

Abstract

The aim of this project is to transform a Thai traditional dessert, Tang Thai Nam Ka-thi or melon-in-coconut milk into ice cream. Melon juice is obtained by blending and filtering Thai slicing melon (*Cucumis melo* L. var. conomon makino). The Just About Right test indicated that the reference formula had too much coconut flavor and less melon flavor. Therefore, melon and coconut adjustments were performed and the improvements on the preference scores were obtained. However, the ice cream after two adjustments had the lowest score of just above 6 in texture attribute. So, the formula was further adjusted by adding corn starch which did not significantly ($p < 0.05$) increase the scores. Thus, coconut cream was partially replaced by the whipped cream. The sensory evaluation after whipped cream substitution showed that the ice cream sample got average preference scores for color 7.2, sweetness 6.8, saltiness 6.8, melon flavor 6.7, coconut flavor 6.7, texture 7.0, and overall acceptance 6.9 from nine-point scale. Consumer acceptance survey of prototype product was carried out with 100 consumers. Consumers preferred the product with 7.1 out of 9-point scale; the product was rated more than moderately like in the scale. The product was accepted by 94% of consumer at the price of 15-30 Baht for 55-gram cup. Ninety-two percent of the consumers were willing to buy the prototype product. Melon-in-coconut milk ice cream had 31.7% overrun, 39.78% melting resistance, efflux time of 49 centistokes as thin liquid mix, foam stability at a decreasing rate of 5% per hour, $L^*a^*b^*$ color of 83.52, 2.81 and 28.90 for light yellow, and hardness of 19.5 kg force in 25 seconds.