CARPATHIAN JOURNAL OF FOOD SCIENCE AND TECHNOLOGY

journal home page:http://chimie-biologie.ubm.ro/carpathian_journal/index.html

TEXTURAL AND SENSORY PROPERTIES OF FALSE ACACIA (ROBINIA PSEUDOACACIA L.) JELLIES WITH FUNCTIONAL COMPONENTS

Stanko Stankov¹, Hafize Fidan¹⊠, Eva Dimitrova², Kiril Mihalev³, Gabor Zsivanovits⁴

¹Department of Nutrition and Tourism

²Department of Informatics and Statistics

³Department of Food Preservation and Refrigeration Technology

^{1,2,3} University of Food Technologies, 26 Maritza Blvd., Plovdiv, 4002, Bulgaria

⁴Food Research and Development Institute, 154 Vasil Aprilov Blvd., Plovdiv, 4002, Bulgaria

[∞]hafizefidan@abv.bg

https://doi.org/10.34302/crpjfst/2020.12.2.6

Article history:

Received:

1 January 2020

Accepted:

2 June 2020

Keywords:

False acacia; Jelly; Basil seeds; Textural indicators; Sensory profiles.

ABSTRACT

The aim of this study is to present the possibility of using *Robinia pseudoacacia* L. flowers in the composition of high-sugar pectin jelly. Basil seeds (*Ocimum basilicum*) are included in jelly's composition in order to improve its functional and sensory properties. The texture of the jellies was evaluated by the methods of penetration, durability and hardness. Relatively comparable indicators of the structural and mechanical properties of the gels were reported. No significant differences were noted in the maximum deformation at the point of destruction and the energy used to destroy the jellies. The basil seed-containing jelly showed higher gel strength, requiring greater both force (0.203 N) and energy (0.567 N.mm) for destruction. The sensory profiles clearly showed the higher panelist's preference of the seed-containing jelly, receiving 53% approval, with 14% for the plain jelly. The results obtained show good possibilities for the application of false acacia flowers in pectic jellies with the participation of basil seeds.