## ABSTRACT

The purpose of this research of was to determine the effect of various phosphate salt concentration  $(Na_2HPO_4)$  and the best soaking time on the characteristics of instant white glutinous rice. The benefits of this research are to provide a variation in the processing of sticky rice so as to increase the added value of glutinous rice, providing an alternative form of processed food glutinous rice into fast food, and produce instant white glutinous rice are more varied.

The experimental design in this research using 3x3 factorial design in a randomized complete block design (RAK) with 3 times repetition, so that there are 27 experiment units. In this research, the factors that used are concentrations of disodium hydrogen phosphate (Na<sub>2</sub>HPO<sub>4</sub>) 0,1%, 0,3%, and 0,5% and soaking time (60 minutes, 120 minutes, 180 minutes). There are several responses used, which are organoleptic response with the attributes of texture, aroma, and taste. Physics responses by measuring sticky rice volume and cooking time. Chemical responses by water content and starch content.

Based on results of this research condluded the concentration of disodium hydrogen phosphate ( $Na_2HPO_4$ ) significantly affect the measuring sticky rice volume, cooking time, moisture, starch content but no significant effect on the responses of the organoleptic taste, aroma, and texture.Factor soaking time significantly affect the measuring sticky rice volume, cooking time, the water content and starch content of no significant effect on the responses of the organoleptic taste, aroma, and texture. The interaction between the concentration of disodium hydrogen phosphate ( $Na_2HPO_4$ ) and soaking time effect on measuring sticky rice volume, cooking time, the water content and starch content of no significant effect on the responses of the organoleptic taste, aroma, and texture.

Based on primary research condluded the best treatment is a3b1 treatment(concentration of disodium hydrogen phosphate 0.5% and soaking time for 60 minutes) with the starch content of 59.78%; water content of 3.67%; cooking time for 09.32 minutes; and measuring sticky rice volume 123.97%.

**Key words**: Dinatrium Hydrogen Phosphat Concentration, Soaking Time, Rice Volume, Cooking Time, water content, starch content and instan white glutinous rice