ABSTRACT

The porang plant (Amorphophallus muelleri blume) is a member of the Araceae family which is commonly known as corpse flower because of its unpleasant floral odor. Porang tubers contain many efficacious compounds such as glucomannan. Glucomannan has many benefits with high economic value. In addition to glucomannan, porang tubers also contain oxalate compounds. The content of calcium oxalate compounds in a tuber is an obstacle when consumed without initial treatment first. The content of calcimi oxalate can cause itching, heat on the tongue and mouth when consuming these tubers besides that it can also cause health problems, especially in the kidneys.

To eliminate calcium oxalate compounds that are detrimental to the body, it is necessary to do initial treatment before consumption, namely by soaking treatment with an acid solution. The content of citric acid and ascorbic acid in star fruit can reduce the calcium oxalate content in porang tubers. Samples of porang tubers that have been obtained are washed and then peeled off the skin. Cut into 2x2 cm with a thickness of 0.5 cm then weighed + 50 grams, soaking is done by stirring in a 7% star fruit juice solution. The variation of stirring speed used is 300, 500 and 700 rpm. Then dried in the sun and made into filtrate to be analyzed oxalate content using the permanganometric titration method. Researchers wanted to find out whether the speed of stirring could affect the reduction in oxalate levels using star fruit juice solvent wuluh 7%.

Based on the results of the research obtained, namely the soaking treatment for 15 minutes with stirring speeds of 300, 500 and 700 rpm gave a decrease in oxalate levels sequentially namely 19.5317%, 35.8783% and 28.8364%. The highest drop result is obtained at a stirring speed of 500 rpm.

Keywords: porang tuber, oxalate compound, stirring speed, star fruit wuluh