

**P-128*****In Vitro* Antioxidant and Antimicrobial Activities From Stem Bark of *Beilschmiedia Madang* Blume (Lauraceae) and Its Major Compound, (+)-kunstlerone**

Wan Mohd Nuzul Hakimi Wan Salleh<sup>1,\*</sup>, Farediah Ahmad<sup>1</sup> and Khong Heng Yen<sup>2</sup>

<sup>1</sup>*Department of Chemistry, Faculty of Science, Universiti Teknologi Malaysia (UTM), 81310 Skudai, Johor, Malaysia;*

<sup>2</sup>*School of Chemistry and Environmental Studies, Faculty of Applied Sciences, Universiti Teknologi MARA (UiTM) Sarawak, 94300 Kota Samarahan, Sarawak, Malaysia; E-mail: nuzoule208@yahoo.com*

The aim of this study was to investigate the *in vitro* antioxidant and antimicrobial activities from stem bark of *Beilschmiedia madang*, and its major compound, a neolignan; (+)-kunstlerone. The antioxidant activity was done using the following assays: DPPH radical scavenging,  $\beta$ -carotene/linoleic acid bleaching and total phenolic content. The MeOH extract showed the highest inhibitory activity towards lipid peroxidation ( $89.6\% \pm 0.4$ ), phenolic content (163.4 mg GA/g) and DPPH radical scavenging ( $IC_{50}$  of 63.2  $\mu\text{g/mL}$ ). The major compound, (+)-kunstlerone showed a potent antioxidant activity with  $IC_{50}$  of 25.5  $\mu\text{g/mL}$  comparable to that of ascorbic acid ( $IC_{50}$  of 15.2  $\mu\text{g/mL}$ ). Evaluation of the antimicrobial activity was examined by using disc diffusion and micro dilution (MIC) method. The results revealed that the MeOH extract and (+)-kunstlerone exhibited moderate activity towards *Streptococcus mutans* and *Aspergillus fumigatus* with MIC values 250  $\mu\text{g/mL}$ .

**Keywords:** Antioxidant, Antimicrobial, *Beilschmiedia madang*.

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