PHYTOCHEMICAL SCREENING AND ANTIOXIDANT ACTIVITY OF DRIED STEM OF *PAEDERIA FOETIDA*

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ABSTRACT

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This study is conducted to determine phytochemical constituents and antioxidant activity in various extracts of dried stem of *P. foetida*. Many studies quantified amount of chemical compounds from the leaves, root and some used the whole plant of *P. foetida*, but very limited research has been reported to analyse amount of active compounds in dried stems of *P. foetida* independently. Total flavonoid content was measured by the aluminium chloride colorimetric assay and total phenolic content was estimated by Follin-Ciocalteau method. The present study reveals that saponin, phenolic, glycoside, alkaloids, tannins and terpenoids were found in all three diferent extracts which are methanol, ethanol and hexane extracts. Methanol extract had the richest content of both phenolics and flavonoids which was 0.0636 mg GAE/g and 0.00175 QE/g respectively and hexane extracts was the least, 0.0103 mg GAE/g and 0.00134 QE/g. The radical scavenging activity (IC_{50}) for methanol, ethanol and hexane extract are 2.8 mg mL^{-1}, -16.88 mg mL^{-1} and -23.15 mg mL^{-1}, respectively. This study justifies the use of these plants as a traditional remedy and can be as the promising plant species for natural source of antioxidant with potential value for treatment of many life threatening diseases. Therefore, the utilization of this plants will be an advantage to human.

Keywords: Antioxidant, Flavonoid, *Paederia foetida*, Phenolic, Phytochemical.