



# 31<sup>st</sup> International Scientific-Expert Conference of Agriculture and Food Industry

*“Future of Agriculture, Agriculture of Future”*

## CONGRESS PROGRAMME



**27-28 September 2021**  
**Ege University**  
**İzmir - Turkey**

## **COMMITTEES**

### **ORGANIZATION COMMITTEE**

Prof. Dr. Nedim Koşum	President of Organizing Committee & Dean, Faculty of Agriculture, Ege University
Prof. Dr. Muhamed Brka	Deputy President of Organizing Committee & Dean, Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Enisa Omanović-Miklicanin	Vice-Dean, Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Banu Yücel	Vice Dean, Faculty of Agriculture, Ege University
Asst. Prof. Dr. Nedim Çetinkaya	Vice Dean, Faculty of Agriculture, Ege University
Assoc. Prof. Özer Hakan Bayraktar	Coordinator of Production Units, Faculty of Agriculture, Ege University
Prof. Dr. Lutvija Karic	Faculty of Agriculture and Food Sciences, University of Sarajevo
Assoc.Prof. Dr. Fulsen Özen	Conference Secretary General, Faculty of Agriculture, Ege University
Prof.Dr. Eftal Düzyaman	Faculty of Agriculture, Ege University
Prof. Dr. Emre İlker	Faculty of Agriculture, Ege University
Asst. Prof. Dr. Almin Toroman	Faculty of Agriculture and Food Sciences, University of Sarajevo
Asst. Prof. Dr. Vedad Falan	Faculty of Agriculture and Food Sciences, University of Sarajevo
Dr. Çiğdem Şeremet Tuğalay	Faculty of Agriculture, Ege University
Dr. Yarkın Akyüz	Faculty of Agriculture, Ege University
Res.Asst. M. Olgun Atalay	Faculty of Agriculture, Ege University
Res.Asst. Tunç Durdu	Faculty of Agriculture, Ege University

### **SCIENTIFIC COMMITTEE**

Prof. Dr. Figen Kırkpınar	President of Scientific Committee, Faculty of Agriculture, Ege University
Prof. Dr. Admir Dokso,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Adnan Değirmencioglu	Faculty of Agriculture, Ege University
Prof. Dr. Ahmet Alçiçek	Faculty of Agriculture, Ege University
Prof. Dr. Ahmet Altındışli	Faculty of Agriculture, Ege University
Prof. Dr. Aleksandra Nikolić,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Alma Rustempašić,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Amir Ganić,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Asima Akagić	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Ayşe Gül	Faculty of Agriculture, Ege University
Prof. Dr. Ayşe Sibel Akalın	Faculty of Agriculture, Ege University
Prof. Dr. Bahriye Gülgün Aslan	Faculty of Agriculture, Ege University
Prof. Dr. Behçet Kır	Faculty of Agriculture, Ege University
Prof. Dr. Behiç Tekin	Faculty of Agriculture, Ege University
Prof. Dr. Bülent Çakmak	Faculty of Agriculture, Ege University
Prof. Dr. Çiğdem Takma	Faculty of Agriculture, Ege University
Prof. Dr. Dragana Ognjenović,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Drena Gadžo,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Duygu Kışla	Faculty of Engineering, Ege University
Prof. Dr. Emine Bayram	Faculty of Agriculture, Ege University
Prof. Dr. Emir Džomba,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Engin Nurlu	Faculty of Agriculture, Ege University
Prof. Dr. Enver Karahmet,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Ercan Özzambak	Faculty of Agriculture, Ege University
Prof. Dr. Erdem Aykas	Faculty of Agriculture, Ege University
Prof. Dr. Erhan Akkuzu	Faculty of Agriculture, Ege University
Prof. Dr. Ervin Zečević,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Fatih Şen	Faculty of Agriculture, Ege University
Prof. Dr. Figen Ertekin	Faculty of Engineering, Ege University
Prof. Dr. Fikreta Behmen,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Fuad Gaşi,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Gamze Saner	Faculty of Agriculture, Ege University
Prof. Dr. Gökhan Söylemezoğlu	Faculty of Agriculture, Ankara University
Prof. Dr. Güldehen Bilgen	Faculty of Agriculture, Ege University
Prof. Dr. Hakan Geren	Faculty of Agriculture, Ege University

## SCIENTIFIC COMMITTEE

Prof. Dr. Harun Uysal	Faculty of Agriculture, Ege University
Prof. Dr. Hülya Atıl	Faculty of Agriculture, Ege University
Prof. Dr. Irzada Taljić,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. İbrahim Duman	Faculty of Agriculture, Ege University
Prof. Dr. İbrahim Kaya	Faculty of Agriculture, Ege University
Prof. Dr. İlkin Yücel Şengün	Faculty of Engineering, Ege University
Prof. Dr. Jasmina Tahmaz	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Jasna Avdić,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Josip Jurković,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Kadir Kızılkaya	Faculty of Agriculture, Adnan Menderes University
Prof. Dr. Melisa Ljuša,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Meltem Serdaroğlu	Faculty of Engineering, Ege University
Prof. Dr. Metin Artukoğlu	Faculty of Agriculture, Ege University
Prof. Dr. Milenko Blesić	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Mirha Đikić	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Mirsad Kurtović	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Murad Yercan	Faculty of of Agriculture, Ege University
Prof. Dr. Musa Sarıca	Faculty of Agriculture, Ondokuz Mayıs University
Prof. Dr. Mustafa Gümüş	Faculty of Agriculture, Ege University
Prof. Dr. Nedžad Karić,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Nermina Đulančić,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Nermina Spaho	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Nurcan Koca	Faculty of Engineering, Ege University
Prof. Dr. Orhan Kengiz	Faculty of Agriculture, Ondokuz Mayıs University
Prof. Dr. Pakeza Drkenda	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Rıdvan Kızılkaya	Faculty of Agriculture, Ondokuz Mayıs University
Prof. Dr. Sabahudin Bajramović,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Sabina Operta,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Samir Muhamedagić,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Sanja Oručević-Žuljević,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Selma Ćorbo	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Senada Čengić-Džomba,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Serra Hepaksoy	Faculty of Agriculture, Ege University
Prof. Dr. Sezai Delibacak	Faculty of Agriculture, Ege University
Prof. Dr. Sezen Özkan	Faculty of Agriculture, Ege University
Prof. Dr. Suad Hamidović,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Tayfun Aşkın	Faculty of Agriculture, Ordu University
Prof. Dr. Turgay Taşkın	Faculty of Agriculture, Ege University
Prof. Dr. Ümrhan Şahan	Faculty of Agriculture, Uludağ University
Prof. Dr. Yekta Göksungur	Faculty of Engineering, Ege University
Prof. Dr. Zilha Ašimović,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Zlatan Sarić,	Faculty of Agriculture and Food Sciences, University of Sarajevo
Prof. Dr. Zümrüt Açıkgöz	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Arzu Yazgı	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Cem Karagözlü	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Gökçen Yönter	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Harun Kesenkaş	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Himmet Tezcan	Faculty of Agriculture, Uludağ University
Assoc. Prof. Dr. Murat Kılıç	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Nayil Dinkçi	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Nesrin Örcen	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Özer Hakan Bayraktar	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Özlem Karahan Uysal	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Özlem Tuncay	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Sevtap Gümüş	Faculty of Agriculture, Ege University
Assoc. Prof. Dr. Tuncay Günhan	Faculty of Agriculture, Ege University
Asst. Prof. Dr. Bülent Yağmur	Faculty of Agriculture, Ege University
Asst. Prof. Dr. Hakan Çakıcı	Faculty of Agriculture, Ege University

27 September 2021 Monday

### Opening Ceremony and Honorary Speech

	<b>Prof. Dr. Nedim KOŞUM</b>	Dean of Faculty of Agriculture, Ege University
<b>09:30-10:30</b>	<b>Prof. Dr. Muhammed BRKA</b>	Dean of Faculty of Agriculture and Food Sciences, University of Sarajevo
	<b>Prof. Dr. Necdet BUDAK</b>	Rector of Ege University

10:30 – 11:30

**BREAK**

### Theme: Plant Production

**CHAIR: Prof. Dr. Muhammed BRKA**

<b>11:30-11:45</b>	A Preliminary Study on The Effect of Different Nitrogen Levels on The Forage Yield and Some Agronomical Components of Triticale ( <i>X Triticosecale</i> Wittmack) <i>Hakan Geren*, Tuğçe Özdoğan Çavdar, Hüseyin Yıldız, Özlem Çevik</i>
<b>11:45-12:00</b>	Assessment of Soil Erosion Intensity Using Erosion Potential Method: Case Study – Brka River Basin <i>Selman Edi Kaloper, Sabrija Čadro*</i>
<b>12:00-12:15</b>	Effects of Some Biological Foliar Applications on Fruit Characteristics of "Chandler" Walnut Variety <i>Nihal Acarsoy Bilgin*, Adalet Mısırlı</i>
<b>12:15-12:30</b>	Effects of Different Treatments on Lettuce Production by Floating Water Culture Technique <i>Anıl Çağatay Binen, Özgün Ünay*, Ayşe Gül</i>
<b>12:30-12:45</b>	<b>DISCUSSION</b>
<b>12:45-13:15</b>	<b>BREAK</b>

### Theme: Food Technology

**CHAIR: Prof. Dr. Yeşim ELMACI**

<b>13:15-13:30</b>	Biocomposite Food Packaging Films Based on Proteins and Carbohydrates: Physical and Barrier Properties <i>Dilara Konuk Takma*, Semra Bozkurt, Mehmet Koç, Figen Korel, Hilal Şahin Nadeem</i>
<b>13:30-13:45</b>	Emerging Trends in Non-Dairy Plant-Based Probiotic Foods <i>Çisem Bulut Albayrak *, Müge Emine Koptagel, Seda Yılmaz</i>
<b>13:45-14:00</b>	Microbiological Contamination of Fresh Milk <i>Enver Karahmet*, Senita Isaković, Almir Toroman</i>
<b>14:00-14:15</b>	Packaging Solutions to Reduce Bread Wastage <i>Farnaz Naserifarr*, Özlem Kızıllırmak Esmer</i>
<b>14:15-14:30</b>	Food Packaging Trends within Sustainable Development <i>Can Türksever*, Özlem Kızıllırmak Esmer</i>
<b>14:30-14:45</b>	<b>DISCUSSION</b>
<b>14:45-15:00</b>	<b>BREAK</b>

Congress will be start 9:30 am TRT (Turkey Time).

Congress will be start 8:30 am CEST (Central European Summer Time).

27 September 2021 Monday

**Theme: Agricultural Economics**

**CHAIR: Prof. Dr. Sabahudin BAJRAMOVIĆ**

15:00-15:15	The Role of The "Smart Village" Concept in The Realization of The Agricultural Potential of Azerbaijan <i>Anar Hatamov</i>
15:15-15:30	What Are The Main Drivers of Consumers Consuming Traditional Food Products? The Case of Gümüşhane Pestil <i>Nilgün Doğan*, Hakan Adanacioğlu</i>
15:30-15:45	Generation Z Shaping Urban Agriculture Development in Emerging Markets – Insight From Bosnia And Herzegovina <i>Alen Mujčinović*, Puzović Alema, Aleksandra Nikolić</i>
15:45-16:00	Is The Data “New Oil” Transforming Global Agrifood System? <i>Aleksandra Nikolić* Alen Mujčinović, Almira Konjić</i>
16:00-16:15	<b>DISCUSSION</b>
16:15-16:30	<b>BREAK</b>

**Poster Session**

**CHAIR: Assoc. Prof. Dr. Fulsen ÖZEN**

16:30-16:35	Economic Evaluation of Corn Sillage Production in Bosnia and Herzegovina <i>Vedad Falan, Alen Mujčinović*, Alejna Krilić</i>
16:35-16:40	State and Perspectives of Aquaculture in The Municipality of Bužim <i>Senita Isaković*, Enver Karahmet, Almir Toroman</i>
16:40-16:45	The Effects of Chitosan on Quality Properties of Seafood Products <i>Ali Kozlu*, Yeşim Elmacı</i>
16:45-16:50	Isolation and Identification of Carotenoid Producing Yeast <i>Feriha Karabela, Yiğit Terzi*, H. Tansel Yalçın</i>
16:50-16:55	Influence of Growth Regulators (IBAs) of Different Concentrations on Quality Rooting of Hardwood Cuttings of Selected Varieties of Currant ( <i>Ribes</i> L.) <i>Fikreta Behmen*, Sadeta Kahrmanović, Mersija Delić</i>
16:55-17:00	Application of Different Urea Concentrations in Protection Of Greenhouses From Snow <i>Nermin Rakita*, Zuhdija Omerović, Lutvija Karić, Sabrija Čadro, Muamer Bezdrob, Saud Hamidović</i>
17:00-17:05	Morphological Characteristics and Yield of Cucumber Depending on Grafting <i>Admira Halilović*, Lutvija Karić, Čerima Zahirović, Fikreta Behmen</i>
17:05-17:10	Influence of Pyrophyllite As a Soil Conditioner on Productivity and Accumulation of Nitrate in Lettuce ( <i>Lactuca sativa</i> L.) <i>Lutvija Karić*, Čerima Zahirović, Maid Suljaković, Fikreta Behmen</i>
17:10-17:15	Effect of Application of Different Amounts of Nitrogen and Stages of Plant Development at Cutting on Yield and Forage Value of Grasslands <i>Muamer Bezdrob*, Armin Jamakovic Saud Hamidović Teofil Gavrić Aleksandar Simić Nermin Rakita</i>
17:15-17:20	Phenological Characteristics of Sweet Cherries Varieties on GiSelA 6 Rootstock in Herzegovina Region <i>Nedim Badžak, Jasmina Aliman*, Alisa Hadžiabulić, Aleksandra Šupljeglav Juić, Mirko Kulina, Mirjana Radović, Zlatka Alić Džanović</i>
17:20-17:45	<b>DISCUSSION</b>

Congress will be start 9:30 am TRT (Turkey Time).

Congress will be start 8:30 am CEST (Central European Summer Time).

28 September 2021 Tuesday

**Theme: Food Technology**

**CHAIR: Prof. Dr. Aleksandra NIKOLIĆ**

9:30-9:45	Health Benefits of Some Traditionally Consumed Mediterranean Greens <i>Ece Dinçtürk, Sibel Karakaya</i>
9:45-10:00	Testing of Physico-Chemical and Sensory Properties of Pate <i>Senita Isaković *, Enver Karahmet, Almir Toroman</i>
10:00-10:15	The Investigation of Phenolic, Flavonoid and Antioxidant Activity Values of Oak Tree Fruit As An Important Endemic Plant of Turkey and Iran <i>Lida Ghaffari Khameneh *, Mustafa Kemal Demirağ</i>
10:15-10:30	Dietary Habits of Adults Prior and During The Covid-19 Lockdown in Bosnia And Herzegovina's Covidiet Study <i>Irzada Taljić*, Muhamed Brka, Celia Rodriguez-Pérez</i>
10:30-10:45	Bee Bread and Bee Pollen <i>Ceyda Dadalı*, Yeşim Elmacı</i>
10:45-11:00	<b>DISCUSSION</b>
11:00-12:30	<b>BREAK</b>

**Theme: Plant Production**

**CHAIR: Prof. Dr. Hakan GEREN**

12:30-12:45	CFD Usage Models In Agricultural Production <i>Yaşar Serhat Saygılı*, Bülent Çakmak</i>
12:45-13:00	The Effects of Sodium Nitroprusside (SNP) Applications Against Salinity Stress on Morphological, Physiological and Biochemical Changes in Grapevine <i>Selda Daler*, Adem Yağcı</i>
13:00-13:15	A Research On The Comparison of Cold Pressed Olive Oil Production and Continuous Type Expressing Techniques and The Economic Analysis of The Oil Amount and Quality <i>Emre İlker, Hakan Yıldız, Özer Hakan Bayraktar, Mustafa Bolca, Burçin Çokuysal, Nedim Koşum, Fatih Şen, Sıdıka Ekren</i>
13:15-13:30	Influence of Repeated Pollination on Fruit and Seed Set in Crosses Between Hybrid Tea Rose Cv. Myrna and Oil-Bearing Rose <i>Tuğba Kılıç*, Soner Kazaz</i>
13:30-13:45	<b>DISCUSSION</b>
13:45-14:00	<b>BREAK</b>

**Theme: Food Technology**

**CHAIR: Prof. Dr. Enisa OMANOVIĆ-MIKLICANIN**

14:00-14:15	Sulforaphane Extraction From Crucifer Group Vegetables and Seeds (Cabbage, Broccoli, Black Radish and Kohlrabi) <i>Rabia Akçay, Figen Kaymak-Ertekin*</i>
14:15-14:30	Opportunities and Restrictions of Pine Honeydew Honey in The World Honey Market <i>Ekin Varol, Banu Yücel*</i>
14:30-14:45	Use of Paraprobiotics and Postbiotics in Dairy Technology <i>Ecem Akan</i>
14:45-15:00	Effect of Ultrasound Treatment on Functional and Sensorial Properties, and Protein Profiles of Turkey Meat <i>Hadiye Nalbant-Tepeoğlu, Sibel Karakaya*</i>
15:00-15:15	<b>DISCUSSION</b>
15:15-15:30	<b>BREAK</b>

Congress will be start 9:30 am TRT (Turkey Time).

Congress will be start 8:30 am CEST (Central European Summer Time).

**Theme: Animal Production**

**CHAIR: Prof. Dr. Turgay TAŞKIN**

<b>15:30-15:45</b>	Determination of Nutritional Composition, Metabolizable Energy, Dry And Organic Matter Digestibility With Near Infrared Reflectance Spectroscopy (Nirs) in Maize Silage <i>Hayrullah Bora Ünlü</i>
<b>15:45-16:00</b>	Importance of Flea Control in Goat Farms: The Case of Bornova District of İzmir Province <i>Turgay Taşkın*, Çağrı Kandemir, Nedim Koşum, Cemal Ün, Hüseyin Can, Sedef Erkunt Alak, Fatma Akkaya, Ahmet Efe Koseoğlu</i>
<b>16:00-16:15</b>	Variation of Milk Yield in Saanen Goats According to Lactation Periods <i>Çiğdem Takma, Hülya Atıl, Yakut Gevrekçi, Çağrı Kandemir, Funda Erdoğan Ataç, Nedim Koşum, Turgay Taşkın*</i>
<b>16:15-16:30</b>	Photoperiodic Lighting Combined With Mild Thermal Manipulation During Incubation May Improve Chick Quality and Early Post-Hatch Growth In Broilers <i>Tahir Shah, Sezen Özkan*</i>
<b>16:30-16:45</b>	Green Laser Irradiation Effects on Camel Spermatozoa Quality During Incubation <i>Ahmed Seoudy*, Nedim Koşum</i>
<b>16:45-17:30</b>	<b>DISCUSSION-CLOSING CEROMONY</b>