

RINGKASAN

UZNAQ DENIA PUTRI. Pemanfaatan Ekstrak Daun Ketapang (*Terminalia catappa* L.) Terhadap Ektoparasit *Zeylanicobdella* sp. Secara In-Vitro. Dibimbing oleh RIKA WULANDARI dan SHAVIKA MIRANTI.

Daun ketapang diketahui mengandung senyawa kimia seperti flavonoid, alkaloid, tanin dan saponin. Senyawa tanin dan flavonoid daun ketapang diduga bersifat sebagai antibakteri. Penelitian ini dilaksanakan pada bulan November 2023 di Lab *Marine Chemistry* Fakultas Ilmu Kelautan dan Perikanan Universitas Maritim Raja Ali Haji untuk mengidentifikasi kandungan bahan aktif ekstrak daun ketapang dan uji *LC-50* pada *Artemia salina*, sedangkan untuk pengujian lintah *Zeylanicobdella* sp. dilakukan di Balai Benih Ikan Pengujian Kabupaten Bintan, Provinsi Kepulauan Riau. Rancangan Penelitian ini menggunakan 4 perlakuan dan 3 ulangan dengan konsentrasi ekstrak uji toksisitas artemia 0 ppm, 20 ppm, 40 ppm, 60 ppm, dan konsentrasi ekstrak uji tantangan lintah *Zeylanicobdella* sp. 0 ppm, 13 ppm, 26 ppm, dan 39 ppm. Hasil pengujian uji fitokimia ekstrak daun ketapang mengandung senyawa positif seperti alkaloid, flavonoid, dan tanin. Nilai *LC50* ekstrak daun ketapang berdasarkan persamaan regresi linier pada kurva regresi ekstrak etanol 96% yaitu 36,308 ppm yang dapat menyebabkan 50% kematian *Artemia salina* dan berpengaruh terhadap kematian lintah *Zeylanicobdella* sp. Hasil uji Anova menunjukkan adanya perbedaan yang signifikan, maka dilakukan pengujian lebih lanjut dengan metode *post hoc test* sebagai uji perbandingan berganda (*Multiple Comparison*) menggunakan uji tukey yang dapat disimpulkan bahwa perlakuan dengan dosis 39 ppm merupakan perlakuan yang berpengaruh pada bahan aktif daun ketapang terhadap kematian parasit jenis *Zeylanicobdella* sp.

Kata kunci: Daun Ketapang (*Terminalia catappa* L.), *Artemia salina* Leach, *Zeylanicobdella* sp.

SUMMARY

UZNAQ DENIA PUTRI. Utilization of Ketapang Leaf Extract (*Terminalia catappa* L.) Against the Ectoparasit *Zeylanicobdella* sp. In-Vitro. Supervised by RIKA WULANDARI and SHAVIKA MIRANTI.

Ketapang leaves are known to contain chemical compounds such as flavonoids, alkaloids, tannins and saponins. The tannin and flavonoid compounds of ketapang leaves are thought to have antibacterial properties. This research was carried out in November 2023 at the Marine Chemistry Lab, Faculty of Marine and Fisheries Sciences, Raja Ali Haji Maritime University to identify the active ingredient content of ketapang leaf extract and the LC-50 test on *Artemia salina*, while for testing the leech *Zeylanicobdella* sp. carried out at the Pengujian Fish Seed Center, Bintan Regency, Riau Islands Province. This research design used 4 treatments and 3 replications with artemia toxicity test extract concentrations of 0 ppm, 20 ppm, 40 ppm, 60 ppm, and leech challenge extract concentrations of *Zeylanicobdella* sp. 0 ppm, 13 ppm, 26 ppm, and 39 ppm. The results of the phytochemical test of Ketapang leaf extract contain positive compounds such as alkaloids, flavonoids and tannins. The LC50 value of Ketapang leaf extract is based on the linear regression equation on the regression curve of 96% ethanol extract, namely 36,308 ppm which can cause 50% death of *Artemia salina* and influence the death of *Zeylanicobdella* sp. leeches. The results of the Anova test showed that there were significant differences, so further testing was carried out using the post hoc test method as a multiple comparison test (Multiple Comparison) using the Tukey test which could be concluded that treatment with a dose of 39 ppm was a treatment that had an effect on the active ingredients of ketapang leaves on mortality. parasite type *Zeylanicobdella* sp.

Keywords: Ketapang leaves (*Terminalia catappa* L.), *Artemia salina* Leach, *Zeylanicobdella* sp.