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**Assessment of *in vitro* antioxidant activity and flavonoid content
*Vernonia cinerea***

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Leafy greens are an essential part of a healthy diet. Eating a diet rich in leafy greens can offer numerous health benefits including reduced risk of obesity, heart diseases, high blood pressure and mental decline. In Sri Lanka, *Kola kanda* or herbal porridge is a traditional breakfast made up of green leaves or herbs. Out of many herbs used for *Kola kanda*, *Vernonia cinerea* (*Monarakudumbiya*) is used to treat various diseases on folklore levels in Sri Lanka. However, no much scientific validation is found for *V. cinerea* for its medicinal uses. The present study was carried out to access the *in vitro* antioxidant activities and flavonoid content of leaf, root, stem and flower parts of *V. cinerea*. *In vitro* antioxidant potential of methanolic extracts of *V. cinerea* was evaluated by means of total phenolics by the Folin-Ciocalteu assay and the DPPH radical scavenging assay using standard procedures with slight modifications. The highest phenolic content of 101.80 ± 7.74 mg GAE/g was observed in flowers and the stem having the least phenolic content (71.95 ± 5.72 mg GAE/g). The flavonoid content ranged from 17.67 mg GAE/g to 12.76 mg GAE/g in all parts. DPPH radical scavenging activity of extracts of *V. cinerea* increased in a dose dependent manner with IC₅₀ values ranging from 800 µg/mL to 2350 µg/mL in different parts. The leafy green, *V. cinerea* under this study contains a significant amount of essential phytochemicals which possess anti-oxidant properties supporting its use as a medicinal herb.

Keywords: Antioxidant activity, *V. cinerea*