ABSTRACT

The purpose of this study was to get a result from the use of liquid smoke coconut shell as a preservative in a product of beef sausage that will increase shelf life, as well as to define the type of grade liquid smoke (grade I or grade II) most optimally utilized as a preservative in a product of beef sausage. The research consisted of two stages: a preliminary study to determine the shelf life of beef sausage standards based organoleptic control is 2 days at room temperature, water content of 71.03% and a total amount of microba is $2.04 \times 10^3$ microbial colonies / gram. The main intensive search conducted for estimating the shelf life of sausage with the addition of liquid smoke at a temperature of $20^\circ$C, $25^\circ$C, $30^\circ$C, and $35^\circ$C with the measured variable are the water content and total microbial count (TPC) were processed using the Arrhenius method. The results showed that the shelf life is based on water content of beef sausage with the liquid smoke longest grade 1 is at a temperature of $20^\circ$C for 2.7 days while the second grade is 3.08 days, the shelf life based on the total number of microbes on beef sausages with liquid smoke grade 1 at a temperature of $20^\circ$C for 3.09 days and 3.12 days for grade 2.

Keywords: Beef Sausage, Liquid Smoke, Shelf Life, Arrhenius Method