ANTIBACTERIAL ACTIVITY TEST OF EXTRACT n-HEKSANA AND CHLOROFORM OF SOURSOP LEAF \textit{(Annona muricata L.) ON GROWTH OF ANTIBACTERIAL \textit{Staphylococcus aureus} ON In Vitro}

Werenfridus Kono Lake

ABSTRACT

This study aimed to determine the antibacterial activity of soursop leaf against \textit{Staphylococcus aureus}. The extraction was processed by maceration method first with n-hexane then chloroform. The antibacterial activities were measured in vitro by means of agar diffusion method using paperdisk. The antibacterial activity was tested by analysis of variance (ANOVA) with a significance value of 0.5\% to know which treatment had an effect or significantly different with a dose respectively 300 mg / ml, 250 mg / ml, 200 mg / ml, 150 mg / ml, 100 mg / ml and produce antibacterial activity with consecutive inhibition zone of 16,70 mm; 14,05 mm; 11,45 mm; 9,85 mm; 3,00. The results of antibacterial activities examination showed chloroform extract can inhibited the growth of \textit{Staphylococcus aureus} at concentration 250 mg/ml with inhibition zone diameter were 14.05 mm. Extract with the highest activity determined the minimum inhibitory concentrations grow (MIC). MIC soursop leaf chloroform extract of the \textit{Staphylococcus aureus} bacteria that was at a concentration of 100 mg/ml with inhibition zone of 3.00 mm.

Keywords: antibacterial, chloroform extract, \textit{Staphylococcus aureus}, soursop leaves \textit{(Annona muricata L.)}.