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## BOOK of ABSTRACTS



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## BFP-5

## INFLUENCE OF THE STORAGE ON ANTIOXIDANT ACTIVITY AND SENSORIAL PROPERTIES OF HERBAL LIQUEUR

Karabegović Ivana<sup>1</sup>, Lazić Miodrag<sup>1</sup>, Stojičević Saša<sup>1</sup>, Nikolić Nada<sup>1</sup>, Vukosavljević Predrag<sup>2</sup>, Veličković Dragan<sup>3</sup>

lmiodrag@yahoo.com

1-Faculty of Technology, University of Niš, Bulevar Oslobođenja 124  
16000 Leskovac, Serbia

2- Faculty of Agriculture, University of Belgrade, P.O. Box 14, 11080 Belgrade, Serbia

3-College of Agriculture and Food Technology, Ćirila i Metodija 1, 18400 Prokuplje, Serbia

The antioxidant activity of a commercial herbal liqueur "Bitter 54", Serbian domestic brand and its sensory attributes were studied during one year storage under various conditions. The antioxidant activity was evaluated using the DPPH test. The samples were subjected to sensory evaluation using the internal sensory panel of Faculty of Agriculture, University of Belgrade where five attributes were evaluated: color intensity, clarity, bitter taste, odor intensity and herbal-fruity taste. The sensory properties were presented on a twenty-point scale. Freshly prepared herbal liqueur "Bitter 54" (sample B54 first day of experiment) was compared with samples stored in original packaging (opaque green bottles) in cardboard box (B54), in the original packaging with the presence of air (bottles filled to half capacity, without cover, in a cardboard box (B54A), in the original packaging exposed to the effects of daylight (B54GL) and in bottles of white transparent glass exposed to daylight (B54WL). All samples were kept at ambient temperature.

Storage of commercial herbal liqueur "Bitter 54" in the original packaging (B54) during the experiment reduced antioxidant activity by over 20 %. This decrease was most pronounced in the first 150 days of the experiment and then stagnated. Samples B54GL and B54WL reduced the antioxidant activity after one year for 6 % and 18 %, respectively. Student's *t*-test showed that there was no statistically significant difference ( $p < 0.05$ ) between the antioxidant activity of samples kept in the dark with and without the presence of oxygen. This is probably due to negligibly small amounts of oxygen from the air that could be dissolved under existing conditions, without mixing or additional oxygen. Freshly prepared beverage had excellent quality and kept it during the first months of the storage under adequate storage conditions. Good quality of B54 lasted till the end of the storage, while variations in quality of samples stored under various conditions were significant and time-dependent.

Key words: herbal liqueur, antioxidant activity, sensorial properties, storage

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*Department of Food Te  
University Ss. Cyril*

Protein is a key ingredient in different food formulations. Its properties and the structure. It is of high-quality hypoallergenic rice bran as food is limited by the stabilization treatment and stabilization and defatting are characteristic for their possible properties.

The objective of this study was obtained by three steps of rice bran with heat for 20 minutes at 100°C treated samples and untreated samples with alkaline treatment type and temperature. The results particularly in microwave treatment and 8, and maximum solubility obtained foams had poor stability at lower temperature. The results compared to proteins from rice bran emulsifying capacities.

Key words: Rice bran, protein