

ABSTRAK

Hijriana H Djalil, NPM. 05171611001. **Uji Efektivitas Antibakteri Ekstrak Daun Sirih Hijau (*Piper betle line*) Terhadap Udang Vaname (*Litopenaeus vannamei*)**. Yang dibimbing oleh ibu Juharni, S.Pi, M.Si selaku Pembimbing 1 dan bapak Dr. Muh. Aris, S.Pi., MP selaku pembimbing II.

Ekstrak Daun Sirih mengandung senyawa antibakteri yang dapat menghambat pertumbuhan bakteri *vibrio sp*. Penggunaan ekstrak daun sirih ditujukan sebagai antibiotik alami untuk keamanan lingkungan dan konsumen. Penelitian ini bertujuan untuk mengetahui konsentrasi yang tepat untuk menghambat pertumbuhan bakteri *vibrio sp* serta efektifitas antibakteri terhadap kelangsungan hidup udang vaname. Udang yang digunakan adalah udang vaname PL20, penelitian ini dilaksanakan pada tanggal 26 september 2020 sampai 07 januari 2021, yang bertempat di Labolaturium Sistem Dan Teknologi Budidaya Perairan, Fakultas Perikanan Dan ilmu Kelautan, Universitas Khairun Ternate untuk uji daya hambat dan uji efektifitas ekstrak daun sirih terhadap udang vaname dilakukan di Laboratorium Basah Kastela Fakultas Perikanan dan Kelautan Universitas Khairun Ternate. Penelitian menggunakan metode eksperimental dengan menggunakan Rancangan Acak Lengkap (RAL) dengan taraf 4 perlakuan 3 ulangan, parameter yang di amati adalah daya hambat ekstrak daun sirih terhadap bakteri *vibrio sp* dan kelangsungan hidup udang vaname (*litopenaeus vannamei* pasca diinfeksi bakteri).

Kata Kunci : Ekstrak Daun Sirih Hijau, Bakteri *vibrio sp*, Udang Vaname, Efektivitas ekstrak Daun sirih (*Piper betle line*).

ABSTRACT

Hijriana H Djalil, NPM. 05171611001. Antibacterial Effectiveness Test of Green Betel Leaf Extract (Piper betle line) Against Vaname Shrimp (*Litopenaeus vannamei*). Supervised by Mrs. Juharni, S.Pi, M.Si as the 1st Advisor and Mr. Dr. Muh. Aris, S.Pi., MP as supervisor II.

Betel leaf extract contains antibacterial compounds that can inhibit the growth of *Vibrio* sp. Bacteria. The use of betel leaf extract is intended as a natural antibiotic for environmental and consumer safety. This study aims to determine the right concentration to inhibit the growth of *Vibrio* sp bacteria as well as the effectiveness of antibacterials on the survival of vaname shrimp. The shrimp used was PL20 vaname shrimp, this research was conducted on 26 September 2020 to 07 January 2021, which was located at the Laboratory of Aquaculture Systems and Technology, Faculty of Fisheries and Marine Sciences, Khairun Ternate University to test inhibition and test the effectiveness of betel leaf extract. on vaname shrimp was carried out at the Kastela Wet Laboratory, Faculty of Fisheries and Marine, Khairun Ternate University. The study used an experimental method using a completely randomized design (CRD) with a level of 4 treatments 3 replications, the parameters observed were the inhibition of betel leaf extract against *Vibrio* sp bacteria and viability of *V*) aname shrimp (*Litopenaeus vannamei* after bacterial infection).

Keywords: *Green Betel Leaf Extract, Vibrio sp bacteria, Vaname Shrimp, Effectiveness of Piper betle line extract.*