

ABSTRACT

Physicochemical, Organoleptic, And Bacteriological Quality Of Papaya Leaves (*Carica Papaya* Linn) And Red Ginger (*Zingiber Officinale* Var. *Rubrum*) Combination In The Development Of The Galactagogue Instant Powder

Some herbal galactagogues have earned reputation and recognition by the public and professionals as an alternative approach to increase the production of breast milk. Galactagogues are any food, beverage, or special herbs believed to be able to assist initiation, to maintain, and to boost excretion of breast milk. Papaya leaves contain quercetin compounds that can activate the prolactin hormone receptors thereby increasing milk production. In addition, red ginger is also one of local food that has a function as galactagogue. The purpose of this study was to analyze the ratio of the number of papaya leaves (*Carica Papaya* Linn) and red ginger (*Zingiber officinale* Var. *Rubrum*) in formulations of combined galactagogue instant powder in regards to the physicochemical, organoleptic, bacteriological quality. This study applied experimental study design, starting with the manufacture of 5 combined formulations in regard to the amount of papaya and red ginger used ie F1 (50g: 100 g), F2 (62,5g: 87,5g), F3 (75g: 75g) , F4 (87,5g: 62,5g) and F5 (100g: 50g). Then, organoleptic test using hedonic test was carried out (which included color, taste, texture and aroma) to the limited panelists to select best three products that possessed the highest effectiveness index. After the products were selected, bacteriological and physicochemical test was also being carried out to test the moisture content, ash content, and the content of quercetin. The results showed that the more the amount of papaya leaves used, the greater the content of quercetin in the product. F5 was the most preferred in regard to flavor and color, and contains 21,5mg/ 100g of quercetin, 1.04% water content and 0.72% ash levels. Therefore, this instant galactagogues powder was being preferred and has met the quality of physicochemical requirements (moisture and ash content) and the quality of bacteriology according to SNI 01-4320-1996 (Powdered Traditional Beverages) and SNI 01-7148-2005 (Special Beverages for Pregnancy and Breastfeeding).

Keywords : galactagogues, papaya leaves, red ginger, instant powder, quercetin, organoleptic quality, physicochemical quality, bacteriological quality