

OOS2025-1262, updated on 31 Mar 2025 https://doi.org/10.5194/oos2025-1262 One Ocean Science Congress 2025 © Author(s) 2025. This work is distributed under the Creative Commons Attribution 4.0 License.



Epifauna Associated with Macroalgae in Senegal (Northwest Africa)

Ibrahima Ndiaye^{1,2,3}, Patrice Brehmer³, Ismaïla Ndour², Youssouph Diatta¹, and Mandé Ndiaye^{2,4} ¹UCAD, Institut Fondamental d'Afrique Noir Cheikh Anta Diop (IFAN), Dakar, Senegal

²ISRA, Centre de Recherches Océanographique Dakar Thiaroye (CRODT), Dakar, Senegal

The association of epifaunal communities with marine macroalgae has not yet been studied on the Cape Verde Peninsula (Dakar, Senegal). Macroalgae were collected at sea during the warm season (July) from stations around the Cape Verde Peninsula to investigate their association with epifaunal organisms. A predominance of amphipods was noted across the entire epifaunal community. The abundance of this order was higher on the macroalgae *Corallina officinalis*. The highest epifaunal density was observed on the genus *Ulva* sp. A significant relationship was observed between the diversity and abundance of epifaunal communities and macroalgal species. However, there was no significant relationship between the biomass of the macroalgae and the biomass of the epifauna. The methodology used in this study could be replicated on a larger spatial and temporal scale. This would provide deeper insights into the communities hosted by macroalgae within the context of the growing blue economy, encouraging future exploitation of macroalgae and addressing biodiversity loss.

Keywords: Epifauna, Macroalgae, Dakar, Senegal.

³IRD, Laboratoire des Sciences de l'Environnement Marin (LEMAR), Dakar, Senegal

⁴UCAD, Institut Universitaire de Pêches et d'Aquacultures (UIPA), Dakar, Senegal