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Antioxidant activity of *Philenoptera violacea* and *Xanthocercis zambeziaca* plant extracts

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People have been relying on natural plants as a source of treatment for various diseases even today that is still the case especially in rural areas where traditional healers outnumber western doctors. Most medicine used by western doctors is also derived from natural plants. The aim of this study was to investigate the antioxidant potential of *Philenoptera violacea* and *Xanthocercis zambeziaca* leaves, flower & twig extracts. These two plants were chosen from 60 plants found in Africa and belonging to the Fabaceae family. The scavenging activities of the *Xanthocercis zambeziaca* extract and *Philenoptera violacea* was determined by 2, 2-diphenyl-1-picrylhydrazyl (DPPH) assay and was compared with standard antioxidant (ascorbic acid). *Xanthocercis zambeziaca* showed moderate (50%) free radical scavenging activity, while *Philenoptera violacea* extract had low free radical scavenging activity at the concentration of 2.5 mg/ml when compared to ascorbic acid. Our results indicate that, *Philenoptera violacea* plant extract showed low antioxidant activity while *Xanthocercis zambeziaca* extract exhibited a moderate dose dependent antioxidant activity and the latter can be considered as a weak source of antioxidant.

Biography

Polo-Ma-Abiele Hildah Ntsoelinyane originates from a small town called Aliwal-North in the Eastern Cape, South Africa. She is pursuing Masters in Biomedical-Technology (Applied health technology research programme) at the Central University of Technology, Free State and has been a recipient of best student awards for all her undergraduate studies. She has obtained both her National diploma and B.Tech degree cum laude. In 2012 and 2013 she has been awarded the best academic performer and received Vice Chancellor's awards. In 2014, she was appointed as a junior lecturer at the Central University of Technology, Free-State and teaching Physics & Numeracy. In 2014, she has published an article 'Phytochemical screening, antibacterial and antioxidant activities of *Asparagus larinicus* leaf and stem extracts' and the second paper is awaiting publication in August 2014 'The anticancer, antioxidant and phytochemical screening of *Philenoptera violacea* and *Xanthocercis zambeziaca* leaf, flower & twig extracts' on the International Journal of Pharmacological Research. PH Ntsoelinyane is passionate about research on drug discovery from medicinal plants, imparting knowledge and effective teaching and learning strategies.

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