

AKTIVITAS ANTIBAKTERI EKSTRAK ETANOL 96% DAUN SIRSAK (*Annona muricata* L) TERHADAP BAKTERI *Staphylococcus aureus*

Tri Yuliani

Infeksi saluran kemih (ISK) merupakan salah satu infeksi yang paling sering terjadi di fasilitas pelayanan kesehatan. *Staphylococcus aureus* merupakan bakteri gram positif yang menyebabkan infeksi saluran kemih. Daun sirsak (*Annona muricata* L) diketahui memiliki aktivitas antibakteri yaitu senyawa *anonaine* dari golongan alkaloid. Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri ekstrak etanol daun sirsak (*Annona muricata* L) yang memiliki zona hambat terbesar terhadap *Staphylococcus aureus* menggunakan metode sumuran. Proses ekstraksi dilakukan menggunakan metode maserasi dengan pelarut etanol 96%. Penelitian ini merupakan penelitian eksperimental dengan rancangan data post test *control group design* pada variasi konsentrasi ekstrak etanol daun sirsak (*Annona muricata* L) sebesar 10%; 20%; dan 40%, kontrol positif (levofloksasin 0,1% dan kotrimoksazol 2%), serta kontrol negatif (DMSO 10%). Data yang diperoleh dianalisis menggunakan uji *Kruskal-Wallis* yang dilanjutkan dengan uji *post hoc Mann-Whitney*. Dari hasil tersebut disimpulkan bahwa ekstrak etanol daun sirsak (*Annona muricata* L) memiliki aktivitas antibakteri terhadap bakteri *Staphylococcus aureus* yang ditandai dengan adanya diameter zona hambat terbesar pada konsentrasi ekstrak 40% yaitu $13,22 \pm 0,39$ mm.

Kata kunci : *Staphylococcus aureus*, infeksi saluran kemih, daun sirsak (*Annona muricata* L), zona hambat.

**ANTIBACTERIAL ACTIVITY OF ETHANOL EXTRACT 96% SOURSOP LEAVES
(*Annona muricata* L) AGAINST STAPHYLOCOCCUS AUREUS BACTERIA**

Tri Yuliani

*Urinary tract infections (UTIs) are one of the most common infections in health care facilities. Staphylococcus aureus is a gram-positive bacterium that causes urinary tract infections. Soursop leaves (*Annona muricata* L) are known to have antibacterial activity. Soursop leaves (*Annona muricata* L) are known to have antibacterial activity, namely anonaine compounds from the alkaloid group. This study aims to determine the antibacterial activity of soursop leaf ethanol extract (*Annona muricata* L) which has the largest inhibitory zone against Staphylococcus aureus using the well method. The extraction process is carried out using the maceration method with a 96% ethanol solvent. This study is an experimental study with a post test control group design data design on variations in the concentration of soursop leaf ethanol extract (*Annona muricata* L) by 10%; 20%; and 40%, positive control (levofloxacin 0.1% and cotrimoxazol 2%), as well as negative control (DMSO 10%). The data obtained were analyzed using the Kruskal-Wallis test followed by the Mann-Whitney post hoc test. From these results, it was concluded that the ethanol extract of soursop leaves (*Annona muricata* L) has antibacterial activity against Staphylococcus aureus bacteria which is characterized by the presence of the largest inhibitory zone diameter at an extract concentration of 40% which is 13.22 ± 0.39 mm.*

Keywords : *Staphylococcus aureus, Urinary tract infections, soursop leaves (*Annona muricata* L), inhibition zone.*