Full Paper	Thematic Section: Biochemical Research.
Registration Code of Publication: 13-35-9-84	Subsection: Properties of Natural Compounds

Publication is available for discussion in the framework of the on-line Internet conference "The chemical basis for the rational use of renewable natural resources".

http://butlerov.com/natural resources/

Contributed: July 8, 2013.

Hepatoprotective activity of chaga melanins

© Guzel A. Ivanova, 1+ Maria A. Sysoeva, 1* and Vladimir V. Zobov²

Department of Food Biotechnology. Kazan National Research Technological University. K. Marx St., 68. Kazan, 420015. Tatarstan Republic. Russia. Phone: +7 (843) 231-41-73. E-mail: guziva@rambler.ru

² Department of Biologically Active Compounds. Laboratory of Chemical-Biological Research.

A.E. Arbuzov Institute of Organic and Physical Chemistry. Akad. Arbuzov St., 8. Kazan, 420088. Tatarstan Republic. Russia. Phone: +7 (843) 273-93-64. E-mail: zobov@iopc.knc.ru

Keywords: melanin, chaga, hyperbranched polymer, antioxidant activity, hepatoprotective activity, carbon tetrachloride.

Abstract

The hepatoprotective properties of chaga melanins were studied on the model of rats acute toxic hepatitis induced by carbon tetrachloride. Hepatoprotective activity analysis was based on the content of experimental animals serum indices such as alanineaminotransferase, aspartateaminotransferase, alkaline phosphatase, total protein, bilirubin, cholesterol, urea, and liver slices. It was shown that the highest antioxidant properties of melanin provides its highest hepatoprotective activity.

^{*}Supervising author; *Corresponding author