

Metodología para el análisis multivariante en evaluaciones ecotoxicológicas de ambientes marino-costero.

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The ecotoxicological evaluations in marine- coastal environments seek to relate environmental warning variables of pollution to changes in the benthic biological communities associated with the coastal evaluated zone. This conference presents a methodology of analysis multivariant for the evaluation of the above mentioned relation contaminated environment- benthic biological community, by means of the utilization of ordinations analysis (PCA, NMDS) for the detection of spatial and temporary gradients, and the Canonical Correspondence Analysis for the study of the relation environmental warning variables of pollution - biological community. The above mentioned methodology is applied in information contributed in two cases of ecotoxicological evaluations: an environmental study for the effects of organic pollution associated with petroleum activities in a coastal Venezuelan zone, and an ecotoxicological evaluation for agricultural and urban activities in the Gulf of Guayaquil, Ecuador. In both cases of study, there were established gradients of spatial and temporary differentiation in reference to the environmental evaluated variables, and the association as for the changes of the benthic biological communities with environmental warning variables of organic pollution. One concludes that this methodology of analysis multivariant allows establishing the effects of the human activities in the functioning of the marine-coastal ecosystems.

Keywords: analysis multivariant; ecotoxicological evaluation; marine-coastal ecosystems.