ABSTRACT

(LITERATURE REVIEW)

POTENTIAL TOXICITY OF BINAHONG (Anredera cordifolia) LEAF EXTRACT ON SHRIMP (Artemia salina Leach) larvae

Wahyuti

Binahong Leaves (Andredera cordifolia) is a medicinal plant that can be used for various treatments one of which is used as an anticancer. One of the earliest methods for cytotoxic testing is Brine Shrimp Lethality Test (BSLT). Aim of this research was to know toxicity level of each extract binahong leaf (Anredera cordifolia) in each solvent n-hexane, ethyl acetate and methanol for level mortality larva shrimp Artemia salina Leach. The test carried out for 24 hours, then the number of dead larvae is counted.

In the first journal, the research method is laboratory experimental using *Artemia salina* Leach shrimp larvae and 96% ethanol solvent. This study showed that 96% ethanol extract of binahong leaves had toxic potential with an LC50 value of 97.797µg/ml.

In the second journal, the research method is a laboratory experiment using *Artemia salina* Leach shrimp larvae and solvents of n-hexane, ethyl acetate, and ethanol. From this study, it was found that the ethanol extract has a very toxic potential compared to ethyl acetate and n-hexane solvents with LC50 values of 7.35702 ppm, 106.992 ppm, and 175.800 ppm, respectively.

In the second journal, the research method is a laboratory experiment using *Artemia salina* Leach shrimp larvae and solvents of n-hexane, ethyl acetate, and ethanol. From this study, it was found that the ethanol extract has a very toxic potential compared to ethyl acetate and n-hexane solvents with LC50 values of 7.35702 ppm, 106.992 ppm, and 175.800 ppm.

In the third journal, the research method is laboratory experimental using *Artemia salina* Leach shrimp larvae and solvents of n-hexane, ethyl acetate, and methanol. From this study, it was found that methanol extract has a very toxic potential compared to n-hexane and ethyl acetate solvents with LC50 values of 447.96 ppm, 3728.29 ppm, and 12414.15 ppm.

From the three journals, the results of the study showed that each binahong leaf extract (*Anredera cordifiola*) had toxic properties compared to n-hexane and methanol.

Keyword: Anredera cordifiola, Artemia salina Leach, Toxicity Test and BSLT