

Metal contamination of *Posidonia oceanica* meadows along the Corsican coastline (Mediterranean)

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*The seagrass *Posidonia oceanica* is a relevant tracer of spatial metal contamination and an interesting tool for water quality evaluation.*

Abstract

The aim of this study is to determine metal (Cd, Co, Cr, Hg, Ni, Pb) concentrations in *Posidonia oceanica* tissues along the Corsican coastline. The results show that except for Cr, all the metals are preferentially accumulated in the blades; this is particularly interesting as it means that future metal analyses may be carried out only on the blades avoiding thus the removal of the shoots. Moreover, they show that metal concentrations may reflect the “background noise” of the Mediterranean Sea. Station 15 (Canari) can however be distinguished from the others due to its high Co, Cr and Ni concentrations. This result may be related to the presence of a previous asbestos mine, located near this station. Therefore, this study reinforces the usefulness and the relevance of *Posidonia oceanica* as a tracer of spatial metal contamination and as an interesting tool for water quality evaluation.

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