P28. COMBINATIONAL EFFECT OF ALYSSUM PATERI SUBSP. PROSTRATUM AND 5-FU ON HT-29 AND PC-3 CANCER CELL LINES
Mehmet Kadir ERDOĞAN\*, Lutfi BEHÇET1
1Department of Biology, Faculty of Arts and Sciences, Bingöl University, 12000, Bingöl, Turkey
*mehmetkadirerdogan@gmail.com

Brassicaceae (Cruciferae) family is widely distributed in the world with 350 genera and about 3500 species. The species of this family have many health-promoting phytochemicals such as minerals, fat, vitamins, phenolic compounds and soluble sugars, and different species of Brassicaceae reduce the oxidative damage and have anticarcinogenetic, antioxidant, antimicrobial, antiinflammatory effects. A. pateri subsp. prostratum is a perennial member of Brassicaceae. 6,10,14-trimethyl-2-pentadecanone (22.09 %), 1,8-cineole (11.91 %), thiobis-methane (6.43 %), 2,6,10-trimethylpentadecane (6.05 %) and hexadecane (4.19 %) is the major constituents of the essential oil of A. pateri subsp. prostratum.

The aim of this study was examined the antiproliferative and apoptotic effect of hexane, chloroform, ethyl acetate and methanol extracts from the aerial parts of Alyssum pateri Nyár subsp. prostratum (Nyár) Dudley, which growing in Turkey, and combination of these extracts with 5-FU. Cell Proliferation Kit I (MTT) and Cell Death Detection Elisa Kit from Roche (Roche Diagnostics, Mannheim, Germany) were used to determine the apoptotic and cytotoxic effect of Alyssum pateri subsp. prostratum extracts on HT-29 human colorectal cancer and PC-3 human prostate cancer cell lines. Propidium iodide and ethidium bromide were used for monitoring the apoptotic and necrotic cells.