PENGARUH FORMULASI PENAMBAHAN TEPUNG BIJI KECIPIR DAN TEPUNG PORANG TERHADAP KANDUNGAN SERAT MIE JAGUNG INSTAN TERSUBTITUSI MOCAF

[The Effect of Addition Formulation of Winged Bean Flour and Porang Flour on The Fiber Content of Instant Corn Noodles Subttued Mocaf]

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ABSTRACT

This study aims to determine the effect of addition formulation of winged bean flour and porang feet flour on the nutrition content of instant corn noodle. The experimental design used was a Completely Randomized Design (CRD) with one factor. The factor which is done is the formulation of adding winged bean flour and porang flour consisting of six treatments. The treatment was P (percentation of corn flour : mocaf : porang flour : winged bean flour) included P1 (65: 20% : 0% : 15%), P2 (65% : 20% : 3% : 12%), P3 (65% : 20% : 6% : 9%), P4 (65% : 20% : 9% : 6%), P5 (65% : 20% : 12% : 3%), P6 (65% : 20% : 15% : 0%).The measured noodle quality parameters are chemical quality (water content, protein content, food fiber content, fat content, ca content), physical quality (color, cooking time, cooking loss, rehydration) and organoleptic quality covering taste, aroma and texture. Addition formulation of winged bean flour and porang feet flour gives a significantly different effect on water content, protein content, dietary fiber content, fat content, ca content, color, cooking loss, cooking time, rehydration, hedonic aroma and taste both hedonic and scoring. The best treatment was obtained in the treatment of P3 (9% winged bean flour : 6% porang flour) with a water content of 4.50%; protein content 11.39%; dietary fiber content of 20.01%; fat content 2.74%; calsium content of 0.06%; content 2,84 ppm, L value 59.59 after brewing and 50.15% after brewing, ° hue before brewing 76.11 and after brewing 77.93; cooking time 10.32 minutes, cooking loss 0.66% and rehydration 10.18 minutes.

Keywords : *Instant corn noodle, Porang flour, Winged bean flour*

ABSTRAK

Penelitian ini bertujuan untuk mengetahui pengaruh formulasi penambahan tepung biji kecipir dan tepung porang terhadap kandungan gizi mie jagung instan. Rancangan percobaan yang digunakan adalah Rancangan Acak Lengkap (RAL) dengan satu faktor. Faktor yang dilakukan yakni formulasi penambahan tepung biji kecipir dan tepung porang yang terdiri dari enam perlakuan. Perlakuan meliputi persentase tepung jagung: mocaf : tepung porang : tepung kecipir yaitu P1 (65% : 20% : 0% : 15%), P2 (65% : 20% : 3% : 12%), P3 (65% : 20% : 6% : 9%), P4 (65% : 20% : 9 : 6%), P5 (65% : 20% : 12 % : 3%), P6 (65% : 20% : 15% : 0%). Setiap perlakuan dilakukan tiga ulangan sehingga diperoleh 18 sampel.Parameter mutu mie yang diukur adalah mutu kimia (kadar air, kadar protein, kadar serat pangan, kadar lemak, kadar Ca), mutu fisik (warna, *cooking time*, *cooking loss*, rehidrasi) serta mutu organoleptik melputi rasa, aroma dan tekstur. Formulasi penambahan tepung biji kecipir dan tepung porang memberikan pengaruh yang berbeda nyata terhadap kadar air kadar protein, kadar serat pangan, kadar lemak, kadar Ca, warna, *cooking loss*, *cooking time*, rehidrasi, aroma secara hedonik dan rasa baik secara hedonik dan skoring. Perlakuan terbaik diperoleh pada perlakuan P3 (9% tepung biji kecipir : 6% tepung porang) dengan kadar air 4,50%; kadar protein 11,39%; kadar serat pangan 20,01%; kadar lemak 2,74%; Kadar Ca 0,06%; kadar Zn 2,84 ppm, nilai L 59,59 setelah diseduh dan 50,15% setelah diseduh, °Hue sebelum diseduh 76,11 dan setelah diseduh 77,93; *cooking time* 10,32 menit, *cooking loss* 0,66% dan rehidrasi 10,18 menit.

Kata Kunci : Mie jagung instan, Tepung biji kecipir, Tepung porang