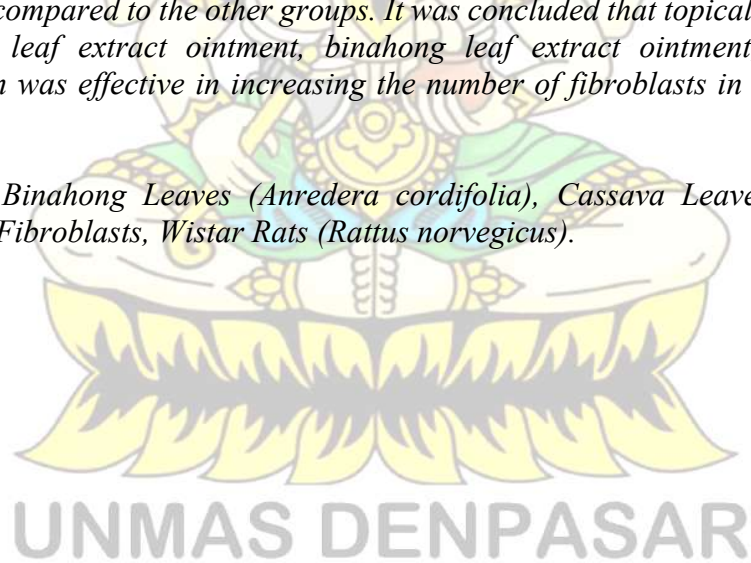


ABSTRACT

*Pre-prosthetic surgery is a procedure performed to create an ideal tissue foundation for the functional success of dental prostheses. The success of this procedure is strongly influenced by the wound healing process, particularly by an increase in the number of fibroblasts, which play a crucial role in extracellular matrix formation. Cassava leaves (*Manihot esculenta*) and binahong leaves (*Anredera cordifolia*) are known to contain flavonoids, tannins, saponins, and other bioactive compounds with antioxidant and anti-inflammatory properties that have the potential to accelerate wound healing. This study aimed to determine the effect of topical application of 20% cassava leaf extract ointment, 20% binahong leaf extract ointment, and a 20% combination of both extracts on the increase in fibroblast numbers in gingival mucosal incision wounds of male wistar rats. This in vivo study employed a post-test only control group design using 30 male Wistar rats weighing 200–250 grams, which were randomly divided into five groups: negative control (vaseline adeps), positive control (Kenalog ointment), 20% cassava leaf extract treatment, 20% binahong leaf extract treatment, and a 20% combination of cassava and binahong leaf extracts. Statistical analysis using the One-Way ANOVA test showed significant differences among groups ($p < 0.001$). The LSD test revealed that the combination group had the highest number of fibroblasts compared to the other groups. It was concluded that topical application of cassava leaf extract ointment, binahong leaf extract ointment, and their combination was effective in increasing the number of fibroblasts in male wistar rats.*

Keywords: *Binahong Leaves (*Anredera cordifolia*), Cassava Leaves (*Manihot esculenta*), Fibroblasts, Wistar Rats (*Rattus norvegicus*).*

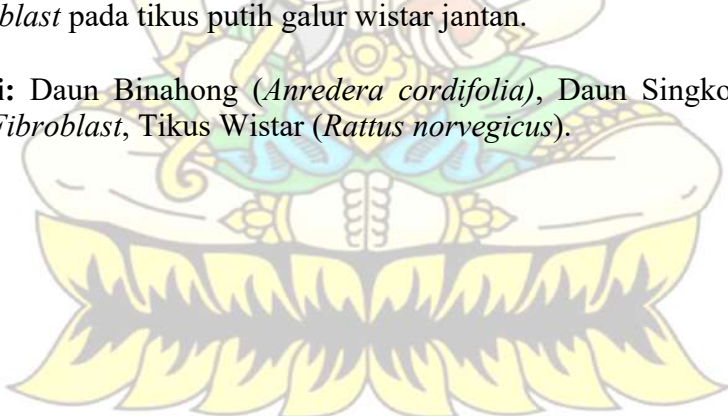


UNMAS DENPASAR

ABSTRAK

Tindakan *pre-prosthetic surgery* merupakan salah satu prosedur untuk menciptakan fondasi jaringan yang ideal bagi keberhasilan fungsional gigi tiruan. Keberhasilan tindakan ini sangat dipengaruhi oleh proses penyembuhan luka, terutama peningkatan jumlah *fibroblast* yang berperan penting dalam pembentukan matriks ekstraseluler. Daun singkong (*Manihot esculenta*) dan daun binahong (*Anredera cordifolia*) diketahui mengandung flavonoid, tanin, saponin, serta senyawa bioaktif lain yang bersifat antioksidan, antiinflamasi, dan berpotensi mempercepat penyembuhan luka. Penelitian ini bertujuan untuk mengetahui pengaruh pemberian topikal salep ekstrak daun singkong 20%, salep ekstrak daun binahong 20%, serta kombinasi keduanya 20% terhadap peningkatan jumlah *fibroblast* pada luka insisi mukosa gingiva pada tikus putih galur wistar jantan. Penelitian ini merupakan penelitian *in vivo* dengan desain *post-test only control group* menggunakan 30 ekor tikus wistar jantan berbobot 200–250 gram yang dibagi secara acak ke dalam lima kelompok, yaitu kontrol negatif (vaseline adeps), kontrol positif (salep kenalog), perlakuan ekstrak daun singkong 20%, perlakuan ekstrak daun binahong 20%, dan perlakuan kombinasi ekstrak daun singkong dan binahong 20%. Analisis statistik menggunakan uji One-Way ANOVA menunjukkan perbedaan bermakna antar kelompok ($p < 0,001$). Uji LSD menunjukkan bahwa kelompok kombinasi memiliki jumlah *fibroblast* tertinggi dibanding kelompok lain. Disimpulkan bahwa pemberian topikal salep ekstrak daun singkong, daun binahong, dan kombinasi keduanya efektif meningkatkan jumlah *fibroblast* pada tikus putih galur wistar jantan.

Kata Kunci: Daun Binahong (*Anredera cordifolia*), Daun Singkong (*Manihot esculenta*), *Fibroblast*, Tikus Wistar (*Rattus norvegicus*).



UNMAS DENPASAR