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Chemical Properties and Sensory Evaluation of Probiotic Yoghurt Manufactured with Aqueous Extract of Aloe vera



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ABSTRACT

In recent years, consumer demand for a new range of dairy products, including yoghurts, which have functional and designed sensory properties have increased. In the present research physicochemical, microbiological and sensory attributes of yogurts manufactured from cow milk with aqueous extract of Aloe vera and Lactobacillus casei before and after cold storage for different periods of time (1, 3, 5, 7 and 10 days) were investigated. Titrable acidity (TA) of examined yoghurts during storage period at 4°C increased and their pH decreased significantly ($P < 0.05$). The percentages of Water Holding Capacity (WHC) and Syneresis of yoghurt samples through the 10 days storage period were significantly decreased and increased, respectively ($P < 0.05$). Viability of L. casei was significantly higher in probiotic yoghurt samples than others with Aloe vera extract after the end storage time. Sensory evaluation of examined yoghurts showed that Aloe vera extract had no effect on sensory quality of probiotic yoghurt samples. It was concluded that probiotic yoghurt with 2.5% Aloe vera extract with low syneresis and high WHC had better physicochemical, microbiological and sensory properties in comparison with the other probiotic yoghurt samples.

Key words: Aloe vera, Aqueous extract, Yoghurt, L. casei, Organoleptic quality, Chemical properties.

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