ROCKY SHORE MACROALGAE COMMUNITIES OF THE AZORES (PORTUGAL) AND THE BRITISH ISLES: A COMPARISON FOR THE DEVELOPMENT OF ECOLOGICAL QUALITY ASSESSMENT TOOLS

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This study focused on intertidal seaweed communities on rocky shores and was planned to provide solid scientific background for the application of the EU Water Framework Directive (WFD) to the Azores based on the tool developed for British shores. Rocky shore intertidal seaweed communities of the British Isles and the Azores are compared based on presence/absence data recorded in single occasion visits to individual stretches of shore. In the Atlantic the use of macroalgae for the assessment of ecological quality of coastal waters has focused on multivariate approaches based on littoral seaweed community features, namely the species richness (FSL/RLS) tool developed in the British Isles and the CFR tool in north Spain. However, intertidal rocky shore seaweed communities in the Macaronesian archipelagos are dominated by turfs and lack most of the large and abundant fucoids that are common in more northern countries. Therefore, neither of the two methods applies perfectly to Macaronesian shores. In an attempt to intercalibrate the results obtained by implementing the FSL/RLS and the CFR tools with Azorean seaweed communities, an alternative model is proposed building on their common features and adapting them to this region’s specificities. The proposed adaptations envisage the need to implement such tools across Macaronesia and compare to other North Atlantic shores as set out by EU guidelines (Water Framework Directive and Marine Strategy Framework Directive).

Keywords: seaweeds, intertidal, quality indices, Macaronesia
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