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To: **Journal of the Serbian Chemical Society**

Dr. Olgica Nedić

INEP, Institute for the Application of Nuclear Energy, Zemun Belgrade,

JSCS: Biochemistry & Biotechnology Sub Editor

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30 March 2020

**Re:**

**Ms. "The phenolic “fingerprint” of strawberry tree (*Arbutus unedo* L.) honey"**

Dear Dr Nedić,

Thank you for your e-mail from 6 February 2020 with enclosed reviewers' comments and suggestions regarding our manuscript.

We highly respect all of the reviewers' comments and suggestions and found them most helpful in improving our paper. We addressed all of the comments in the following answers (hereunder) and revised the manuscript accordingly (the revised part are marked in yellow).

We hope that the revised manuscript will be accepted for publication in *Journal of the Serbian Chemical Society.*

On behalf of all of the co-authors,

Uroš M. Gašić, PhD

**Answers to the Reviewers’ Comments**

**Reviewer B:**

 **The manuscript “The phenolic “fingerprint” of strawberry tree (*Arbutus unedo* L.) honey“, gives interest information and about a Honey type that is not well studied yet and is complementary to others papers previously published.**

**However, I have some comments.**

**For me the higher problem is that the title and abstract was the same previously published in UNIFood Conference; Belgrade, Serbia, October 2018, ISBN: 978-86-7522-060-2, by the same authors. Title “Phenolic “fingerprint” of strawberry tree (*Arbutus unedo* L.) honey”**

**I don´t know what is the politic of the journal concerning this issue or if this publication be part of a special issue of this conference. So this part I let to the Journal Editor to decide. If Not the title and abstract must be changed concerning plagiarism problems even the work belongs to the same authors.**

**Because of that I put “be published after major revision and additional review”, because I do not have another option, But if fact if the if for the journal the previously reported is not a problem my option is “be published after minor revision without additional review”**

*Authors’ answer:*

*The title and abstract have been changed.*

**Another concerning:**

**Line 47: what is “high values of colour”?**

*Authors’ answer:*

*“High value of colour” has been replaced with “very dark”.*

**Line 47 “The European Directive includes” identify which one**

*Authors’ answer:*

*European Directive has been replaced with European Directive concerning honey (2001/110/CE).*

**Line62: the next paper must be**

*Authors’ answer:*

*EXPERIMENTAL section has been moved to the next page.*

**Line 109: 0.45 μm not 0.45-μm**

*Authors’ answer:*

*Dash has been moved.*

**Line 83 – the name of the species must be in italic**

*Authors’ answer:*

*The authors agree that the name of the species must be in italics, but in Line 83 we have the names of the families that must be written using normal font (not italics).*

**More details about the number of honey samples analysed was needed. How many**

**and if the results are similar for all of them**

*Authors’ answer:*

*Regarding the number of samples, strawberry tree honey is a specific (relatively rare) type of honey originating from a plant whose pollen is not dominant, and in this preliminary study we have selected one sample that satisfied the sensory and melissopalinological characteristics as well as the content of homogentisic acid as specific marker of this type of honey.*

**Reviewer C:**

 **The manuscript reports an investigation on the phenolic profile for strawberry tree honey and some other analysis (total phenolic content and radical scavenging activity). The manuscript and results are relevant information, but some modifications in the text and references could be necessary do for accepted manuscript. Please check carefully.**

*Authors’ answer:*

*We have made all of the necessary changes in the manuscript and added proposed references.*

**Other remarks and comments are summarized as follows:**

**Line 27 Keywords: Please, included strawberry tree honey**

*Authors’ answer:*

*According to the Instructions to Authors, it is not allowed to use words appearing in the manuscript title for the keywords.*

**Lines 52: Please, re-written the sentences**

*Authors’ answer:*

*The sentence has been rewritten to be more understandable.*

**Line 34: Please, add reference**

*Authors’ answer:*

*The reference has been added (M. G. Miguel, M. L. Faleiro, A. C. Guerreiro, M. D. Antunes, Molecules 19 (2014) 15799–823).*

**Line 36: Please, add this reference:**

**• Afrin et al. (2019). Strawberry tree honey as a new potential functional food. Part 1: Strawberry T tree honey reduces colon cancer cell proliferation and colony formation ability, inhibits cell cycle and promotes apoptosis by regulating EGFR and MAPKs signaling pathways. Journal of Functional Foods.**

*Authors’ answer:*

*The reference has been added.*

**Line 33-34 and 39-42: Please, re-written for just one paragraph (the**

**information was repeat).**

*Authors’ answer:*

*The first paragraph describes the plant while the second paragraph describes the honey. We have changed the second paragraph in order to avoid repetition.*

**Line 42: Please, add this reference:**

**• Von Der Ohe, W., Oddo, L. P., Piana, M. L., Morlot, M., Martin, P. (2004). Harmonized methods of melissopalynology. Apidologie, 35, S18-25.562**

*Authors’ answer:*

*The reference has been added.*

**Line 52: Add reference**

*Authors’ answer:*

*We apologize for the mistake; it was in fact the only study regarding effects of strawberry tree honey on haematological and biochemical indices in humans. We have changed the text accordingly.*

**Line 67 Chemicals: Add galic acid as reagents**

*Authors’ answer:*

*Gallic acid has been added in* Chemicals *section.*

**Line 78 Sample: Please, the number of samples analyzed**

*Authors’ answer:*

*In this preliminary study we have selected one sample that satisfied the sensory and melissopalinological characteristics.*

**Line 87 Total phenolic content (TFC): Add concentration of Folin-Ciocalteu.**

*Authors’ answer:*

*The molar concentration of Folin-Ciocalteu reagent has been added (2 M).*

**Line 87 Total phenolic content (TFC): For this method, why the analysis was**

**made at 50ºC?. Please, add reference.**

*Authors’ answer:*

*We apologize for the mistake; it was in fact 40 °C. We have changed this in the text and added the reference (U. Gašić, S. Kečkeš, D. Dabić, J. Trifković, D. Milojković-Opsenica, M. Natić, Z. Tešić, Food Chem. 145 (2014) 599–607).*

**Line 96 DPPH radical scavenging activity (RSA): Please, add the honey**

**solution concentration. Add reference.**

*Authors’ answer:*

*The honey solution concentration (1:10, w/v) and reference have been added (B. Tariba Lovaković, M. Lazarus, I. Brčić Karačonji, K. Jurica, T. Živković Semren, D. Lušić, N. Brajenović, Z. Pelaić, A. Pizent, J. Trace Elem. Med. Biol. 45 (2018) 85–92).*

**Line 134 Table 1: Please, reduced the decimal number for Calculated mass and Exact mass columns**

*Authors’ answer:*

*The decimal numbers for Calculated and Exact masses have been reduced in the new version of revised manuscript.*

**Line 176: Add this reference Development and Validation of a GC-MS Method for the Analysis of Homogentisic Acid in Strawberry Tree (*Arbutus unedo* L.) Honey**

*Authors’ answer:*

*The reference has been added.*

**Line 179-183: Please, compared the results obtained with other studies research with the same origin honey. For example, this reference**

**• Castiglioni et al (2017). Chemometric approach to the analysis of antioxidant properties and colour of typical Italian monofloral honeys. International Journal of Food Science and Techonology.**

**• Ciulu et al (2019). Chemometric treatment of simple physical and chemical data for the discrimination of unifloral honeys. Talanta**

*Authors’ answer:*

*The results were compared with mentioned studies and the references have been added.*

**Reviewer E:**

**See lines 87-100.**

**The manuscript is well written and gives novel information about strawberry tree honey. My main objection is the amount of time used for the spectrometric assays. Normally, the Folin-Ciocalteu assay needs 2 h. The same holds for the DPPH assay in honey. The authors should provide relevant references or support their findings providing a graph with the plateau of the reaction.**

*Authors’ answer:*

*Both assays were performed according to the previously reported procedures with minor modifications: total phenolic content was determined as proposed by Gašić et al. (1) while DPPH scavenging assay was evaluated as proposed by Tariba Lovaković et al. (2).*

*Additionally, we performed a preliminary experiment to determine the reaction kinetics with respect to the time period (30-120 min for TPC and 30-60 min for DPPH, 10 min steps) prior to the spectrophotometric measurement. The measured absorbances in both assays have not changed during the tested period.*

*(1) U. Gašić, S. Kečkeš, D. Dabić, J. Trifković, D. Milojković-Opsenica, M. Natić, Z. Tešić, Food Chem. 145 (2014) 599–607*

*(2) B. Tariba Lovaković, M. Lazarus, I. Brčić Karačonji, K. Jurica, T. Živković Semren, D. Lušić, N. Brajenović, Z. Pelaić, A. Pizent, J. Trace Elem. Med. Biol. 45 (2018) 85–92*