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SYNTHESIS DE ODORIZING DURIAN FOR HAND AND MOUTH AFTER DURIAN CONSUMPTION

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ABSTRACT

Durian (Duriozibethinus) is a type of fruit production is relatively abundant. The fruit is often called The King of Fruit, because it feels good and a lot of fans. This research aims to make durian odor remover products on the hands and mouth after eating durian. This research was conducted laboratories. Durian dry weight of peel that is used is a variation of 1, 2, 3, 4, 5, 6 and 8 g. Extract the durian peel dry with medium distilled water, tap water and commercial water brand club. Each volume of 500ml and benzoate acid additive is weighted 0.5 g. The resulting product has a pH of 5.6 to 6.2. In the extract product weighs 8 g of dried durian peel in distilled water, commercial water and tap water has a high-power clean, safe and practical. Products durian deodorizing liquid form with dry peel resulting of 2 to 4g have the resilience to future ekstraki media tap water is +3.5 months, commercial water brands club of ± 10 and distilled water of ± 4 months. The chemical composition of the product is lignin, saponins, flavonoids, pectin, thiamin, niacin, riboflavin.

Keywords: durian, deodorizing liquid products, extraction, the inside of durian peel.

1. INTRODUCTION

From 2005to 2008 durian Indonesia is the production lot. In 2005 people consume durian as much as 0.21kg/capita/year. In 2006people consume 0,78kg/capita/year. In 2008, people consumed from 1.92 to 2.0kg/capita/yr. Indonesianlocaldurianproductionis683, 232 tons per year. Many types of good quality durian from Indonesia, but also much import. From 2004to 2010, Indonesia imported durian been rising [1, 2, 3].

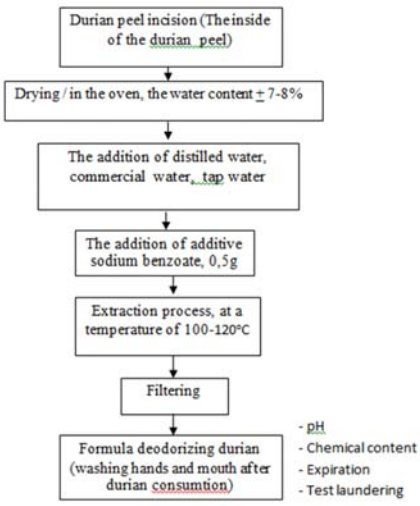
Research Yani M. *et al*., 2013statingthateliminatesodorof ammonia gas was done by using in organic bio filter filler material by comparing the pebbles and activated charcoal. Fiter activated charcoal to absorbed ors better than to wear coral [4]. Sekine; *et al.* 1976 examined the deodorizing liquid lanolin where in making use of methanol and ethanol with mixing temperatures between 17 and18°C [5]. Yasuyuki Mori, 1980, examines the composition deodorizing liquid aromatic hydrocarbon containing isoparaffin having a boiling point of more than 150oC initial and final boiling point lower than 300°C [6]. This research is to develop and exploit the potential of durian waste. Durian contains ±79.08% waste of skin and seeds [7].

This study utilizes durian peel waste into durianodor remover products. Some people already know that washing the smell of durian by putting water on durian skin (inside). This research aims to synthesize deodorizing formula durian with the extraction process. This liquid to wash your hands and mouth after eating durian. Everyone uses the liquid product is more practical.

2. METHOD

This study was conducted in a laboratory, data collection and testing data is held repetitions of each three (3) times. Research materials used are, durian peel in side, aquqdes, bottled water brands club, water taps, benzoic acid. This research used equipment: Erlenmeyer, measuring cups, glass hacker, electric scales brand Mettler Toldo Al. 204, the maximum210g and 0.01gminimum, filter, pH paper, thermometers, microscopes, stoves, LPG, glass bottle, flask volume, HPLC.

Grooves make deodorizing liquid product in the hands and mouth of the durian peel as follows:



2.1 Data analysis

This study data analysis using ANOVA (Analysis of Variance) unilabiate with significance level α=5%, this compares Results with P=0.05. When there is a real difference then continued with test Honestly Significant Difference (HSD) at the level of α=5%. This research data is the result of a durability of the product solution, the pH of deodorizing product with distilled water media, commercial water, tap water.

3. RESULTS AND DISCUSSIONS

The water content of the skin durian, wet and dry based are74.89% and7-8%, respectively. This research was conducted by extracting the media wearing distilled

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water, tap waterandcommercialwater500mlrespectively. Additive sodium benzoate with a weight variation durian peel (inside) dry1, 2, 3, 4, 5, 6, 7, and8gat a temperature of100-120°C. Physical observation results obtained in Table-1 and Table-2.

Table-1. Color extracted wear distilled water, commercial water, tap water500ml, 0.5g of sodium benzoate with a variation of1gtodrydurianpeel8g.

No.	Durian peel weights (g)	Color		
		A	B	C
1.	1,00	transparent	transparent	transparent
2.	2,00	yellow	yellow	yellow
3.	3,00	light yellow	light yellow	Yellow purple
4.	4,00	light yellow	light purple	light purple
5.	5,00	light yellow	purple brown	Purple brown
6.	6,00	dark yellow	purple brown	dark purple
7.	7,00	dark yellow	dark brown	dark brown
8.	8,00	dark yellow	dark brown	dark brown

Table-2. Results of wear distilled water extraction, commercial water, 500mlof tap water, 0.5g of sodium benzoate with a variation of1gto8 g durian peel dry.

No.	Durian peel weights (g)	Results laundering		
		A	B	C
1.	1,00	less clean	less clean	less clean
2.	2,00	less clean	less clean	less clean
3.	3,00	less clean	less clean	less clean
4.	4,00	clean enough	clean enough	clean enough
5.	5,00	clean enough	clean enough	clean enough
6.	6,00	clean	clean	Clean
7.	7,00	well clean	clean	Clean
8.	8,00	well clean	well clean	well clean

Description Tables 1 and 2:

A= distilled water / quads
B= commercial water
C= tap water

In Tables 1 and 2 shows the higher the weight of the dried durian peel color is brown and the pH has been rising. Figure-1 and Figure-2 below, shows the resilience of the liquid product to the durian peel dry weight of1gup to8g.

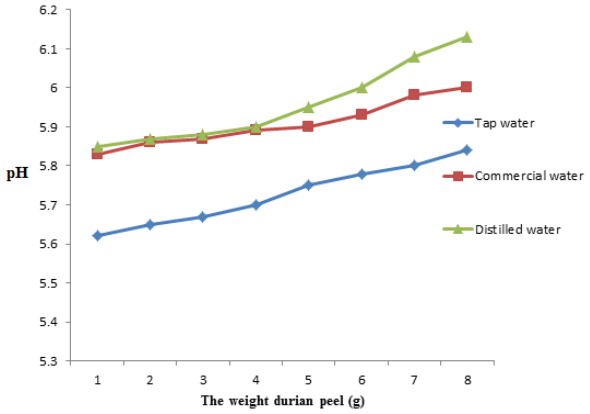

Figure-1. Effect of durian peel weights 1g to 8g in 500 ml of tap water in the solvent extraction, commercial and distilled water to Ph.

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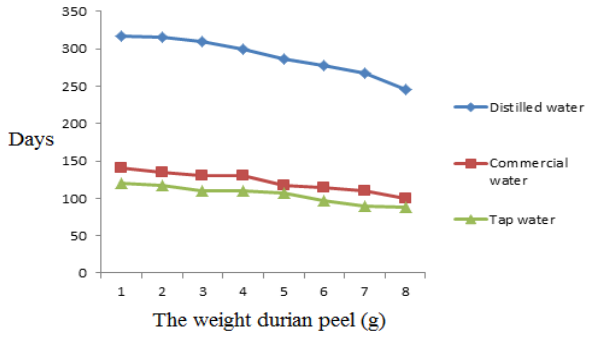

Figure-2. Resilience durian peel weights 1g to 8g in 500 ml of distilled water solvent extraction, commercial water, tap water versus time (days).

In Figure-1, the pH increased significantly, namely from 5.6 to 6.2. PH high extraction medium is distilled water. Figure-2, the highest resistance to the extraction medium is distilled water with a weight of 1g of peel. On the product extraction with tap water media, commercial water has a light purple color as it reacts with the minerals in the water. The higher the weight of durian peel has a higher concentration of the solution. The higher the concentration of the solution increasingly more clean in washing the hands and mouth. High concentrations will be easily covered with fungus or microbe. Resilience is the highest product at a concentration of 2g to 4g in 500ml of distilled water.

In the media products with tap water extract light purple color as it reacts with the minerals contained in the water. In the media there is no distilled water mineral substance. The higher the weight of durian peels in the solution / product higher concentrations and more clean in the washing. The higher the concentration of durian peels fungus grown so much easier than with low concentrations. Hand washing product durability and optimal mouth is at a concentration of durian peel 4g in 500ml media terilihat in Figure-3 below, the higher the concentration of durian peel the durability of the product is low.

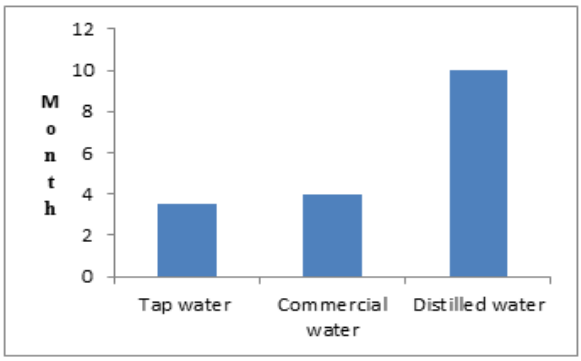

Figure-3. Resilience durian skin weights with good quality 4g in 500 ml of distilled water as solvent extraction, commercial water, tap water versus time (months).

Visual images deodorizing products with raw materials durian peel (part in) can be seen in Figure-4 below:

Figure-4. Product durian odor removers for hand and mouth.

4. CONCLUSIONS AND ADVICE

Durian peel extract product can eliminate the smell of durian in the hands and mouth after eating durian. These products can also eliminate the stench of sea fish. The nature of the product having a pH of 5.6 to 6.2. Durability of the products the higher the concentration, the lower the durian peels. The higher the concentration, the faster durian peel contaminated by fungi and microbe. The higher the concentrations of the durian peel cleansing products higher power. It is present in distilled water extraction media 2g to 4g optimal product contains concentrations in the medium 500ml of distilled water. The compositions of durian odor remover products with wearing HPLC analysis are carbohydrates, lignin, saponins, flavonoid, pectin, thiamin, niacin, riboflavin. Substances dominant products remove odors are pectin, thiamin, niacin.

In this study may be suggested, better de odorizing products are made with no color to make it more attractive in marketing. Recommended for commercial/marketed to the public with a more attractive packaging.

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