARN/ADN en Perna Viridis (Linnaeus, 1958) sometido a cambios de salinidad [

Escuela Profesional de Biología. Facultad de Ciencias Naturales y Matemática de la Universidad Nacional Federico Villarreal : ASEFIM, Instituto de Capacitación y Consultoría,
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Analítica

The salinity in coastal areas is one of themost variableenvironmental parameters due to the contributions of continental waters; their effects are important in the osmoregulatory processes of invertebrates, particularly sessile organisms such as bivalves. Very little is known about the risks of prolonged exposure to low concentration of salinity in Perna viridis and their effects on the physiological condition. In this study, P. viridis, an important mariculture species, was exposed at different salinities of 36, 16 and 12 ups, which were reduced 2 ups every two days up to eight weeks in the experimental conditions. During the experimental period a 12:12 photoperiod and a temperature of 25"1.5 C were maintained, and the organisms were fed daily with a mixture of microalgal monocultures (about 30000 cellsmL-1) of Chaetoceros gracilis and Tetraselmis chuii. In all samples were determined pH and the intra- and extracellular ions sodium, potassium and chloride. Proteins, DNA, RNA concentration and the RNA/DNA ratio were evaluated in abductor muscle. Significant variations (P<0.001) were observed in electrolytic parameters and RNA/DNA ratio, which indicate that P. viridis is an excellent osmoconformer when subjected to reduced salinity and that it might maintain a light hyperionic condition of its internal fluids in relation to its environment. However, 12 ups salinities compromise the physiological condition of P. viridis, reducing its growth rate
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