ABSTRACT

As Thailand is the state of the major producer for coconut milk, the valuable cost for exporting is over the 2000 million baths per year. There were, however, few researches attempted to produce innovative product from coconut milk. Any attempted has been made on coconut milk cheese production, unfortunately, the researcher has been reported that coconut milk could not produce cheese because it does not contain casein. However, our previous trial on the production of coconut cheese-like from coconut milk was successfully developed by partly addition of skim milk powder which helps to enrich casein source (Tipvarakarnkoon, 2009; Sorn-saard and Tipvarakarnkoon, 2012). According to the previous work, four formulations' coconut milk cheese product have been developed and presented variety taste and characteristics. Therefore, this study was aimed to conduct a qualitative descriptive analysis in terms of the sensory perception. The product was profiling and used to compare with commercial cow's milk cheeses. Four different formulas were; 0:100:0 (0%), 10:75:15 (25%), 20:50:30 (50%), and 30:25:45 (75%), (coconut milk powder: pasteurized milk: water). The results showed that developed coconut milk's cheese showed high smoothness, dense and watery in appearance. The texture was less hardness, but firm, high moistness of mass and low adhesive and low grainy texture. It could be classified into 2 groups which are firm products (0% and 25%) and low firm product (50% and 75%). In particularly, 75% coconut milk in cheese gave lowest firmness, high moistness of mass with high degree of dissolving as well as lowest in adhesiveness. Comparing to the commercial products, developed coconut milk fresh cheese showed a similar appearance and texture to cream cottage cheese, excepts they were lower in graininess and adhesiveness texture than cottage cheese. The developed products clearly induced coconut milk odor and flavor which compliance in cheese overall flavor and preferred by consumers (6.8 – 7.0 out of 9-point hedonic scale). This, however, lowers the cheese aroma and flavor in products. The texture profile analysis (TPA) has been also evaluated to correlate with sensory data. The results showed that higher coconut milk content in cheese lower hardness firmness of final products.