**Cover Letter**

Research paper**: Divergence of barley and oat varieties according to the content of β-glucan**

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Dear Editor,

We submit a manuscript entitled “Divergence of barley and oat varieties according to the content of β-glucan*”* by authors Stefan M. Marković, Nevena H. Djukić, Desimir Knežević, Suzana V. Leković, to be considered for publication as an original scientific paper in Journal of the Serbian Chemical Society.

We declare that this manuscript is original, has not been published before and is not currently being considered for publication elsewhere. All authors have read and approved this original scientific paper and are aware of its submission to Journal of the Serbian Chemical Society.

Considering that the content of β-glucan in oat and barley can be increased by breeding (and using appropriate agro-technology), the main aims of the manuscript was: to define the content of β-glucan in 10 oat varieties and 10 barley varieties, comparison of β-glucan content in different oat and barley varieties, and identification of the varieties with higher content of β-glucan as a modest contribution to breeding oat and barley. This paper, for the first time, presents the content of β-glucan in two rows of spring barley varieties: Novosadski 296, Novosadski 297, Novosadski 300, Novosadski 301,Novosadski 306, Novosadski 310, Novosadski 312, Novosadski 314, Novosadski 316, Novosadski 318, and 10 varieties of spring oat: Flaemingsterne, Vok, Mozart, Juha, Hannes, Alden, Aslak, Wasa, Tomba, Kaempe gul. On the basis of biochemical analysis of β-glucan content in the analyzed oat and barley varieties and the similarity dendogram with Euclidean distance it can be concluded that there is a genetic diversity in the content of β-glucan among oat and barley varieties, on which basis there is a possibility of choosing varieties for the selection lines of high nutritional capacity required to improve nutrition and to use as a source for obtaining useful preparations in pharmaceutical industry for further implementation.

We hope you find our manuscript suitable for publication and look forward to hearing from you.

Sincerely,

 Associate Prof. Nevena H. Đukić

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