

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

R. **Fatin**<sup>1</sup>, R. Norazsida<sup>1\*</sup>, M.S. Mohamed Arshad<sup>2</sup>, O. Ilma<sup>1</sup>

<sup>1</sup>Department of Biomedical Science, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, 25200 Kuantan, Pahang, Malaysia.

<sup>2</sup>Department of Physical Rehabilitation Sciences, Kulliyyah of Allied Health Sciences, International Islamic University Malaysia, Jalan Sultan Ahmad Shah, Bandar Indera Mahkota, 25200 Kuantan, Pahang, Malaysia.

\*Corresponding author email: [norazsida@iium.edu.my](mailto:norazsida@iium.edu.my)

### 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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