AQUATIC TOXICOLOGY

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DESCRIPTION

Aquatic Toxicology publishes original scientific papers dealing with the mechanisms of toxicity and the responses to toxic agents in aquatic environments at the community, species, tissue, cellular, subcellular and molecular levels, including aspects of uptake, metabolism and excretion of toxicants.

The aim of the journal is to increase our understanding of the impact of toxicants on aquatic organisms and ecosystems. Studies with aquatic model systems that provide fundamental mechanistic insight to toxic effects on organisms in general are also welcome. Both laboratory and field studies will be considered. The mechanistic focus includes genetic disturbances and adaptations to environmental perturbations, including the evolution of toxicant responses; biochemical, physiological and behavioural responses of organisms to toxicants; interactions of genetic and functional responses, and interactions between natural and toxicant-induced environmental changes. The bioaccumulation of contaminants is considered when studies address mechanisms influencing accumulation. Ecological investigations that address reasons, possibly also considering their genetic and physiological aspects, for toxicant-induced alterations of aquatic communities or populations are suitable.

Reports on technique development or monitoring efforts are generally not within the scope of Aquatic Toxicology, except those concerning new methodologies for mechanistic research with an example of their application. Identification of toxicants or toxicologically relevant molecules in organisms will be considered only if the identification is a part of a more comprehensive mechanistic study. Whenever possible, information of exposure should be based on measured concentrations and not nominal or assumed ones. Manuscripts reporting acute toxicity data (lethal concentration, LC-50 or lethal dose, LD-50) as a major finding are usually not considered. Similarly, since biological variability is a major feature of toxicant responses, studies which do not address this (e.g. pooled microarray or RNA sequencing data as major reported data) are normally not considered.

AUDIENCE

Environmental Toxicologists, Marine Biologists, Ecotoxicologists, Biochemical Toxicologists, Conservationists.

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Biochemical mechanisms that influence susceptibility to environmental stress, anthropogenic and natural chemicals

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3. Short Communications
4. Letters to the Editor

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