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SENSORY EVALUATION AND RHEOLOGICAL BEHAVIOUR OF YOGURTS PREPARED FROM GOAT MILK¹

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Abstract: Goat milk production is a dynamic and growing industry that is fundamental to the wellbeing of hundreds of millions of people worldwide and is an important part of the economy in many countries. The aim of the present paper is scientific development of new technologies for goat milk yogurt with improved sensory and rheological properties. Set-yoghurts produced from goat and cow milk were examined fresh and after cold storage for sensory quality and rheological properties, in accordance with the ISO (Official Methods of Analysis of AOAC International). Rheological investigations consisted of the determination of apparent viscosity and drawings of flow curves. In comparison to cow milk yoghurt, goat milk yoghurt had a better consistency, and was more acceptable sensorially. The apparent viscosity of goat milk yoghurt was more and its flow curve was characterized by a smaller hysteresis loop area than these of yoghurts from cow milk. The reported results on sensory evaluation and rheological behaviour of goat milk yoghurt could guide industry to develop new goat dairy products with improved quality.

Keywords: sensory attributes, rheology, goat milk, yoghurt, health benefits.

REFERENCES

- Caleja, C., Barros, L., Antonio, A.L., Caroch, M., Oliveira, M.B.P.P., Ferreira, I.C.F.R. (2016). *Fortification of yogurts with different antioxidant preservatives: A comparative study between natural and synthetic additives*. Food Chemistry, Vol. 210, 262–268.
- Innocente, N., Biasutti, M., Rita, F., Bricchese, R., Comi, G., Iacumin, L. (2016). *Effect of indigenous Lactobacillus rhamnosus isolated from bovine milk on microbiological characteristics and aromatic profile of traditional yogurt*. LWT–Food Science and Technology, Vol. 66, 158–164.
- Popovici, C., Tița, A.M. (2018). *Goat milk yoghurt with high biological properties*. Proceedings of the 4th International Conference - New Trends on Sensing-Monitoring-Telediagnosis for Life Sciences, 30 August-1 September 2018, Transilvania University of Brasov, Romania, 83.
- Saha, B.N.P., Vasiljevic, T., McKechnie S., Donkor, O.N. (2016). *Physicochemical, textural and rheological properties of probiotic yogurt fortified with fibre-rich pineapple peel powder during refrigerated storage*. LWT – Food Science and Technology, Vol. 65, 978-986.
- Yangilar, F. (2013). *As a Potentially Functional Food: Goats' Milk and Products*. Journal of Food and Nutrition Research, Vol. 1 (4), 68-81.

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