Natural Product Research, 2015

ISSN: 1478-6419

Antioxidant activities and phenolics profiling of different parts of Carica papaya by LCMS-MS

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Abstract

This article deals with the comparison of the antioxidant activity of aqueous extracts of various parts of Carica papaya L. The evaluation of total phenolic content and total flavonoid content revealed high antioxidant potential of the seeds and fruits. The free radical-scavenging potential of the aqueous extracts indicated the seeds to have better DPPH-scavenging activity than fruits. The results were augmented by the FRAP activity as well. The phenolics present in the extracts were separated and identified as 5-hydroxy feruloyl quinic acid, acetyl p-coumaryl quinic acid, quercetin-3-O-rhamnoside, syringic acid hexoside, 5-hydroxy caffeic quinic acid, peonidin-3-O-glucoside, sinapic acid-O-hexoside, cyaniding-3-O-glucose and methyl feruloyl glycoside by LCMS-MS technique.

Keywords: Carica papaya extracts; DPPH; FRAP; LCMS-MS; antioxidant activity..