



2nd International
UNIDOKAP Black Sea Symposium on
BIODIVERSITY

28 - 30 November 2018

Ondokuz Mayıs University - Samsun / TURKEY

**PROGRAMME
and
ABSTRACT BOOK**

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HALL 2

DAY 3 - Friday - 30.Nov.2018

Session 1

Moderator: Prof. Dr. Hakan Mete DOĞAN

09.00 - 09.45

NS36	Gözde KOYGUN	The Cytotoxic Effects Of Soybean (<i>Glycine max</i> l.) In Breast Cancer MCF-7 Cell Line In Vitro
NS37	Gözde KOYGUN	Cytotoxic Effect Of Medlar Fruit Extract On Breast Cancer Of MCF-7
FS08	Güliz AKYÜZ	Nanotechnology in Food Safety
MD03	Salih SARICAOĞLU	Isolation and Molecular Typing of Nonomurea Strains From Basaltic Parent Material
MD04	Salih SARICAOĞLU	Polyphasic Taxonomy of A Novel <i>Actinomadura</i> sp. 14C53, Isolated from Basaltic Parent Material
MD01	Talha GENÇBAY	Phylogenetic Analysis of <i>Nonomurea</i> sp. AG16 Isolated from The Acıgöl Soil, Nevşehir
MD02	Talha GENÇBAY	Molecular Characterization of A Novel <i>Actinomadura</i> sp. DG80, Isolated From Derinkuyu Soil, Nevşehir

09-45 - 10.15

Poster Session - Coffee Break

Session 2

Moderator: Prof. Dr. Yüksel ARDALI

(Invited Speaker)

Assist. Prof. Dr. Hrisi KARAPANAGIOTI

University of Patras · Department of Chemistry, Greece

"Effects of plastic and microplastic pollution on the environment"

11-00 - 11.30

Poster Session - Coffee Break

NS36

The Cytotoxic Effects Of Soybean (*Glycine max l.*) In Breast Cancer MCF-7 Cell Line In Vitro

Gözde KOYGUN¹, Emine ARSLAN², Elif Gülbahçe Mutlu³

¹Nanotechnology and advance materials, Selcuk University, Konya, Turkey

²Biology/ Faculty of Science, Selcuk University, Konya, Turkey

³Medical Biology/ Faculty Of Medical, Karatay University, Turkey

gozdekayadibi@hotmail.com

Aim of the study: Breast cancer is one of the most noticeable disease in women aged 20–59 years also it is expected to account for 30% of all new cancer diagnoses in women in 2016. Long-term use of soybean (*Glycine max l.*) may prevent the progression of cancer. However, the molecular mechanism for the functions of soybean remains unclear. So we decided to see how effective soybeans are on MCF-7 Cell lines.

Materials and Methods: Human breast cancer cell lines MCF-7 were treated with different concentrations of methanol extract of soybean seeds. The growth rate was evaluated by XTT tests for 48 and 72 hours.

Results and Discussion: Soybean showed significant inhibitory effects on the growth rates of MCF-7 cells in a concentration-dependent way ($P < 0.05$). Best effective concentration was 131.65 μM for the 72 hours plates on MCF-7 cell lines. result of 48 hours soybeans concentration was calculated as a 476.8 μM . Cytotoxicity assays resulted in a dose dependent growth inhibition of MCF-7 cells. The different concentration of soybean will be beneficial to the therapy of breast cancer since its causes may be involved in multiple aspects. Therefore, soybean methanol extract will necessitate further deep investigation for a probable use as a cancer preventive food additive.

Keywords: Breast Cancer, MCF-7, Soybean *Glycine max l.*, XTT tests