

Antioxidant activity of three cultivars of *Mangifera indica L*

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Mango (*Mangifera indica L.*) is one of the most important tropical fruits in the world which is riched with the high content of vitamins, organic acids, ascorbic acid, amino acids, carbohydrates, β -carotene, polyphenols and certain volatile compounds. Along with fruits, leaves and inflorescence of this plant is ethno-medicinally very important throughout the world. In this study the antioxidant activity of different maturation stages (1.0, 3.0, 4.5 and 6.0 inches length) of three cultivars of mango inflorescence, collected from different organic and inorganic field of West Bengal were evaluated *in vitro*. The radical scavenging properties on 2,2 diphenyl-1-picrylhydrazyl (DPPH), superoxide anion, nitric oxide and reducing power as well as the flavonoids, phenolics, and total carotene contents of methanolic extracts of the inflorescence were determined. All inflorescence extracts, mainly the 4.5 inches mature stages of Langra cultivar exhibited strong scavenging activity towards all radicals tested due to the presence of relatively high total phenol, flavonoids, as well as total carotene contents. All samples which are collected from organic soil fields showed higher antioxidant potential than inorganic field. Based on the results obtained, we can conclude that the inflorescence extracts of mango plant may be the valuable source of natural antioxidant and would be potentially applicable in both medicine and food industry.

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