

## Review Form 1.7

Journal Name:	<b>Annual Research &amp; Review in Biology</b>
Manuscript Number:	<b>Ms_ARRB_96217</b>
Title of the Manuscript:	<b>ANALYSIS OF TOTAL ORGANIC MATTER, TOTAL NITROGEN, AND TOTAL PHOSPHORUS IN THE ESTUARY WATERS OF MAROS AS A SOURCE OF BRACKISH WATER FOR FISH PONDS AQUACULTURE</b>
Type of the Article	

### **General guideline for Peer Review process:**

This journal's peer review policy states that **NO** manuscript should be rejected only on the basis of '**lac k of N o velt y**', provided the manuscript is scientifically robust and technically sound. To know the complete guideline for Peer Review process, reviewers are requested to visit this link:

(<https://www.journalarrb.com/index.php/ARRB/editorial-policy> )

[Review Form 1.7](#)

**PART 1: Review Comments**

	Reviewer's comment	Author's comment (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<p><b>Compulsory</b> REVISION comments</p> <ol style="list-style-type: none"> <li><b>Is the manuscript important for scientific community?</b> (Please write few sentences on this manuscript)</li> <li><b>Is the title of the article suitable?</b> (If not please suggest an alternative title)</li> <li><b>Is the abstract of the article comprehensive?</b></li> <li><b>Are subsections and structure of the manuscript appropriate?</b></li> <li><b>Do you think the manuscript is scientifically correct?</b></li> <li><b>Are the references sufficient and recent? If you have suggestion of additional references, please mention in the review form.</b></li> </ol> <p><u>(Apart from above mentioned 6 points, reviewers are free to provide additional suggestions/comments)</u></p>	<p>L = Line</p> <p><b>Abstract</b></p> <p>L11: " At the mouth of the river" -&gt; Which river?</p> <p>L11-13: " At the mouth of the river, there is an estuary ecosystem, which is a mixing place between fresh water and seawater that transports organic matter, minerals, and sediment from upstream to the estuary and from the sea containing minerals, so that estuary waters are more fertile than other areas."-&gt; confused, too long sentence. Avoid sentences longer than 2 lines.</p> <p>L14: repetition of the word "grounds" -&gt; rewrite</p> <p>L21: "show that" -&gt; showed that</p> <p>L22: "The results of water quality analysis in estuaries show that salinity, organic matter, ammonia, nitrite and nitrate, and phosphate exceed the standard threshold for water quality standards for pond cultivation. Thus, the waters of the Maros estuary are not suitable for aquaculture, especially" -&gt; for all samples? for the 5 stations (A, B, C, D and E)? Missing full stop in last sentence.</p> <p><b>Introduction</b></p> <p>L25: "year. which is divided" -&gt; full stop or comma?</p> <p>L43-44: "Lacerda [7] stated that disposal of untreated waste; in the form of solid waste and wastewater, urban runoff, livestock, and use of fertilizers and other chemicals in agriculture" -&gt; incomplete sentence. What was the result of this author?</p> <p><b>Material and methods</b></p> <p>L62-63: specify the country</p> <p>L64-65: total phosphorus analysis is missing. Confused. Check and rewrite.</p> <p>L66: briefly describe the experimental methodology for laboratory analysis (TOTAL ORGANIC MATTER, TOTAL NITROGEN, AND TOTAL PHOSPHORUS)</p> <p>L76-77: Again -&gt; total phosphorus analysis is missing. Confused.</p>	

Review Form 1.7

	<p>L88-99: Confused. I didn't understand.</p> <p>L83: "2.3. Determination of Observation Stations" -&gt; missing a map showing observation stations A, B, C, D and E.</p> <p>L111: Why italics?</p> <p>L115: "less than a meter. only at the" -&gt; full stop?</p> <p>L121-122: "Other supporting data measured include temperature, dissolved oxygen, ammonia, pH, and salinity" -&gt; if there are "other supporting data " why does the title just say " TOTAL ORGANIC MATTER, TOTAL NITROGEN, AND TOTAL PHOSPHORUS "?</p> <p>L127: "presented in tables and graphs." -&gt; the document has only 2 tables, no graphs. L130-131: "To assess the feasibility of the estuary of Maros as a source of brackish water for fish pond aquaculture." -&gt; incomplete sentence.</p> <p><b>Results and discussion:</b></p> <p>L136: "Water from various sources..." -&gt; this sentence is not suitable for the beginning of the results section. Present the results first and then discuss.</p> <p>L138: "results of the analysis of the quality of water entering the Estuary can be 138 seen in Table 1." and L142: "The results of the analysis of the One-Way ANOVA and 142 Tukey Test, the difference in water quality at some observation stations can be seen in Table 1." -&gt; Confused. Present the results of Table 1 only once.</p> <p>Table 1: Table 1: What are the reference values? Maximum value allowed? Standard value? Is there any national legislation establishing limits for these pollutants? -&gt; missing a column with the maximum allowed value of each parameter. What does the superscript "a", "b" and "c" mean? Footnote?</p> <p>L154: "The highest TOM concentration was found in river water, which ranged from 66.28 - 94.36 mg/l," -&gt; this result is not in accordance with Table 1 (Station D River Water = 79.78±0.04 ).</p> <p>L155: "estuary water ranged from 59.15 – 82.65 mg/l." -&gt; this result is not in accordance with Table 1 (Estuary E Station = 71.43±0.04).</p> <p>L156: "pond wastewater which ranged from 38 - 45 mg/l" -&gt; this result is not in accordance with Table 1 (Station B Pond Wastewater = 12.36±0.04).</p> <p>L157: "calculated F value of 35.12 &gt; F table 1 at a level of 0.01," -&gt; I didn't understand.</p>	
--	---	--

Review Form 1.7

	<p>Check.</p> <p>L162: "TOM of river water was not significantly different from settlement and estuary wastewater." -&gt; What does "settlement" mean ? Compared to which sample?</p> <p>L172: "farming business. intensive" -&gt; full stop?</p> <p>L174: "people/km2" -&gt; superscript 2</p> <p>L184-185: "calculated the F value of 15.06 &gt; from the F table 1 at the 0.01 level" -&gt; I didn't understand.</p> <p>L185: "level. means that" -&gt; Full stop? L185: "means that Ho is rejected" -&gt; What does "Ho" mean?</p> <p>L189: "residential wastewater." -&gt; "Residential" or "Domestic?" According to Table 1 is "domestic". Do not change the words.</p> <p>L191: Again "residential"</p> <p>L192: "is because" -&gt; was because</p> <p>L197: "Export" -&gt; What does it mean? the section title is vague. Should it be "Total Phosphorus" ? Confused.</p> <p>L204: "sea. [15] states" -&gt; Rewrite.</p> <p>L205: "not more than 0.1 ppm," -&gt; Table 1 shows the results in mg/l. Table 1 shows the results in mg/l. What is the conversion of ppm to mg/l?</p> <p>L208-209: "a calculated F value of 17.69 &gt; table F value of 4.5 208 levels of 0.01 was obtained, meaning Ho was rejected," -&gt; I didn't understand. Check.</p> <p>L219: Why italics?</p> <p>L222: "<b>3.4. Evaluation and feasibility of the estuary water of Maros as a source of brackish Water for fish pond aquaculture</b>" -&gt; what are the maximum values allowed for the contaminants shown in Table 1? What are the limits established by national or international environmental legislation? Without these parameters it is not possible to conclude.</p> <p>L237-238: "Indonesia Ministry of Environment and Forestry Regulation, KEPMEN. 02/KLH/1988, 237 which is &lt; 50 mg/l." -&gt; Indonesia Ministry of Environment and Forestry Regulation, KEPMEN. 02/KLH/1988, which is &lt; 50 mg/l. L242:</p> <p>Format "H 2 S," -&gt; H2S</p>	
--	--	--

Review Form 1.7

	<p>Table 2: "Ph" -&gt; pH What does "Anonymous 2004" mean? It is not appropriate. "TOM ( mg/l)" and "Phosphate ( mg / l )" different from others (mg/l) "Ranged Values" -&gt; shouldn't these values be specified for each station (A, B, C, D or E)? "Standards For Aquaculture " -&gt; Reference? environmental legislation? Table 2 is in section 3.4.1 but is not cited in this section. The Table should be cited and explained in the most appropriate section.</p> <p>L266: "In estuarial" -&gt; in</p> <p>L267: "According to [17]. The main" -&gt; Full stop?</p> <p>L277-281: Table 2: "NO2 (mg/l) 1,35 – 2,65" -&gt; the authors did not compare the value in Table 2 with the recommended limit.</p> <p>L283-287: "nitrate levels are above the standards" -&gt; what is the standard? Value? L296: "the water. in this study" -&gt; full stop?</p> <p>Table 2: "DO" -&gt; Specify int the text that "DO" is "Dissolved Oxygen" or use "Dissolved Oxygen" in Table 2.</p> <p>L297: "The ideal concentration should be between 10 and 30 parts per thousand" -&gt; Reference? the authors wrote "ppt" and then "parts per thousand", it's not the same thing. ppm = parts per million ppt = parts per trillion</p> <p>L299-300: "This level is suitable for the survival and growth of cultivated commodities." -&gt; What is the suitable level of pH? what is the standard? Value? Reference?</p> <p>L302-304: put the verbs in the past. Why did the authors specify the result for the months of october and november in the case of salinity analyses? This separation in months was not made for the other analyses.</p> <p>L317: "namely 0.5 mg/l. (KEPMEN No. 02/KLH/1988 [18]. This" -&gt; format, correct. L322: "shortage. oxygen" -&gt; full stop?</p> <p><b>Conclusion</b></p> <p>L328-329: "The water quality of the estuary water of Maros exceeds the water quality threshold for fish pond aquaculture; TOM (59.15 – 329 82.65 mg/l), NH3 (0.21-0.29 mg/l), salinity (26-38 ppt), and phosphates (1.86 -2.36 mg/l)." -&gt; What is the "water quality threshold" for each parameter? Format NH3 -&gt; NH3</p>	
--	---	--

**Review Form 1.7**

	L336: Full stop missing  And the conclusion about the parameters in table 2?  <b>References</b> Check the references.	
<b>Minor</b> REVISION comments		
1. Is language/English quality of the article suitable for scholarly communications?		
<b>Optional/General</b> comments		

**PART 2:**

	<b>Reviewer's comment</b>	<b>Author's comment</b> (if agreed with reviewer, correct the manuscript and highlight that part in the manuscript. It is mandatory that authors should write his/her feedback here)
<b>Are there ethical issues in this manuscript?</b>	<i>(If yes, Kindly please write down the ethical issues here in details)</i>	

**Reviewer Details:**

Name:	<b>Thiago Simonato Mozer</b>
Department, University & Country	<b>Universidade Federal Fluminense, Brazil</b>