**Cover Letter**

Biljana Davidović-Plavšić

Department of Chemistry

Faculty of Natural Sciences and Mathematics, University of Banja Luka

Mladena Stojanovića 2, 78000 Banja Luka

Bosnia and Herzegovina

Email: biljana.davidovic-plavsic@pmf.unibl.org

Phone/fax: +387/51/319-142

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

## Department of Physiology

### Institute for Biological Research "Siniša Stanković"**,** University of Belgrade,

Bulevar despota Stefana 142, Belgrade 11060

Republic of Serbia

Email: spasa@ibiss.bg.ac.rs

Phone: + 381 11 2078396

## 2. dr Verica Milošević

### [Department of Citology](http://www.ibiss.bg.ac.rs/index.php/en/citology/people)

### Institute for Biological Research "Siniša Stanković"**,** University of Belgrade,

Bulevar despota Stefana 142, Belgrade 11060

Republic of Serbia

Email: dimi@ibiss.bg.ac.rs

Phone: +381 11 2078304

dr Mirjana Žabić

Faculty of Agriculture, University of Banja Luka

Bulevar Petra Bojovića 1A, 78 000 Banja Luka

B&H

mirjana.zabic@agro.unibl.org

Phone: +387 51 330 991

Please address all correspondence concerning this manuscript to me at biljana.davidovic-plavsic@pmf.unibl.org.

Thank you for your consideration of this manuscript.

Sincerely,



Dr Biljana Davidović-Plavšić , assistant professor

Department of Chemistry

Faculty of Natural Sciences and Mathematics, University of Banja Luka