

# Review of: "Estimates of Atlantic Goliath Grouper (*Epinephelus Itajara*) Bycatch Mortality in Commercial Fisheries of the Southeastern Us From 2002 to 2022"

Felipe Amezcua<sup>1</sup>

<sup>1</sup> Universidad Nacional Autónoma de México

Potential competing interests: No potential competing interests to declare.

The present work describes an interesting and relevant subject, considering the studied species. However, there are several issues that prevent me from recommending this manuscript for publication.

My first concern is that the goal and research question are not clear. The title relates to bycatch mortality, but in the introduction, other subjects are discussed, such as the causes of mortality. In fact, the first research question raised is about the contribution of the commercial fishery to the mortality of the studied species. This is out of the main context initially considered.

Besides that, in the introduction, these subjects are not properly established, and therefore, there is not a clear working hypothesis.

I believe that the scope of this work needs to be clearly established, and the authors need to adhere to it. I think the title should be changed to reflect all the analyses related to the depth of capture.

Authors also need to delve deeper into the main scope of the manuscript. A better description of the background is missing.

Another main concern is that the authors need to define what they mean by mortality. It seems to me that they are only considering the number of dead fish, but are not estimating mortality per se. This needs to be clarified.

Also, if they are only using the logbooks, how do they determine the percentage of surviving individuals at each depth?

## Minor comments

The information provided by the logbook data is necessary to understand the potential limitations of such data. Additionally, authors do not consider the possible distributions of the various species caught as bycatch. Multiplying the catch by ten is highly speculative.

The way in which the barotrauma levels were applied is also unclear. I assume that this was based solely on the depth of capture, but this needs to be clearly explained.

The equation from Table 1 and all the methods are missing in the Materials and Methods section. In general, the present

manuscript lacks a proper Materials and Methods (M&M) section, as there are many results that have not been adequately described beforehand.