The manuscript (#105231) by Parenrengi et al. addresses the isolation of a serotonin-like compound that appears to stimulate reproductive development when injected in *P monodon*.

The manuscript has the potential for more impactful future research. However, in its current form lacks the quality to be published in PeerJ.

Please consider the following observations.

General:

The manuscript needs editing and proofreading to better convey its message.

Introduction:

Authors stated in lines 85-88 that this work aimed to "develop alternatives for commercial tiger shrimp reproduction". I believe authors refer to the abolishment of ablation. However, the methods indicate that ablation was still performed. Authors need to revise the manuscript and set the aims of the study in consistent way with the methods.

Material and methods:

Line103. Please fix tense in sentence: "After being cleaned of dirt and sticky soil, banana humps are chopped into little". It should read: "banana humps were chopped"

Lines 121-124. Please rewrite sentence to increase clarity.

In line 140, Authors said: After four-time injections, an eyestalk from females was ablated"

I consider that the improved reproductive development observed was the synergistic effect of eyestalk ablation and serotonin-like injection. I think this should be considered in the title of the revised manuscript. Now, if the goal is eradicating eyestalk ablation, the manuscript needs other treatments including those where animals are injected and remain non-ablated.

Authors need to provide more details in how vitellogenin was measured.

Results

Variation in Figure 3 (molting) appears very large for SE. Was this analysis made on female and male combined? If yes, does plotting female and male independently shows different trends? Is there any sex-specific effect of the treatment?

Line 236. The authors assessed the reproductive performance using only vitellogenin. However, in line 236-238 the authors stated: “The successful isolation of the genes was demonstrated by the clear and consistent band of Beta-actin gene expression, appearing at approximately 400 bp, in both female and male tiger shrimp”.

The authors have not explained what B-actin has to do with reproductive performance. Did authors miss details in materials and methods. No mention of PCR workflow exists in M&M.

The legend of Figure 4 makes references to molting outcomes, instead of PCR results.

Tables were not included in the manuscript nor found in the manuscript dashboard.

I will be happy to review this manuscript again when all material is provided.