

July 8, 2021

Foods

Dear Editor:

We wish to re-submit the manuscript titled “*Hizikia fusiformis*: pharmacological and nutritional properties.”

We thank you and the reviewers for your thoughtful suggestions and insights. The manuscript has benefited from these insightful suggestions. I look forward to working with you and the reviewers to move this manuscript closer to publication in the *Foods*.

The manuscript has been rechecked and the necessary changes have been made in accordance with the reviewers' suggestions. The responses to all comments have been prepared and attached herewith/given below.

Thank you for your consideration. I look forward to hearing from you.

Sincerely,

Maria Dyah Nur Meinita

E-mail: maria.meinita@unsoed.ac.id (M.D.N.M)

Reviewer 1

Comments and Suggestions for Authors

Hello Authors,

The manuscript reviews nutritional and pharmacological properties of the brown seaweed. It has covered analytical findings for nutritional and bioactive compounds. The pharmacological properties section covers major metabolic and inflammatory diseases. Brown seaweed's various bioactive compounds have shown positive effects at cellular level treating the listed diseases. This paper will definitely increase interest in cultivation, processing and commercializing of the brown seaweed. Please see some of my comments below,

Line 48 \$ sign

Thank you for your suggestion. We have revised and added the \$ sign.

Figure 2. Graph - Pharmacological properties (last bar) spelling error

Thank you for your correction. We have revised "propertis" to "properties" in the last bar.

Line 134 repeat statement (119-120)

Thank you for your correction. We have modified the sentence in line 119. Please check the modified sentence in lines 120-122 and 136

Line 353- reference format not consistent

Thank you for your correction. We have revised the citations throughout the paper.

Fig 6. Line 362- phlototannins (spelling error)

Thank you for your correction. We have revised the spelling.

Section 3.2.1. Table 5. Include quantitative assessment of antibacterial activity rather than 'High antibacterial activity'

Thank you for your correction. We have revised the wording

Line 583- how can reduced diet and water intake can improve liver function?

Thank you for your question. We have revised the sentence.

Line 586- Alternatives- spelling error

Thank you for your correction. We have revised the spelling.

**Table 2, line 607, 611, 617- mention Nitric Oxide then use NO
Same use fullform of TNF (first) then use abbreviations.**

Thank you for your correction. We have ensured that the full term is used at the first mention of the term in the main text as well as in each table.

line 642- Use full forms of ALP & BMP-2

Thank you for your correction. We have included the full terms.

line 681- Spelling error Nutraceutical

Thank you for your correction. We have revised the spelling.

Reviewer 2

Comments and Suggestions for Authors

There are major concerns:

The review is comprehensive, thereby I suggest to remove "mini-review" from the title of the manuscript

Thank you for your suggestion. We have removed "mini-review" from the title

- 1. The authors should check the English grammar and language style. I suggest that the authors may correct the English by a native speaker. The aim is correcting the English grammar and also to improve quality of the manuscript.**

Thank you for your suggestion. The revised manuscript has been checked by an English proofreader (Editage)

- 2. In the Introduction the authors only described that the total phenolics have great antioxidant and anti-inflammatory potentials and they bring a lot of benefits for the people who make their use in diet. However, the authors presented no information**

about the chemical structure of these compounds, explaining why these compounds have these positive properties. The authors should improve the quality of the Introduction citing recent publications that showed relevant results about the "phenolics", "antioxidant activities" and "health potential" in food technology era, the complete references as follows:

DOI: 10.1016/j.foodchem.2020.126646

DOI: 10.3390/antiox8070203

DOI: 10.1155/2017/8579387

IFRJ 24(5): 1897-1902

Thank you for your suggestion. We have added some sentences and cited some recent references regarding "phenolics", "antioxidant activities," and "health potential" in the food technology era.

3. **For consistency, I recommend the Authors to use either "dw" or "DW" throughout the manuscript.**

Thank you for your correction. We have revised all instances of dw to DW.

4. **Table 2 is confusing. According to its current form it seems that Iron (Fe) is the most abundant mineral while in the text you have stated calcium (Ca). Needs to be clarified. Also, delete "nd: not determined" as footnote since you have presented all the values of mineral elements.**

Thank you for your suggestion.

- *Based on how much a mineral is needed in the diet and how much they are available in the human body, minerals are classified as major minerals (Ca, Mg, K, Na and P) and trace elements (Fe, Cu, Mn and Zn). Among the major minerals, Ca is the most abundant, and among the trace minerals, Fe is the most abundant in *Hizikia fusiformis*. We have revised the table and relevant sentences to reflect this meaning.*
- *We have deleted "nd: not determined"*

5. **Line 247: Kindly follow the journal reference style (number in square bracket). Rewrite as "Park et al. [61]" instead of "Park et al. (2019)".**

Thank you for your suggestion. We have revised all in-text citations based on your suggestion.

- 6. Lines 271, 285, 303, 304, 328, 341, 353, 379, 404, 452, 456, 492, 517, 580, 583, 609, 619, 636, 638, and 664: see comment 5.**

Thank you for your correction. We have revised all in-text citations based on your suggestion

- 7. Line 304: Elaborate "PGE" as its first mention.**

Thank you for your correction. We have made this correction

- 8. Tables 5, 6, 7, 8, 9, 10, 11, 12, 13 and 14: Change "In vitro" to "*In vitro*" and "in vivo" to "*in vivo*". This also applies to throughout the text.**

Thank you for your correction. We have revised all instances according to your suggestion.

- 9. Line 574: Include suitable reference for the statement.**

Thank you for your correction. We have included the reference.

- 10. Lines 580-583: These statements are completely opposite to the findings of Seong et al. [65]. Kindly check the article again for clarification. I presume that, in the study of Seong et al. [65], they stated the stimulation of insulin signaling pathway in insulin-resistant HepG2 cells by inhibiting PTP1B.**

Thank you for your correction. We have revised the sentences according to your suggestion.