

VOLUME | ISSUE | YEAR
44 | 5 | 2020
ISSN 1300-011X • E-ISSN 1303-6173

TURKISH JOURNAL OF
**AGRICULTURE
& FORESTRY**

<http://journals.tubitak.gov.tr/agriculture/>



Published by the Scientific and
Technological Research Council of Turkey

TÜBİTAK

TURKISH JOURNAL OF AGRICULTURE AND FORESTRY

Editor-in-Chief

Sezai ERCİŞLİ, Atatürk University, Turkey

VOLUME 44 • ISSUE 5 • 2020

Assistant Editor-in-Chief

Müttalip GÜNDOĞDU, Abant İzzet Baysal University, Turkey

ISSN 1300-011X • E-ISSN 1303-6173

SCOPE OF JOURNAL

- The Turkish Journal of Agriculture and Forestry is published electronically 6 times a year by the Scientific and Technological Research Council of Turkey (TÜBİTAK).
- It publishes, in English, full-length original research papers and solicited review articles on advances in agronomy, horticulture, plant breeding, plant protection, plant molecular biology and biotechnology, soil science and plant nutrition, bionergy and energy crops, irrigation, agricultural technologies, plant-based food science and technology, forestry, and forest industry products.
- Review articles are only accepted upon invitation by the editorial board and will still be subject to the same review process required of regular submissions. Manuscripts must be based on original research and contain novel findings of general significance.

Studies that:

1. merely confirm known facts in just another species or materials or collected materials from fields or markets;
2. are only of local interest;
3. are based on surveys, material collection, or economic data, and/or are related to planning and policy; or
4. report new records and taxonomy outside the scope of the journal and will normally not be considered for publication.

EDITORIAL BOARD

- Ahmet ÇELİK, Atatürk University, Turkey
- Ahmet KAZANKAYA, Yüzüncü Yıl University, Turkey
- Ali ERGÜL, Ankara University, Turkey
- Andreas BÖRNER, Leibniz Institute of Plant Genetics and Crop Plant Research, Germany
- Anne FRARY, Izmir Institute of Technology, Turkey
- Antonio PIZZI, University of Lorraine, France
- Ayhan TOPUZ, Akdeniz University, Turkey
- Bekir Erol AK, Harran University, Turkey
- Boris DURALIJA, University of Zagreb, Croatia
- Cindy E. PRESCOTT, University of British, Canada
- Çiğdem ULUBAŞ SERÇE, Niğde University, Turkey
- Davut KARAYEL, Akdeniz University, Turkey
- Elena K. KHLESKINA, N.I.Vavilov All-Russian Institute of Plant Genetic Resources, Russian Federation
- Ender MAKİNECI, İstanbul University, Turkey
- Ephrem HABYARIMANA, CREA Research Center for Cereal and Industrial Crops, Italy
- Erdal Necip YARDIM, Bitlis Eren University, Turkey
- Erol YILDIRIM, Atatürk University, Turkey
- Esra Çapanoğlu GÜVEN, İstanbul Technical University, Turkey
- Faheem Shehzad BALOCH, Sivas University of Science and Technology, Turkey
- Fahrettin TILKI, Çoruh University, Turkey
- Franci STAMPAR, Ljubljana University, Slovenia
- Gökhan SÖYLEMEZOĞLU, Ankara University, Turkey
- Hakan ÖZER, Atatürk University, Turkey
- Hakan ÖZKAN, Çukurova University, Turkey
- Hatice ÖZAKTAN, Ege University, Turkey
- Hüsnü DEMİRSOY, Ondokuz Mayıs University, Turkey
- Işık TEPE, Yüzüncü Yıl University, Turkey
- İsmail Alper SUSURLUK, Uludağ University, Turkey
- Jen-Tsung CHEN, National University of Kaohsiung, Taiwan
- Kirill S. GOLOKHAVAST, N.I. Vavilov All-Russian Research Institute of Plant Genetic Resources, Russian Federation
- Liang CHEN, Chinese Academy of Agricultural Sciences, China
- Máthé Ákos, West Hungarian University, Hungary
- Maurizio LAMBARDI, CNR National Research Council, Italy
- Mehdi RAHIMI, Graduate University of Advanced Technology, Iran
- Mehmet Eşref İRGET, Ege University, Turkey
- Mehmet Hakkı ALMA, Iğdır University, Turkey
- Mehmet Rüştü KARAMAN, Afyon Kocatepe Üniversitesi, Turkey
- Mehraj ABBASOV, Genetic Resource Institute of ANAS, Baku, Azerbaijan
- Melekşen AKIN, Iğdır University, Turkey
- Muhammad Amjad NAWAZ, Chonnam National University, South Korea
- Muhammad Qasim SHAHID, South China Agricultural University, China
- Muhammed Bahattin TANYOLAÇ, Ege University, Turkey
- Mustafa ERKAN, Akdeniz University, Turkey
- Nadir AYRILMIŞ, İstanbul University, Turkey
- Nazım ŞEKEROĞLU, Kilis 7 Aralık University, Turkey
- Nebahat SARI, Çukurova University, Turkey
- Osman SAĞDIÇ, Yıldız Technical University, Turkey
- Peter NIEMZ, ETH Zurich, Switzerland
- Radu E. SESTRAS, University of Agricultural Sciences and Veterinary Medicine Cluj, Napoca, Romania
- Renata NURZYNSKA-WIERDAK, University of Life Sciences in Lublin, Poland
- Ruhsar YANMAZ, Ankara University, Turkey
- Rupert WIMMER, Universität für Bodenkultur Wien, Austria
- Salih KAFKAS, Çukurova University, Turkey
- Silvana NICOLA, Università degli di Torino, Italy
- Suat ŞENSOY, Van Yüzüncü Yıl University, Turkey
- Süleyman AKBULUT, Izmir Kâtip Çelebi University, Turkey
- Tarık YARILGAÇ, Ordu University, Turkey
- Taşkın ÖZTAŞ, Atatürk University, Turkey
- Tohru TOMINAGA, Kyoto University, Japan
- Tolga KARAKÖY, Sivas University of Science and Technology, Turkey
- Tunde JURIKOVA, Constantine the Philosopher University, Slovak Republic
- Üstün ŞAHİN, Atatürk University, Turkey
- Vahdettin ÇİFTÇİ, Abant İzzet Baysal University, Turkey
- Velibor SPALEVIC, University of Montenegro, Montenegro
- Virginia STOCKWELL, Oregon State University, U.S.A.
- Yıldız AKA KAÇAR, Çukurova University, Turkey
- Yowhan SON, Korea University, South Korea

ABSTRACTED AND INDEXED

- Science Citation Index Expanded
- Scopus
- Academic Search Complete

CONTENTS

Determination of some physicochemical and biochemical parameters of hazelnut (<i>Corylus avellana</i> L.) cultivars.....	439
Necati ÇETİN, Mehmet YAMAN, Kevser KARAMAN, Bünyamin DEMİR	
Larvicidal effect of <i>Achillea biebersteinii</i> Afan. (Asteraceae) essential oil against larvae of pine processionary moth, <i>Thaumetopoea pityocampa</i> (Denis & Schiffermüller, 1775) (Lepidoptera: Notodontidae)	451
Memiş KESDEK, Şaban KORDALI, Ayşe USANMAZ BOZHÜYÜK, Melek GÜDEK	
Isolation and identification of <i>Bacillus pumilus</i> YHH-2, a potential pathogen to the alfalfa weevil (<i>Hypera postica</i> Gyllenhal)	461
Hatice ÖĞÜTCÜ, Yasemin ERBEY, Medine GÜLLÜCE, Burak ALAYLAR, Mehmet KARADAYI, Selma SEZEN, Mahmut ERBEY	
Identification of genetic diversity among mutant lemon and mandarin varieties using different molecular markers	465
Görkem SÜLÜ, Yıldız AKA KAÇAR, İlknur POLAT, Aytül KİTAPCI, Ertuğrul TURGUTOĞLU, Özhan ŞİMŞEK, Gül SATAR	
DNA fingerprinting and genetic diversity analysis of world quinoa germplasm using iPBS-retrotransposon marker system.....	479
Muzaffer BARUT, Muhammad Azhar NADEEM, Tolga KARAKÖY, Faheem Shehzad BALOCH	
Dihydroquercetin increases the adaptive potential of wild soybean against copper sulfate and cadmium sulfate toxicity	492
Darya Konstantinovna CHERNYSHUK, Lubov Yegorovna IVACHENKO, Hülya DOĞAN, Ghulam RAZA, Muhammad Amjad ALI, Kirill Sergejevich GOLOKHAVST, Muhammad Amjad NAWAZ	
Biochemical content in fruits of peach and nectarine cultivars.....	500
Mustafa Kenan GEÇER	
Exogenous cysteine alleviates mercury stress by promoting antioxidant defence in maize (<i>Zea mays</i> L.) seedlings.....	506
Ferhunde AYSIN, Aykut KARAMAN, Aslı YILMAZ, Özkan AKSAKAL, Ebru GEZGİNCİOĞLU, Sakineh Mohammadi KOHNEHSHAHRI	
Phenotypic variability of autochthonous walnut (<i>Juglansregia</i> L) genotypes in northwestern Bosnia and Herzegovina.....	517
Azra SKENDER, Mirsad KURTOVIC, Pakeza DRKENDA, Dinko BECIRSPAHIC, Aziz EBRAHIMI	
Effect of sodium carboxymethyl cellulose (Na-CMC) added to urea-formaldehyde resin on particleboard properties.....	526
Abdullah İSTEK, Aziz BİÇER, İsmail ÖZLÜSOYLU	
Effect of morphological components on the herbage yield and quality of quinoa (<i>Chenopodium quinoa</i> Willd.) grown at different dates	533
Süleyman TEMEL, Bilal KESKİN	
