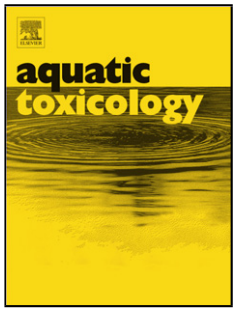

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A comparative experimental approach to ecotoxicology in shallow-water and deep-sea holothurians suggests similar behavioural responses

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Highlights

- Shallow-water and deep-sea holothurians avoided copper-contaminated sediment.
- Shallow-water taxa may be suitable ecotoxicological proxies for deep-sea taxa.
- Avoidance behaviour may have bioenergetic consequences.

Abstract

Exploration of deep-sea mineral resources is burgeoning, raising concerns regarding ecotoxicological impacts on deep-sea fauna. Assessing toxicity in deep-sea species is technologically challenging, which promotes interest in establishing shallow-water ecotoxicological proxy species. However, the effects of temperature and hydrostatic pressure on toxicity, and how adaptation to deep-sea environmental conditions might moderate these