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Phytochemical screening, free radical scavenging and total phenolic profiles of genus *Strychnos* from eastern Botswana

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In order to identify the value and nutraceutical potential of bioactive compounds with free radical scavenging activity, some underutilized edible fruits were studied for total phenolic content. There is plethora of evidence that increased consumption of fruits significantly reduces the incidence of chronic diseases such as cancer, cardiovascular diseases and other aging- related pathologies. Polyphenols present in fruits have significant antioxidant and free radical scavenging activities with protective properties on biomolecules such as lipids, proteins and nucleic acids. In Botswana, wild fruits are widely consumed by rural communities and contribute to the socio-economic security. The main objective of the present study was to conduct phytochemical analysis and evaluate the free radical scavenging and total phenolic profiles of edible wild fruits from three plants of the genus *Strychnos*. Phytochemical screening revealed presence of alkaloids, phytosterols, phenols, terpenoids, reducing sugars, saponins and flavonoids. Free radical scavenging power estimated by the stable free radical DPPH ranged from 78.8% (S. *cocculoides*); 89.6% (S. *madagascariensis*); 95.4% (S. *spinosa*) acetone extracts measured at 50 µg/ml. Total phenolic contents by the Folin-Ciocalteu method ranged from 678 (S. *madagascariensis*); 968 (S. *cocculoides*) and 1288 mg/L GAE (S. *spinosa*). the results of these study validates the use of the wild fruits as health promoting agents and their potential as nutraceuticals.

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