

Putu Bayu Tantrayana. 105100501111015. **CHARACTERISTIC OF PHYSICAL-CHEMISTRY FROM SNAKE FRUIT EXTRACT (*Zalacca Var Amboinensis*) WITH A METHOD OF MASERATION (STUDY COMPOUND PROPORTION:SOLVENT (B/V) AND SOLVENT CONCENTRATION)**

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SUMMARY

Snake fruit (*Salacca zalacca*) is a tropical fruit originally from Indonesia are widely spread throughout the archipelago. Snake fruit plants blooming and fruiting throughout the year, but the best time is in a period from August to October, and will produce fruit in January to April. Bark fruit grows well at altitude 0-700 m above the sea level (Tjahjadi, 1989). The advantages of this fruit is that they have a high nutrient content. Based on data released by the central statistics bureau of Indonesia in 2012, production of snake fruit in Indonesia reached 1.035.407 ton. This certainly become a high potential to be developed as processed food products.

Extraction is one of the food processing method that used to process snake fruit into an extract. This extraction is using the method of maceration. The principal of this maceration method is soaking the simplicia powder using certain solvents at room temperature and protected from lights. This process is very beneficial in a compounds isolation of nature materials because due to sample immersion, there will be a fragmentation of the wall and cell membrane caused by the difference of pressure between inside and outside parts of the cell, so that the secondary metabolites which was inside the nature cytoplasm will dissolved inside the organic solvent and the extraction of the compounds will be perfect as the period of the immersion can be arranged.

This research using the methods of RAK (completely randomize design), consist of 2 factors with 3 replications. The first factor is material ratio and the solvent consisting of 2 levels, that is 1:2 and 1:3 ratio. The second factor is the solvent concentrate consisting 3 levels, that is 70%, 80%, and 90%. The data analyzed using ANOVA variety and processed using Microsoft Excel. There will be a BNT 5% further study if real difference is founded. The result of organoleptic study being analyzed using hedonik quality test. The selection of the best treatment using the methods of Zeleny for physical and chemical.

The best treatment based on the properties of the physical and chemical that contained in the ratio treatment : solvent (b/v) 1:2 with 90% solvent concentrate has a 0,36% total value of phenol parameter, 2,55% total value of acid parameter, 32,63% total value of sugar parameter, 149,08 ppm value of antioxidant parameter activity, 58,27 value for total dissolved parameter, 4,44 value of Ph parameter, 192,82 gram for last product volume parameter value, 29,03 value of brightness parameter (L), 25,78 value of redness parameter (a*), 24,88 value of yellowness parameter (b*).

Keyword : Snake fruit, snake fruit extract, compound proportion : solvent(b/v) and solvent concentration