

## MICROBIOLOGICAL PROPERTIES OF ARTISANAL CHEESE (BIENO SIRENJE)

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### Abstract

Samples from six cheeses made from raw ewe's milk, in two farmhouses, located in the village Peshtani, region of Mariovo during the complete production process were collected. Microbiological analyses were conducted including mesophylic counts, LAB, coliform bacteria, *Salmonella sp.*, yeasts and moulds. The quality of the milk used for cheese production in the both farmhouses was comparable.

The prevalence of microbiological groups in milk, vary from 6.72-7.10 log cfu/mL for mesophylic counts; 6.52-7.13 log cfu/mL for lactococci; 6.29-6.52 log cfu/mL for lactobacilli; 5.37-5.80 log cfu/mL for coliform bacteria and 4.09-4.38 log cfu/mL for yeasts. The presence of *Salmonella sp.* was not detected in neither of collected samples. The increasing of the number of all analyzed microorganisms during cheeses maturing was recorded in all cheese samples. During maturation, the dominant group of microorganisms is LAB. The trend of prevalence decreasing of analyzed microorganisms was noticed during the brining (increased concentration of salt and lowering pH value). Moulds have discontinued occurrence in the cheese, being more frequently recorded during brining.

To gain an artisanal cheese with good quality, it is necessary to monitor the process of production, sanitation of equipment and tools as well as introduction of good manufacturing practice.

**Key words:** Artisanal cheese, Mesophilic count, LAB, Coliform bacteria, Yeasts and moulds.