

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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Potential competing interests: No potential competing interests to declare.

General

The paper aims to fill the gap in Ghana's reproductive biology of *Pagrus caeruleostictus*. Despite highlighting the importance of fishery and the paper's title, the authors should have mentioned the species in the introduction. It is crucial to give antecedents about the species (size, longevity, maturity, reproductive strategy) since most species belonging to the Sparidae family tended to have smaller body sizes, more widespread distributions, and shorter life spans. Still, some have unique traits worldwide (for example, Comeros-Raynal et al. 2026: <http://dx.doi.org/10.1016/j.biocon.2016.08.027>).

Most of the analyses are descriptive, but some significant results, such as the maturity length (at 50% of maturity), lack statistical inference.; i.e.,

a) Gonadosomatic could be biased, and allometry must be tested (Somarakis et al., 2004; Flores et al., 2014).

b) The authors obtain length at maturity empirically directly from the resulting observation, but it needs to be obtained from the statistically fitted logistical model to the data, i.e., $L_{50} = -b/a$. What is the intention behind mentioning this model, after all?

Specific

1) Replace "(Botwe et al 2018)" by "(Botwe et al. 2018)"

2) Replace "The study focused on three offshore stations, with coordinates 05°40'32.91"N, 000°09'57.94"E, 05°35'32.78"N, 000°04'12.38"E and 05°34'54.59"N,

000°02'31.64"W as shown in Figure 1." by "The samples come from three stations in the Gulf of Ghinea along the coast of Greater Accra Region, namely Vernon Bank, Disposal Site, offshore Sakumono (Figure 1)."

3) Replace "...and maturity stages were determined." with "the gonads were collected for determining macroscopic maturity stages (see below)."

4) The sex ratio is males over females or females over males. The sex proportion is females over total specimens or males over total specimens.

5) GSI could be biased and must be based on isometry (Somarakis et al.

2004 <https://link.springer.com/article/10.1007/s00227-004-1419-2> ; Flores et al. 2014

<https://doi.org/10.1093/icesjms/fsu155>).

6) Size at first maturity. Please use "Size at maturity".

7) Logistic function. Please mention explicitly the formula for $L_{50} = -b/a$ and the statistical estimation for the parameters a and b . Was it through non-linear least square or maximum likelihood? I suggest a least-square fit to the data by using the data visually read from Figure 7 as an example. They are in the supplement file attached to this review.