

## **Polyphenols Content and Antioxidant Activity of Extracts from Peganum harmala Seeds**

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**Abstract :** The aim of the present work is the evaluation of the antioxidant activity of the Peganum harmala (*P. harmala*) seeds extracts. The antioxidant activity was evaluated by applying two methods, the method of  $\beta$ -carotene bleaching and DPPH (2, 2-Diphenyl-1-Picryl-Hydrazyl). Using Folin-Ciocalteu assay, these results revealed that the concentration of polyphenols in EthOH E. ( $122.28 \pm 2.24 \mu\text{g GAE/mg extract}$ ) is the highest. The antiradical activity of the *P. harmala* seeds extracts on DPPH was found to be dose dependent with polyphenols concentration. The E. EthOH extract showed the highest antioxidant activity ( $\text{IC} = 252.10 \pm 11.18 \mu\text{g /ml}$ ). The test of  $\beta$ -carotene bleaching indicates that the E. EthOH of *P. harmala* showed the highest percentage of the antioxidant activity (49.88 %).

**Keywords :** antioxidant activity, Peganum harmala, polyphenols, flavonoids

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