

## EFFICACY OF AQUEOUS AND ETHANOLIC EXTRACTION ON PHENOLICS AND ANTIOXIDANT ACTIVITY OF *PAEDERIA FOETIDA* L. AND *SPERMACOCE STRICTA* L.F.

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**Abstract:** Plant phenolics, particularly flavonoids are rich source of antioxidants. Efficient extraction of phenolics with solvents safe for human health is sought for dietary formulations. The study deals with the efficacy of aqueous (temperature 30, 50, 80, and 100°C; duration 10, 20 and 30 min) and ethanolic (concentration 50, 70, and 90%; duration 30, 60 and 90 min) extractions of total phenolic content (TPC) and flavonoid content (TFC), and total antioxidant activity (TAA) in *Paederia foetida* L. and *Spermacoce stricta* L.f. (Family; Rubiaceae). The observations are statistically analyzed and results reveal that the phenolic and flavonoid contents and antioxidant activity is higher in *P. foetida* than *S. stricta*. Furthermore, ethanolic extraction is better than aqueous extraction in terms of antioxidant activity. The result highlights the potential use of the two plant species in dietary formulations to defend oxidative stress.

**Keywords:** Phenolics, Flavonoid, Antioxidant activity, *Paederia foetida*, *Spermacoce stricta*.

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