# Review of: "Reef Fish in the Vitória-Trindade Seamount Chain of the Southwestern Atlantic: Biogeographical Corridors and Impact of Fishing"

Virginia Andrea García Alonso

Potential competing interests: No potential competing interests to declare.

**Overall**

This manuscript addresses important baseline information relevant for fisheries management in the Brazilian EEZ. However, there is still much to be done to improve its robustness, credibility, and overall structure. There are several inconsistencies in terms of the analyses performed, how results are described, and how the information gathered is discussed. I would suggest making several changes, including changing the title, since the terms “Biogeographical Corridors” and “Impact of Fishing” are not correctly analyzed nor discussed, and revising the English of the entire manuscript, since there are many sentences and paragraphs that should be rephrased (e.g., inconsistent verb tense, incorrect word order, wrong expressions).

**Abstract**

The abstract is lacking an initial background. There are some unnecessary details (such as the gear employed) that should be just in the methodology.

**Introduction**

The background and the importance behind the study are well explained. However, the last two paragraphs should be revised and rewritten since the last sentences starting from “The use of this information allowed the compilation of…” are more suited for the Conclusion rather than the Introduction.

**Materials and Methods**

Study area

I would suggest marking the Vitória Trindade Chain and the Abrolhos Chain in Figure 1 in different colors/line types.

Data collection

It is not clear which areas were covered by the different cruises, and, although the authors mention Figure 1, there is no indication there neither. I would suggest including points in Figure 1 with different colors and/or shapes to indicate the sampling stations/areas covered in each cruise.

Sample processing

This section is not well written; I would suggest rewriting it.

Data analysis

The second sentence makes no sense. It appears “the reinforcing the importance of the need for conservation measures in these areas” was pasted there mistakenly.

Authors fail to describe how and why they would use “The global biogeographical distribution patterns of species [that] were obtained from Froese & Pauly (2005)”. Furthermore, they never mention what software they used to carry out the different analyses.

**Results**

Species composition and biogeography

It is not clear what “Occurrences” and the number inside “()” imply in Table 1.

The outlines in Figure 2B seem to have been drawn arbitrarily, especially since there is overlap between squares and triangles. Axis values are missing in this figure as well. I would suggest removing those outlines.

There is no development on the “representative species of each distribution pattern,” which is shown in Table 2.

“Because the reduction in sizes reflects the impact of commercial fishing on the community.” This sentence is not supported by any evidence/data regarding commercial fishing in the manuscript.

**Discussion**

What about the species not included (only 34 of 125)? They should at least be in a supplementary file, and their importance should have been discussed. Also, according to Ayoub-Hannaa et al. (2013), “in marine settings, the first DCA axis has been interpreted in some cases as a function of water depth (Holland et al., 2001, Miller et al., 2001, Bonelli and Patzkowsky, 2008),” so you could include this data and have a more robust analysis.

Authors say, “The lower sizes in the Abrolhos Trindade Complex, if compared to the North and Trindade areas, indicate that there was a different impact from commercial fishing,” when they show no proof of it. There is no information regarding the fishing effort nor of a correlation between these two variables. Furthermore, this could just be a difference based on the size ranges intrinsic to the different species captured in this area, and this is never discussed nor put to the test. This asseveration should be dismissed from the manuscript, or evidence supporting this should be included.

**References**

All references should follow an equal format. Authors should choose one and format every reference accordingly.