



NUTRITIONAL EVALUATION OF SELECTED UNDERUTILIZED WILD EDIBLE PLANTS IN SRI LANKA

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Abstract

Underutilized Wild Edible Plants (UWEP) in Sri Lanka plays an important role in the diets of residents. Nevertheless, there is insufficient data of their nutritional values even they have been used for food and medicinal purposes. In this paper, tender leaves of five selected UWEP species: *Coccinia grandis*, *Acrostichum aureum*, *Polyscias scutellaria*, *Talinum triangulare* and *Commelina diffusa* were studied. The proximate nutritional composition ash, moisture, crude protein and crude fat were determined. For different selected species moisture and ash content ranged between 85.56% - 88.74% and 1.25% - 2.01% respectively of fresh weight. Crude protein and crude fat content ranged between, 0.14%-0.23% and 2.8%-8.5% respectively, as a percentage of dry weight. The results reinforce the growing awareness that UWEP of the Sri Lanka can contribute useful amounts of nutrients to human diet. Anti-oxidant potential of selected species was measured using DPPH radical scavenging assay and the Total Antioxidant Capacity (TAC) was measured using ABTS radical. *Coccinia grandis* showed the highest antioxidant potential as determined by both methods (IC₅₀ value of 0.62 mg mL⁻¹ and TAC of 93.1%). Since selected species licit high nutrient content and high antioxidant potential, these species could be good alternatives to other commonly consumed plant foods.

Keywords: Underutilized Wild Edible Plants, Nutrition Value, Proximate Analysis, Antioxidant Value