**Cover Letter**

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11th October 2018

Dear Editor,

# We would like to submit an original research article entitled "Effects of Hemazin SC 500 (terbuthylazine) on antioxidative enzymes in human erythrocytes *in vitro*” for consideration by the J.Sreb.Chem.Soc.

We confirm that this work is original and has neither been published elsewhere, nor is currently under consideration for publication elsewhere.

In our work we have shown for the first time that the triazines pesticide terbuthylazine, as an active compound of the commercial preparation Hemazin SC 500, induced changes in the antioxidative metabolism of human erythrocyte *in vitro*. We have not found in the available literature any work related to this issue, although there are works on the influence of terbuthylazine on the DNA level. In our work at lower concentrations of terbuthylazine, SOD and GST activities increased, while at higher concentrations we detected a higher CAT activity. An important conclusion from our work is that the chronic effects of low concentrations of terbuthylazine as an active compound of herbicides should be monitored, as they can lead to the depletion of antioxidant capacity of the whole organism. All procedures in the paper were approved by the Ethical Committee of the Medical Faculty of the University of Banja Luka, B&H number 18/4.14/18. Please find enclosed as **supplementary file** the Approval of the ethics committee of the Medical Faculty in Banja Luka on conducting research on human blood.

We have no conflicts of interest to disclose.

For reviewers we suggest:

1. dr Mihajlo Spasić, full professor

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Thank you for your consideration of this manuscript.

Sincerely,



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