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Antioxidant properties of some selected medicinal plants

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Eventhough the natural plant therapy has been used for ages in Sri Lanka, most of those plants have not been scientifically validated. This study is focused on antioxidant properties of selected four medicinal plant crude extracts which include Pterocarpus marsupium (Gammalu) letax, Katharanthus roseus (Mini Mal) root, Citrus aurantifolia (Dehi) fruit, Terminalia arjuna (Kumbuk) bark Plant aqueous extracts were prepared as specified by the ayuvedic practitioners. Then the plants' antioxidant properties were checked using DPPH antioxidant assay on these extracts using spectrophotometric methods. Further, a preliminary phytochemical assay was conducted on the extracts of selected plants. The selected plants showed IC50 *Pterocarpus* marsupium 0.083 ± 0.001 , Katharanthus values 0.087 ± 0.001 , Citrus aurantifolia 0.094 ± 0.005 , Terminalia arjuna 0.086±0.000 and they were compaired with the standard Ascorbic acid solution 0.080±0.001. The selected plants showed a significant correlation in percentage scavenging activity tests with standard ascorbic acid. It was found that tannins, alkaloids and flavonoids were present in all the plants by phytochemical screening. T. arjuna showed very high correlation thorugh out the selected concentrations. The highest potency was seen in *Pterocarpus* marsupium letax extract and lowest potency was seen in Citrus aurantifolia fruit extract.

Key words: Antioxidant, P.marsupium, K. roseus, C. aurantifolia, T. arjuna

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