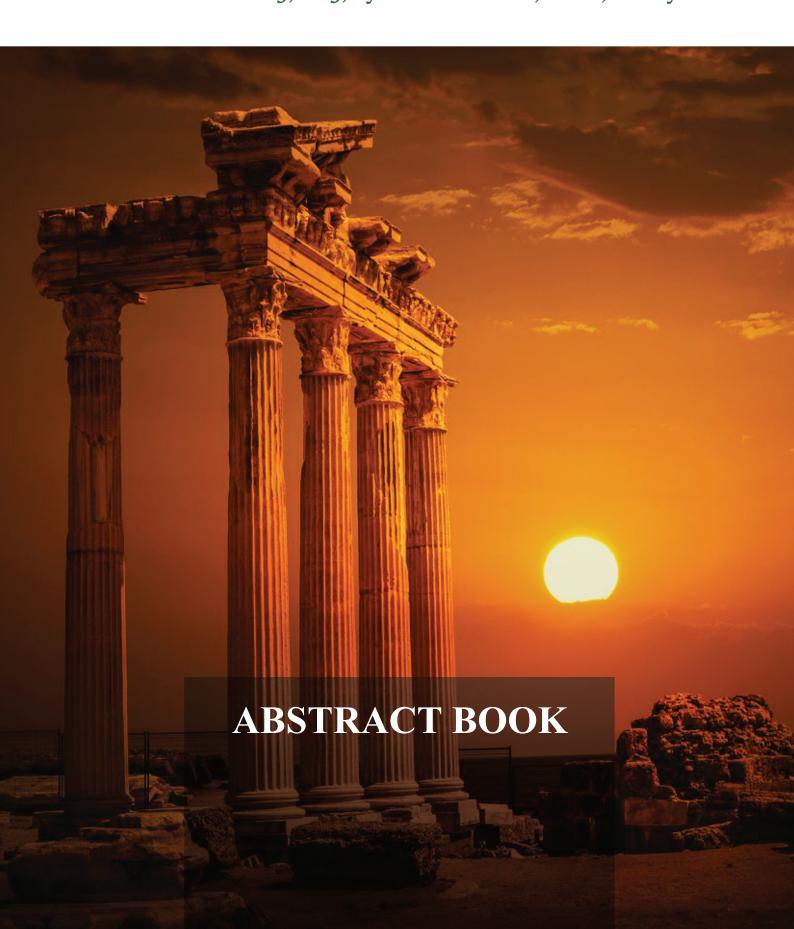


## th INTERNATIONAL CONGRESS OF THE TURKISH SOCIETY OF TOXICOLOGY October 16-19,2019, Lykia World Hotel, Belek, Antalya-TURKEY





10<sup>th</sup> International Congress of the Turkish Society of Toxicology 16-19 October 2019 - Antalya, Turkey.

## **ABSTRACT BOOK**

#### **WELCOME**

It is my great pleasure to invite all of you to the 10th International Congress of the Turkish Society of Toxicology (TST), which will be held in Antalya, Turkey between 16-19 October, 2019.

Our congress with the theme "Toxicology: From Prediction to the Endpoints" will highlight emerging developments in numerous areas of toxicology. The scientific programme will consist of plenary lectures, and sessions covering many topics such as, ecotoxicology, environmental toxicology, endocrine disrupters, metal toxicity, molecular toxicology, genotoxicity, food safety, regulatory toxicology, alternative methods, and risk assessment. Many short communications, oral and poster presentations will be also held for early career researchers. The Continuing Education programme will provide the opportunity for all kind of attendees to learn about recent developments in toxicology. The Congress is a continuation of the series of traditional TST meetings, including meetings in Ankara (1987 and 2009) in Antalya (1997, 2006, 2012) and in Izmir (2015). Our Congress will provide an important national and international platform for sharing and discussing the latest developments with professionals scientifically.

During the meeting, you will have the opportunity to learn more about Antalya, which is the most visited touristic province of Turkey's Mediterranean coast. The area has witnessed many historical changes; you can enjoy the charming atmosphere and the stunning view of the sea.

We invite you to attend TTD2019 in the hope of carrying out a scientifically and socially satisfying, congruent congress. On behalf of the Organizing and the Scientific Committees, I wish to express our gratitude to all the speakers, oral and poster presenters who will share their knowledge with us and also to all of you who will participate in advance.

Looking forward to meeting you all at TTD2019!

Prof. Dr. Nurşen BAŞARAN Congress President President of TST

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The Organising Committee of TTD2019 is thankful to the above organizations and sponsors for their contribution and support

# P60 - Antigenotoxic effects of Biochaga and Dihydroquercetin (taxifolin) on H<sub>2</sub>O<sub>2</sub> induced DNA damage in human WBC

# <u>Lada Živković</u><sup>1</sup>, Vladan Bajić<sup>2</sup>, Dijana Topalović<sup>1</sup>, Marija Bruić<sup>1</sup>, Biljana Spremo-Potparević<sup>1</sup>

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The health benefits of natural products have long been recognized. Consumption of dietary compounds such as supplements, provides an alternative source of natural products to those obtained from the diet. There is a growing concern regarding to possible side effects of using different food supplements simultaneously, since their possible interactions are less known. For the first time, we have tested genotoxic and antigenotoxic effects of Biochaga, in the cooperation to Dihydroquercetin. No genotoxic effect on whole blood cells was observed within individual treatment of Biochaga (250 µg/mL, 500 µg/mL and 1000 µg/mL) and Dihidroqercetin (100 µg/mL, 250 µg/mL and 500 µg/mL), nor in cooperation. Afterwards, antigenotoxic potency of both supplements (compounds) against oxidative hydrogen peroxide ( $H_2O_2$ ) induced DNA damage to whole blood cells (WBC) was assessed, using the comet assay. Biochaga and Dihydroquercetin displayed a strong potential to attenuate  $H_2O_2$ -induced damage on DNA in cells at all tested concentrations, with a statistical significance (p<0.05), whereas Biochaga at the dose of 500 µg/mL in the cooperation with Dihydroquercetin 500 µg/mL was most prominent. Biochaga in cooperation with Dihydroquercetin is able to protect genomic material from oxidative damage induced by hydrogen peroxide *in vitro*.