Cytosolic Metal Distribution as an Indicator of Toxicity in Sea Urchins from the Southern California Bight

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ABSTRACT

Sea urchins (*Strongylocentrotus purpuratus*) were collected from intertidal stations at Point Dume, Redondo Beach and White's Point in the Southern California Bight. Cytosolic metal levels varied both within and between stations, with the highest levels found in organisms from White's Point. Examination of the cytosolic metal distribution nby Sephadex G-75 gel chromatography indicated that organisms adapted to increased levels of trace metals by producing more of a metallothionein-like metal-binding protein. Histological and histochemical examinations indicated that these organisms were not stressed over the range of metal concentrations encountered in this study.

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