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Determination of antioxidant compounds , proximate compositions and assessment of free radical scavenging activities of nypa fruticans wurmb . sap


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Abstract

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Abstract

Nipa palm sap (NPS) as source of medicine traditionally used to treat various diseases. This study identified good radical scavenging activity in NPS with the IC₅₀ value of 33.36 µg/mL using 2, 2-diphenyl-1-picrylhydrazyl (DPPH) assay. NPS comprises of moisture (72.44%), ash (1.04%), protein (7.04%), carbohydrate (19.48%), fat (0%), and energy level (106 kcal). Glucose (0.3%) and fructose (1.8%) were detected using high-performance liquid chromatography. Maleic acid, cinnamic acid, chlorogenic acid, and kaempferol were the predominant compounds revealed by ultra-high-performance liquid chromatography. Overall, NPS has the potential antioxidants sources with significant health benefits and values for commercialisation. © Universiti Putra Malaysia Press.

Author keywords


Antioxidant ; DPPH; Nipa palm sap ; Proximate analysis; UHPLC

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