ABSTRACT

The purpose of this research is to suspect age save black mulberry smoothies based on thw Arrhenius approach with the purpose of knowing how long a shelf life of black mulebrry smoothies at different storage temperature based on the Arrhenius approach.

On a shelf life prediction of a product need to be done the testing parameters that affect the quality of the product before it is stored for a certain period. The parameters observed in the black mulberry smoothies prior storage include gravimetric method of moisture content and amount of microorganisms method total plate count. The parameters analyzed starting early storage on day 0.

Based on the results of the calculation of the water content in the sample of black mulberry smoothies is stored on a different temperature, the obtained result where water content according to journal is 83,31-84% *so that the shelf life of products black mulberry smoothies are packed using bottle at each temperature was 21 days at a temperature of 5^{o}C , 8 days at a temperature of 15^{o}C, and 3 days at a temperature of 25^{o}C.While based on the results amount of microorganisms in the sample of black mulberry smoothies is stored on a different temperature, the obtained result where amount of microorganisms according to SNI is 5,0 x 10^{2} cfu/ml so that the shelf life of products black mulberry smoothies are packed using bottle at each temperature was 13 days at a temperature of 5^{o}C , 2 days at a temperature of 15^{o}C, and 0,34 days at a temperature of 25^{o}C. The results of the analysis of the viscosity on the black mulberry smoothies were analyzed using viscometer, acquired the black mulberry smoothies is equal amounting 28 d.Pas.*

Keywords : smoothies, black mulberry, shelf life, moisture content, amount of microorganisms, viscosity