PHYTOCHEMICAL SCREENING AND ANTIOXIDANT ACTIVITY OF FRESH LEAVES OF *PAEDERIA FOETIDA*

NURDIYANA AMIRAH BINTI MOHAMAD SHAHRUL

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ABSTRACT

The objectives of this research were to conduct preliminary phytochemical screening and to determine the antioxidant activity of fresh leaves of *P. foetida*. The extracts were prepared using methanol, ethanol and hexane by using simple maceration process. Antioxidant activity of *P.foetida* was determined by using the total phenolic content, total flavonoid content and DPPH assay. Bioactive compounds such as alkaloids, phenols, terpenoids, glycosides, saponins and tannins were present in *P. foetida* from the screening test. The IC₅₀ of methanol, ethanol and hexanes extracts were 1.7, 1.5 and 13.27 mg/mL respectively. The total phenolic content of the methanolic, ethanolic and hexane extracts of *P. foetida* in terms of gallic acid equivalent were 40.7, 35.4 and 7.57 GAE/g respectively. The total flavonoid content of the methanolic, ethanolic and hexane extracts of *P. foetida* in terms of quercetin equivalent were 9.1, 8.4, and 13.1 QE/g respectively. In the determination of antioxidant activity, methanolic extract showed the highest value in term of IC₅₀, TPC and TFC. Hence, results obtained from this study shows that *P. foetida* is a promising natural antioxidant and its potential should be further explored.