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Characterization of polyphenols by HPLC,theirantioxidantand GC-MS analysisof wild Calotropisprocera leaves and fruit extracts

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Abstract : Medicinal plants are considered as important source of promising bioactive compounds. *Calotropisprocera* is a traditional medicinal plant which is known to have biochemical constituents with potential medicinal properties.The present study was aimed to evaluate the phytochemicals and antioxidant properties of crude methanolicextracts of wild *C.procera*. The total phenolic, flavonoidandDPPHantioxidant activity were measured in methanol extract of (leaves and fruits) of*C.procera*.Additionally,HPLC analysis of both extracts showed that Ellagic acid (18.03%), and Tannic (6.30%) were the major phenolic compounds in *C.procera*. Various phenolic compounds such as rutin, chlorogenic, caffeic, ferulic, coumaric acids were also identified.The chemical composition of hexane extract derived from leaves and fruits were analyzed using Gas chromatography-mass spectrometry (GC–MS) and have an interesting contribution to the total antioxidant activity.Results of the present study show that *C. procera*plant is rich source of polyphenolic agents that might be playing an important role in inhibition theprogressofseveral diseasess.
Keywords: Antioxidant activity, *Calotropisprocera*, DPPH free radicalscavenging, flavonoid, phenolic.

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