METAL ACCUMULATION AND SUBLETHAL EFFECTS IN THE SEA ANEMONE, AIPTASIA PALLIDA, AFTER WATERBORNE EXPOSURE TO METAL MIXTURES

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The impact of metals on symbiotic cnidarians is largely understudied. To address this issue, a toxicity study was performed where the sea anemone, *Aiptasia pallida* was exposed to a control or a metal mixture (Cu, Zn, Ni, and Cd) at three exposure levels for 7 d. Anemones were then transferred to clean seawater for an additional 7 d to assess metal depuration and recovery. Accumulation of copper, zinc, nickel, and cadmium and their effects on enzyme activity, protein concentration, and algal cell density were measured over 7 d. Metal accumulation was time and concentration dependent throughout the experiment. Additionally, enzyme activity and algal cell density were significantly affected. Metal depuration and physiological recovery were dependent on both the metal and exposure concentration. Understanding how *A. pallida* and their symbionts respond to mixed metal exposures may allow better understanding about the response of symbiotic cnidarians to metal-polluted aquatic environments.