

Abstract

The effects of free radicals and active oxygen species on biological molecules have created very problems in recent years. These compounds are known to be responsible for oxidative deterioration of vital molecules such as proteins, lipids and nucleic acids. Antioxidants protect biological systems against these factors and have been suggested to play a preventing role in human health. In the present study, the antioxidant activity of water and alcoholic extracts of ziziphus jujube was determined. The extracts obtained by ultrasonic and traditional methods. 2,2-Diphenyl-1-picrylhydrazyl (DPPH) was added to the extracts and the antioxidant activity was determined by amount of reagent consumption. For tracking the progress of the reaction, high performance liquid chromatography (HPLC) was used. In order to optimize the extraction conditions, effective parameters such as extracting solvent, temperature and time were investigated.

Keywords: Antioxidant activity, ziziphus jujube., Ultrasonic assisted extraction, DPPH.



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**The Thesis Submitted for the Degree of M. Sc
In the field of Analytical Chemistry**

**Ultra Sound Assisted Extraction and
Evaluation of Antioxidant Activity of
Ziziphus jujube Mill Using DPPH Reagent**

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June 2014