***ABSTRACT***

*Juice to classify as wet food product cultivation. The purpose of this research was to utilize and diversify processed purple sweet potato into a healthful beverage products.*

*The purpose of this research was to determine the shelf life of the juice purple sweet potato through changes in the quality (physical, chemical and microbiological) on the temperature and duration of storage of the Arrhenius model application. The benefit of this research is to determine the shelf life and the right temperature for a good storage for purple sweet potato juice and shelf life can affect the determination of the Arrhenius model.*

*This research was conducted to estimate the shelf life of purple sweet potato juice using the Arrhenius method by storing purple sweet potato juice at temperatures 15oC, 25oC, and 35oC to see the changed of quality purple sweet potato juice for 7 days. The parameters analyzed were anthocyanins, total microbes, total soluble solid (TSS), and pH.*

*Based on result from the research show shelf life and quality the best of purple sweet potato juice was stored at temperature 15oC, and the parameter which to measure was are anthocyanin,total microbial, total soluble solid, and pH. Where the shelf life of mix juice to suppose until 2,01 days (2 days 14 hours) for anthocyanin content, 0,94 days (22 hours 33 minutes) for total microbial, 17,54 days (17 days 12 hours) for total soluble solid, and 21,16 days (21 days 3 hours) for pH. Reduction the quality value between temperature 15oC – 25oC is 1,48 for anthocyanin content,2,17 for total microbial,1,12 for total soluble solid, and 1,13 for pH. Reduction the quality value between temperature 25oC – 35oC is 1,63 for anthocyanin content,2,06 for total microbial,1,03 for total soluble solid, and 2,53 for pH.*