ABSTRACT

The purpose of this study was to estimate the shallots paste storage shelf life based on the Arrhenius approach to find out the shallot paste shelf life at different storage temperatures and different packaging was based on the Arrhenius approach.

In this research conducted preliminary research and main research, in the preliminary research, the determination of selected shallots paste consisting of varieties of Brebes, Sumenep and Tuk-tuk with acceptance test (organoleptic test) and characteristic of shallots and shallots paste. While in the main research, the estimated shelf life of selected shallots paste are packed alumunium foil and glass packaging with parameter testing include moisture content of oven vacuum method, peroxide by titration method and amount of microorganisms by total plate count method. The parameters analyzed starting early storage on day 0 until the 28th day with a span of 4 days.

Based on the result of calculation of the moisture content in the sample of selected shallot paste, the obtained result shelf life time of products shallots paste are packed using alumunium foil at storage temperature 15 $^{\circ}C$, 30 $^{\circ}C$ and 45 $^{\circ}C$ is 52 days, 35 days and 24 days. While the shelf life of selected shallots paste are packed using glass packaging at storage temperature 15 °C, 30 °C and 45 °C is 57 days, 45 days and 37 days. Based on the result of calculation of peroxide in the sample of selected shallot paste, the obtained result shelf life time of products shallots paste are packed using alumunium foil at storage temperature 15 $^{\circ}C$, 30 ^oC and 45 ^oC is 50 days, 44 days and 40 days. While the shelf life of selected shallots paste are packed using glass packaging at storage temperature 15 °C, 30 $^{\circ}C$ and 45 $^{\circ}C$ is 70 days, 60 days and 53 days. Based on the result amount of microorganisms in the sample of selected shallot paste, the obtained result shelf life time of products shallots paste are packed using alumunium foil at storage temperature 15 °C, 30 °C and 45 °C is 43 days, 37 days and 32 days. While the shelf life of selected shallots paste are packed using glass packaging at storage temperature 15 °C, 30 °C and 45 °C is 40 days, 39 days and 37 days.

Keywords : shallot, shallot paste, shelf life, moisture content, peroxide, amount of microorganisms,