

## **Estimation of total phenolic acids, flavonoid compounds and antioxidant activity of Ficus deltoideavarieties and their HPLC profiles with different solvents**

### **ABSTRACT**

The aim of this study was to evaluate the effect of methanol and ethanol extraction on antioxidant activities, total polyphenol, phenolic acid and flavonoid content of different *Ficus deltoideavarieties*. Our findings revealed that fresh leaves of *F. deltoideavar. kunstleri*; FDK1 had the highest total polyphenol, phenolic acid, flavonoid and antioxidant activities compared to that of other varieties. Ethanol extraction of FDK1 showed the highest activity in total antioxidant (DPPH) (4.48 mg TE/g FW), polyphenol (1.13 mg GAE/g FW) and flavonoid content (6.81 mg RE/g FW) while methanol extraction showed the highest activity in total antioxidant (FRAP) (2.43 mg TE/g FW) and phenolic acid content (4.54 mg GAE/g FW). HPLC quantification in dried leaves of FDK1 found out rutin exhibited higher than naringin. The highest rutin and naringin was found in FDK1 and FDT2 (12.83 and 3.04  $\mu\text{g/g DW}$ ). These results demonstrate that extraction solvent and *F. deltoideavariety* influence the activity of total antioxidant, polyphenol, phenolic acid and flavonoid content.

**Keyword:** Antioxidant; *Ficus deltoidea*; Flavonoid; Phenolic acid; Polyphenol