

## ABSTRACT

### TOXICITY TEST OF METHANOL EXTRACT OF ANDE-ANDE LUMUT (*Selaginella doederleinii*) LEAVES USING THE BRINE SHRIMP LETHALITY TEST (BSLT) METHOD

Mokhamad Ilhan Nanziz

*The Ande-ande moss plant is a medicinal plant. Phytochemical screening of the Ande-ande moss plant contains alkaloids, flavonoids, saponins, tannins and steroids. Ande-ande moss leaves are commonly used to treat respiratory tract infections, diarrhea, broken bones, bleeding, and cancer. In its development as an anticancer drug, toxicity tests need to be carried out to determine its level of safety. The aim of this research was to determine the toxicity of methanol extract of Ande-ande Lumut (*Selaginella doederleinii*) leaves against *Artemia salina* shrimp larvae using the Brine Shrimp Lethality Test method. The shrimp larvae used in this study were 48 hours old because at that age the larvae's body parts are more complete than when they hatch. This research method includes making a test solution concentration and carrying out toxicity testing which is carried out for 24 hours using 5 concentrations with the following mortality levels: 0 ppm (3.3%) as a control solution, 1 ppm (10%), 2 ppm (16.6%), 3 ppm (23.3%), 4 ppm (33.3%), 5 ppm (40%). These results calculated the LC50 value using probit analysis. From the results of this research, it was found that the LC50 value was 8.304 ppm in the methanol extract of Ande-ande Lumut (*Selaginella doederleinii*) leaves, indicating that this value is very toxic to shrimp larvae and could potentially be developed as a cancer drug.*

**Keyword :** *Selaginella doederleinii*, BSLT, *Artemia salina*, LC<sub>50</sub>.