UJI AKTIVITAS ANTIBAKTERI DAN TOKSISITAS FRAKSI HEKSANA, ETIL ASETAT, DAN AIR BUAH RIMBANG (*Solanum torvum* Sw.)

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ABSTRACT

ANTIBACTERIAL AND TOXICITY ACTIVITY TEST OF HEXANE, ETHYL ACETATE, AND AQUEOUS FRACTIONS OF *RIMBANG* FRUIT (*Solanum torvum* Sw.)

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The rimbang plant (*Solanum torvum* Sw.) has traditionally been used as an herbal remedy to treat various ailments, such as boils, tinea versicolor, eye disorders, flu, fever, and diarrhea. This study was conducted to identify the secondary metabolite compounds present in the hexane, ethyl acetate, and aqueous fractions of rimbang fruit that are involved in inhibiting the growth of *Staphylococcus aureus* and *Escherichia coli*, as well as to evaluate the toxicity potential of each fruit fraction. Antibacterial activity was tested using the disk diffusion agar method against *Staphylococcus aureus* and *Escherichia coli* by measuring the diameter of the inhibition zones. Toxicity was assessed using the Brine Shrimp Lethality Test (BSLT) method with *Artemia salina* Leach larvae by determining LC_{50} values. The results showed that the fruit fractions of rimbang contained various secondary metabolite compounds, such as flavonoids, phenolics, saponins, steroids, triterpenoids, alkaloids, and coumarins. The antibacterial test results indicated that the ethyl acetate fraction exhibited better antibacterial activity at concentrations of 25% and 50% compared to the hexane and aqueous fractions against *Staphylococcus aureus* and *Escherichia coli*. The toxicity test indicated that the ethyl acetate and aqueous fractions did not exhibit toxic effects, while the hexane fraction was found to have weak toxicity, with an LC_{50} value of 595,66 mg/L.

Keywords: *Solanum torvum* Sw.*, traditional medicine, secondary metabolites, antibacterial, toxicity.*