

ABSTRACT

Stick is a snack which made by main raw material wheat flour. Currently wheat flour in Indonesia obtained by imports, therefore that was necessary to reduce or control the rate of import of wheat flour through the utilization of local natural resources, namely the white sweet potato flour. Moreover, the addition of the product stick seaweed as product diversification efforts. The purpose of this study was to determine the effect of substitution of white sweet potato flour into flour to characteristics of seaweed stick.

*The research method used in this research consisted of two phases: preliminary research and primary research. The preliminary research were carried out determination of moisture, starch carbohydrate and crude fiber content of wheat flour, white sweet potato flour, and dry seaweed *Eucheuma cottonii*. The primary research was conducted to determine the effect of substitution of white sweet potato flour into flour on the organoleptic and chemical response. The processing of seaweed sticks include: pulping seaweed, mixing I, mixing II, kneading, thinning of the dough, dough molding, cutting, frying and draining. Testing chemical response includes analysis of moisture, starch carbohydrates, and crude fiber content. The experimental design used in this study was a Randomized Block Design with pattern 1x6 for four times repetition continued with the Duncan's test for different real factors.*

*The results of research showed that white sweet potato flour substitution influences on moisture content, starch content, and organoleptic characteristics including color, aroma and flavor, but does not affect the crispness and crude fiber content. The study of selected samples (white sweet potato flour 5% : wheat flour 95%) are as follows: moisture content 2.07%, starch content 44.05%, crude fiber content 10.14%, protein content 8.42%, fat content of 27.23%, the number of microbes / total plate count (TPC) $2,0 \times 10^1$ cfu / ml and *E.coli* 0.0 APM / ml.*

Keywords: stick, substitution, white sweet potato flour.