

## **ABSTRACT**

# **QUALITY CHARACTERISTICS OF SWEET BREAD PRODUCED FROM SUBSTITUTED SACHA INCHI FLOUR (*Plukenetia volubilis L.*) AND WHEAT FLOUR**

**BY**

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One of the food products made from wheat flour and fermented with yeast is bread. The processing is by baking. Broadly speaking, the principle of making bread consists of mixing, fermenting, forming, and baking. This research aims to determine the effect of wheat flour formulation and sacha inchi bean flour on the quality characteristics of sweet bread, as well as getting the formulation based on the best quality characteristics according to SNI 01-3840-1995. The research was arranged in a Randomized Complete Group Design (RAKL) with a single factor and 4 replications. The formulations used were 6 levels of wheat flour and sacha inchi ratio P0 (100%: 0%); P1 (95%: 5%); P2 (90%: 10%); P3 (90%: 10%), (85%: 15%); P4 (80%: 20%) and P5 (75%: 25%). The data obtained were analyzed for homogeneity with Bartlett's test and data multiplicity was tested with Tukey's test, then analyzed variance (ANARA) to determine the effect of treatment. If there was a real effect, the data were further analyzed with the Honest Real Difference Test (BNJ) at the 5% level. The results showed that the ratio of wheat flour and sacha inchi bean flour had a very significant effect on the moisture content, ash content, and expandability of sweet bread, as well as the sensory aroma, color, taste, texture and overall acceptance. The best formulation of wheat flour and sacha inchi bean flour according to SNI 01-3840-1995 is treatment P2 (90% :10%) with the criteria of moisture content of 21.26%; ash content of 2.02%; swelling power of 13.88%; aroma 4.80 (very like), taste 4.86 (very like), color 4.78 (very like), texture 4.86 (very like), and overall acceptance 4.88 (very like). Moisture content, ash content and sucrose sugar content have met the requirements of SNI 01-3840-1995, but fat content does not meet the 13.64% and far exceeds the maximum SNI 01-3840-1995 (max. 3%).

key words : sweet bread, sacha inchi flour, wheat flour

## **ABSTRAK**

### **KARAKTERISTIK MUTU ROTI MANIS HASIL SUBSTITUSI TEPUNG KACANG SACHA INCHI (*Plukenetia volubilis L.*) DAN TEPUNG TERIGU**

**Oleh**

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Salah satu produk pangan yang berbahan baku tepung terigu dan difermentasi dengan ragi yaitu roti. Proses pengolahannya dengan cara dipanggang. Secara garis besar prinsip pembuatan roti terdiri dari pencampuran, peragian, pembentukan, dan pemanggangan Penelitian ini bertujuan untuk mengetahui pengaruh substitusi tepung terigu dan tepung kacang sacha inchi terhadap karakteristik mutu roti manis, serta mendapatkan substitusi berdasarkan karakteristik mutu terbaik sesuai SNI 01-3840-1995. Penelitian disusun dalam Rancangan Acak Kelompok Lengkap (RAKL) dengan faktor tunggal dan 4 ulangan. Formulasi yang digunakan adalah 6 taraf perbandingan tepung terigu dan sacha inchi P0 (100% : 0%); P1 (95% : 5%); P2 (90% : 10%); P3 (85% : 15%); P4 (80% : 20%) dan P5 (75% : 25%). Data yang diperoleh dianalisis kehomogenannya dengan uji Bartlett dan kemenambahan data diuji dengan uji Tukey, selanjutnya dianalisis ragam (ANARA) untuk mengetahui pengaruh perlakuan. Apabila terdapat pengaruh nyata, data dianalisis lebih lanjut dengan Uji Beda Nyata Jujur (BNJ) pada taraf 5%. Hasil penelitian menunjukkan bahwa perbandingan tepung terigu dan tepung kacang sacha inchi berpengaruh sangat nyata terhadap kadar air, kadar abu, dan daya kembang roti manis, serta sensori aroma, warna, rasa, tekstur dan penerimaan keseluruhan. Formulasi tepung terigu dan tepung kacang sacha inchi terbaik sesuai SNI 01-3840-1995 adalah perlakuan P2 (90% : 10%) dengan kadar air 21,26%; kadar abu 2,02%; daya kembang 13,88%; aroma 4,80 (sangat suka), rasa 4,86 (sangat suka), warna 4,78 (sangat suka), tekstur 4,86 (sangat suka), dan penerimaan keseluruhan 4,88 (sangat suka). Kadar air, kadar abu dan kadar gula sukrosa telah memenuhi syarat SNI 01-3840-1995, namun kadar lemak tidak memenuhi yaitu 13,64% dan jauh melebihi maksimal SNI 01-3840-1995 (maks. 3%).

Kata kunci : roti manis, tepung kacang sacha inchi, tepung terigu