

Phytochemical Analysis and Antioxidant Activity of Aqueous Extract of *Ficus septica* Leaves from Sabah, Malaysia

ABSTRACT

Medicinal plants have long been used as primary antidotes for a variety of ailments, including tuberculosis, heart diseases, cancer, wound healing, asthma, diabetes mellitus, hypertension, pharyngitis, etc. Medicinal plant of *Ficus septica* Burm. f. (Moraceae) is a subtropical tree commonly known as the ivory fig, septic fig or white-veined fig. The present work aims to investigate the antioxidant activity, phenolic and flavonoid content, and qualitative screening of various phytochemicals in aqueous extracts of *F. septica* leaves. Total phenol and flavonoid contents were calculated using Folin-Ciocalteu and aluminium chloride reagents. The antioxidative effect of *F. septica* was evaluated using the 2,2-diphenyl-1-picrylhydrazyl (DPPH) radical scavenging assay. *Ficus septica* was found to contain 27.32 ± 0.03 mg/g total phenolics expressed as gallic acid equivalent and 12.65 ± 0.00 mg/g total flavonoid expressed as catechin equivalent. In addition, the leaf extracts were found to contain various secondary metabolites such as alkaloids, flavonoids, tannins, saponins, steroids and triterpenoids. The ability of *F. septica* to scavenge the DPPH radical was determined by its IC₅₀ value. The IC₅₀ value of *F. septica* was 4.45 µg/mL. Inferred from the presence of phytochemicals, total phenolic and flavonoid content, and antioxidant activity of the plant, *F. septica* could be a potential addition to pharmaceutical products to improve human health by participating in the antioxidant defence system against the production of free radicals.