## Influence of Temperature and Time on the Physical and Chemical Properties of Siam Madu Orange Peel Flour Dr. Ir. Budi Hariono, M.Si.

## Alfini Nur Febrianti

Study Program of Food Engineering Technology Majoring of Agriculture Technology

## ABSTRACT

Orange peel is one of the wastes produced by citrus fruits with a fairly highwater content. Flour is the most appropriate utilization product, because the shelf life is quite long. The purpose of the study was to find out the physical and chemical properties of orange peel flour, as well as to know the best temperature and time during the drying process. This study used a Randomized Group Design with 8 treatments and 3 repetitions. Drying is carried out at a temperature of 60°C and 70°C. The time used for each temperature is 4 hours, 5 hours, 6 hours, and 7 hours. Temperature and drying time have a very noticeable effect on the physical and chemical properties of sweet orange peel flour. The results of the analysis test showed that the yield value, color, moisture content, ash content, vitamin C, and antioxidant activity had a significant effect on the quality of sweet orange peel flour. Based on the analysis that has been carried out, the best treatment was obtained on the T1t1 treatment, namely drying orange peel at a temperature of 60°C of 4 hours. This treatment is the drying with the lowest temperature and the fastest time compared to other treatments.

Keywords: Orange peel, orange peel flour, drying