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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 ß-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 ± 2.24 µg 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 (IC = 252.10 ± 11.18 µg /ml). The test of β-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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