

Abstract

Anticancer Activity of *Centaurea babylonica* L. [†]

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Abstract: Today, new agents are required to protect from cancer due to the side effects and some deficiencies in the medical drugs used to treat cancer. Because of this reason, active substances used in drugs which is herbal origin of the treatment of tumors as an alternative agent studies continues to increase. It has been determined that some species belonging to the genus *Centaurea* have cytotoxic effect. *Centaurea babylonica* plant has not been performed on cytotoxicity before. Plant was collected from Çamlıyayla district of Mersin province. Methanol extract was prepared from the plant and cytotoxicity tests of the extracts were performed. *In vitro* cytotoxic effects of extraneous material obtained from the supernatant were determined by MTT assay using C6 (Glioma), A549 (human lung adenocarcinoma) and MCF-7 (human breast cancer) cell lines. Cytotoxic effect was found high in methanol extract. In the DNA synthesis inhibition test of extract, the extract was found to show a high inhibition from the cisplatin used as a control. The 3T3 test, in which the methanol extract showed no toxic effect on healthy fibroblast cells, was supported.

Keywords: *Centaurea babylonica*; methanol extract; cytotoxicity

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