

Phytochemical Profiles and Antioxidant Activity of Selected Indigenous Vegetables in Northern Mindanao, Philippines

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Abstract : The crude methanol extracts of five indigenous vegetables namely, *Amaranthus tricolor*, *Basella rubra* L., *Chochurus olitorius* L., *Ipomea batatas*, and *Momordica chuchinensis* L., were examined for their phytochemical profile and antioxidant activity using 1,1-diphenyl-2-picrylhydrazyl (DPPH) free radical. The values for DPPH radical scavenging activity ranged from 7.6-89.53% with *B. rubra* and *I. batatas* having the lowest and highest values, respectively. The total flavonoid content of all five indigenous vegetables ranged from 74.65-277.3 mg quercetin equivalent per gram of dried vegetable material while the total phenolic content ranged from 1.93-6.15 mg gallic acid equivalent per gram dried material. Phytochemical screening revealed the presence of steroids, flavonoids, saponins, tannins, carbohydrates and reducing sugars, which may also be associated with the antioxidant activity shown by these indigenous vegetables.

Keywords : antioxidant, DPPH radical scavenging activity, Philippine Indigenous vegetables, phytochemical screening

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