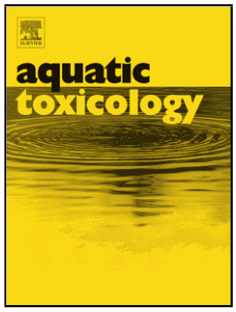

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Species-specific behaviours in amphipods highlight the need for understanding baseline behaviours in ecotoxicology

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Highlights

- Records phototaxis and thigmotaxis responses in marine and freshwater amphipods
- Determines distinct behaviours in response to light
- Determines distinct behaviours between species of amphipods
- Outlines the importance of careful study design and underlying knowledge of baseline behaviours

Abstract

Behavioural studies in ecotoxicology are increasing with techniques and endpoints used in pharmacology being translated to other vertebrate and invertebrate species. Despite this, data on the baseline behaviours of model organisms, and inter-species variability in behaviour are currently under-studied. This study assessed a range of behaviours associated with anxiety including swimming speed, phototaxis and thigmotaxis in a marine and freshwater amphipod (*Echinogammarus marinus* and *Gammarus pulex*). Differences in sensitivity to