

EVALUATION OF WOUND HEALING PROPERTIES OF *PLECTRANTHUS AMBOINICUS* USING HPdLF FIBROBLAST CELL LINES AS STUDY MODEL

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ABSTRACT

Plectranthus amboinicus is a semi-succulent with pungent oregano odour that belongs to family Lamiaceae. It has been extensively used in traditional medicine for its wound-healing effect. However, there is a lack of scientific evidence to support the claimed. Thus, this study aimed to evaluate wound healing properties of *P. amboinicus* extracts through *in vitro* study. Six extracts were used in this study, including three parts of the *P. amboinicus*, namely, leaves, stem and roots with two types of solvent, aqueous and methanol respectively. Cell proliferation assay was conducted to identify a significant dose that has the potential of wound healing properties. Determined concentration then proceeded with a scratch wound assay for evaluation. Based on the result, it shows that methanol root extract of *P. amboinicus* with concentration 0.3906 µg/ml has a high potential of wound healing properties in comparison with control. These findings would support the potential use of *P. amboinicus* as a wound-healing plant.

Keywords: Cell proliferation; *In vitro*; *Plectranthus amboinicus*; Wound healing

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