

**UJI AKTIVITAS ANTIBAKTERI EKSTRAK ETANOL
DAUN SIRSAK (*Annona muricata* L.) TERHADAP
Salmonella typhi SECARA *IN VITRO***

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Intisari

Latar Belakang: Demam tifoid merupakan infeksi sistemik yang disebabkan oleh *Salmonella typhi*. Masalah tifoid di Indonesia disebabkan oleh faktor kebersihan, resistensi antibiotik, dan belum adanya vaksin yang efektif. Tanaman sirsak (*Annona muricata* L.) telah digunakan secara turun temurun oleh sebagian masyarakat Indonesia untuk mengobati penyakit. **Tujuan:** Penelitian ini bertujuan untuk mengetahui aktivitas antibakteri ekstrak etanol daun sirsak terhadap *Salmonella typhi*, menentukan kandungan senyawa metabolit sekunder, menentukan konsentrasi efektif, dan konsentrasi hambat minimum (KHM) dari ekstrak etanol daun sirsak dalam menghambat pertumbuhan *Salmonella typhi*. **Metodologi:** Daun sirsak diekstraksi secara maserasi menggunakan pelarut etanol 70%. Ekstrak yang diperoleh kemudian dilakukan skrining fitokimia. Uji aktivitas antibakteri dilakukan dengan metode difusi cakram *Kirby-Bauer*. Penelitian ini menggunakan 6 konsentrasi yaitu 500 mg/mL, 600 mg/mL, 700 mg/mL, 800 mg/mL, 900 mg/mL, 1000 mg/mL. Kontrol positif menggunakan siprofloksasin 5 µg/disk sedangkan kontrol negatif menggunakan DMSO 10%. **Hasil:** Berdasarkan skrining fitokimia, ekstrak etanol daun sirsak mengandung senyawa alkaloid, fenol, flavonoid, saponin, tanin, dan triterpenoid. Ekstrak etanol daun sirsak tidak dapat menghambat pertumbuhan *Salmonella typhi*. **Kesimpulan:** Ekstrak etanol daun sirsak tidak memiliki aktivitas antibakteri terhadap *Salmonella typhi*.

Kata Kunci: Antibakteri, Ekstrak etanol daun sirsak, *Salmonella typhi*

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**IN VITRO ANTIBACTERIAL ACTIVITY DETERMINATION OF
ETHANOL EXTRACTS OF SOURSOP LEAVES (*Annona muricata* L.)
AGAINST *Salmonella typhi***

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Abstract

Background: Typhoid fever is a systemic infection caused by *Salmonella typhi*. In Indonesia, typhoid problem were caused by hygiene, antibiotic resistance, and ineffective vaccination factors. Soursop (*Annona muricata* L.) has been used by most of Indonesian people to treat many diseases. **Objective:** The aim of this study was to investigate the antibacterial activity of ethanol extracts of soursop leaves against *Salmonella typhi*, determined the secondary metabolite compounds, determined the effective concentration, and the minimum inhibitory concentration (MIC) of ethanol extracts of soursop leaves to inhibit the growth of *Salmonella typhi*. **Method:** Soursop leaves was extracted by maceration method using 70% ethanol. Chemical compounds of this extract were determined by phytochemical screening. Antibacterial activity test was determined by Kirby-Bauer Disc Diffusion method. This study used various concentration consist of 500 mg/mL, 600 mg/mL, 700 mg/mL, 800 mg/mL, 900 mg/mL, and 1000 mg/mL. Ciprofloxacin 5 µg/disk was used as positive control while negative control used DMSO 10%. **Result:** Based on phytochemical screening, ethanol extracts of soursop leaves contained alkaloids, phenols, flavonoids, saponins, tannins, and triterpenoids. Ethanol extracts of soursop leaves didn't showed antibacterial activity against the growth of *Salmonella typhi*. **Conclusion:** Ethanol extracts of soursop leaves didn't has antibacterial activity against *Salmonella typhi*.

Keywords: Antibacterial, Ethanol extracts of soursop leaves, *Salmonella typhi*

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