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## Potensi Ekstrak Etanol Daun Pare (*Momordica charantia* L.) sebagai Alternatif Obat Penyembuh Luka pada Punggung Mencit Jantan (*Mus musculus* L.)

### *Wound Healing Potential of an Ethanolic Extract of Bitter Melon Leaves (*Momordica charantia* L.) to Heal Back Injury on Male Mice (*Mus musculus* L.)*

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#### ABSTRACT

The leaves of bitter melon (*Momordica charantia* L.) contains flavonoid, tannin and saponin which plays a role in wound healing. The purpose of this study was to determine the effect of bitter melon leaves (*M. charantia* L.) ethanolic extract on wound healing the back injury on male mice. The parameters of this study were the length of wound closure and histopathological observations by looking at the level of epithelialization, the number of new blood vessels, and the number of inflammatory cells. This study was conducted in a complete randomized design. The mice were divided into five groups: [K (+)], [K (-)], [P1], [P2], [P3], each group consist four mice. All of mice was wounded by cut on the back skin about 1.5 cm in length. The wound were treated every two times a day for 9 days, K(+) is given povidone iodine as a positive control, K(-) is given 95% ethanol as a negative control, P1 is given 50% ethanolic extract of bitter melon, P2 is given 75% ethanolic extract of bitter melon and P3 is given 100% ethanolic extract of bitter melon. On the 10th day, one of the mice from all of groups was taken to observe the histopathology of their skin. The results showed that the leaf extract of bitter melon has wound healing potential by accelerate the healing process of back skin's wound in mice and has best histopathology picture compared to controls.

Keywords : Bitter Melon (*Momordica charantia* L.), Male Mice (*Mus musculus* L.), povidone iodine

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#### PENDAHULUAN

Luka menjadi salah satu penghambat makhluk hidup dalam menjalankan aktivitas sehari-hari. Luka dapat diartikan sebagai cedera pada bagian tubuh, yaitu ketika kulit dan jaringan dibawahnya kehilangan integritas atau hubungan (Franzet *et al.*, 2008).

Dari hasil uji kandungan fitokimia menunjukkan bahwa adanya kandungan flavonoid, tanin, saponin, alkaloid, dan terpenoid mampu untuk menyembuhkan luka (Wijaya, 2014). Senyawa-senyawa tersebut terdapat dalam daun pare (Subahar, 2004). Berdasarkan kandungan senyawa metabolit sekunder yang terdapat dalam tumbuhan pare yang diduga berpotensi sebagai alternatif obat luka, maka peneliti melakukan penelitian tentang potensi ekstrak etanol daun pare (*M. charantia* L.) sebagai alternatif obat penyembuh luka pada punggung mencit jantan (*Mus musculus* L.).