ANTIOXIDANT AND TOXICITY STUDIES OF FRUIT PEEL EXTRACTS

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ABSTRACT

ANTIOXIDANT AND TOXICITY STUDIES OF FRUIT PEEL EXTRACTS

In this study, the peel extracts of species from family Curcurbitacea that included Cucumis melo var. cantalupensis, Cucumis melo var. inodorus and Citrullus lanatus were investigated on their total phenolic content using Folin-Ciocalteau method, DPPH radical scavenging activity and toxicity. Methanol was used as the extracting solvents of each extracts. All of the three extracts exhibited the ability to scavenge free radicals. The highest scavenging effect was presented by methanolic extract of Cucumis melo var. inodorus (IC₅₀=4.61) which was corresponding to its highest total phenolic content (64.2 \pm 0.10 μ g GAE/ml). Meanwhile, the lethality concentration presented by each extracts was less than 10 μ l/ml. The results of this study indicate that methanol provided good extraction but at the same time might interfered the toxicity level presented by each extract.