

Ecotoxicological assays employing the freshwater gastropod *Biomphalaria glabrata* (Say, 1818)

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Ecotoxicological assays establishment with native organisms sensitive to different classes of pollutants and greater ecological significance is increasingly encouraged in all countries. In this sense, gastropods are considered innovative, responsive and of extreme environmental importance. However, standardised tests with molluscs are still scarce, and more information is needed about the biology of promising organisms as bioindicators, as well as their interactions with different chemical substances are required. Among the most studied species for such analyses in Europe, stands out the freshwater gastropod *Lymnaea stagnalis* (Linnaeus, 1758), regulated by the Organization for Economic Co-operation and Development. In Latin America, some species are more representative, with wide geographic distribution and presents a large volume of data available (most of them developed in Brazil), mainly with the freshwater gastropod *Biomphalaria glabrata* (Say, 1818). In addition to the most common ecotoxicological assays, the search for techniques with lower disposal of substances generated in laboratory analysis, and that evaluate the sub-lethal risks of pollutants at low concentrations, as well as the development and reproduction analysis are relevant and suggested by environmental monitoring programs. In this work, reference substances (copper sulphate and sodium dodecyl sulphate) were used to establish the acute, chronic toxicity and sublethal effects assays with *B. glabrata*. Such compounds are proposed as a positive control for the tests and need to have their toxicity ranges defined for each of the endpoints evaluated. In this way, this work aimed to carry out the intercalibration between laboratories in different regions of Brazil and define the conditions of the test carried out in parallel by three Laboratories (Butantan Institute, Embrapa and University of Caxias do Sul) for later regulation at ABNT (Brazilian Association of Technical Standards), agency for the elaboration of standards for tests in Brazil, with the aim of adapting tests to regional Brazilian needs, with native species and greater ecological significance. The proposed protocols for developmental and toxicity assays were reproducible between laboratories. The realisation of different approaches to studies allows the establishment of permissible limits and to evaluate the impact of compounds in the ecosystems with environmental and ecological relevance for one country.

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