

Review of: "Peat Mass Change and Water Level Influence on Regenerated Melaleuca Forest After a Fire in U Minh Thuong National Park, Vietnam"

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Potential competing interests: No potential competing interests to declare.

The manuscript handles changes in different layers of peat in terms of volume, amount, carbon content or selected chemical properties in U Minh Thuong National Park, Vietnam. The outputs give useful information especially for park managers and researchers. However, English quality should be improved. There are many issues that should be addressed before publishing. Some suggestions/corrections were given as follows to increase the quality of the manuscript:

- Page 2, line 63: It is better to avoid words such as “we” or “our”.
- Page 2, lines 71-74: A citation is needed. Which study?
- Page 2, lines 75-79: It seems the given results are from another study. If those statements are from the results of this study, it is better to move this part to conclusion section.
- Page 2, line-s 80-84: Introduction section should be developed. The background, previously conducted studies and their limitations should be given.
- Page 2, lines 88-90: This sentence is not clear. It should be rehandled.
- Page 2, line 94: Where forest growth survey results will be used? An explanation is needed here.
- Page 2, lines 94-96: This sentence should be rehandled.
- Page 2, line 99: The value “9 2” should be revised to “92”.
- Page 3, line 102: Diameter is obtained by dividing circumference to 3,1416.
- Page 3, line 104: The term “Mearsure” should be changed to “measure”.
- Page 3, lines 101-106: This section should be written in a more formal style
- Page 3, line 110: The term “D1.3” should be changed to “D1.3 * D1.3”.
- Page 3, lines 113-117: Those abbreviations were not mentioned in the above given formulas. It is better to give them in its first use.
- Page 3, lines 119-120: The sentence should be rehandled.
- Page 3, line 126 (title of figure 1): The study area is “U Minh Thuong National Park” in Vietnam.
- Page 4, lines 127-129: The sentence is incomplete, please revise it.
- Page 4, lines 132-133: On page 2, is stated as “Southern Institute of Forestry Science.” Please provide full correct name and avoid the duplication.

- Page 4, line 154: Please provide full name of content 2 here, in brief.
- Page 4, lines 156-158: It is better to use “5” instead of “05” throughout the manuscript.
- Page 4, lines 164-165: “All indications.....”. This information was given before.
- Page 4, line 172: The term “Correlation” should start with lowercase letters “correlation”.
- Page 5, line 177: “environment indicators”. What are the environment indicators?
- Page 5, line 179: Why didn't you use Pearson correlation?
- Page 5, line 185: Why citing to this reference is needed?
- Page 5, Table 1: How the thickness of the measured peats was disseminated to all study area using sample plot values? Clarification is needed.
- Page 5, Figure 2: The information given in figure 2 has already been given in Table 1. It is better to remove it.
- Page 5, Figure 2: The title of the figure mentions on the change. The figure is not related to change.
- Page 6, line 215: The reference of “SubFIPI, 2005” was not mentioned.
- Page 6, lines 220-222: The information was given in Table 2, not in Figure 5.
- Page 6, lines 23-224: Those statements are refer to general information. It is better to give in the introduction section.
- Page 7, Figure 5: The information given in figure 5 has already been given in Table 1. It is better to remove it.
- Page 7, Table 2: “Area (m2)” should be changed to “Area (ha)”.
- Page 7, Table 2: Average density is given as “Mg/m2”, however, when peat content (ton) were divided to total area (ha) different values are found.
- Page 7, Table 2: Thresholds given in the “Thickness of peat layer (cm)” column is not consistent with Table 1. For instance, there is an area of 979 having a peat thickness between 70-100, however the same area was given between 90-100 cm in Table 1.
- Page 7, lines 249-250: This information has already been given before.
- Page 7, lines 252-254: How a reference published in 2014 can be used to give information for 2022?
- Page 7-8, lines 256-273: Those part mentioned about a previously conducted study. You can use it for discussion, however, it is given like the result of this study.
- Page 8, line 267: The given value “1,085,493” is volume or content? The given value is different from given in Table 3.
- Page 8, Figure 6: The information given in figure 6 has already been given in Table 1. It is better to remove it.
- Page 8, Table 3: Thresholds given in the “Thickness of peat layer (cm)” are different from your statements given in the previous page (0-20, 20-50, 50-100, >100).
- Page 8, line 277: It is better to revise the title.
- Page 8, line 286: The number of “2” and “5” in the term of “P2O5” should be written in subscripts.
- Page 8, line 286: It is better to explain the abbreviation in its first use.
- Page 9, line 295: The number of “2” and “5” in the term of “P2O5” should be written in subscripts.
- Page 9, line 303: The letter of “p” in “p-values” should be written in capital letters (P).
- Page 9, lines 318-321: Those information is more appropriate for “conclusion” section.
- Page 9, line 324: Do you mean “peat water” in the statement of “....of peat in.....” ?
- Page 9, line 325: Do you mean “peat water” in the statement of “....of peat between.....” ?

- Page 10, line 330: Do you mean “peat’s water” in the statement of “....the peat’s acidity.....” ?
- Page 10, lines 337-340: Those information is more appropriate for “conclusion” section.
- Page 10, table 6: The unit given as “cm” under the column of “Peat thickness” should be given only in the first row as other tables.
- Page 10, line 343: Do you mean “peat water” in the statement of “....of peat also.....” ?
- Page 10, line 344: The letter of “p” in “p<0.001” should be written in capital letters (P).
- Page 10, line 348: The term of “2+” should be written in subscripts.
- Page 10, table 7: The unit given as “cm” under the column of “Peat thickness” should be given only in the first row as other tables.
- Page 10, line 355: The term of “diametr” should be changed to “diameter”.
- Page 11, table 8: It is better to explain the abbreviations of “Hvn” and “Hdc” in its first use.
- Page 11, Figure 7: The information given in figure 7 has already been given in Table 8. It is better to remove it.
- Page 11, Figure 8: The information given in figure 8 has already been given in Table 8. It is better to remove it.
- Page 11, line 380: The definition of the “height growth under branches” should be given. Is it “total height” minus “crown height”? And is it a parameter/indicator for productivity?
- Page 12, Figure 9: The information given in figure 9 has already been given in Table 8. It is better to remove it.
- Page 12, Figure 10: The information given in figure 10 has already been given in Table 8. It is better to remove it.
- Page 12, lines 412-416: The information given here has already been given in the previous paragraph. It can be removed from the text.
- Page 12, lines 420-421: However, the number of trees generally decreases when the site quality increases. What is the reason for the opposite findings?
- Page 13, lines 438: The term “treetops” should be changed to “tree tops”.
- Page 13, lines 447: The term/sign of “R” should be changed to “r”.
- Page 14, lines 458: The term of “acid humic” should be changed to “SQ²⁻” ? Could you please check it?
- Page 14, lines 458-459: However, R values indicating strong correlation considering table 10.
- Page 15, line 497: The term “pH” should be replaced with “K₂O”. Could you please check it? Here, the outputs are related to “K₂O”.
- Page 15, line 500: The term “pH” should be replaced with “K₂O”. Here, the outputs are related to “K₂O”.
- Page 16, line 507: The term “pH” should be replaced with “Fe²⁺”. Here, the outputs are related to “Fe²⁺”.
- Page 16, line 518: The results from this study should be compared with previously conducted studies.
- Page 16, Conclusion section: Prominent results should be given.
- Page 17, line 576: Publisher, number of pages etc. information should be given in the reference of “Tran and Thai (2014)”.