

Antioxidant activity of *aquilaria malaccensis* (thymelaeaceae) leaves

A.W.N. Huda, M.A.S. Munira, S.D. Fitrya, M. Salmah

Department of Chemical Sciences, Faculty of Science & Technology, Universiti Malaysia Terengganu, MALAYSIA

ABSTRACT

The phytochemical and antioxidant activity of *Aquilaria malaccensis* leaves were investigated. The sequential maceration extraction methods utilizing solvents with different polarities namely hexane, ethyl acetate and methanol yielded the corresponding crude extract. The extracts were subjected to preliminary phytochemical screening and revealed the presence of alkaloids, flavanoids, triterpenoids, steroids and saponins. The phytochemical screening suggests that flavanoids present in this species might provide a great value of antioxidant activity. Preliminary screenings of the free radical scavenging activity on the extracts of the plants with 2, 2-Diphenyl-1-picrylhydrazyl (DPPH) were tested and showed positive result. Quarcetine was used as reference standard. The extracts exhibited strong antioxidant activity radical scavenging activity with IC₅₀ value of 8.0 x 10² mug/ml, 1.6 x 10² mug/ml, 1.4 x 10² mug/ml, 30.0 mug/ml and 3.33 mug/ ml for hexane, DCM, ethyl acetate, methanol and quarcetine respectively.

KEYWORDS

Aquilaria malaccensis . IC₅₀ value . antioxidant activity

REFERENCES