

**UJI TOKSISITAS AKUT EKSTRAK ETANOL 70%
DAUN KARAMUNTING (*Rhodomyrtus tomentosa* (Aiton) Hassk.)
TERHADAP GAMBARAN HISTOPATOLOGI
GINJAL TIKUS**

Ni'matul Muthmainnah¹, Heru Fajar Trianto², Pandu Indra Bangsawan³

Abstrak

Latar Belakang: Daun karamunting (*Rhodomyrtus tomentosa* (Aiton) Hassk.) telah banyak digunakan dimasyarakat sebagai obat tradisional untuk pengobatan penyakit kolik, diare, disentri, abses, perdarahan, sakit perut, penetral racun dan luka. Penggunaan daun karamunting dosis tinggi diketahui dapat merusak ginjal secara mikroskopik. **Tujuan:** Penelitian ini bertujuan untuk mengetahui dosis toksik ekstrak etanol 70% daun karamunting (*Rhodomyrtus tomentosa* (Aiton) Hassk.). **Metodologi:** Desain penelitian ini merupakan *true experimental* bentuk *Post test - Only Control Design*. Penelitian ini menggunakan 25 tikus dan dibagi 5 kelompok. Kelompok kontrol positif (KP) diberikan injeksi intraperitoneal gentamisin 80mg/kgBB; Kelompok kontrol negatif (KN) diberikan CMC per oral; Kelompok perlakuan 1, 2, 3 diberikan ekstrak daun karamunting (*Rhodomyrtus tomentosa* (Aiton) Hassk.) dengan dosis masing-masing 600mg/kgBB, 1200mg/kgBB, 2400mg/kgBB per oral. Semua perlakuan dilakukn selama 10 hari. Tikus kemudian dibedah pada hari ke-11, diambil ginjal kanan dan dibuat preparat histopatologi dengan pewarnaan H&E. Preparat histopatologi dilihat dibawah mikroskop dengan perbesaran lensa objektif 4x kemudian dihitung luas kerusakannya menggunakan aplikasi *AxioVision* Rel.4.8. Data dianalisa menggunakan *One Way ANOVA*, dilanjutkan dengan analisis *Post Hoc Test*. **Hasil:** Terdapat perbedaan bermakna rerata luas kerusakan pada kelompok perlakuan 1 dan 2 dengan kelompok kontrol positif ($p=0,00$), tetapi tidak terdapat perbedaan bermakna antara kelompok perlakuan 3 dengan kelompok kontrol positif ($p=0,372$). **Kesimpulan:** Semakin tinggi pemberian dosis ekstrak etanol 70% daun karamunting (*Rhodomyrtus tomentosa* (Aiton) Hassk.) maka semakin luas kerusakan yang terjadi pada ginjal tikus.

Kata kunci: toksisitas akut, *Rhodomyrtus tomentosa* (Aiton) Hassk.

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- 1) Program Studi Pendidikan Dokter, Fakultas Kedokteran, Universitas Tanjungpura Pontianak, Kalimantan Barat
 - 2) Departemen Histologi, Program Studi Pendidikan Dokter, Fakultas Kedokteran, Universitas Tanjungpura Pontianak, Kalimantan Barat.
 - 3) Departemen Farmakologi, Fakultas Kedokteran, Universitas Tanjungpura Pontianak, Kalimantan Barat

**TEST OF ACUTE TOXICITY OF 70% ETHANOL EXTRACT OF
KARAMUNTING LEAVES (*Rhodomyrtus tomentosa* (Aiton) Hassk.
IN WISTAR RAT KIDNEY: HISTOPATHOLOGICAL STUDY**

Ni'matul Muthmainnah¹, Heru Fajar Trianto², Pandu Indra Bangsawan³

Abstract

Background: *Rhodomyrtus tomentosa* (Aiton) Hassk. leaves have been used among community as traditional medication for colic disease, diarrhea, dysentery, abscess, bleeding, abdominal pain, antidote, and wound. Oral administration of *Rhodomyrtus tomentosa* (Aiton) Hassk. leaves in high dosage is considered to damage kidney microscopically. **Objective:** This study was aimed to find toxic dosage of 70% ethanol extract of karamunting leaves (*Rhodomyrtus tomentosa* (Aiton) Hassk.). **Methods:** This study was a true experimental study with Post test - Only Control Design. This study used 25 rats and divided in 5 groups. Positive control group (KP) was injected intraperitoneally by 80mg/kgBB gentamicin; Negative control group was administered orally by CMC; Treatment groups 1, 2, 3 were administered orally by *Rhodomyrtus tomentosa* (Aiton) Hassk. leaves extract in dosage of ,respectively, 600mg/kgBW, 1200mg/kgBW, 2400mg/kgBW. All treatments were conducted in 10 days. Rats were dissected in eleventh day. Right kidneys of each rat were taken and histopathological specimens were stained by H&E. Histopathological specimens were examined under microscope with 4X objective lens and kidney damage area was calculated by AxioVision Rel.4.8 software. Data were analyzed by One Way ANOVA test with SPSS 16.0 software. **Result:** Kidney damage area in treatment groups 1 and 2 were different significantly with positive control groups ($p= 0,000$), but there was no difference between treatment group 3 and positive control group ($p=0,372$). **Conclusion:** Dosage of *Rhodomyrtus tomentosa* (Aiton) Hassk. leaves ethanol extract and kidney damage area were linear.

Keyword: *Rhodomyrtus tomentosa* (Aiton) Hassk., acute toxicity.

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- 1) Medical Education Program, Faculty of Medicine, University of Tanjungpura Pontianak, West Kalimantan
 - 2) Department of Histology, Medical Education Program, Faculty of Medicine, University of Tanjungpura Pontianak, West Kalimantan.
 - 3) Department of Anatomical Pathology, Medical Education Program, Faculty of Medicine, University of Tanjungpura Pontianak, West Kalimantan.