

**Cytotoxicity of Turkish Propolis Samples on Human Bronchial Epithelial Cells**Züla ATLI ŞEKEROĞLU<sup>1</sup>, Zeynep KOLÖREN<sup>1</sup>, Ömer ERTÜRK<sup>1</sup><sup>1</sup>Department of Molecular Biology and Genetics, Faculty of Arts and Sciences, Ordu University, Ordu  
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**Aim of the Study:** Propolis is a resinous hive product collected by honeybees from various plant sources. It has been reported that propolis has a wide variety of biological actions. The aim of this study was to determine the *in vitro* cytotoxicity of Turkish propolis extracts on human bronchial epithelial (BEAS-2B) cell cultures.

**Material and Methods:** The 3-(4,5-dimethylthiazol-2-yl)-2,5-diphenyltetrazolium bromide (MTT) assay was used for the determining of the cytotoxicity of Turkish propolis ethanolic extracts. BEAS-2B cells were treated with different concentrations (1, 2, 4, 5, 6, 7, 8 and 16 mg/ml) of propolis and 72 hours after the IC<sub>50</sub> value was calculated.

**Results:** Our results indicated that propolis showed stronger inhibitory effects at the higher concentrations (7, 8 and 16 mg/ml). The 50% inhibitory concentrations (IC<sub>50</sub>) of propolis was found approximately at 6 mg/ml concentration. Propolis reduced cell viability by approximately 43, 23 and 13 % in BEAS-2B cells with treatments of 7, 8 and 16 mg/ml.

**Keywords:** Propolis, MTT assay, BEAS-2B cells, Cytotoxicity