

ABSTRACT

TOXICITY TEST OF MINT LEAF (*Mentha arvensis*) AGAINST *Artemia salina* Leach SHRIMP LARVAE USING *Brine Shrimp Lethality Test*

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Mint plant (*Mentha arvensis*) is one of the medicinal plants. Phytochemical screening of mint plants contain flavonoids, polyphenol, tannins and essential oils. Leaves mint are generally used to treat the digestive tract. In its development as an anticancer drug, it is necessary to carry out a toxicity test to determine its safety level. The purpose of this study was to determine the toxicity of mint leaves (*Mentha arvensis*) to *Artemia salina* shrimp larvae using *Brine Shrimp Lethality Test*.

This research method includes maceration extraction with 70% ethanol solvent, making concentration (1 ppm, 2 ppm, 3 ppm, 4 ppm, 5 ppm), and toxicity test using shrimp larvae, calculation of LC₅₀ value using Probit analysis.

From the results of the study, the LC₅₀ value of 10.237 ppm in mint leaf extract (*Mentha arvensis*) showed that it was potentially very toxic so that it could be developed further studies of LD₅₀ on mice *in vivo*.

Keyword : *mint leaves, toxicity test, LC₅₀*