



DISTRIBUTION OF PHENOLIC COMPOUNDS IN THE SEAGRASS *POSIDONIA OCEANICA*

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Abstract—The identification and quantification of phenolic compounds was carried out in various *Posidonia oceanica* foliar tissues using high performance liquid chromatography (HPLC). Samples were taken during the spring and correspond to sites presenting different environmental conditions: over-grazing by herbivores (*Sarpa salpa*, *Paracentrotus lividus*), presence of anthropogenic waste (chemical and organic), interspecific competition with the alga *Caulerpa taxifolia* and intra-specific competition (dense meadows). A total of 23 compounds were identified and quantitatively analysed; of these, acetosyringone and ferulic acid exhibit the highest concentrations. The level of the compounds found varies with (i) the tissue examined with the highest concentrations being observed in young growing leaves (intermediate leaf blades) and (ii) the environmental conditions (abiotic factors and “stress” conditions). © 1998 Published by Elsevier Science Ltd. All rights reserved

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