

ABSTRACT

THE EFFECT OF INCLUSION TEMPERATURE IN LIME (*Citrus aurantifolia*) FRUIT COMPOSITION ON PROXIMATE COMPOSITION OF PORANG (*Amorphophallus muelleri* Blume) CHIPS

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Porang is one of the tubers in the Araceae family which has a great opportunity to be exported, so it needs to be developed in Indonesia. This plant has the potential to improve the community's economy but the community has not been able to process the plant. Porang tubers have many benefits, apart from being used as food, the glucomannan contained in porang tubers is also used for industrial purposes, chemical laboratories, and medicine. Porang tubers also contain other chemicals, namely calcium oxalate which is quite high and causes itching in the throat and hands. The decrease in calcium oxalate levels can be done by immersing it in a 5% lime juice solution for 15 minutes at 45 and 60°C. Porang tubers have a high water content of 70% -80% so they are easy to rot when stored in tuber form without any processing. Therefore, in order to get a longer shelf life, porang tubers are processed into porang chips. Processing is done by means of thinly sliced porang tubers with a thickness of 0.5 cm then the porang tubers are soaked in a 5% lime juice solution for 15 minutes at 45 and 60°C to reduce the calcium oxalate content, then the drying process is carried out with oven. This study aims to determine the effect of immersion temperature of 5% lime juice solution on the proximate composition 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 at 45 and 60°C, then dried in an oven at 60°C for 11 hours. From this process, the lowest water content was obtained from the 45°C immersion process which produced porang chips with a water content value of 74.28%, ash 0.53%, protein 0.74%, fat 0.02%, carbohydrates 24.45%, calories 100.76 Kcal/100g, energy 0 Kcal/100g and immersion at 60°C produced porang chips with a water content value of 78.12%, ash 0.49%, protein 0.44%, fat 0.02%, carbohydrates 20.95%, calories 85.56 Kcal/100g, energy 0 Kcal/100g.

Keywords: porang tubers, calcium oxalate, immersion temperature, lime, proximate levels.