

ABSTRAK

Pencoklatan Enzimatis pada tepung kentang dapat menurunkan kualitas mutu tepung. Pencoklatan dapat dihambat menggunakan *coater* seperti kitosan. Penelitian ini bertujuan untuk mengetahui pengaruh *edible coat* kitosan terhadap kandungan gizi tepung kentang pada kondisi pengeringan yang berbeda, dengan tepung kentang tanpa *coating* sebagai kontrol. Metode penelitian meliputi cara pengeringan yang dilakukan pada suhu kamar (25°C) dan suhu oven (40°C). Parameter kandungan gizi yang diteliti meliputi kadar air dan abu dilakukan dengan metode gravimetri sedangkan kadar vitamin C dengan metode titrasi. Analisis kadar fosfor dilakukan dengan metode spektrofotometri visible sedangkan kadar kalsium dan besi dilakukan dengan metode spektrofotometri serapan atom (SSA). Hasil analisis kandungan gizi tepung kentang *coating* kitosan pada pengeringan suhu kamar diperoleh kadar air 15,14%; vitamin C 9,57%; abu 3,73%; fosfor 0,32%; kalsium 0,05%; besi 0,027% sedangkan pada suhu oven diperoleh kadar air 11,61%; vitamin C 7,97%; abu 2,64%; fosfor 0,32%; kalsium 0,30%; besi 0,024%. Pada tepung kentang tanpa *coating* kitosan pada pengeringan suhu kamar diperoleh kadar air 14,60%; vitamin C 4,83%; abu 3,78%; fosfor 0,25%; kalsium 0,03%; besi 0,028% sedangkan pada suhu oven diperoleh kadar air 11,11%; vitamin C 6,28%; abu 2,78%; fosfor 0,23%; kalsium 0,04%; besi 0,028%. Berdasarkan data tersebut dapat disimpulkan bahwa *coating* kitosan berpengaruh terhadap kandungan gizinya, kondisi pengeringan tepung kentang pada suhu oven 40°C memiliki kandungan gizi lebih baik dari pengeringan suhu kamar 25°C .

Kata kunci : *edible coat*, kitosan, kandungan gizi, pencoklatan

ABSTRACT

Enzymatic browning in potato flour quality can degrade the quality of flour. Browning can be inhibited using a coater such as chitosan. This study aims to determine the effect of chitosan as an edible coat on nutrient content of potato flour at different drying ways, with potato flour without coating as a control. Research methods include drying at room temperature (25°C) and the oven temperature (40°C). Parameters examined included nutrient content and moisture content of ash carried by the gravimetric method, while the levels of vitamin C by titration method. Analysis of the levels of phosphorus carried by visible spectrophotometric method while the levels of calcium and iron was conducted using atomic absorption spectrophotometry (AAS). The results of the analysis of the nutrient content of potato flour coating chitosan on room temperature drying retrieved the moisture content of 15,14%; vitamin C 9,57%; 3,73% ash; 0,32% phosphorus; 0,05% calcium; 0,027% iron, while the temperature of the oven retrieved a moisture content of 11,61%; vitamin C 7,97%; 2,64% ash; 0,32% phosphorus; 0,30% calcium; 0,024% iron. An potato flour with out chitosan coating at room temperature drying retrieved the moisture content of 14,60%; vitamin C 4,83%; 3,78% ash; 0,25% phosphorus; 0,03% calcium; 0,028% iron, while the temperature of the oven retrieved a moisture content of 11,11%; vitamin C 6,28%; 2,78% ash; 0,23% phosphorus; 0,04% calcium; 0,028% iron. Based on data from these studies it can be concluded that chitosan coatings affect the nutritional content, potato flour drying conditions at a temperature of 40°C oven drying have nutrition content better than room temperature of 25°C .

Keywords: browning , chitosan, edible coat, nutrient content

