

Ecotoxicology of First and New Generation PFAS in Marine Bivalves (*Cerastoderma edule*)

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PFAS are a group of extremely stable synthetic chemicals, termed Forever Chemicals, with the capacity for bioaccumulation and biomagnification. Coastal ecosystems, such as estuaries, act as reservoirs for contaminants, where biomonitoring programs are essential. Bivalves are considered excellent biomonitors because they are filter feeders and accumulate contaminants, thus reflecting ecosystem health and the risk of transfer to higher trophic levels.

Objectives

- Evaluate the toxicity of first and new generation PFAS through biochemical (biomarkers) and physiological responses (filtration and feeding rates);
- Compare the toxicological effects of the two substances, identifying which one is more toxic to bivalves;
- Establish correlations between the biochemical and physiological effects following exposure.



Tasks

