

Review of: "Sex Ratio, Spawning Cycle, and Size at Maturity of Bluespotted Seabream (*Pagrus Caeruleostictus*, Val 1987) From the Coast of Ghana"

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Sex Ratio, Spawning Cycle, and Size at Maturity of Blue Spotted Seabream *Pagrus caeruleostictus*, Val 1987) from the Coast of Ghana

Comments

This manuscript describes a study that evaluated the sex ratio, spawning cycle, and size at maturity of blue spotted seabream (*Pagrus caeruleostictus*) from the coast of Ghana. There is no doubt that the seabream is an important fish in both commercial fisheries and marine ecosystems. I have read the manuscript with interest. The manuscript is very brief, and the language of the manuscript is understandable. However, I have the following concerns, which need to be carefully incorporated in the manuscript before it becomes acceptable for publication.

1. Introduction:

- This section is not convincing. Why was this study important when there was some existing data on a similar topic of blue spotted seabream? Include the rationale for conducting this study.
- Discuss all previous studies, then find the gap that you wanted to fill up. Include the objectives of the study clearly at the end of the introduction.

1. Materials and methods:

- It is not mentioned whether fish were sampled every month. If samples were taken monthly, then how many samples were collected per month?
- Did you collect samples from commercial vessels, or did you sample directly from the coastal water?
- Size at sexual maturity can also be confirmed using the GSI-length relationship plot (please consult the published paper: Aquaculture and Fisheries, 2021, 6, 424–431). Nowadays, the GSI-length relationship plot is widely used to calculate the size at first sexual maturity.
- Monthly GSI data needs to be statistically analyzed to understand which month is significantly different from which month. Fig. 6 of the published paper (Aquaculture and Fisheries, 2021, 6, 424–431) may help you to understand the

issue.

- Describe the characteristics of the five maturity stages in this section.

1. **Results:**

- Analyze all data in Fig. 2 using the chi-squared test to understand monthly statistical differences in sex ratio.
- Length intervals in Table 1 should be in ranges (first column).
- Include error bars with mean and statistical evidence to understand monthly statistical differences in GSI.
- It is difficult to understand why the GSI is zero in some sampling months. It indicates that data collection may have some problems, particularly biased sampling.
- Some additional data like monthly average egg diameter and histological changes of eggs is necessary to confirm the spawning seasons (see Aquaculture and Fisheries, 2021, 6, 424–431). However, these data are absent.

1. **Discussion:** The observed maturity and spawning season of the fish contradict those reported in previous studies. Therefore, it is unnecessary to conclude that revising the minimum landing size through mesh size regulation is essential for sustaining this commercial species in the coastal waters of Ghana. Instead, it is advisable to conclude that further studies incorporating monthly historical observations and oocyte diameters are needed to confirm the results observed in this study.