

Phenolic content, antioxidant activity and nutritional composition of cordia evolution (clarke) gamble

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The objectives of this study were to determine phenolic content and antioxidant activity of methanolic extracts from different parts of *Cordia evolution* (leaf, bark, and fruit). Therefore the edible part of this plant fruit was evaluated the nutrition composition. The leaf extract showed the highest total phenolic content (25.40 ± 0.34 mg GAE/g extract) and total flavonoid content (69.70 ± 3.37 mg RE/g extract) accompanied with best antioxidant activity through all antioxidant assays ($p < 0.05$). The fruit proximate compositions of crude protein, ash carbohydrate, fiber and fat were 23.28, 10.47, 11.32, 5.56 and 3.86% respectively. Macro-nutrient contents were found to be higher in the fruit when compared to micronutrients. The analysis also showed the presence of almost all the essential and non-essential amino acids. Linolenic acid content was higher than stearic acid among the fatty acids in the fruit. These results suggest that *C. evolution* leaf, bark, and fruit may serve as a potential source of natural antioxidant for food and nutraceutical application.

Biography

Arunachalam Karuppusamy has completed M.Sc. Plant Science in Bharathiar University during year 2008 – 2009. He has completed projects entitled "Evaluation of *Merremia tridentata* (L.) hallier f. for in vivo Anti-inflammatory, Analgesic and in vitro Free radical Scavenging Activities". He is pursuing his Ph.D programme in the field of bioprospecting and nutraceuticals and has filed a patent entitled on "Dietary Supplement and method of manufacturing the dietary supplement". (Number: 1119/CHE/2010). He has published more than 15 papers in reputed journals and serving as an editorial board member of reputed.

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