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PLANT SCIENCE
MEETING

6th MEETING IN FUNCTIONAL BIOLOGY
AND BIOTECHNOLOGY OF PLANTS

 **2/3 November 2022**

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23 ABSTRACT SUBMISSION
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 **BIOLOGIA
FUNCIONAL
E BIOTECNOLOGIA
DE PLANTAS**



Organizing Committee:

Diana Areias; Inês Moura; Lécia Rodrigues; Talita Silva

Floating islands implementation in marine and freshwater environments

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Abstract

Rapid industrialization, changes in human activities, and agricultural practices have led to the widespread use of toxic organic compounds, resulting in increased concentrations of pollutants in the environment that can be transmitted through air, water, or soil, resulting in numerous environmental and health problems. Therefore, the efficient management of water in these polluted sites is urgently needed. Aiming at this, this work proposes the use of floating wetland islands (FWI) for phytoremediation of these environments, since they have a great potential to promote several ecosystem services, such as biodiversity and water quality improvement. Having that in consideration it will be carried out an assessment related to the most adequate materials for the floating platform to be applied in marine and freshwater environments. Plants will be selected based on previous research carried out by the group It is intended that the floating platform developed under the present study will be compared with a commercial system cork based. It will be monitored the plant development and establishment in the two floating platforms materials and environments, the associated fauna and the water characterization. From the analysis of these results, this work hopes that these nature-based solutions can contribute to better water management, in such a way that will involve the conservation and rehabilitation of ecosystems.

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