

## C526922: MAJOR FOOD TECHNOLOGY

KEY WORD: ROYAL JELLY / FRUIT AND VEGETABLE DRINK

WALLEE CHANSUKSURACHODE : FRUIT AND VEGETABLE DRINK WITH ROYAL

JELLY. THESIS ADVISOR : ASSO. PROF. PANTIPA JANTAWAT, Ph.D.,

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ISBN 974-631-215-4

Appropriate formula for the production of fruit and vegetable drink were studied. Quantities of pineapple juice, passion fruit juice and carrot juice were varied at 9:0:1, 8:1:1, 7:2:1, 6:3:1, 5:4:1, 4:5:1, 3:6:1 and 2:7:1. The best quality product was selected and sugar was added at 0, 3, 6, 9 and 12% W/V to improve its flavor. Incorporation of two types of gelling agents comprising low methoxyl pectin (0.1, 0.2 and 0.3% W/V) and carrageenan (0.025, 0.05, 0.075, 0.1, 0.2 and 0.3% W/V) was carried out and the best quality product was selected for further study on appropriate quantity of royal jelly (7, 8 and 9% W/V). Study on storage stability of the selected product was carried out by adding sodium benzoate at 0, 100 and 200 ppm and the resulting products stored at 5-8°C for 0-4 weeks. The two most appropriate samples selected were those containing pineapple, passion fruit and carrot juices at 7:2:1 and 6:3:1, sugar 12% W/V, low methoxyl pectin 0.1 or carrageenan 0.025% W/V and royal jelly 9 and 8% W/V, respectively. These two samples can still be classified as royal jelly products after storage without sodium benzoate for 2-4 months at 5-8°C. At the end of the storage period, the chemical, microbiological and organoleptic qualities of the samples were still being acceptable.

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