

# Review of: "Cadmium Toxicity-Induced Changes in Antioxidative Enzyme Levels in Freshwater Catfish *Channa Punctatus* (Bloch)"

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Potential competing interests: No potential competing interests to declare.

This paper lacks clarity and needs further improvement.

## ABSTRACT

The abstract lacks clarity and detail, hindering a proper evaluation of the study's strengths and weaknesses.

Please include:

- Duration of exposure to CdCl<sub>2</sub>.
- Number of fish per treatment group.
- The main findings regarding changes in enzyme levels and lipid peroxidation.
- A mention of any statistically significant differences observed.
- While the abstract mentions acclimatization and treatment with CdCl<sub>2</sub>, details on the duration of exposure and other relevant experimental details are missing.
- Key findings and any significant observations.

## INTRODUCTION

- The introduction is overly lengthy and could benefit from conciseness.
- Please prioritise information directly related to cadmium's impact on fish and the relevance of studying antioxidant enzyme levels in this context.
- The section lacks a clear statement of the study's purpose/significance of study.
- Clearly state the research question or hypothesis at the end of the introduction.

## MATERIALS AND METHODS

- Clearly describe the number of fish used per treatment group, acclimation process of the fish used, experimental design, how the fish is exposed to cadmium, how many replicates, whether there is a control, and what the size of the tank used is.
- The justification for using 10% (w/v) homogenate buffer is not provided.
- Please provide a justification for using 9,000 rpm for 30 minutes.
- Consider mentioning any ethical considerations or approvals related to animal use.

## RESULTS

- Units for protein concentration (mg/ml) are inconsistent with the methods section, which mentions mg/protein. Ensure consistency throughout the manuscript.

## DISCUSSION

- The discussion is repetitive and lacks a clear organization. The information is presented in a descriptive manner without sufficient analysis or explanation of the implications.
- The discussion could benefit from a more focused approach, highlighting the key findings and their broader significance in the context of cadmium-induced toxicity in fish.