

ABSTRACT

THE EFFECT OF DRYING TEMPERATURE WITH OVEN ON THE COMPOSITION OF PROXIMATE *CHIPS* PORANG (*Amorphophallus muelleri* Blume) AFTER SOAKING IN LIME JUICE (*Citrus aurantifolia*)

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Porang tubers are one of Indonesia's natural resources. Not many people know porang tubers as a local food ingredient that grows in forest lands in East Java. Porang tubers have high glucomannan content and are good for health, among others, can reduce cholesterol levels, blood sugar, and weight. Porang tubers contain high levels of calcium oxalate which can cause itching and irritation when consumed in large quantities with frequent intensity and can affect the quality of porang tubers. One of the ways to reduce the calcium oxalate content in porang tubers is by soaking porang tubers in a 5% lime juice solution for 15 minutes. Porang tubers that have been sliced thinly with a thickness of 0.5 cm and have gone through the soaking process are then dried in an oven with temperature variations of 60 °C and 70 °C for 11 hours. This study aims to determine the effect of drying temperature on the composition of the proximate levels of porang chips after immersion in a 5% lime juice solution to suit the quality criteria of porang chips. Porang tubers were sliced with a thickness of 0.5 cm, then soaked in a 5% lime juice solution for 15 minutes and then dried in an oven at a drying temperature of 60°C and 70°C for 11 hours. From this process, the results obtained the lowest water content of *chips* by drying at a temperature of 70°C with a water content value of 12.63%; ash 3.45%; 5.28% protein; fat 0.29%; carbohydrates 78.35%; energy 337.13%; calories 2.61%; while drying at 60°C produced *chips* with a moisture content of 14.87%; ash 3.87%; 5.36% protein; 0.52% fat; carbohydrates 75.38%; energy 327.64%; and 4.68% calories. From the results of these studies, it was found that the proximate levels that were most in accordance with the quality requirements of the porang chips were drying in the oven at a temperature of 70 °C so that it did not affect the quality of *chips* produced.

Keywords : porang tubers, *chips*, proximate analysis, lime, drying, oven, drying temperature.