ABSTRACT

THE EFFECT OF STIRRING ON THE SOAKING PROCESS OF PORANG TUBERS IN STAR FRUIT JUICE SOLUTION WULUH 7% ON OXALATE COMPOUND LEVELS

Porang tuber (Amorphophallus muelleri Blume) is a type of plant from the taro-talasan tribe, many grow in Indonesia from the family (Areceae). Porang tubers are plants producing carbohydrates, fats, proteins, minerals, vitamins and dietary fiber. The special content found in porang root plants is glucomannan. Glucomannan includes hydrocolloids that have the ability to thicken and form gels so that they are widely used in various industries. In the field of industry, porang can be used to gloss fabrics, paper adhesives, paint making materials, cotton fabric materials and used as additional or functional materials in food products. But porang tubers cannot be consumed directly, this is because there are oxalate compounds in tubers that can cause itching in the mouth, burning sensation, irritation of the skin, mouth and digestive tract.

From a brief explanation of the advantages and disadvantages of porang tubers, researchers want to examine the reduction in oxalate compound levels using star fruit juice solution wuluh 7% by soaking for 15 meneit with stirring and without stirring to reduce oxalate compound levels so that they can be used properly. Based on the results of the study, it was found that the effect of stirring in the soaking process in star fruit juice solution wuluh 7% speed 500 rpm can reduce oxalate compound levels by 35.00%, and at 0 rpm or without stirring can reduce oxalate compound levels by 8.35%.

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