Dear Dr. Radak,

Thank you for sending us the reviewer’s comments on the manuscript ID - 1375 “Fruška gora mountainous environments – assessing the impact of geological setting and land use on soil properties”. We have accepted all comments and changed the manuscript accordingly.

Reviewer A did not have any comments and suggested accepting the manuscript in the present form. Reviewer B had minor comments and we accepted all of them as it is indicated in the following text. Our answers are marked with yellow color.

Sincerely yours,

Gordana Gajica

Answers to reviewer comments follow.

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Reviewer A:

Does the manuscript contain enough significant original material?:

 yes

Is the manuscript clearly and concisely written?:

 yes

Are the conclusions adequately supported by the data?:

 yes

Does the manuscript give appropriate credit to related recent publications?:

 yes

Are the references appropriate and free of important omissions?:

 yes

Is the length of the manuscript appropriate?:

 yes

Does the manuscript need condensation or extension?:

 no

Is the quality of the figures (including legends and axes labelling)

satisfactory?:

 yes

Are the nomenclature and units in accordance with SI?:

 yes

Are the English grammar and syntax satisfactory?:

 yes

ADDITIONAL COMMENTS

Please indicate the page numbers for suggested corrections.

Please, be as specific as possible if major correction by the author(s) is recommended! :

 N/A

REPORT:

 The Manuscript ID - 1375 “Fruška gora mountainous environments – assessing the imapct of geological setting and land use on soil properties” presents the results of soil properties (pH, redox potential – Eh, electrical conductivitz – EC, total dissolved solids – TDS, concentrations of available cations: Ca, Mg, K, Na, contents of organic carbon – Corg and nitrogen – N) in two type of rocks (serpentinite and

marals) and two types of their land uses (meadow and forest) on Fruška gora mountain. Authors gave assessment of sediment quality parameters:

geoaccumulation index (Igeo), Enrichment Factor (EF), Sediment Pollution Index (SPI) and Toxicity Index (TI) that are important for environmental risk assessment.

It is an interesting and novel investigation about characteristics of various types of rocks and various types of land uses in order to predict potential of land degradation caused by changes in land uses. This is important for future land management in similar soil formations.

The Manuscript is well written and results are clear and good organized.

Abstract and Conclusion are suitably done.

The results that authors obtain and present in this Manuscript are novel for this area and useful for future investigations in others regions and for comparison.

I recommend this MS for publication in presented form.

In my opinion, this manuscript should:

 be published as is

If manuscript is suitable for publishing, referees recommendation :

 Original scientific paper

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Reviewer B:

Does the manuscript contain enough significant original material?:

 yes

Is the manuscript clearly and concisely written?:

 no

Are the conclusions adequately supported by the data?:

 yes

Does the manuscript give appropriate credit to related recent publications?:

 yes

Are the references appropriate and free of important omissions?:

 yes

Is the length of the manuscript appropriate?:

 yes

Does the manuscript need condensation or extension?:

 yes

Is the quality of the figures (including legends and axes labelling)

satisfactory?:

 yes

Are the nomenclature and units in accordance with SI?:

 yes

Are the English grammar and syntax satisfactory?:

 yes

ADDITIONAL COMMENTS

Please indicate the page numbers for suggested corrections.

Please, be as specific as possible if major correction by the author(s) is recommended! :

 This paper dealing with interesting topic and could be considered for publication in the Journal of Serbian Chemical Society after revision.

Please find below some comments which could improve this manuscript:

In the part Experimental from the page 88-128 information about Fruska gora mountain must be removed to the Introduction part. This information belongs to this part of paper with some references.

Paragraph about Fruska Gora is moved to the Introduction and references were added.

Line 129: For the purpose of this study- must be replaced this sentence is used in the paper Line 21.

The sentences is deleted

Part Results and discussion

Line 173-177 This part also does not belong here. This could be used for explanation of obtained results which are similar with previously described in the literature, in the part Results and discussion in other cases this does not belongs to the beginning of this part.

The paragraph is moved to Introduction

Line 203 Anova (and LSD post-hoc test) Part in the brackets is first time mentioned here and it is not explained earlier. What is this? It is also mention second time below this part in the part Conclusions.

Changed to Analyses of Variance (two-way ANOVA) and Least Square Difference (LSD post-hoc test)

In the part of Conclusions

Lines 285-288: these sentences are same like in the part of manuscript which is immediately above this text and must be rewritten.

The paragraph has been rewritten.

This study has also shown interesting difference between soil properties depending on the slope position. Soils sampled from top of the hillslope on all four tested hillslopes (forest and meadow serpentinite and forest and meadow marl) have different characteristics than soils at the middle and at the bottom of the slope.

Now the paragraph is:

This study reveals that slope position influences soil properties. Soils at the top of the all tested hillslopes have statistically significant different characteristics than soils at the middle or at the bottom of the slope.

In my opinion, this manuscript should:

 be published after minor revision without additional review

If manuscript is suitable for publishing, referees recommendation :

 Original scientific paper