

References - Review: Opportunities and Limitations of Aquatic Invertebrate Behavior as Relevant Endpoint in Ecotoxicological Testing

1. Azevedo-Pereira, H. M., Lemos, M. F., & Soares, A. M. (2011). Effects of imidacloprid exposure on *Chironomus riparius* Meigen larvae: Linking acetylcholinesterase activity to behavior. *Ecotoxicology and Environmental Safety*, 74(5), 1210–1215. <https://doi.org/10.1016/j.ecoenv.2011.03.018>
2. Beauchard, O., Choi, K., Lee, S. H., Ji, C., Lek, S., & Chon, T. (2009). Quantitative characterization of response behaviors and individual variation in *Chironomus riparius* after treatments of diazinon. *Ecology and the Environment*. <https://doi.org/10.2495/eco090131>
3. Berisha, H., Horváth, G., Fišer, Ž., Balázs, G., Fišer, C., & Herczeg, G. (2022). Sex-dependent increase of movement activity in the freshwater isopod *Asellus aquaticus* following adaptation to a predator-free cave habitat. *Current Zoology*, 69(4), 418–425. <https://doi.org/10.1093/cz/zoac063>
4. Bownik, A. (2017). Daphnia swimming behavior as a biomarker in toxicity assessment: A review. *Science of the Total Environment*, 601–602, 194–205. <https://doi.org/10.1016/j.scitotenv.2017.05.199>
5. Bownik, A., Ślaska, B., Bochra, J., Gumieniak, K., & Gałek, K. (2019). Procaine penicillin alters swimming behavior and physiological parameters of *Daphnia magna*. *Environmental Science and Pollution Research*, 26(18), 18662–18673. <https://doi.org/10.1007/s11356-019-05255-2>
6. De Lange, H., Sperber, V., & Peeters, E. (2006). Avoidance of polycyclic aromatic hydrocarbon-contaminated sediments by the freshwater invertebrates *Gammarus pulex* and *Asellus aquaticus*. *Environmental Toxicology and Chemistry*, 25(2), 452–457. <https://doi.org/10.1897/05-413.1>
7. Egan, N., Stinson, S., Deng, X., Lawler, S. P., & Connon, R. E. (2023). Swimming Behavior of *Daphnia magna* Is Altered by Pesticides of Concern, as Components of Agricultural Surface Water and in Acute Exposures. *Biology*, 12(3), 425. <https://doi.org/10.3390/biology12030425>
8. Faimali, M., Gambardella, C., Costa, E., Piazza, V., Morgana, S., Estévez-Calvar, N., & Garaventa, F. (2017). Old model organisms and new behavioral end-points: Swimming alteration as an ecotoxicological response. *Marine Environmental Research*, 128, 36–45. <https://doi.org/10.1016/j.marenvres.2016.05.006>
9. Felten, V., Charmantier, G., Charmantier-Daures, M., Aujoulat, F., Garric, J., & Geffard, O. (2008). Physiological and behavioral responses of *Gammarus pulex* exposed to acid stress. *Comparative Biochemistry and Physiology Part C: Toxicology & Pharmacology*, 147(2), 189–197. <https://doi.org/10.1016/j.cbpc.2007.09.006>
10. Fišer, Ž., Prevorčnik, S., Lozej, N., & Trontelj, P. (2019). No need to hide in caves: shelter-seeking behavior of surface and cave ecomorphs of *Asellus aquaticus* (Isopoda: Crustacea). *Zoology*, 134, 58–65. <https://doi.org/10.1016/j.zool.2019.03.001>
11. Höller, F., & Stief, P. (2005). Adaptive behavior of chironomid larvae (*Chironomus riparius*) in response to chemical stimuli from predators and resource density. *Behavioral Ecology and Sociobiology*, 58(3), 256–263. <https://doi.org/10.1007/s00265-005-0932-8>
12. Horváth, G., Kerekes, K., Nyitrai, V., Balázs, G., Berisha, H., & Herczeg, G. (2023). Exploratory behavior divergence between surface populations, cave colonists and a cave population in the water louse, *Asellus aquaticus*. *Behavioral Ecology and Sociobiology*, 77(1). <https://doi.org/10.1007/s00265-022-03288-1>
13. Itoh, A., & Hisama, H. (2010). Motion Control of *Daphnia magna* by Blue LED Light. *Journal of Aero Aqua Bio-mechanisms*. <https://doi.org/10.5226/jabmech.1.93>
14. Kohler, S. A., Parker, M. O., & Ford, A. T. (2018). Species-specific behaviors in amphipods highlight the need for understanding baseline behaviors in ecotoxicology. *Aquatic Toxicology*, 202, 173–180. <https://doi.org/10.1016/j.aquatox.2018.07.013>
15. Lellák, J. (1968). Positive Phototaxis der Chironomiden-Larvalae als regulierender Faktor ihrer Verteilung in stehenden Gewässern. *Annales Zoologici Fennici*, 5(1). <http://www.jstor.org/stable/23731448>

16. Meisch, C., Massard, J. A. (2015). Les recherches sur les crustacés (Crustacea) du Luxembourg: aperçu historique. *Bulletin de la Société des naturalistes luxembourgeois*, 116, 381-390
17. Moroz, L. L., & Winlow, W. (1991). Respiratory behavior in *Lymnaea stagnalis*: Pharmacological and Cellular Analyses. *Acta Biologica Hungarica*, 43(1–4).
18. Pestana, J. L., Loureiro, S., Baird, D. J., & Soares, A. M. (2009). Fear and loathing in the benthos: Responses of aquatic insect larvae to the pesticide imidacloprid in the presence of chemical signals of predation risk. *Aquatic Toxicology*, 93(2–3), 138–149. <https://doi.org/10.1016/j.aquatox.2009.04.008>
19. Roozen, F. C. J. M. (2001). behavioral response of *Daphnia* to olfactory cues from food, competitors and predators. *Journal of Plankton Research*, 23(8), 797–808. <https://doi.org/10.1093/plankt/23.8.797>
20. Saalmann V. et al., in preparation
21. Sakharov, D. A., & Rósza, K. S. (1988). Defensive behavior in the pond snail, *Lymnaea stagnalis*: the whole body withdrawal associated with exsanguination. *Acta Biologica Hungarica*, 40, 329–341.
22. Soose, L. J., Hügl, K. S., Oehlmann, J., Schiwy, A., Hollert, H., & Jourdan, J. (2023). A novel approach for the assessment of invertebrate behavior and its use in behavioral ecotoxicology. *Science of the Total Environment*, 897, 165418. <https://doi.org/10.1016/j.scitotenv.2023.165418>
23. Szokoli, F., Winkelmann, C., Berendonk, T. U., & Worischka, S. (2015). The effects of fish kairomones and food availability on the predator avoidance behavior of *Gammarus pulex*. *Fundamental and Applied Limnology*, 186(3), 249–258. <https://doi.org/10.1127/fal/2015/0633>
24. Truscott, R., McCrohan, C. R., Bailey, S. E. R., & White, K. (1995). Effect of aluminium and lead on activity in the freshwater pond snail *Lymnaea stagnalis*. *Canadian Journal of Fisheries and Aquatic Sciences*, 52(8), 1623–1629. <https://doi.org/10.1139/f95-756>
25. Vakolyuk, I. A., & Zhukov, V. V. (2000). Study of the *Lymnaea stagnalis* Photoreception from Phototaxis Manifestations. *Journal of Evolutionary Biochemistry and Physiology*, 36(5).
https://www.researchgate.net/publication/288282151_Study_of_the_Lymnaea_stagnalis_photoreception_from_phototaxis_manifestations
26. Van Den Berg, S., Rodríguez-Sánchez, P., Jun, Z., Olusoiji, O., Peeters, E., & Schuijt, L. M. (2023). Among-individual variation in the swimming behavior of the amphipod *Gammarus pulex* under dark and light conditions. *Science of the Total Environment*, 872, 162177.
<https://doi.org/10.1016/j.scitotenv.2023.162177>
27. Verbitskii, V., & Verbitskaya, T. I. (2012). Thermal preference and avoidance in cladoceran *Daphnia magna strauss* (crustacea, cladocera) acclimated to constant temperature. *Biology Bulletin*, 39(1), 93–98. <https://doi.org/10.1134/s1062359011060148>