



Diversity and distribution of algal settlement in Mangrove of Londji, Kribi-Southern-Cameroon

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ABSTRACT

Objective: Phytosociological characterization of microalgae in the mangrove area of Londji in Kribi, South Region of Cameroon while analysing the physicochemical parameters related to it.

Methodology and results: Geo-textiles were laid in the river and water samples taken. One hundred and eight (108) samples were collected in 6 different areas. One hundred and twenty-four (124) species of microalgae were inventoried in this ecosystem, divided into 87 genera, 50 families, 26 orders, 11 classes and 5 groups (phyla). The *Bacillariophyceae* class was the highest with 59.68%, followed by *Xygoephyceae* 3.23% and *Haptophyceae* 2.42%. *Euglenophyceae* and *Xanthophyceae* both had 1.61% while *Chrysophyceae*, *Rhodophyceae* and *Cryptophyceae* all had 0.81%. Finally, *Cyanophyceae* represented 5.65% of total number of species. The analyses of the physicochemical parameters did not show major organic pollution however little metallic pollution was observed.

Conclusion and application: This work made it possible to set up three aspects of biodiversity: to know the algal diversity of the environment, to inventory different species, and to know the state of the ecological environment of this ecosystem. Thus, to know the state of the environment for the development of this ecosystem, within the framework of the emerging shrimp farming in Cameroon.

Keys words: Cameroon, Kribi, mangrove, microalgae, plant sociology.