

**PENGARUH KETEBALAN IRISAN DAN SUHU PENGERINGAN
TERHADAP SIFAT FISIK CHIP DAN TEPUNG PORANG
(*Amorphophallus oncophyllus*)**

INTISARI

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Umbi porang (*Amorphophallus oncophyllus*) merupakan salah satu hasil pertanian yang melimpah di Indonesia. Porang mengandung glukomannan yang bermanfaat sebagai serat pangan larut air yang rendah kalori dan banyak digunakan dalam industri pangan sebagai bahan tambahan dengan berbagai fungsi. Penelitian ini dilakukan untuk mengkaji perubahan sifat fisik berupa warna dan densitas pada chip porang selama pengeringan menggunakan *cabinet dryer* serta tepung porang yang dihasilkan selama pemisahan.

Proses produksi tepung porang dilakukan dengan metode berikut: umbi porang segar dicuci dan dikupas kemudian dirajang dengan ketebalan 1 mm dan 3 mm. Irisan porang kemudian dikeringkan dengan suhu 50°C, 60°C, 70°C sampai kadar air mencapai 8-11%. Selama pengeringan diambil data densitas dan warna dengan interval 15 menit. Chip porang kering kemudian ditepungkan dan dipisahkan dari kalsium oksalat dan komponen lain.

Hasil penelitian menunjukkan bahwa tidak ada perbedaan yang signifikan ($P < 0,05$) antara perlakuan suhu pengeringan terhadap warna dan densitas chip porang. Sedangkan ketebalan irisan mempengaruhi warna dan densitas. Konstanta laju perubahan densitas berkisar antara 0,0044 – 0,0297/menit dan konstanta laju perubahan warna sebesar 0,0015 – 0,013/menit. Setelah melalui proses pemisahan tepung porang memiliki densitas sebesar 0,602 – 0,732 gr/cm³. Tepung porang yang telah melalui proses pemisahan siap untuk diekstraksi menjadi tepung glukomannan.

Kata kunci: Umbi porang (*Amorphophallus oncophyllus*), pengeringan *cabinet dryer*, pemisahan.

***THE EFFECT OF TEMPERATURE AND SLICE THICKNESS ON DRYING
PROCESS TO PHYSICAL PROPERTIES OF CHIP AND PORANG FLOUR***

(Amorphophallus oncophyllus)

ABSTRACT

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*Porang corm (*Amorphophallus oncophyllus*) is one of the agricultural products that are abundant in Indonesia. Porang contains glucomannan that useful as a water-soluble dietary fiber, has low calories, and is widely used in the food industry as natural food additiver. This study was done to study the changes of physical properties such as color and density of porang chip during drying process using cabinet dryer and porang flour during separation process.*

Porang flour production process carried out by the following methods: fresh porang corm was washed and stripping and then sliced with a thickness of 1 mm and 3 mm. Porang slices was dried at a temperature of 50 ° C, 60 ° C, 70 ° C to reach moisture content of 8-11%. During drying, color and density data were taken with an interval of 15 minutes. Porang chip was powdered and separated from the calcium oxalate and other components through separation process.

The study showed there wasn't significant difference ($P < 0,05$) between the temperature of the drying treatments to the color and density of porang chips. Meanwhile, the slice thickness affected the color and density. The constanta rate of density change were 0.0044 to 0.0297/minute and the constanta rate of color change were 0.0015 to 0.013/minute. Through the separation process porang flour had density value in the range of 0.602 to 0.732 g / cm³ while the flour whitenesses were 60,58 to 73,012%. Porang flour that had been through the separation process was be ready to be extracted into glukomannan flour.

*Keywords: porang corm(*Amorphophallus oncophylus*), cabinet dryer drying, separation*