

APPLICATION OF COASTAL ENVIRONMENTAL QUALITY INDEX (ICAC) IN THE MOLLUSC CULTIVATION AT ENSEADA DO BRITO, PALHOÇA, SANTA CATARINA

Mariane Pallaoro da Fontoura*, Isabela Pinheiro, Yole Alvim Buchalla Coelho, Robson Ventura, Renato Mendonza and Luis Alejandro Vinatea Arana

Empresa de Pesquisa Agropecuária e Extensão Rural de Santa Catarina
Epagri
Rodovia Admar Gonzaga, 1.357
Florianópolis, Santa Catarina, Brasil

The Enseada do Brito is located in a sheltered cove, with rivers flowing into the region and malacoculture as their main source of income. This activity, as well as other aquaculture activities, enjoy the natural resources and causes changes in the environment. Thus, this study aimed to investigate a possible impact of shellfish farming on water quality in the region using the Coastal Environmental Quality Index (ICAC), based on the concentration of ammonia, nitrate, nitrite, orthophosphate and silicate. We selected five sampling stations in the cove called EB1, EB2, EB3, EB4 and EB5, divided into areas with or without the influence of the molluscs cultivation and rivers. During the period August-October 2010, the parameters were monitored salinity (‰), transparency (cm), temperature (°C) and pH. In October, water samples were collected at five stations in the cove for nutrient analysis, weighting, with the results, the values of the ICAC. During the study period, the physical and chemical parameters remained constants and no difference was detected ($p > 0.05$) between stations. ANOVA found no significant difference of nutrients ($p > 0.05$) of the ICAC and between stations ($p = 0.88$). The results indicate that during the study of bivalve cultivation did not affect the water quality of the bay.