

***CONVOLVULUS GALATICUS*, *CROCUS ANTALYENSIS*, AND *LILIUM CANDIDUM* EXTRACTS SHOW THEIR ANTITUMOR ACTIVITY THROUGH INDUCTION OF P53-MEDIATED APOPTOSIS ON HUMAN BREAST CANCER CELL LINE MCF-7 CELL**

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Conventional and newly emerging treatment procedures such as chemotherapy, catalytic therapy, photodynamic therapy, and radiotherapy have not succeeded in reversing the outcome of cancer diseases to any drastic extent, which has led researchers to investigate alternative treatment options. The extensive repertoire of traditional medicinal knowledge

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their healing properties. It has been reported that several members of the *Convolvulaceae*, *Iridaceae*, and *Liliaceae* families have antitumor activity against some tumor cell lines. Here we first report that *Convolvulus galaticus*, *Crocus antalyensis*, and *Lilium candidum* species have cytotoxic activity on human breast cancer cell line MCF-7 cells. Plant samples were collected and identified, and their cytotoxic effects on the MCF-7 cell line were examined at different concentrations of methanol extracts. We found that all three plants have cytotoxic effects on MCF-7 cells but that *C. galaticus* has the strongest cytotoxic effect even in the lowest extract concentration tested (0.32 µg/mL). Our results indicate that these plant extracts have cytotoxic effects on human breast carcinoma cell line MCF-7 cells and that this cytotoxic effect comes from p53-mediated stimulation of apoptosis.