

Dear miss Milica R. Nićetin:

Thank you for the interest to publish your paper in the J. Serb. Chem. Soc..

Your manuscript entitled: "THE POSSIBILITY TO INCREASE ANTIOXIDANT ACTIVITY OF CELERY ROOT DURING OSMOTIC TREATMENT" has been evaluated by referees, the reports of which are enclosed.

Please consider the suggested changes and upload (by logging in with your registered username and password to the JSCS OnLine article processing service <http://www.shd-pub.org.rs>) within 60 days, after this time Manuscript will be considered as withdrawn (detailed instructions are available at <http://www.shd-pub.org.rs/index.php/JSCS/about/submissions#authorGuidelines>, heading MANUSCRIPT REVISION):

1. The corrected manuscript (as .doc file in "REVIEW" Section - Editor Decision - Upload author version option);
2. Your comments on the changes you made in the text as .doc or .pdf file in "add a supplementary file" option under "SUMMARY" Section of your submission (in the Title field please write "Response to Reviewers")
3. corrected Figure(s), Schemes..., if any (also as supplementary file(s) - Title: Corrected Fig.xxx, Type: Illustration(s)....).

Please note that all files supplied in revision have to be presented to reviewers - hence, please mark "Present file to reviewers" during the upload of supplementary files.

The filling-in of the metadata is obligatory (please correct it in "SUMMARY" Section, option EDIT METADATA, if necessary)

Upon completion, send the Notify Editor email to the Sub-editor ("REVIEW" Section - Editor Decision option)

Dr. Olgica Nedić

INEP, Institute for the Application of Nuclear Energy, Zemun Belgrade,  
[jscs-bh@shd.org.rs](mailto:jscs-bh@shd.org.rs)

JSCS : : Biochemistry & Biotechnology Sub Editor

Dear Editor,

The authors would like to thank the Editor and Reviewers for a quick and professional review. It is obvious that Reviewers are experts in this field. All Reviewers remarks are accepted and the paper is changed according to Reviewer's comments. The authors believe that the changed paper would satisfy Reviewers criteria and that it is going to be interesting enough for publishing in *Journal of Serbian Chemical Society*.

We decided to revise the manuscript according to reviewer's remarks, highlighting the changes directly on the revised manuscript.

Best regards,

Milica Nićetin

**Reviewer G:**

Reviewer's suggestions are fully accepted. All changes were highlighted directly on the revised manuscript. The authors believe that the corrected paper would satisfy Reviewer's criteria and that it is going to be interesting enough for publishing in *Journal of Serbian Chemical Society*. Also, paper is thoroughly checked for grammatical and writing errors by a native English speaker.

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! :

Page 4:

the manuscripts lacks information on celery root samples subjected to osmotic treatment.

Please provide information on:

- source of plant material
- celery variety
- size of root samples subjected to osmotic treatment (were they cut or used as whole?)
- post harvest treatment of root samples (storage temperature etc.)

**AUTHORS:** A few sentences regarding Reviewer's comments were added to the text:

Celery root (*Apium graveolens* L. var. *rapaceum*) was purchased on a local market in Novi Sad, Serbia, shortly before the experiment. Prior the acquisition, the samples were stored in the sales gondola at room temperature. Celery root samples were cut into cubes (1x1x1 cm)

using kitchen knife. After preparation samples were measured and immersed in hypertonic solutions. Sample to solution ratio was 1:20 which can be considered high enough to neglect the influence of solution concentration changes during the process.

Page 8:

Please provide information on the preparation of extract which was used for antioxidant activity studies

**AUTHORS:** Some clarifications regarding the preparation of extract for antioxidant study was added to the text. A few sentences were added according to Reviewer's comment:

*Preparation of celery root extracts*

To prepare the extracts for antioxidant analysis, fresh and osmotically dehydrated celery root samples dried at 50°C in a heat chamber (Instrumentaria Sutjeska, Croatia) until constant weight. Dried samples were finally grounded into a powder, using Universal laboratory mill type WZ-1 (Spolem, ZBPP, Bydgoszcz, Poland). 2g of powder for each sample, were extracted with 200 ml of boiled water. After extraction, at room temperature for 10 min, obtained aqueous extracts were filtered using Whatmann No. 1 filter paper. The extracts were stored in a refrigerator (4 °C) until further use.

**REPORT:**

The presented paper contains elements of novelty and is within the journal's scope. I have no remarks except that some of important information is missing (see above)

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

## **Reviewer L**

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?:

no

Are the nomenclature and units in accordance with SI?:

yes

Are the English grammar and syntax satisfactory?:

no

**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 manuscript is talking about the effects of two osmotic processing type on the water loss (WL), solid gain (SG), water activity (aw), dry matter (DM), antioxidant activity (expressed by DPPH) and color attributes (described by CIELAB coordinates L\*, a\* and b\*). The topic is interesting, however, the writing is not clear enough and the language need carefully revised. Accordingly, this manuscript can't be published in present formation.

Reviewer's suggestions are fully accepted. All changes were highlighted directly on the revised manuscript. The authors believe that the corrected paper would satisfy Reviewer's criteria and that it is going to be interesting enough for publishing in *Journal of Serbian Chemical Society*. Also, paper is thoroughly checked for grammatical and writing errors by a native English speaker.

The major comments:

1. The title is not suitable with the content.

**AUTHORS:** Within this work celery root or celeriac (*Apium graveolens* var. *rapaceum*) was used (it is grown for its swollen, edible, enlarged, brown, beet-like roots), while celery (*Apium graveolens* var. *dulce*) is grown for its edible crisp leaf stalk and leaves. The authors believe that the exact term for the samples used in this manuscript is “celery root”, according to the literature cited in the Introduction section. Also, according to the cited references, celery root is a source of digestible carbohydrates, proteins, and high amount of dietary fibers, rich in bioactive compounds such as vitamins, free amino acids, minerals, etc. The term “celery petiole” is related to celery leaf stalks, which is also a rich source of vitamins, however it was not presented in this article.

2. Please make sure that celery root is edible. Or “celery root” referred in this manuscript is “celery petiole”.

**AUTHORS:** Within this work celery root or celeriac (*Apium graveolens* var. *rapaceum*) was used (it is grown for its swollen, edible, enlarged, brown, beet-like roots), while celery (*Apium graveolens* var. *dulce*) is grown for its edible crisp leaf stalk and leaves. The authors believe that the exact term for the samples used in this manuscript is “celery root”, according to the literature cited in the Introduction section.

3. The last paragraph of the section “INTRODUCTION” is more like experimental than objective of an article.

**AUTHORS:** This paragraph is removed from the Manuscript, according to Reviewer's comment.

4. Table 1 should be divided into two separated tables, one is for experimental design, and one is for results presentation should be arranged in results and discussion section.

**AUTHORS:** Table 1 was divided into Table 1 (with the experimental design data), and the other part of the previous Table 1 is presented by histogram graphics (Figure 1), according to Reviewer's suggestion.

5. The data in Table 2 would be more clarity if they were illustrated by a figure.

**AUTHORS:** Table 1 was divided into Table 1 (with the experimental design data), and the other part of the previous Table 1 is presented by histogram graphics (Figure 1), according to Reviewer's suggestion.

The minor comments:

1. The first 7 pages are without line number, which made reviewer difficult to point the content need revision.

**AUTHORS:** Line numbers were added, according to the Reviewer's comments.

2. Generally, tables and figures should be placed after the text and reference list.

**AUTHORS:** Corrected, according to Reviewer's comment.

3. There are more marked in the attached PDF copy.

**AUTHORS:** The comments written in PDF file were carefully revised, and all the Reviewer's suggestion are fully accepted.

In my opinion, this manuscript should:

be published after major revision and additional review

If manuscript is suitable for publishing, referees recommendation :

Original scientific paper

**Comments attached in PDF file (Reviewer L):**

**Page 3:**

Unclear illustration: "sensory characteristic changes and retaining or even improving its initial nutritional value and functional properties"

**AUTHORS:** This sentence is changed according to Reviewer's comment:

Foodstuff is not exposed to high temperatures, the changes in the initial sensory characteristic is minimal, while the nutritional value and the functional properties of the product are kept on the same level or even improved.

There are syntax errors. Please rearrange the sentence: "High dry matter content favorable to high water loss, specific nutrient composition responsible for enriching the nutritive quality of osmodehydrated product, lower costs and energy requirements are the main reasons why sugar beet molasses is such a useful osmotic solution."

**AUTHORS:** This sentence is changed according to Reviewer's comment:

High dry matter content and a high water loss, a specific nutrient composition and nutritive quality of osmodehydrated product, low costs and energy requirements are a few of the main reasons why sugar beet molasses is a useful osmotic solution.

It is better to use potassium.

**AUTHORS:** Changed according to Reviewer's comment.

**Page 4:**

More like experimental than objective.

**AUTHORS:** This paragraph is removed from the Manuscript, according to Reviewer's comment.

**Page 5:**

Which is the information about the producer?

**AUTHORS:** Changed according to Reviewer's comment. (TESTO 650, Testo SE & Co. KGaA, Lenzkirch, Germany).

Result should be presented in the Results and Discussion section.



**AUTHORS:** This sentence is removed to the Experimental part and put at the start of the Results and Discussion section, according to Reviewer's comment.

**Page 8:**

Which kind of equipment was used?

**AUTHORS:** The used equipment was UV/VIS Evolution 300 Spectrophotometer (Thermo Fisher Scientific, Waltham, MA, USA).

Company, Country?

**AUTHORS:** The used camera was: Canon PowerShot A550 (Canon Europe Ltd, Uxbridge, Middlesex, United Kingdom).

Which program?

**AUTHORS:** This sentence is changed according to Reviewer's comment. We used an originally developed computer program in this investigation.

Should be expressed by a table to list the parameters and levels in this section.

**AUTHORS:** This part of text is arranged according to Reviewer's comment, and one Table is added in Statistical analysis section.

**Reviewer H:**

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?:

no

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?:

no

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! :

I uploaded a file with some comments and suggestions for improvements of the final version.

#### REPORT:

I uploaded a file with some comments and suggestions for improvements of the final version.

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

Reviewer's suggestions are fully accepted. All changes were highlighted directly on the revised manuscript. The authors believe that the corrected paper would satisfy Reviewer's criteria and that it is going to be interesting enough for publishing in *Journal of Serbian Chemical Society*. Also, paper is thoroughly checked for grammatical and writing errors by a native English speaker.

**Comments attached in PDF file (Reviewer H):**

**Page 2**

plural

**AUTHORS:** Changed, according to Reviewer's comment.

but changed in while

**AUTHORS:** Changed, according to Reviewer's comment.

put these inside brackets like you did with the other cases.

**AUTHORS:** Changed, according to Reviewer's comment.

**Page 3**

remove this comma

**AUTHORS:** Changed, according to Reviewer's comment.

**Page 4**

you must express as % or g/100g or g/g, depending on your specific case, but you can't leave it without units

**AUTHORS:** Changed to "%", according to Reviewer's comment.

units

**AUTHORS:** Changed to "%", according to Reviewer's comment.

units

**AUTHORS:** Changed to "% ", according to Reviewer's comment.

## **Page 5**

The aw (its better to start a new sentanece in this way...)

**AUTHORS:** Changed, according to Reviewer's comment.

the presentation of the results should be in the Results section not in the materials and methods.

**AUTHORS:** This part of text is arranged according to Reviewer's comment, and one Table is added in Statistical analysis section.

## **Page 6**

move to the right place

**AUTHORS:** This part of text is arranged according to Reviewer's comment, and one Table is added in Statistical analysis section.

Tabels must stand alone, i.e., withoout the use of the text to explain. Therefore you must add some footsnotes for all the abreviations used in the table

**AUTHORS:** This abbreviations are explained in the footnote of the table, according to Reviewer's comment.

## **Page 8**

replace the comma by: and the corresponding standard deviation...

**AUTHORS:** Changed, according to Reviewer's comment.

## **Page 10**

other sets

**AUTHORS:** Changed, according to Reviewer's comment.

place Table 1 after this

**AUTHORS:** The Table is placed in this part of the text, according to Reviewer's comment.

has

**AUTHORS:** Changed, according to Reviewer's comment.

remove this comma

**AUTHORS:** Changed, according to Reviewer's comment.

has

**AUTHORS:** Changed, according to Reviewer's comment.

because of the diffusion

**AUTHORS:** Changed, according to Reviewer's comment.

I find this entance too certain for something that was not verified before in other casess. If this came in accordance with previously published results you culd make such a statement, but in that case a reference must be added.

If it just you supposition, not proven by other, you should rephrase your sentence like: It seems that there is a relationship ....., and this might be a confirmation....

**AUTHORS:** This sentence is changed, according to Reviewer's comment: "It seems that there is a relationship between the increase of color parameters and antioxidant activity in samples treated in molasses, and this is probably due to the fact that some of the pigments in molasses are known for their antioxidant properties."

## **Page 13**

this sentence does not make sense, it seem there is something missing by the end.

**AUTHORS:** This sentence is changed, according to Reviewer's comment: "The ANOVA calculation showed the effects of the independent variables on the responses (Table 3)."

is

**AUTHORS:** Changed, according to Reviewer's comment.

are (samples is plural)

**AUTHORS:** Changed, according to Reviewer's comment.