

## Seasonal variations of total mercury in foliar tissues of *Posidonia oceanica*

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Cold vapour atomic absorption spectrophotometry (CV-AAS) was used to evaluate total mercury concentrations in *Posidonia oceanica*, after initial mineralization of the samples in a microwave oven. Measurements were taken of three leaf tissue types: the adult leaf blade, the adult leaf sheath, and the intermediate leaf blade. Plants were sampled monthly over a one year period at two sites presenting different degrees of pollution: Rosignano (Tuscany, Italy) and Tonnara (Corsica, France).

The mercury concentrations recorded in the different *P. oceanica* tissues were systematically higher at the more contaminated of the two sites, thus confirming the value of this plant as a biological indicator. The mercury concentrations observed exhibit seasonal variations, with higher concentrations recorded in winter than in summer. These variations seemed to be negatively correlated to the plant's phenology. Also, the mean mercury concentrations were generally lower in young tissue (intermediate leaf blade) than in the older tissue (adult leaf blade).