

ABSTRAK

Annisa Tri Banoeari, NIM 4193510002 (2023). Kajian Aktivitas Antibakteri dan Toksisitas Ekstrak Biji Telang (*Clitoria ternatea L*)

Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri ekstrak biji telang (*C. ternate. L*) terhadap bakteri *E. faecalis* dan *P. vulgaris* dan untuk mengetahui toksisitas ekstrak aseton biji telang terhadap larva udang *Artemia salina* Leach. Biji telang diekstrak dengan metode maserasi dengan pelarut aseton. Uji pendahuluan aktivitas antibakteri dilakukan dengan metode difusi cakram. Kemudian dilanjutkan dengan penentuan nilai *minimum inhibitory concentration* (MIC) dan *minimum bacteridal concentration* (MBC). Uji toksisitas dilakukan menggunakan metode *Brine Shrimp Lethality Test* (BSLT). Efektivitas ekstrak biji telang menunjukkan aktivitas antibakteri terhadap bakteri *E. faecalis* dengan sebesar 40,3% dan terhadap bakteri *P. vulgaris* sebesar 31,4%. Adapun nilai MIC dan MBC terhadap bakteri *E. faecalis* yaitu 1250 µg/mL dan 5000 µg/mL dan terhadap bakteri *P. vulgaris* 1250 µg/mL dan >5000 µg/mL. Hasil uji toksisitas menunjukkan bahwa ekstrak aseton biji telang bersifat sangat toksik dengan nilai LC₅₀ sebesar 17.9941 ppm.

Kata Kunci : *C. ternatea L*, Antibakteri, *E. faecalis*, *P. vulgaris*, Toksisitas.



ABSTRACT

Annisa Tri Banoeari, NIM 4193510002 (2023). Study of Antibacterial Activity and Toxicity of Telang Seed Extract (*Clitoria ternatea* L)

This study aims to determine the antibacterial activity of sea cucumber seed extract (*C. ternate. L*) against the bacteria *E. faecalis* and *P. vulgaris* and to determine the toxicity of telang seed acetone extract against *Artemia salina* Leach shrimp larvae. Telang seeds were extracted using the maceration method with acetone solvent. Preliminary testing of antibacterial activity was carried out using the disc diffusion method. Then proceed with determining the *minimum inhibitory concentration* (MIC) and *minimum bacteridal concentration* (MBC) values. The toxicity test was carried out using the *Brine Shrimp Lethality Test* (BSLT) method. The effectiveness of telang seed extract showed antibacterial activity against *E. faecalis* bacteria of 40.3% and against *P. vulgaris* bacteria of 31.4%. The MIC and MBC values for *E. faecalis* bacteria are 1250 µg/mL and 5000 µg/mL and for *P. vulgaris* bacteria 1250 µg/mL and >5000 µg/mL. The results of the toxicity test showed that the acetone extract of telang seeds was very toxic with an LC₅₀ value of 17.9941 ppm.

Keywords: *C. ternatea*, Antibacterial, *E. faecalis*, *P. vulgaris*, Toxicity.

