{rokbox title=|Pinna nobilis :: Image: Salud Deudero (COB-IEO)| thumb=|images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-altas-concentraciones-metales-pesados-pinna-vazquez-luis-et-al-2015-thumb.jpg|}images/stories/ieo/imagenespublicaciones/centro-oceanografico-baleares-altas-concentraciones-metales-pesados-pinna-vazquez-luis-et-al-2015.jpg{/rokbox}

Maite Vázquez-Luis, Mercè Morató, Juan Antonio Campillo, Carlos Guitart, **Salud Deudero**, 2015.

High metal contents in the fan mussel *Pinna nobilis* in the Balearic Archipelago (western Mediterranean Sea) and a review of concentrations in marine bivalves (Pinnidae)

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Abstract: Concentrations of metals (Cd, Cu, Hg, Pb and Zn) in the marine bivalve *Pinna nobilis* at several coastal locations of Majorca and the Cabrera Islands (Mediterranean Sea) were investigated. The elevated concentrations of metals found in the soft tissues of *P. nobilis* indicate high bioaccumulation factors. All concentrations and the calculated metal pollution index showed significant differences between sites, with particularly high concentrations in the Cabrera Archipelago, a marine protected area (MPA). The datasets were evaluated with the limited information published in the literature for Pinnidae species worldwide. In benthic *P. nobilis*, concentrations of Cd, Cu and Zn are more than 30 times higher and Hg and Pb concentrations are 4 and 7 times higher, respectively, than concentrations in other bivalve species, such as *Mytilus galloprovincialis* (Mytilidae). These observations from species inhabiting nearby ecological habitats of the coastal environment (Pinnidae vs. Mytilidae) are also discussed in the context of current marine monitoring strategies and assessments.

Keywords: trace metal, bivalve, mollusc, bioaccumulation, Pinnidae, Mytilidae