

Antioxidant and cytotoxic activity of ethyl acetate extract from leaves of a native plant

from Marivan

Zahra Dashtizadeh', Fereshteh Jookar Kashi', Zeinab Toluei"

Natural Essential Oil Research Institute, University Of Kashan, Kashan, I.R. Iran.
* Biotechnology Division, Department of Cell and Molecular Biology, Faculty of Chemistry, University of Kashan, I.R.
* Biotechnology Division, Department of Cell and Molecular Biology, Faculty of Chemistry, University of Kashan, I.R.

Abstract

Prunus mahaleb is a genus of trees and shrubs in the family *Rosaceae*. This plant is an important rootstock for cherry and sour cherry cultivars. It grows in warm, dry climates such as Mediterranean region. This plant is used for many things including baking and candy industries and many diseases such as kidney and gastro intestinal troubles. The purpose of this study was to verify cytotoxicity and antioxidant properties of leaves ethyle acetate extract of plant.

This plant was collected in August $\gamma \cdot \gamma \gamma$ from southeast of Marivan, Iran. Methanolic extract was performed with a soxhlet apparatus and the fraction of ethyl acetate was separated by $\gamma \circ \cdot$ ml of ethyl acetate. Antioxidant activity of the extract was determined by $\gamma \circ \gamma$ -diphenyl- γ -picrylhydrazyl (DPPH) radical scavenging activity and cytotoxic activity was determind by the brine shrimp lethality bioassay and *Artemia salina* larvae. The results showed that the extract has very good antioxidant and cytotoxic activity.

Keywords: *Prunus mahaleb*, Ethyl acetate extract, Antioxidant, Cytotoxic, DPPH, Brine shrimp lethality