

Isolation and HPLC Quantitative Analysis of Antioxidant Flavonoids from *Alternanthera tenella* Colla

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Phytochemical analysis of the antioxidant ethanolic extract of *Alternanthera tenella* Colla led to the isolation of six flavonoids, acacetin 8-*C*-[α -L-rhamnopyranosyl-(1 $\rightarrow$ 2)- β -D-glucopyranoside] (**1**), 2''-*O*- α -L-rhamnopyranosyl-vitexin (**2**), 2''-*O*- β -D-glucopyranosyl-vitexin (**3**), vitexin (**4**), quercetin (**5**) and kaempferol (**6**). All the structures were established by ESI-MS and NMR spectroscopic methods. Antioxidant capacity of extract, fractions and isolated compounds was determined using the oxygen radical absorbance capacity (ORAC) assay and extract, fractions and flavonoids isolated showed antioxidant activity *in vitro*. Moreover, the total soluble phenolic contents of the extract and fractions were measured using the Folin-Ciocalteu reagent and the quantitative analysis of flavone C-glycosides major constituents was performed by HPLC.

Key words: *Alternanthera tenella* Colla, Flavonoids, ORAC Assay