

**PROGRAM STUDI SARJANA FARMASI  
UNIVERSITAS IMELDA MEDAN**

Nama : Rada Syahfitri  
NIM : 2148201033  
Judul : Uji Efektivitas Ekstrak Daun Singkong (*Manihot esculenta Crantz*) Terhadap Penyembuhan Luka Sayatan Pada Mencit Putih Jantan (*Mus musculus*)

**ABSTRAK**

Daun singkong (*Manihot esculenta Crantz*) bermanfaat bagi kesehatan karena kandungan vitamin C cukup tinggi, dan mengandung senyawa organik flavonoid, triterpenoid, tanin, saponin yang memiliki sifat antiinflamasi dapat menghambat jalur peradangan, seperti enzim siklooksigenase dan lipoksigenase, sehingga mampu mengurangi peradangan dan mendukung proses penyembuhan luka lebih cepat. Tujuan penelitian untuk mengetahui apakah sediaan ekstrak daun singkong (*Manihot esculenta Crantz*) memiliki efek terhadap percepatan penyembuhan luka sayatan pada mencit putih jantan (*Mus musculus*). Penelitian dilaksanakan di Laboratorium Farmakologi dan Kimia Farmasi Universitas Imelda Medan. Sampel penelitian daun singkong (*Manihot esculenta Crantz*) yang digunakan sebagai bahan uji, hewan uji mencit putih jantan (*Mus musculus*). Luka sayat dilakukan pada punggung mencit panjang 1 cm, dengan kedalaman 0,2 mm. Penelitian bersifat eksperimental menggunakan mencit putih jantan (*Mus musculus*) sebanyak 20 ekor dibagi menjadi 5 kelompok yaitu: kelompok 1 kontrol positif (bioplacenton), kelompok 2 kontrol negatif (minyak kelapa), kelompok 3,4,5 diberikan ekstrak daun singkong (*Manihot esculenta Crantz*) konsentrasi 5%,10%,15%. Data diuji menggunakan uji statistik ANOVA menunjukkan bahwa data berdistribusi normal, uji homogenitas varians sebesar  $0,116 > 0,05$ . Hasil analisis data *One Way* ANOVA nilai yang didapatkan adalah  $0,029 < 0,05$ , terdapat perbedaan signifikan antar kelompok perlakuan ekstrak daun singkong (*Manihot esculenta Crantz*) konsentrasi 5%, 10% dan 15%.

Kesimpulan : ekstrak daun singkong (*Manihot esculenta Crantz*) yang memberikan efek penyembuhan paling cepat pada luka sayatan mencit putih jantan (*Mus musculus*) adalah konsentrasi 15%. Saran : membuat sediaan terhadap ekstrak daun singkong (*Manihot esculenta Crantz*) untuk mengembangkan berbagai formulasi obat berbasis ekstrak daun singkong (*Manihot esculenta Crantz*).

**Kata Kunci : Daun singkong (*Manihot esculenta Crantz*), Mencit Putih Jantan (*Mus musculus*), Luka sayat.**

**BACHELOR OF PHARMACY PROGRAM  
UNIVERSITY OF IMELDA MEDAN**

Name : Rada Syahfitri  
NIM : 2148201033  
Title : *Effectiveness Test of Cassava Leaf Extract (Manihot esculenta Crantz) on Incision Wound Healing in Male White Mice (Mus musculus)*

**ABSTRACT**

*Cassava leaves (Manihot esculenta Crantz) are beneficial for health due to their relatively high vitamin C content and the presence of organic compounds such as flavonoids, triterpenoids, tannins, and saponins, which possess anti-inflammatory properties. These compounds can inhibit inflammatory pathways, including cyclooxygenase and lipoxygenase enzymes, thereby reducing inflammation and supporting faster wound healing. The purpose of this study was to determine whether preparations of cassava leaf extract (Manihot esculenta Crantz) have an effect on accelerating the healing of incision wounds in male white mice (Mus musculus). The research was conducted at the Pharmacology and Pharmaceutical Chemistry Laboratory, Imelda University, Medan. The cassava leaves used as test materials and male white mice (Mus musculus) as test animals. Incision wounds measuring 1 cm in length and 0.2 mm in depth were made on the backs of the mice. This experimental study involved 20 male white mice divided into 5 groups: group 1 as positive control (bioplacenton), group 2 as negative control (coconut oil), and groups 3, 4, and 5 receiving cassava leaf extract at concentrations of 5%, 10%, and 15%, respectively. Data were analyzed using ANOVA statistical tests, which showed normal distribution of data and homogeneity of variance with a p-value of  $0.116 > 0.05$ . The One Way ANOVA results yielded a p-value of  $0.029 < 0.05$ , indicating a significant difference among the treatment groups receiving cassava leaf extract at concentrations of 5%, 10%, and 15%. In conclusion, cassava leaf extract (Manihot esculenta Crantz) at a concentration of 15% produced the fastest wound healing effect on incision wounds in male white mice (Mus musculus). It is recommended to develop pharmaceutical preparations based on cassava leaf extract (Manihot esculenta Crantz) to formulate various drug products derived from this extract.*

**Keywords:** *Cassava Leaves (Manihot esculenta Crantz), Male White Mice (Mus musculus), Incisional Wound*