**FORMULASI GEL EKSTRAK ETANOL DAUN AFRIKA *(Gymnanthemumamygdalinum* (Del.))SEBAGAI OBAT LUKA BAKAR DERAJAT 2A**

**YANG DIINFEKSIKAN DENGAN *Pseudomonasaeruginosa***

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**ABSTRAK**

Luka bakar adalah suatu bentuk kerusakan jaringan yang disebabkan kontak dengan sumber panas.Daunafrika (*Gymnanthemumamygdalina* Del.) memiliki kandungan senyawa flavonoid, saponin, alkaloid, tannin, terpenoidyang dapat memberikan efek penyembuhan luka bakar. Penelitian ini bertujuan untuk mengetahui konsentrasi efektif ekstrak etanol daun afrika dalam penyembuhan luka bakar yang diinfeksikan denganbakteri *Pseudomonas aeruginosa*.

Metode penelitian ini secara eksperimental, selanjutnya dilakukan pemeriksaan karakterisasi, skrining fitokimia, formulasi dan evaluasi sediaan gel ekstrak etanol daun afrika (EEDA) dengan konsentrasi 20%, 25% dan 30% serta uji efektivitas gel terhadap luka bakar pada marmot jantan, yang dibagi kedalam 6 kelompok perlakuan yaitu, perlakuan gel EEDA dengan berbagai konsentrasi, control negatif (dasar gel), control positif (gel konvensional) dan tanpa diobati. Luka bakar dibuat dengan logam panas dengan diameter 2 cm pada bagian punggung marmut, diberiperlakuan dan diamati efek penyembuhan. Data dianalisis secara statistic menggunakan metode ANOVA (AnalisisOf Variance) dengan uji Duncan.

Hasil pemeriksaan karakterisasikadar air 8%, kadar sari larut dalam air 21%, kadar sari larut dalam etanol 19,3%, kadar abu total 0,98% dan kadar abu tidak larut dalam asam 0,949%.skrining fitokimia menunjukkan adanya golongan senyawa flavonoid, alkaloid, tanin, saponin, steroid / triterpenoid. Hasil evaluasi sediaan menunjukkan gel EEDA memenuhi 3 uji parameter yaitu uji organoleptis, uji homogenitas dan uji pH, sementara hasil uji daya sebar belum memenuhi persyaratan, dayasebar yang baik (5-7 cm). Hasil uji sediaan gel EEDA terhadap luka bakar pada marmut jantan yang diinfeksikan bakteri *Pseudomonas aeruginosa* dapat menyembuhkan luka bakar, konsentrasi EEDA 30% mampu menyembuhkan luka bakar hamper sama dengan control positif (gel konvensional).

***Kata kunci:*** Gel ekstrak etanol daun afrika, luka bakar, infeksi, *Pseudomonas aeruginosa*

**FORMULATION OF AFRICAN LEAF ETHANOL EXTRACTS *(Gymnanthemumamygdalinum*(Del.)) AS GEL 2A THAT**

**IS INFECTED WITH *Pseudomonas aeruginosa***

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**ABSTRACT**

*Burns are a form of tissue damage was caused by contact with a heat. African leaves (Gymnanthemumamygdalina*Del.*) contain flavonoid compounds, saponins, alkaloids, tannins, terpenoids which can used to treat wound on burns. Aims of this study was to determine the effective concentration of infected with the bacterium Pseudomonas aeruginosa.*

*The step of this study were ethanol extract of african leaved for healing burn which was, characterization of dried leaves , phytochemical screening, formulation and evaluation of the gel of African leaves ethanol extract gel (EEDA) with concentrations of 20%, 25% and 30% and effectiveness tests on male guinea pigs. which were divided into 6 treatment groups, namely, EEDA gel treatment with various concentrations, negative control (gel base), positive control (conventional gel) and untreated. Burns made with hot metal with a diameter of 2 cm on the back of guinea pigs, were treated and observed healing effects. Data were analyzed statistically using ANOVA (Analysis of Variance) method with Duncan test.*

*The results of the chracterization of dried levas showed, it contained 8% water content characterization, 21% of water soluble juice content, 19.3% of ethanol soluble content, 0.98% of total ash content and 0.949% of acid insoluble ash content. Phytochemical screening showed flavonoids, alkaloids, tannins, saponins, steroids / triterpenoids. The contained in exrich leaves and extract of africanlaves evaluation results of gel showed that the EEDA gel fulfilled three test of parameters, namely organoleptic test, homogeneity test and pH test, while the spread test results did not meet the requirements, was 4,7 cm. The EEDA gel test results on burns in male guinea pigs infected with Pseudomonas aeruginosa could heal burns, 30% EEDA concentration was able to cure burns almost the same as positive controls (conventional gel).*

Keywords: *African leaf ethanol extract gel, burns, infection, Pseudomonas aeruginosa*