

MICPS2-017-PS

Toxicity Test With Bslt (*Brine Shrimp Lethality Test*) Method of *Nothopanax fruticosum* (L.) Miq Leaves

Virsa Handayani *, Andi Amaliah Dahlia, Alfiah Husnawati Basri

Laboratory of Pharmacognosy Phytochemistry, Faculty of Pharmacy, Universitas Muslim Indonesia,
Makassar, Indonesia

*Corresponding author: virsa.handayani@umi.ac.id

ABSTRACT

Nothopanax fruticosum (L.) Miq is a plant from the Araliaceae family. The leaves of *Nothopanax fruticosum* (L.) Miq has a very strong antioxidant with the potential as an initial screening in toxicity assay. The research aimed to determine the LC₅₀ value of *Nothopanax fruticosum* (L.) Miq leaf extract against shrimp larvae of *Artemia salina* Leach. The leaves were extracted using 96% ethanol by maceration. The ethanol extract was made with concentrations of 25, 50, 250, 500, 1000, and 3000 and its comparator used a sea water negative control. Each concentration consisted of 10 larvae with 3 replications. The observations were made after 24 hour-testing by counting the number of dead shrimp larvae. The LC₅₀ value was calculated using the probit analysis method. The results showed that the LC₅₀ value of *Nothopanax fruticosum* (L.) Miq leaf extract was 66.07 µg / mL ± 12.16 µg / mL. This indicated that the leaf extract had a strong potential for toxicity to *Artemia salina* Leach shrimp larvae because the LC₅₀ value was <1000 ppm.

Keywords: Toxicity, *Nothopanax fruticosum* (L.), Miq leaves, *Brine Shrimp Lethality Test*, LC₅₀