



Effect of somatic cells on the yield, clotting time and organoleptic quality of Wagashi

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1 ABSTRACT

Traditional Wagashi (Peulh cheese) production technology occupies an important place in the artisanal processing of fresh milk in African countries. It faces many quality problems of cheese products due to infectious mastitis. It is in this context that an exploratory study was conducted in the communes of Parakou, Nikki, Tchaourou, Gogonou and Malanville in Benin, in order to determine in cattle the influence of somatic cells on the yield, the clotting time and the organoleptic quality of Wagashi. The Californian Mastitis Test (CMT) used on 212 bovine milk samples showed positive for mastitis. The threshold for CMT is 300×10^3 cells/ml, with the distribution of samples by proportion (%) somatic cell (CS) as follows: 900×10^3 CS/ml at 2700×10^3 cells/ml (61%), 8100×10^3 CS/ml (11%), 300×10^3 cs (26%), 100×10^3 CS/ml (2%). The time of coagulation and cheese yield varied significantly ($p < 0.001$): For the CCS + line, it is 30 minutes with a yield cheese 1.72 kg/100L versus 20 minutes for the CCS line-and a yield cheese 1.93 kg/100L. The triangular test used for degustation of cheeses showed a significant difference (P value = 0.01%) between Issu CCS + and CCS-cheeses. 58.53% indicate a bitter taste and a friable mechanical aspect for the CCS + cheese compared to 41.46% a sweet taste and a mechanical aspect of firmness for sac-derived cheese.
