ATLAS 17th INTERNATIONAL SCIENTIFIC RESEARCH AND INNOVATION CONGRESS

APRIL 28 - MAY 2, 2026
ROME, ITALY

ACCEPTANCE/INVITATION LETTER

Dear: Derya BİNAY & Prof. Dr. Fatma ÜNAL & Prof. Dr. Mehmet Ali ERGÜN & Res. Assist. Ece AKBAŞ & Prof. Dr. Deniz YÜZBAŞIOĞLU

Herewith, the international scientific committee is happy to inform you that the peer-reviewed draft paper entitled **"ANTIGENOTOXIC POTENTIAL OF BORIC ACID AGAINST ASPARTAME: ALKALINE COMET TEST FINDINGS IN HUMAN LYMPHOCYTES"** has been accepted for oral presentation as well as inclusion in the conference proceedings of the ATLAS 17th INTERNATIONAL SCIENTIFIC RESEARCH AND INNOVATION CONGRESS to be held in Rome, Italy during April 28 - May 2, 2026.

We are looking forward to hearing from you.
With Warmest Regards,

Assoc. Prof. Dr. Hüseyin ERİŞ
ORGANIZING COMMITTEE

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ATLAS

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APRIL 28 - MAY 2, 2026

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Prof. Dr. Anderi JEAN

Assoc. Prof. Dr. Hüseyin ERİŞ

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DATE AND PLACE

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Samet KUŞKIRAN

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SCIENTIFIC RESEARCH AND INNOVATION CONGRESS

APRIL 28 - MAY 2, 2026, ROME, ITALY

In-person Congress Program



EDUCATION

April 28, 2026
Roma Local Time: 14:00-15:00

Termini Meeting Hall (Via Cavour, 50/a, 00184 Roma RM, Italy)

Prof. Dr. Baran ARSLAN

Digital Marketing in Health Tourism: Examples of Applications

29.04.2026 / IN-PERSON SESSION-1

Roma Local Time: 13:00-15:00

Termini Meeting Hall (Via Cavour, 50/a, 00184 Roma RM, Italy)

Head of Session: Assoc. Prof. Dr. Hüseyin ERİŞ

Kübra Nur METİN Assist. Prof. Dr. Çağdaş KARA	Eskişehir Osmangazi University TÜRKİYE	EVALUATION OF THE RELATIONSHIP BETWEEN URBAN STRUCTURE INDICATORS AND TRAFFIC DENSITY: THE CASE OF ESKIŞEHIR
Prof. Dr. Deniz YÜZBAŞIOĞLU Assoc. Prof. Dr. Ece AVULOĞLU YILMAZ Ayşen Yağmur BURGAZLI Busenaz TUNCAY Assoc. Prof. Dr. Sevcan MAMUR Prof. Dr. Fatma ÜNAL Assoc. Prof. Dr. Berat ÇINAR ACAR Prof. Dr. Zehranur YÜKSEKDAĞ	Gazi University TÜRKİYE Amasya University TÜRKİYE Gazi University TÜRKİYE	ASSESSMENT OF CYTOTOXICITY AND GENOTOXICITY OF GREEN-SYNTHESIZED SELENIUM NANOPARTICLES USING MTT ASSAY AND CHROMOSOMAL ABERRATION TEST
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Assoc. Prof. Dr. Vakkas ULUÇAY Prof. Dr. İrfan DELİ Res. Assist. Zeynep BAŞER	Kilis 7 Aralik University TÜRKİYE	AN IMPROVED TSK MODEL WITH DISTANCE MEASURE UNDER TRAPEZOIDAL INTUITIONISTIC FUZZY ENVIRONMENT
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Assist. Prof. Dr. Esra USLU	Karabük University TÜRKİYE	EXPERIENCE-BASED MULTIFUNCTIONAL SPACE DESIGN AT KALEALTI EDUCATION AND CITY HISTORY MUSEUM
Assist. Prof. Dr. Esra USLU	Karabük University TÜRKİYE	AN EXPERIENTIAL FURNITURE DESIGN: THE “SHARE YOUR IDEA” UNIT FOR THE KALEALTI EDUCATION AND CITY HISTORY MUSEUM

29.04.2026 / IN-PERSON SESSION-2

Roma Local Time: 15:00-17:00

Termini Meeting Hall (Via Cavour, 50/a, 00184 Roma RM, Italy)

Head of Session: Prof. Dr. Baran ARSLAN

Res. Assist. Dr. Ebru TANRIKULU	Harran University TÜRKİYE	FROM FOMO TO DIGITAL CONTROL: AN EXAMINATION OF THE MEDIATING MECHANISM OF PRIVACY CONCERNS
Prof. Dr. Baran ARSLAN Yonca BAKIR	Harran University TÜRKİYE	POSTPONING TO AVOID MISSING OUT: THE EFFECT OF FOMO ON WORK PROCRASTINATION BEHAVIOR
Prof. Dr. Baran ARSLAN Yonca BAKIR	Harran University TÜRKİYE	THE EFFECT OF POST-PURCHASE REGRET ON NEGATIVE e-WOM BEHAVIOR AMONG GENERATION Z COSMETIC CONSUMERS
Assist. Prof. Dr. Semra POLAT	Samsun University TÜRKİYE	EXAMINING THE COGNITIVE DEMAND LEVELS OF MATHEMATICAL TASKS GENERATED BY CHATGPT: THE EFFECT OF PROMPTS
Assist. Prof. Dr. Semra POLAT Prof. Dr. Veli TOPTAŞ	Samsun University TÜRKİYE Kırıkkale University TÜRKİYE	AN ANALYSIS OF THE PRIMARY SCHOOL MATHEMATICS CURRICULUM IN TERMS OF EDUCATIONAL GAMES WITHIN THE MAARIF MODEL FRAMEWORK
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Assoc. Prof. Dr. Duygu AYAR Assoc. Prof. Dr. Filiz POLAT Assoc. Prof. Dr. Fatma KARASU Assoc. Prof. Dr. Hüseyin ERİŞ	Gaziantep Islamic Science and Technology University TÜRKİYE Osmaniye Korkut Ata University TÜRKİYE Kahramanmaraş Sütçü İmam University TÜRKİYE Harran University TÜRKİYE	STRESS AND QUALITY OF LIFE AMONG PARENTS OF CHILDREN WITH SPECIAL NEEDS: THE EFFECT OF PROGRESSIVE MUSCLE RELAXATION EXERCISE
Assoc. Prof. Dr. Duygu AYAR Assoc. Prof. Dr. Filiz POLAT Assoc. Prof. Dr. Fatma KARASU Assoc. Prof. Dr. Hüseyin ERİŞ	Gaziantep Islamic Science and Technology University TÜRKİYE Osmaniye Korkut Ata University TÜRKİYE Kahramanmaraş Sütçü İmam University TÜRKİYE Harran University TÜRKİYE	PARENTS OF CHILDREN WITH SPECIAL NEEDS: HOPE AND SOCIAL SUPPORT

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ANTIGENOTOXIC POTENTIAL OF BORIC ACID AGAINST ASPARTAME: ALKALINE COMET TEST FINDINGS IN HUMAN LYMPHOCYTES

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ABSTRACT

The widespread consumption of artificial sweeteners, particularly aspartame (ASP; E-951), has increased in parallel with the global rise in metabolic disorders. Although aspartame is generally considered safe, growing evidence has raised concerns regarding its potential genotoxic effects. In 2023, the International Agency for Research on Cancer (IARC) classified aspartame as "possibly carcinogenic to humans" (Group 2B). In contrast, boric acid (BA) has been identified as a biologically active compound with antioxidant and antigenotoxic properties. This study aimed to evaluate the protective potential of BA against ASP-induced DNA damage in human peripheral lymphocytes using the alkaline single-cell gel electrophoresis (Comet) assay. Lymphocytes were exposed to ASP (0.125, 0.25, 0.50, and 1 μg/mL) either alone or in combination with BA (0.0313, 0.0625, 0.125, and 0.25 μg/mL) for 1 hour. DNA damage was quantified by measuring tail intensity and tail moment via Comet Assay IV software (Perceptive Instruments Ltd., UK). ASP exposure resulted in a significant and dose-dependent increase in DNA damage. Significant increases in tail intensity ($p < 0.01$–0.001) and tail moment ($p < 0.05$–0.001) were observed at all concentrations relative to the negative control, indicating elevated DNA strand breakage. Co-treatment with BA significantly attenuated ASP-induced genotoxicity across all tested concentrations. At lower ASP concentrations (0.125 and 0.25

μg/mL), BA produced consistent and statistically significant reductions in both tail intensity and tail moment. At 0.50 μg/mL ASP, BA exhibited a concentration-dependent protective effect, with maximal reductions observed at higher doses ($p<0.001$). Notably, even at the highest ASP concentration (1 μg/mL), BA significantly mitigated DNA damage parameters ($p<0.01–0.001$), demonstrating strong protective capacity under elevated genotoxic stress. In conclusion, boric acid demonstrated a pronounced, concentration-dependent antigenotoxic effect against aspartame-induced DNA damage in human lymphocytes. These findings suggest that BA may serve as a potential protective agent against oxidative DNA damage associated with artificial sweetener exposure. However, further mechanistic studies and *in vivo* investigations are required to better understand this effect.

KEYWORDS: Aspartame, Boric Acid, Genotoxicity, Antigenotoxicity, Artificial sweetener, COMET assay

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