

Review of: "Cadmium Toxicity Induced Changes on Antioxidative Enzymes Level in Fresh Water Catfish *Channa Punctatus* (Bloch)"

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Potential competing interests: No potential competing interests to declare.

The article "Cadmium Toxicity Induced Changes on Antioxidative Enzymes Level in Fresh Water Catfish *Channa Punctatus* (Bloch)" has scientific relevance, but requires improvements in the text.

In the abstract, review the phrase "Such alteration can be act as a bioindicator for aquatic environment." It is incorrect. Fish is the bioindicator, and not enzymatic and histopathological changes.

In the abstract, also review the phrase "For in vitro assessment of cadmium effect in terms of enzymatic and nonenzymatic assay, assays have been done." This paper is based on in vivo exposure, not in vitro.

The abstract needs to present the concentrations of cadmium to which the fish were exposed and for what period of time.

You need to present the results in the Abstract (they are not presented).

The conclusion of the abstract needs to be rewritten: "This study is of academic importance and will provide valuable information regarding cadmium toxicity. At the same time, it will address the public health issue as far as consumption of the fish from contaminated water is concerned." Observe the relevance and limitations of your work. Note that this work did not evaluate the health of humans who eat contaminated fish.

At the end of the introduction, a paragraph with the objective of the work is necessary.

In the materials and methods section, the tested concentrations were presented (35 and 70 mg/L), but the exposure period was not presented (the times 30 and 60 days are only included in the results, but it needs to be included in the materials and methods and also in the summary).

It is also necessary to justify the selection of these concentrations (are they environmentally relevant?)

The number of fish used in the groups, nor the total number of organisms, is not presented in the materials and methods section. This is important information for validating the results (it needs to be statistically relevant).

Was there approval by the ethics committee for the use of animals? It is mandatory under international law to present an opinion approving the project (mention this in the article and present the protocol number).

Before collecting biological material, were the fish anesthetized?

In tables 1 and 2, concentrations are 35 and 70 mg/L and not low and high doses. Authors should note that they are working with concentrations and not doses, that is, the term dose should not appear in the article.

In figure 1, it is cropped.

Improve figure titles and also highlight the concentrations used (figures need to be self-explanatory).

Figure 6 has very low resolution.

In the discussion, the relationship between the enzymatic biomarkers and each other is shown, as they are all related to oxidative stress, and also between these and the morphological biomarkers, which were also analyzed in the liver. In the discussion, damage to the morphologies of cells in exposed animals is not mentioned.