The purpose of the study is to assess the effect of the use of mono probiotic culture and mixed cultures of *Lactobacillus plantarum* and *Lactobacillus rhamnosus* on the physicochemical properties and its viability during storage. The soft cheeses were made through three treatments: (1) the use of *Lactobacillus rhamnosus* culture, (2) the use of *Lactobacillus plantarum* culture and (3) the use of mixed cultures (*Lactobacillus rhamnosus* and *Lactobacillus plantarum*). The variables measured were the cheese texture (firmness and stickiness), proximate, pH of the product, and the number of LAB. The results showed that cheese firmness ranged from 10.78 to 47.75 gf, cheeses stickiness was -8.23 to -11.53 gs, cheese pH was 4.70- 5.60; number of cheese LAB was 8.59-9.69 log cfu/g. The content of protein, fat, and ash were 13.65-16.54%, 15.28-20.03%, and 2.7-3.39%, respectively. The conclusion of this study was that the soft cheeses with mixed cultures of *L. rhamnosus* and *L. plantarum* are potentially good to be developed as a probiotic food.

Keywords: culture, *Lactobacillus rhamnosus*, *Lactobacillus plantarum*, soft cheese
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