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Determination of flavonoids, carotenoids and chlorophyll concentration in *Cynodon dactylon* (L.)

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*Cynodon dactylon* (L.) is a potent medicinal plant in the traditional and current Indian medicinal systems. The objective of this research was to find out the levels of flavonoids, carotenoids and chlorophyll b in *C. dactylon* leaves by high-performance liquid chromatography (HPLC) equipped with a diode array detector. HPLC analysis revealed that total carotenoid and total flavonoid concentration were 62mg/100 g and 249.1mg/g respectively. The mean chlorophyll b was 85.1mg/100 g in *C. dactylon*. Among the flavonoids, quercetin (164.7mg/g) was the major flavonoid followed by kaempferol (48.2mg/g), rutin (18.4mg/g), catechin (12.1mg/g) and myricetin (5.7mg/g). Of the carotenoids, β-carotene (35.2 mg/100 g) was predominant followed by lutein (17.0mg/100 g), violaxanthin (5.8mg/100 g) and zeaxanthin (4.2mg/100 g). Chlorophyll b concentration was 85.1mg/100 g in *C. dactylon*. The results of this investigation should be useful information for further pharmacological studies.

**Keyword:** flavonoids, carotenoids, kaempferol, myricetin.