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**Sun protection activity of *Mangifera zeylanica* stem bark aqueous and methanolic extracts**

Gunawardana SLA<sup>1\*</sup>, Sirimuthu NMS<sup>2</sup>, Gunasekara TDCP<sup>3,4</sup>, Siriwardhene MA<sup>1,4</sup>

<sup>1</sup>Department of Pharmacy and Pharmaceutical Sciences, Faculty of Allied Health Sciences, University of Sri Jayewardenepura, Sri Lanka, <sup>2</sup>Department of Chemistry, Faculty of Applied Sciences, University of Sri Jayewardenepura, Sri Lanka. <sup>3</sup>Department of Microbiology, Faculty of Medical Sciences, University of Sri Jayewardenepura, Sri Lanka. <sup>4</sup>Center for Plant materials and Herbal Products Research, University of Sri Jayewardenepura, Sri Lanka

**Background** *Mangifera zeylanica* is an endemic plant to Sri Lanka. This plant is commonly known as ‘Atamba’.

**Objective:** This study investigates the sun protecting activity of the stem bark extracted with two different solvents (methanol, and water).

**Method:** Specimens of *Mangifera zeylanica* stem bark was collected from two different locations Rambukkana and Galle during the period of January to March 2019. The plant barks were separated into inner bark and outer bark, washed and air dried. Then the plant bark was coarsely powdered and was extracted with aqueous and methanol solvents using reflux extraction for an hour. The aqueous extract was freeze dried and the methanol extract was rotary evaporated. The sun protection activity was tested by determining the Sun Protection Factor (SPF) value. The SPF value measures the efficiency of the sun screening products. The products which show a SPF value above 30 is considered to have high sun screening activity. The in-vitro sun protection activity was measured using the SPF value determination using UV spectrometry.

**Results:** The results showed that methanol extract of *Mangifera zeylanica* methanolic extract of inner bark and outer bark collected from Galle had SPF values of 33.69 and 26.21 while the inner and outer bark of aqueous extract exhibited SPF values of 28.91 and 28.44. The inner and outer methanol extract of *Mangifera zeylanica* bark collected from Rambukkana had SPF values of 33.69 and 32.37 while aqueous extract had SPF values of 33.33 and 32.58 for the inner and outer bark, respectively.

**Conclusion:** A strong sun protection activity was observed in extracts of *Mangifera zeylanica* especially in the methanol extracts.