

## INTISARI

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Daun sirsak (*Annona muricata* L.) termasuk famili Annonaceae yang telah dikenal sebagai tumbuhan obat. Daun sirsak (*Annona muricata* L.) mengandung alkaloid, tannin, flavonoid, terpenoid dan kandungan senyawa acetogenin yang diduga memiliki potensi sitotoksik. Tujuan penelitian ini adalah untuk mengetahui potensi sitoksisitas akut infusa daun sirsak (*Annona muricata* L.). Subyek uji yang digunakan hewan uji mencit galur *Swiss Webster* umur 2-3 bulan, kisaran berat badan 20-25 gram. Penelitian eksperimental ini menggunakan 4 dosis perlakuan yaitu 5.565 mg/kgBB, 78.623 mg/kgBB, 175.362 mg/kgBB, 386.956 mg/kgBB dan 1 kontrol negatif dengan 5 kali pengulangan. Hewan uji mencit yang digunakan berjumlah 25 ekor dengan masing-masing 5 ekor mencit jantan untuk tiap konsentrasi. Kematian mencit dihitung setelah 24 jam perlakuan. Analisis dilakukan perhitungan nilai LD<sub>50</sub> menggunakan rumus *Thompson and Weil* diperoleh nilai LD<sub>50</sub> 49,82 mg/kgBB. Hal ini menunjukkan bahwa infusa daun sirsak (*Annona muricata* L.) memiliki potensi sangat toksik terhadap hewan uji mencit, karena nilai LD<sub>50</sub> 5 – 50 mg/kgBB. Kemudian dihitung analisis probit menggunakan *Microsoft Excel* dan diperoleh nilai probit 4,08 g/100 mL.

Kata Kunci : Daun Sirsak (*Annona muricata* L.); infusa; toksisitas; dan mencit (*Mus Musculus* L.)

## ABSTRAK

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Soursop leaves (*Annona muricata* L) belongs to the Annonaceae family, known as a medicinal plant. Soursop leaves (*Annona muricata* L.) contain alkaloids, tannins, flavonoids, terpenoids, and acetogenin compounds predict to have cytotoxic potential. This study aimed to determine the potential for acute toxicity infusion of soursop leaf (*Annona muricata* L.). The testing subjects used Swiss Webster mice of 2-3 months old with a bodyweight range of 20-25 grams. This experimental study used 4 treatment doses, namely 5,565 mg / kg BW, 78,623 mg / kg BW, 175,362 mg / kg BW, 386,956 mg / kg BW and 1 negative control with 5 repetitions. The animals test used 25 mice with 5 male mice for each concentration. The mortality of mice was counted after 24 hours of treatment. The analysis was performed to calculate the LD<sub>50</sub> value using the Thompson and Weil formula, and it shows the LD<sub>50</sub> value of 49.82 mg/kg BW. It indicates that the infusion of soursop leaf (*Annona muricata* L.) has the potential to be very toxic to the mice because the LD<sub>50</sub> value is 5 - 50 mg/kg BW. Furthermore, probit analysis was carried out using Microsoft Excel and obtained a probit value of 4.08 g / 100 mL.

**Keywords:** Soursop Leaves (*Annona Muricata* L.); Infusion; Toxicity; and Mice (*Mus Musculus* L.)

