

**UJI TOKSISITAS INFUSA TUMBUHAN SURUHAN (*Peperomia pellucida*
L. Kunth) SECARA INVITRO DENGAN METODE *BRINE SHRIMP*
LETHALITY TEST (BSLT)**

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ABSTRAK

Tanaman suruhan (*Peperomia pellucida* L. Kunth) merupakan salah satu tanaman dari keluarga *Piperaceae* yang telah lama dimanfaatkan secara tradisional untuk menurunkan kadar asam urat darah, kolesterol, tekanan darah, serta mengobati berbagai penyakit seperti bisul, jerawat, abses, dan sakit perut sebab diketahui mengandung berbagai senyawa bioaktif yang memiliki efek teurapetik diantaranya flavonoid, tanin, saponin, triterpenoid, steroid dan alkaloid. Penelitian ini bertujuan untuk mengetahui nilai LC_{50} (*Lethal Concentration*) infusa daun suruhan secara *in vitro* menggunakan metode *Brine Shrimp Lethality Test* (BSLT) serta senyawa bioaktif yang terkandung didalamnya. Pengujian toksisitas menggunakan empat perlakuan konsentrasi yaitu 10 ppm, 100 ppm, 500 ppm, 1000 ppm beserta kontrol negatif dan dilakukan sebanyak tiga kali pengulangan untuk setiap perlakuan. Sebanyak 10 ekor larva *Artemia salina* Leach digunakan untuk masing-masing konsentrasi lalu jumlah larva yang mengalami kematian dihitung setelah 24 jam perlakuan. Berdasarkan uji skrining fitokimia, infusa daun suruhan mengandung senyawa flavonoid, alkaloid, saponin serta tanin. Uji BSLT menunjukkan bahwa nilai LC_{50} infusa daun suruhan yaitu sebesar 304,92 ppm dan masuk ke dalam kategori toksisitas sedang. Perbedaan nilai LC_{50} yang didapatkan dengan penelitian sebelumnya dapat disebabkan adanya perbedaan dari metode ekstraksi dan pelarut yang digunakan, serta perbedaan habitat atau lokasi sampel uji yaitu tanaman suruhan diperoleh.

Kata kunci : Infusa Daun Suruhan, BSLT, *Artemia salina* Leach, Toksisitas Akut, LC_{50}

INVITRO TOXICITY TEST OF SURUHAN PLANT (*Peperomia pellucida* L. Kunth) INFUSION WITH THE BRINE SHRIMP LETHALITY TEST (BSLT) METHOD

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ABSTRACT

Suruhan (*Peperomia pellucida* L. Kunth) is one of the plants from the Piperaceae family that has long been traditionally used to reduce blood uric acid levels, cholesterol, blood pressure, and to treat various diseases such as boils, acne, abscesses, and stomachaches because its known contain of various bioactive compounds that have therapeutic effects, including flavonoids, tanins, saponins, triterpenoids, steroids, and alkaloids. This study aims to determine the lethal concentration (LC₅₀) value of suruhan leaf infusion using in vitro method the Brine Shrimp Lethality Test (BSLT). Toxicity testing used four concentration treatments namely 10 ppm, 100 ppm, 500 ppm, and 1000 ppm, along with a negatif control, and conducted as many as three repetitions for each treatment. Ten larvae of *Artemia salina* Leach were used for each concentration, and the number of larvae that died was counted after 24 hours of treatment. Based on phytochemical screening test, suruhan leaves infusion contains flavonoids, alkaloids, saponins and tanins. The BSLT test revealed that the LC₅₀ value of suruhan leaf infusion is 304.92 ppm and belongs to the moderate toxicity category. The difference in LC₅₀ value with previous studies can be caused by differences of extraction methods and solvents used, as well as differences in location of the sample which is suruhan plant obtained.

Keywords: Suruhan Leaf Infusion, BSLT, *Artemia salina* Leach, Acute toxicity, LC₅₀