

## ABSTRACT

*The purpose of this research is to study the influence of the type of eggs and concentration of tween 80 and the interaction of these two factors on the characteristics of egg powder to obtain good results that can be used for further processing.*

*The preliminary study in this research is the analysis of fat and protein for the three types of eggs are local chicken eggs, hen eggs and duck eggs. The main study was conducted using a randomized block design (RAK) with a 3x3 factorial and repeat 3 times. Factor A (types of eggs) with 3 levels, namely: A<sub>1</sub> (local chicken eggs), A<sub>2</sub> (hen eggs), A<sub>3</sub> (duck egg) and factor B (concentration of tween 80) with 3 levels, namely: B<sub>1</sub> (0.1%) , B<sub>2</sub> (0.5%), B<sub>3</sub> (1%). The response in the main study is the water content, protein content, fat content, color analysis, dissolved solids and total yield.*

*Results of preliminary research results obtained in local chicken egg protein content of 13.097% and 15.719% fat content, the protein content of hen eggs 12.919% and 12.534% fat content, as well as on a duck egg protein content of 13.529% and 14.490% fat content. The main research results indicate that the influence of the type of eggs affect water content, protein content, fat content, color level (brightness, red, and yellow), soluble solids, yield and flavor of egg powder products. The concentration of tween 80 significant effect on water content, fat content, protein content, the level of color (yellow), and aroma. Their interaction significantly affected the water content, the color level (brightness, red, and yellow), soluble solids and aroma.*

*Based scent products most preferred by the panelists found on A<sub>2</sub>B<sub>1</sub> treatment with a value of 3,97 which has a moisture content of 6,13%, 5.74% dissolved solids value, while the aroma of the most disliked by panelists found on A<sub>3</sub>B<sub>3</sub> treatment with a value of 2,72 which has a moisture content of 5,30%, 36,03% dissolved solids value.*

*Keywords : Flour Eggs, Type of Eggs, Concentration of Tween 80 , and Foam - Mat Drying*