



## Evaluation of the antioxidant activity of medicinal plant by radical scavenging activity using DPPH

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### ABSTRACT

In this research work, we studied a medicinal plant of Solanaceae family . In order to evaluate the importance of this plant, which grows spontaneously in our arid zone El-Oued (Algeria). Our research has been oriented towards the extraction of plant material (leaves). The maceration was carried out with both ethanol and distilled water solvents with the ratio (8/2). The clash of the extract hydroethanol obtained with the various polar and apolar solvents, led to obtaining the following extracts: the extract of chloroform, the extract of ethyl acetate and finally the n-butanol extract. Quantification of total polyphenols and total flavonoids was have been performed and the antioxidant activity was also performed. Furthermore, the results showed that EtOAc extract which had the highest level of polyphenol and flavonoid content ,whereas n.BuOH extract has stronger antioxidant capacity against the radical DPPH.

**Key words:** total polyphenols; total flavonoids; Solanum nigrum L; Extraction ;DPPH.