

Evaluation of the antioxidant activity of *Ruellia*

tuberosa

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Abstract

The antioxidant activity of *Ruellia tuberosa* L. (Acanthaceae) was investigated by the 2,2-diphenyl-1-picrylhydrazyl (DPPH) free radical-scavenging assay and the hydrogen peroxide-induced luminol chemiluminescence assay. The methanolic extract (ME) and its four fractions of water (WtF), ethyl acetate (EaF), chloroform (CfF), and n-hexane (HxF) were prepared and then subjected to antioxidant evaluation. The results of both methods revealed that *R. tuberosa* possesses potent antioxidant activity. The antioxidant activities of the different fractions tested decreased in the order of EaF > CfF > ME > WtF > HxF according to the hydrogen peroxide-induced luminol chemiluminescence assay, and results were the same with the exception of the rank order of HxF and WtF according to the DPPH free radical-scavenging assay. The results provide useful information on the pharmacological activities associated with free radicals of this traditional folk remedy.