

Review of: "Food and Feeding of Atlantic Mudskipper *Periophthalmus Barbarus* in Ogbo-Okolo Mangrove Forest of Santa Barbara River, Bayelsa State Niger Delta, Nigeria"

Pablo Collins¹

¹ Instituto Nacional de Limnología

Potential competing interests: No potential competing interests to declare.

The manuscript "Food and Feeding of Atlantic Mudskipper *Periophthalmus barbarus* in Ogbo-Okolo Mangrove Forest of Santa Barbara River, Bayelsa State, Niger Delta, Nigeria" is interesting and has relevant information for the species and science in general. Recognition of the pathway of matter and energy from the analysis of diet is a valuable tool that can be used to identify the possible effects that environmental changes caused by man or nature could have on this species or others.

However, I do not recommend accepting the manuscript in its current condition, and I give my reasons below.

Introduction

The introduction is very long and focuses on the general biology and ecology of the group, leaving in the background the central axis of the manuscript, which is the feeding of the Atlantic Mudskipper. The objective of the work cannot be correctly appreciated.

I recommend substantially shortening the introduction by focusing on topics related to the objective, the feeding, and potential prey in the study area.

Furthermore, in the introduction, there is repeated information, unfinished sentences, and information that is not supported by references.

Format aspects: in several sites, the genus is not written in italics.

Materials and Methods

This section explains the capture method at length, although it does not refer to why they used 350 specimens. Was there any evaluation of the minimum number needed for observations?

Figure 1 does not provide relevant information for the work. I suggest indicating the sampling sites where the traps were placed. If the figure is taken from another manuscript, it must reference the original authors. The figure reference should be more self-explanatory.

The laboratory analysis is explained in detail. The size range should go to the results (top of page 6). If you can indicate

the reason why you separated them into three size groups. Is it a biological, physiological reason? Youth, young adults, adults?

Was differentiation made between males and females? Does variation in the feeding occur?

No statistical test is indicated that allows differences in the results to be observed.

Format aspects: all species and genus names must be in italics, measurement abbreviations must be correct (gram is g, centimeter is cm). Review the magazine's rules. Check the year of the bibliographic citations and correct them.

Results

The results begin with a table that is not referenced in the text, like the following one; you need in the text to reference the tables and figures. In this table, as in the following one, there is no order of the observed items. Sort them according to taxonomic criteria (algae, plants, invertebrates, vertebrates, debris and sands).

The porifera item is Porifera?

The authors indicate the dominance of one item, but this was not determined from a test. The second, third, and fourth items may have statistically similar percentages. Evaluate statistically with a test before indicating the dominance of any item.

If you had some information about the environment during sampling, it would be interesting: temperature, salinity, pH, etc.

Discussion and Conclusion

The authors begin this section by repeating the information provided in the results and later again repeat newly the information presented in the results.

It would be interesting for the authors to discuss omnivory in this section, the ability to capture live prey, and item remains, whether plant and algae items are captured directly or indirectly; if there is information on the capacity of digestive enzymes that can transform what is consumed

It would also be interesting to discuss the size of the captured items and their relation to the mouth size.

These would be some of the aspects that could add value to the discussion of the work.