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Phytochemical screening and antioxidant activity of psidium guajava [Saringan fitokimia dan aktiviti antioksidan terhadap psidium guajava]

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Abstract

Psidium guajava or commonly known as guava is useful to treat gastroenteritis, dysentery, stomach pain and indigestion. In this study, the leaves of this species were screened for its phytochemical and antioxidant activity. The phytochemicals were extracted by sequential maceration by using n-hexane, chloroform and methanol, while phytochemical screening was performed using various chemical tests. Meanwhile, its antioxidant activity was assessed by the 2,2-diphenyl-1-picrylhydrazyl (DPPH) assay. Steroids and terpenoids were found to be present in the n-hexane extract, while phenols and terpenoids were detected in the chloroform extract. The methanol extract contained flavonoids, steroids, saponins, phenols and terpenoids. Among the tested extracts, the methanolic extract demonstrated strong DPPH radical scavenging activity with an IC₅₀ value of 45.52 µg/mL. © 2020, Malaysian Society of Analytical Sciences. All rights reserved.

Author Keywords

Antioxidant; Phytochemical screening; Psidium guajava

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