

Abstract

Cytotoxic Activity of Endemic *Astragalus argaeus* Boiss. from Turkey [†]

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Abstract: *Astragalus* L. is the largest genus in the family Leguminosae with over 3000 species and is represented in Turkey by 445 species, of which 224 are endemic. Several *Astragalus* species have many biological properties such as hepatoprotective, immunostimulant, antiviral, anti-aging, antitumor, antioxidant, antimicrobial, antimalarial, antileishmanial, antiperspirant, anti-inflammatory, diuretic and tonic. The aim of this research was the investigation of the cytotoxic activities of extracts obtained from underground and aerial parts of *Astragalus argaeus* Boiss. on a human breast cancer cell line (MCF-7). The cytotoxic effects of extracts on MCF-7 (human breast cancer cell lines) and fibroblast cells during 24 and 48 h were determined by 3-(4,5-dimethyl thiazol-2-yl)-2,5-diphenyl tetrazolium bromide (MTT) assay. The extracts showed weak cytotoxic activity on MCF-7 during 24 h. To the best of our knowledge, this study is the first report on cytotoxic activity of *A. argaeus*.

Keywords: *Astragalus argaeus*; cytotoxic activity; MCF-7

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