Microbial Quality of Raw Camel Milk Produced in South of Morocco

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Abstract : Thirty one samples of raw camel milk obtained from the region of Laâyoune (South of Morocco) were examined for their microbial quality and presence of some pathogenic bacteria (Staphylococcus aureus and Salmonella sp.). pH of the samples ranged from 6.31 to 6.64 and their titratable acidity had a mean value of 18.56 °Dornic. Data obtained showed a strong microbial contamination with an average total aerobic flora of 1.76 108 ufc ml-1 and a very high fecal counts: 1.82 107 ; 3.25 106 and 3.75 106 ufc.ml-1 in average for total coliforms, fecal coliforms and enterococci respectively. Yeasts and moulds were also found at average respective levels of 3.13 106 and 1.60 105 ufc.ml-1. Salmonella sp. and S. aureus was detected respectively in 13% and 30% of the milk samples. These results indicate clearly the lack of hygienic conditions of camel milk production and storage in this region. Lactic acid bacteria were found at the following average numbers: 4.25 107 ; 4.45 107 and 3.55 107 ufc.ml-1 for Lactococci, Leuconostocs and Lactobacilli respectively.

Keywords : camel milk, microbial quality, Salmonella, Staphylococcus aureus

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