ABSTRAK

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Program Studi : Kedokteran Umum
Judul Skripsi : Efektivitas Formulasi Getah Jarak Gurita (*Jatropha multifida* L.) - CMC dalam Proses Penyembuhan Luka Bakar pada Tikus Putih Jantan Dinilai dari Jumlah Sel Leukosit PMN dan Tinjauannya Menurut Pandangan Islam

Latar Belakang: Luka bakar masih menjadi masalah kesehatan global. Getah jarak gurita (*Jatropha multifida* L.) mengandung flavonoid, saponin, tanin, dan alkaloid dengan aktivitas antibakteri, antiinflamasi, dan antioksidan. Kombinasi dengan *Carboxymethyl chitosan* (CMC) diharapkan mempercepat penyembuhan luka melalui penurunan leukosit PMN, serta ditinjau menurut Islam.

Tujuan: Menilai efektivitas formulasi JM-CMC dalam mempercepat penyembuhan luka bakar pada tikus putih jantan.

Metode: Penelitian eksperimental ini menggunakan tikus putih jantan dengan perlakuan JM-CMC (5%, 10%, 15%) dan kontrol Bioplacenton, CMC, base gel, serta salin. Jumlah leukosit PMN diamati melalui preparat histologi HE pada hari ke-5, 9, 14, serta penelitian lanjutan hari ke-5, 10, dan 15. Analisis data menggunakan uji *Shapiro-Wilk*, *Levene*, ANOVA, dan *Post Hoc* LSD menggunakan SPSS.

Hasil: JM-CMC 15% paling efektif menurunkan leukosit PMN, signifikan pada hari ke-9 ($p<0,05$), dengan hasil lanjutan yang konsisten.

Kesimpulan: Formulasi JM-CMC 15% efektif mempercepat penyembuhan luka bakar dan sesuai prinsip pengobatan herbal Islam.

Kata Kunci: *Jatropha multifida* L., CMC, leukosit PMN, luka bakar, Islam.

ABSTRACT

Name / NPM : *Maulida Raisa A'yunia Jiddan (1102020255)*
Study Program : *Medicine*
Title : "*The Effectiveness of The Coral Plant Sap (Jatropha multifida* L.*) - CMC Formulation in The Burn Healing Process in Male White Rats is Evaluated on The PMN Leukocyte and Its Review from an Islamic Perspective"*

Background: *Burns remain a global health problem. Jatropha multifida* L. *latex contains flavonoids, saponins, tannins, and alkaloids with antibacterial, anti-inflammatory, and antioxidant activities. Combined with biocompatible Carboxymethyl chitosan (CMC), this formulation is expected to accelerate wound healing by reducing PMN leukocytes, and is also reviewed from an Islamic perspective.*

Objective: *To evaluate the effectiveness of JM-CMC formulation in accelerating burn wound healing in male white rats.*

Methods: *This experimental study used male white rats treated with JM-CMC (5%, 10%, 15%) and controls (Bioplacenton, CMC, base gel, and saline). PMN leukocyte counts were observed through HE histological preparations on days 5, 9, 14, and in the follow-up study on days 5, 10, and 15. Data were analyzed using Shapiro-Wilk, Levene,* ANOVA*, and Post Hoc LSD with SPSS.*

Results: *The 15% JM-CMC formulation was the most effective in reducing PMN leukocytes, with a significant difference on day 9 ($p<0.05$), and consistent findings in the follow-up study.*

Conclusion: *The 15% JM-CMC formulation effectively accelerates burn wound healing and aligns with Islamic principles of herbal medicine.*

Keywords: *Jatropha multifida* L.*, CMC, PMN leukocytes, burn wound, Islam.*