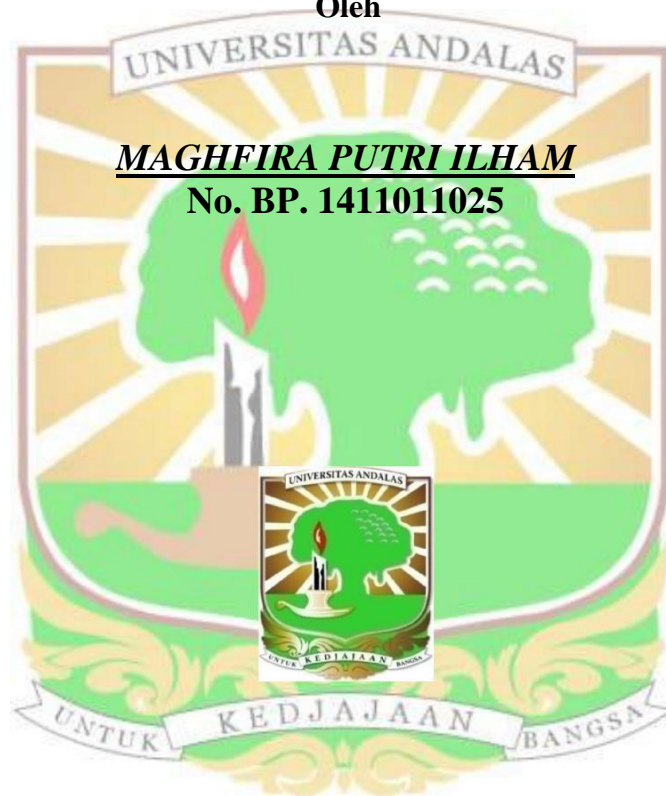


**KARAKTERISASI SIMPLISIA DAN EKSTRAK DAUN
“AKA LAMBUANG” (*Merremia peltata* (L.) Merr.)
SERTA UJI AKTIVITAS ANTIBAKTERI**

SKRIPSI SARJANA FARMASI

Oleh



MAGHFIRA PUTRI ILHAM

No. BP. 1411011025

**Pembimbing I: Dr. H. Yohannes Alen, M.Sc
Pembimbing II: Prof. Dr. Amri Bakhtiar, MS DESS, Apt**

**FAKULTAS FARMASI
UNIVERSITAS ANDALAS**

PADANG

2019

Karakterisasi Simplisia dan Ekstrak Daun “Aka Lambuang” (*Merremia peltata* (L.) Merr.) serta Uji Aktivitas Antibakteri“

ABSTRAK

Merremia peltata (L.) Merr., atau dikenal dengan nama daerah “Aka Lambuang” merupakan tumbuhan obat tradisional yang termasuk ke dalam famili *Convolvulaceae*, yang digunakan masyarakat untuk mengobati berbagai penyakit khususnya diare dan luka pada kulit. Penelitian ini bertujuan untuk mengkarakterisasi simplisia dan ekstrak sesuai Farmakope Herbal Indonesia, serta uji aktivitas antibakteri dari ekstrak daun “Aka Lambuang”. Dari hasil penelitian, simplisia daun “Aka Lambuang” berbentuk hati (*cordatus*), tunggal, berkerut, berwarna hijau tua, tidak berbau dan tidak berasa. Parameter organoleptis berupa serbuk halus, warna hijau tua, bau khas aromatis, dan tidak berasa. Uji mikroskopis simplisia didapatkan fragmen pengenal stomata tipe parasitik, rambut penutup, sel parenkim, berkas pengangkut, dan sel parenkim dengan kristal berbentuk “drust”. Parameter untuk susut pengeringan $9,49\% \pm 0,18\%$, kadar sari larut air $20,86\% \pm 0,13\%$, kadar sari larut etanol $6,62\% \pm 0,08\%$, kadar abu total $6,86\% \pm 0,01\%$, dan kadar abu tidak larut asam $0,23\% \pm 0,02\%$. Parameter untuk ekstrak “Aka Lambuang” memiliki organoleptis berupa ekstrak kental, warna coklat kemerahan, bau khas aromatis, dan rasa pahit. Rendemen ekstrak 26,96%, dengan nilai R_f yang sama dengan pembanding asam ferulat yaitu 0,46. Kadar abu total $10,32\% \pm 0,12\%$, kadar abu tidak larut asam $0,25\% \pm 0,12\%$, kadar air $16,66\% \pm 0,85\%$ dan kadar fenolik total 80,05%. Uji aktivitas antibakteri ekstrak, fraksi heksan, fraksi etil asetat dan fraksi butanol memiliki daya hambat terhadap kedua bakteri uji *Staphylococcus aureus* dan *Eschericia coli* dengan kategori bakteriostatik.

Kata kunci: *Merremia peltata* (L.) Merr., Karakterisasi, Simplisia, Ekstrak, Antibakteri



**“Characterization of Crude Drug and Extract “Aka Lambuang”
(*Merremia peltata* (L.) Merr.,) Leaves and Antibacterial Activity Test”**

ABSTRACT

Merremia peltata (L.) Merr., known as "Aka Lambuang" is a traditional medicinal plant that belongs to the *Convolvulaceae* family, commonly used by people to treat various diseases, especially diarrhea and skin lesion. The purpose of this research was to characterize crude drug and extract according to Indonesian Herbal Pharmacopeia, and the antibacterial activity test of "Aka Lambuang" leaves extract. The results of this research, can be concluded that the crude drug of "Aka Lambuang" leaves was cordate, single, wrinkled, dark green, odorless and tasteless. Parameter for organoleptic was smooth powder, dark green, characteristic odor, tasteless. The microscopical fragment was parasitic type stomata, cover hair, parenchymal cells, the vessel, and drust-shaped crystals of parenchymal cells. Loss on drying was $9,49\% \pm 0.18\%$, water soluble extract was $20.86\% \pm 0.13\%$, ethanol soluble extract was $6.62\% \pm 0.08\%$, total ash content was $6.86\% \pm 0.01\%$ and acid insoluble ash was $0.231\% \pm 0.02\%$. The extract was viscous, reddish brown, characteristic odor and bitter. The yield of ethanol extract was 26.96%, TLC R_f value equal to ferulic acid as standard was 0.46. Total ash content was $10.32\% \pm 0.12\%$, acid insoluble ash was $0.25\% \pm 0.12\%$, water content was $16.66\% \pm 0.85\%$, and total phenolic content was 80.05%. The antibacterial activity test of extract and fraction of hexane, ethyl acetate and butanol show inhibition on both *Staphylococcus aureus* and *Escherichia coli* bacteria in the bacteriostatic category.

Keywords: *Merremia peltata* (L.) Merr., Characterization, Crude drug, Extract, Antibacterial

