

# UTAEM Newsletter

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### **Workshop on Sustainable Future with Smart Agriculture**

Smart Agricultural Techniques, which will shape the future of agriculture where modern and smart technologies supported by artificial intelligence, transformed conventional agricultural techniques, was discussed through a well-attended workshop held thanks to the joint efforts



of TAGEM and Izmir Institute of Technology (İYTE), on November 24-25. General Director of TAGEM Dr. Metin TÜRKER and IYTE President Prof. Yusuf BARAN, İzmir Provincial Director of Agriculture and Forestry Mustafa ÖZEN attended the workshop, and the pinciples and codes of Agriculture 4.0

and Smart Agricultural Technologies were shared with the participants through the presentations of experts from universities, research institutions and the private sector. Approximately 150 people participated in the workshop, including representatives from public, private sector and NGOs.





## 10<sup>th</sup> International Training on Organic Farming

10<sup>th</sup> International Training on Organic Agriculture was held in our Center with 7 participants from India, Rwanda and Tunisia between 12-16 September 2022. During the training schedule, researchers from General Direc-

torate of Plant Production, Atatürk Horticultural Central Research Institute, Bornova Plant Protection Research Institute, Erbeyli Fig Research Institute, Manisa Viticulture Research Institute, Olive Research Institute, Ege University and International Agricultural Research and Training Center instructed lectures on varied topics on Organic Farming such as Organic Cotton, Organic Tillage Methods, Organic Vineyard Cultivation, Plant Disease Management in Organic Farming, Organic Fig Cultivation, Regulations and Legislations in Organic Farming. Also participants shared both cultural and technical knowledge and experiences through their country presentations. A technical excursion to the field of an or-



ganic farmer in Menemen - Emiralem was organized within the scope of the program, during the field visit participants had the chance to see and acquire knowledge on organic farming practices in the region. Through another visit to Ege University, cooperation possibilities among countries were evaluated.

### **SENSENSECO Project COST Action Conference and Management Committee Meeting**

e "COST Action Final Conference and Management Committee Meeting" of the SENSECO (Optical Synergies for Spatiotemporal SENSing of Scalable ECOphysiological Traits) Project, which was carried out by 19 Mayıs University within the scope of the COST Action program, was held in our Center between 26-28 September 2022. Researchers from the United States and France participated online, including 80 researchers from 34 different countries of the European Union and the European Community. In the meeting, the board of directors of the project gathered around for the last conference, held within the scope of the Project.



### 10. International Training on Integrated Pest Management

10th International Training on Integrated Pest Management was 2022's last of the series of trainings held every year regularly under the coordination and hosting of UTAEM, which primarily aim to share the knowledge and experience of research institutes affiliated to TAGEM. International Training on "Integrated Pest Management and Alternative Methods for Reducing Pesticide Use" was held between 10-14 October 2022, with 19 participants from Pakistan, Algeria, Sudan, India, North Macedonia, Tunisia, Iran, Kazakhstan, Morocco and Niger.



### General Director of TAGEM, Dr. Metin TÜRKER's Visit

General Director of TAGEM, Dr. Metin TÜRKER, and Head of Soil Water Resources Department, Dr. Ali PEKSÜSLÜ, visited our center on 14.10.2022. General Director, started his visit with the stuff meeting and received information about the study areas of the researchers and through the presentation of our director Tuncay TOPDEMİR. After visiting the exhibition hall of "Agriculture from Past to Present", he attended in the closing and certification ceremony of International Training on "Integrated Pest Management and Alternative Methods for Reducing Pesticide Use". After lunch with the employees of the center, our General Director ended his visit.



#### PANEL ON AGRICULTURAL DROUGHT AND EFFICIENT WATER USE

UTAEM hosted "Panel on Agricultural Drought and Efficient Water Use" on 18th October 2022 which was coordinated by Izmir Provincial Directorate of Agriculture and technically supported by the Ege University, Faculty of Agriculture.





During the one-day panel, Prof. Serafettin Asik and Prof. Mehmet Ali UL from Ege University moderated the morning and afternoon sessions respectively. Almost 120 hundred farmers and technical personnel from the vicinity of Izmir province attended the course.

Experts from UTAEM, State Hydraulic Works (DSI), Izmir Provincial Agricultural Directorate and Manisa Viticulture Research Institute shared their knowledge via presentations with the participants on water saving and agricultural drought.



#### MEETING ON GAPS AND EXPANSION AND CONTROL OF ORGANIC AGRICULTURE

"Project Evaluation Meeting on Good Agricultural Practices (GAP) and the Expansion and Control of Organic Agriculture", organized by the Directorate General for Plant Production, was held in UTAEM between 24 - 27 October 2022. The meeting was held to evaluate GAPs and organic agriculture projects of 2022 and to plan the activities of 2023; furthermore, participants got informed about project evaluation and monitoring phases. The meeting was held with 121 participants from the relevant units of 77 provinces.



#### **UTAEM HOSTED LENSES STAKEHOLDER MEETING**



Stakeholder meeting was held with the local farmers of Menemen District in November 4, 2022 in our Center with the support of Menemen Chamber of Agriculture within the scope of the Project titled "Learning and Action Alliances for Nexus Environments in an Uncertain Future (LENSES)" under the Horizon 2020 Prima Project. During the interactive sessions of the meeting, participants exchanged their knowledge and also challenges and potential measures for the agricultural production in Menemen Plain were discussed. Participants were also informed of UTAEM facilities and ongoing projects by making site visits.









## Ongoing activities under the projects conducted by Agricultural Economics Department

### **Impact Analysis for Livestock Subsidies in Izmir Province**

In the recent years, subsidies allocated for husbandry in Turkey increased dramatically and subsidies have been diversified as well. The most important target within the sector is to make animal breeding profitable. For this aim, analyzing the impact for livestock subsidies will

be highly beneficial to develop effective policies. The said project aims to evaluate the impact of certain types of subsidies granted to the animal breeders or people dealing with husbandry within the Ministry of Agriculture and Forestry such as specific subsidies for calf, milk production as well as breeding of small ruminants. Considering these facts, our Division for Agronomics under UTAEM is responsible for the Izmir part of the impact analysis project for the husbandry subsidies in Türkiye.

## The Project on Determining the Wastes and Suitable Waste Management Model in the Sugar Value Chain in Türkiye

All sucrose-based sugar of Türkiye is produced from sugar beet. During the sugar production process from sugar beet, many waste material is also produced. The said agricultural wastes cause serious economical and environmental problems.

The said project will be carried out with the participation of stake-holders and agricultural enterprises so as to improve current sugar value chain by developing the optimal agricultural waste management model. In the project, all stages of sugar value chain will be accepted as a whole and production and marketing characteris-

tics, product losses, amount of wastes, the cost for re-using the wastes and their environmental impacts will be calculated. The ultimate goal of the project is to provide the most suitable agricultural waste management model.

## A Study on the Consumption Structure and Factors Affecting Consumption of Geographically Indicated Foods in Turkey: Izmir Case

In a globalizing world, people change their consumption habits as their income increases. They turn to healthy, reliable, controlled and traditional products, and they are willing to pay more for these products. Both in the world and in Turkey, the products grown in a certain region due to factors such as soil and climate, or special products with production techniques applied in that region thanks to the past experience, are protected with the "Geographical Indication" registration and offered to the consumers with a guaranteed quality level. It is aimed with this study to determine the geographically indicated food consumption amount and the factors affecting consumption in İzmir.

Thus, the study will compare the knowledge levels of consumers who prefer geographically indicated products and those who do not, determine the geographical indication awareness level of the consumers who consume the equivalents of geographically indicated products, compare the socio-economic levels of consumers who prefer geographically indicated products and those who do not and reveal the factors affecting the consumption of geographically indicated products.

### A Study on the Effects of Climate Change on Beekeeping Enterprises in Turkey

Since the 1800s, human activities have increased the world temperature by approximately 1.1 centigrade degrees. One of the ecological factors affecting honey quality and yield in beekeeping is climatic conditions. Climate change may cause the loss of some plants and flowers, decrease in the yield and quality of honey as the cannot reach pollen and nectar, thus, may lead to population loss in honey bees due to starvation. With the change of climate, there will be a change in plant diversity, which will indirectly affect bees negatively. These factors are important in beekeeping and beekeeping fields because of the relationship between precipitation, altitude, wind and temperature. The effects of climate change are felt more and more day by day, and the most affected sector is the nature-dependent agriculture sector.

This study aims to to determine the socio-cultural effects of climate change on beekeeping operations in Turkey, investigate the yield loss, examine the adaptation of beekeeping to climate change and develop policy recommendations for adaptation to climate change.

### 3<sup>rd</sup> International Training on Climate Change and Drought

3<sup>rd</sup> International Training on Climate Change and Drought Management was held between 5-9 September 2022 with 7 seven participants from Iran, Tunisia, Egypt and Sudan.

During the course, the researchers from UTAEM and Research Institute on Soil, Fertilizer and Water Resources (Ankara), Ataturk Research Institute on Soil, Water and Agricultural Meteorology as well as Ege University shared their knowledge, expertise and made presentations about the details of

their specific projects on the effect of climate change on agricultural activities from different perspectives such as plant growth, agricultural irrigation, soil-carbon sequestration and soil tillage methods.





### **ABOUT US...**

UTAEM operates within the General Directorate of Agricultural Research and Policy under the Ministry of Agriculture and Forestry. The Center aims to carry out national/international research projects for increasing the agricultural productivity, conservation and sustainable management of natural resources and to hold national/international courses, workshops seminars etc. according to the needs and demands of public sector, private sector, professional organizations and non-governmental organizations. Besides its scheduled programs and projects, UTAEM is open to any kind of activities of training programs and research projects on demand from national/ international organizations. UTAEM adopts sharing the agricultural studies, experience and knowledge in international platform as principle and is one of the leading organizations in this regard.

### **CONTACT US**

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