

# Prof. MİNE TÜRKTAŞ

## Personal Information

**Office Phone:** [+90 312 202 1552](tel:+903122021552)

**Fax Phone:** [+90 0533 220 8010](tel:+9005332208010)

**Email:** [mturktas@gazi.edu.tr](mailto:mturktas@gazi.edu.tr)

**Other Email:** [mineturktas@gmail.com](mailto:mineturktas@gmail.com)

**Web:** <https://avesis.gazi.edu.tr/12339>

## International Researcher IDs

ORCID: 0000-0001-8089-3774

Yoksis Researcher ID: 26339

## Education Information

Doctorate, Univeristat Für Bodenkultur Wien, Gıda Kimyası Ve Bioteknoloji, Austria 2004 - 2007

Postgraduate, Middle East Technical University, Graduate School Of Natural And Applied Sciences, Biyoteknoloji Anabilim Dalı (Disiplinlerarası), Turkey 2001 - 2003

Undergraduate, Ankara University, Fen Fakültesi, Biyoloji Bölümü, Turkey 1995 - 2000

## Foreign Languages

English, C1 Advanced

## Dissertations

Doctorate, Molecular mechanisms involved in heavy metal accumulation by *Salix caprea*, Univeristat Für Bodenkultur Wien, Gıda Kimyası Ve Bioteknoloji, 2007

Postgraduate, Investigations of wheat genes involved in zinc efficiency mechanism using differential display technique, Middle East Technical University, Analiz ve Fonksiyonlar Teorisi, Biyoteknoloji Anabilim Dalı (Disiplinlerarası), 1950

## Research Areas

Life Sciences

## Academic Titles / Tasks

Professor, Gazi University, Fen Fakültesi, Biyoloji, 2022 - Continues

Associate Professor, Gazi University, Fen Fakültesi, Biyoloji, 2020 - Continues

Associate Professor, Cankiri Karatekin University, Faculty Of Science, Department Of Biology, 2015 - 2020

Assistant Professor, Cankiri Karatekin University, Faculty Of Science, Department Of Biology, 2012 - 2014

## Academic and Administrative Experience

Cankiri Karatekin University, Fen Fakültesi, Biyoloji Bölümü, 2014 - 2016

## Courses

Bioinformatics, Undergraduate, 2022 - 2023  
Biotechnological Analysis Programs, Undergraduate, 2022 - 2023  
Research Project, Undergraduate, 2021 - 2022  
Bacterial Genetics, Undergraduate, 2021 - 2022  
Genom Editing in Plant Biotechnology, Postgraduate, 2021 - 2022  
Bioinformatics Analyses, Postgraduate, 2021 - 2022  
Biotechnological Metabolites, Postgraduate, 2021 - 2022  
MicroAlgal Biotechnology, Undergraduate, 2021 - 2022

## Advising Theses

TÜRKTAŞ ERKEN M., Epigenetik düzenlemelerin afyon haşhaşı (Papaver somniferum L.) bitkisinde tebain yolağı üzerine etkilerinin belirlenmesi, Postgraduate, Z.AYDINLI(Student), 2020  
TÜRKTAŞ ERKEN M., Farklı BIA içeriklerine sahip haşhaş çeşitlerinde üç farklı gen düzenleyici elementin (transkripsiyon faktörü, miRNA, transpozon) ifade analizleri, Postgraduate, R.BAŞ(Student), 2020  
TÜRKTAŞ ERKEN M., Epigenetik düzenlemelerin haşhaş (papaver somniferum L.)bitkisinde morfin yolağı üzerine etkilerinin belirlenmesi, Postgraduate, B.BULUT(Student), 2020  
TÜRKTAŞ ERKEN M., Yeni nesil dizileme teknolojisi ile zeytinin (Olea Europea L. cv. Ayvalık) pedisel dokusunun transkriptom dizilemesi, Postgraduate, Ü.TANMAN(Student), 2015

## Published journal articles indexed by SCI, SSCI, and AHCI

- I. **Spatial transcriptomics reveals the interplay between cancer and immune cells directed by MXene quantum dots**  
CEYLAN A., UYAR R., Çelik D., Rafieerad A., Çinar O. O., Summak G. Y., Gurcan C., Giro L., Khoueiry R., TÜRKTAŞ M., et al.  
NANO TODAY, vol.56, 2024 (SCI-Expanded)
- II. **Small Warriors of Nature: Novel Red Emissive Chlorophyllin Carbon Dots Harnessing Fenton-Fueled Ferroptosis for In Vitro and In Vivo Cancer Treatment**  
Kirbas Cilingir E., Besbinar O., Giro L., Bartoli M., Hueso J. L., Mintz K. J., Aydogan Y., Garber J. M., TÜRKTAŞ M., EKİM O., et al.  
Small, vol.20, no.18, 2024 (SCI-Expanded)
- III. **Divergent Proteomic Profiles of Opium Poppy Cultivars**  
Aykanat S., Türктаş M.  
TURKISH JOURNAL OF BIOLOGY, vol.48, no.1, pp.80-90, 2024 (SCI-Expanded)
- IV. **In silico COMPARATIVE TRANSCRIPTOME ANALYSIS OF Papaver somniferum CULTIVARS**  
Tan T. G., TÜRKTAŞ M., Guclu G.  
ACTA SCIENTIARUM POLONORUM-HORTORUM CULTUS, no.6, pp.69-78, 2023 (SCI-Expanded)
- V. **2D MXenes with antiviral and immunomodulatory properties: A pilot study against SARS-CoV-2**  
Unal M. A., Bayrakdar F., Fusco L., Besbinar O., Shuck C. E., Yalcin S., Erken M., Ozkul A., Gurcan C., Panatli O., et al.  
Nano Today, vol.38, 2021 (SCI-Expanded)
- VI. **Adaptive Roles of Plant Development and Genome Structure Against Soil Composition**  
Gürkök T., Dölarslan M., Gül E., Türктаş Erken M.  
Fresenius Environmental Bulletin, vol.30, no.4, pp.4031-4042, 2021 (SCI-Expanded)

- VII. **In silico prediction of type I PKS gene modules in nine lichenized fungi**  
TÜRKTAŞ ERKEN M., CANSARAN DUMAN D., Tanman U.  
BIOTECHNOLOGY & BIOTECHNOLOGICAL EQUIPMENT, vol.35, no.1, pp.376-383, 2021 (SCI-Expanded)
- VIII. **Photocatalytically Active Graphitic Carbon Nitride as an Effective and Safe 2D Material for In Vitro and In Vivo Photodynamic Therapy**  
Taheri H., Unal M. A., SEVİM M., Gurcan C., Ekim O., Ceylan A., Syrgiannis Z., Christoforidis K. C., Bosi S., Ozgenc O., et al.  
SMALL, vol.16, no.10, 2020 (SCI-Expanded)
- IX. **MSAP analysis reveals diverse epigenetic statuses in opium poppy varieties with different benzyisoquinoline alkaloid content**  
Bulut B., Aydinli Z., Turktas-Erken M.  
TURKISH JOURNAL OF BIOLOGY, vol.44, no.2, pp.103-109, 2020 (SCI-Expanded)
- X. **Genome of wild olive and the evolution of oil biosynthesis**  
Unver T., Wu Z., Sterck L., Turktas M., Lohaus R., Li Z., Yang M., He L., Deng T., Javier Escalante F., et al.  
PROCEEDINGS OF THE NATIONAL ACADEMY OF SCIENCES OF THE UNITED STATES OF AMERICA, vol.114, no.44, 2017 (SCI-Expanded)
- XI. **A phylogenetic perspective on the influence of ecological attributes on selected species of Astragalus**  
Dolarslan M., Gul E., Acar E., Turktas M.  
ECOSCIENCE, vol.24, pp.105-113, 2017 (SCI-Expanded)
- XII. **TRANSCRIPTIONAL ACTIVITY OF RETROTRANSPOSONS IN OLIVE VARIETIES**  
Tanman-Ziplar U., Turktas M.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.26, no.11, pp.6882-6890, 2017 (SCI-Expanded)
- XIII. **Functional Characterization of 4' OMT and 7OMT Genes in BIA Biosynthesis**  
Gurkok T., Ozhuner E., Parmaksiz I., Ozcan S., Turktas M., Ipek A., Demirtas I., OKAY S., Unver T.  
FRONTIERS IN PLANT SCIENCE, vol.7, 2016 (SCI-Expanded)
- XIV. **Transcriptome analysis of wheat inoculated with Fusarium graminearum**  
Erayman M., Turktas M., Akdogan G., Gurkok T., Inal B., Ishakoglu E., Ilhan E., Unver T.  
FRONTIERS IN PLANT SCIENCE, vol.6, 2015 (SCI-Expanded)
- XV. **Hexaploid wheat (Triticum aestivum) root miRNome analysis in response to salt stress**  
Eren H., Pekmezci M. Y., OKAY S., Turktas M., Inal B., Ilhan E., Atak M., Erayman M., Unver T.  
ANNALS OF APPLIED BIOLOGY, vol.167, no.2, pp.208-216, 2015 (SCI-Expanded)
- XVI. **Transcriptome Profiling of Alkaloid Biosynthesis in Elicitor Induced Opium Poppy**  
Gurkok T., Turktas M., Parmaksiz I., Unver T.  
PLANT MOLECULAR BIOLOGY REPORTER, vol.33, no.3, pp.673-688, 2015 (SCI-Expanded)
- XVII. **Regulation of the alkaloid biosynthesis by miRNA in opium poppy**  
Boke H., Ozhuner E., Turktas M., Parmaksiz I., Ozcan S., Unver T.  
PLANT BIOTECHNOLOGY JOURNAL, vol.13, no.3, pp.409-420, 2015 (SCI-Expanded)
- XVIII. **miR408 overexpression causes increased drought tolerance in chickpea**  
Hajyzadeh M., Turktas M., Khawar K. M., Unver T.  
GENE, vol.555, no.2, pp.186-193, 2015 (SCI-Expanded)
- XIX. **Sequencing of plant genomes - a review**  
Turktas M., Kurtoglu K. Y., Dorado G., Zhang B., Hernandez P., Unver T.  
TURKISH JOURNAL OF AGRICULTURE AND FORESTRY, vol.39, no.3, pp.361-376, 2015 (SCI-Expanded)
- XX. **Genome-wide fungal stress responsive miRNA expression in wheat**  
Inal B., Turktas M., Eren H., Ilhan E., OKAY S., Atak M., Erayman M., Unver T.  
PLANTA, vol.240, no.6, pp.1287-1298, 2014 (SCI-Expanded)
- XXI. **Use of fluorescent-based amplified fragment length polymorphism to resolve phylogenetic relationships of Colchicum species from Turkey**  
Metin O. K., Turktas M., Ertugrul F., Kaya E.  
GENETICS AND MOLECULAR RESEARCH, vol.13, no.1, pp.1480-1490, 2014 (SCI-Expanded)

- XXII. **Proteome changes in wild and modern wheat leaves upon drought stress by two-dimensional electrophoresis and nanoLC-ESI-MS/MS**  
Budak H., Akpinar B. A., Unver T., Turktas M.  
PLANT MOLECULAR BIOLOGY, vol.83, pp.89-103, 2013 (SCI-Expanded)
- XXIII. **Molecular phylogenetic analysis of Tulipa (Liliaceae) based on noncoding plastid and nuclear DNA sequences with an emphasis on Turkey**  
Turktas M., Metin O. K., Bastug B., Ertugrul F., Sarac Y. I., Kaya E.  
BOTANICAL JOURNAL OF THE LINNEAN SOCIETY, vol.172, no.3, pp.270-279, 2013 (SCI-Expanded)
- XXIV. **Expression of zinc and cadmium responsive genes in leaves of willow (Salix caprea L.) genotypes with different accumulation characteristics**  
Konlechner C., Turktas M., Langer I., Vaculik M., Wenzel W. W., Puschenreiter M., Hauser M.  
ENVIRONMENTAL POLLUTION, vol.178, pp.121-127, 2013 (SCI-Expanded)
- XXV. **In Planta Evidence for the Involvement of a Ubiquitin Conjugating Enzyme (UBC E2 clade) in Negative Regulation of Disease Resistance**  
Unver T., Turktas M., Budak H.  
PLANT MOLECULAR BIOLOGY REPORTER, vol.31, no.2, pp.323-334, 2013 (SCI-Expanded)
- XXVI. **Nutrition Metabolism Plays an Important Role in the Alternate Bearing of the Olive Tree (Olea europaea L.)**  
Turktas M., Inal B., OKAY S., Erkilic E. G., Dundar E., Hernandez P., Dorado G., Unver T.  
PLOS ONE, vol.8, no.3, 2013 (SCI-Expanded)
- XXVII. **Evaluation of the genetic relationship between Fritillaria species from Turkey's flora using fluorescent-based AFLP**  
Metin O. K., Turktas M., Aslay M., Kaya E.  
TURKISH JOURNAL OF BIOLOGY, vol.37, no.3, pp.273-279, 2013 (SCI-Expanded)
- XXVIII. **Genome-wide identification of alternate bearing-associated microRNAs (miRNAs) in olive (Olea europaea L.)**  
Yanik H., Turktas M., Dundar E., Hernandez P., Dorado G., Unver T.  
BMC PLANT BIOLOGY, vol.13, 2013 (SCI-Expanded)
- XXIX. **Taxonomical investigations on two geophytes distributed in Turkey**  
Metin O. K., Turktas M., Genisel H., Aslay M., Ertugrul F., Ogras T., Kaya E.  
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- XXX. **Phylogenetic analysis of Turkish Iris species inferred from non-coding chloroplast region**  
Bastug B., Turktas M., Ertugrul F., Metin O. K., ÖZCAN T., Ogras T., Kaya E.  
NEW BIOTECHNOLOGY, vol.29, 2012 (SCI-Expanded)
- XXXI. **Molecular characterization of phylogenetic relationships in Fritillaria species inferred from chloroplast trnL-trnF sequences**  
Turktas M., Aslay M., Kaya E., Ertugrul F.  
TURKISH JOURNAL OF BIOLOGY, vol.36, no.5, pp.552-560, 2012 (SCI-Expanded)
- XXXII. **Differentiation of metallicolous and non-metallicolous Salix caprea populations based on phenotypic characteristics and nuclear microsatellite (SSR) markers**  
Puschenreiter M., Tuerktas M., Sommer P., Wieshammer G., Laaha G., Wenzel W. W., Hauser M.  
PLANT CELL AND ENVIRONMENT, vol.33, no.10, pp.1641-1655, 2010 (SCI-Expanded)

## Articles Published in Other Journals

- I. **In silico Analyses of miRNAs Associated with Root and Tuber in S. commersonii**  
Koral A. Ö., Türktaş M.  
Gazi University Journal of Science Part A: Engineering and Innovation, vol.9, no.3, pp.251-258, 2022 (Peer-Reviewed Journal)
- II. **Identification and in silico Expression Analysis of Three Transcription Factors In The Wild Potato**

TÜRKTAŞ ERKEN M.

Journal of Crop Improvement, vol.34, pp.676-686, 2020 (ESCI)

## Refereed Congress / Symposium Publications in Proceedings

### I. Alkaloid Pathway Analysis in Poppy with Proteomics

Aykanat S., Türктаş M.

5. Ulusal Uygulamalı Biyolojik Bilimler Kongresi (UBBK), Adana, Turkey, 29 - 30 October 2022, pp.1-2

### II. Differentiation of bread wheat transcription factors against major abiotic stresses

Akdogan G., Turktas M., Tufekci E. D., Unver T.

41st FEBS Congress on Molecular and Systems Biology for a Better Life, Kusadasi, Turkey, 3 - 08 September 2016, vol.283, pp.75

## Supported Projects

ASLIM B., TÜRKTAŞ M., SÜNTAR İ., NIĞDELİOĞLU DOLANBAY S., Project Supported by Higher Education Institutions, In vivo Yara İyileşmesinde Paraprobiyotiklerin Moleküler Etki Mekanizmalarının Omik Analizler ile Araştırılması, 2024 - Continues

TÜRKTAŞ M., Fuşa Ş., Project Supported by Higher Education Institutions, Manyetik Nanopartiküllerin Alzheimer Hastalığında Epigenetik Regülasyonlar Üzerine Etkileri, 2023 - Continues

TÜRKTAŞ M., Yıldırım B., Project Supported by Higher Education Institutions, Lactiplantibacillus plantarum GD2 kaynaklı liyofilize paraprobiyotüğünün PRBLpGD2 protein içeriği ve yara iyileşme üzerinde antioksidan ve antiinflatuar aktivitesinin analizi, 2023 - Continues

TÜRKTAŞ M., Aksoylu T., Project Supported by Higher Education Institutions, Haşhaş Bitkisinde Epigenomik Yaklaşımlar ile Alkaloid Yolak Analizi, 2023 - Continues

Türктаş M., Horizon Europe Project, Molecular Mechanisms of Dietary Intervention on Neurodegeneration (Neurodiet), 2023 - 2026

TÜRKTAŞ M., Aykanat S., Project Supported by Higher Education Institutions, Proteomik ile Haşhaşta Morfin Yolak Analizi, 2022 - 2023

Türктаş Erken M., Project Supported by Higher Education Institutions, Epigenetik düzenlemelerin haşhaş (Papaver somniferum L.) bitkisinde morfin yolağı üzerine etki- lerinin belirlenmesi, 2018 - 2020

TÜRKTAŞ ERKEN M., Project Supported by Higher Education Institutions, Yabani Patates Bitkisinde Transkripsiyon Faktörlerinin Tespiti ve İfade Analizleri, 2017 - 2018

TÜRKTAŞ ERKEN M., Project Supported by Higher Education Institutions, Yarı Kurak Alanlarda Yayılış Gösteren Bazı Bitki Taksonlarının Ekobiyositolojik Özelliklerinin İncelenmesi, 2017 - 2018

TÜRKTAŞ ERKEN M., Project Supported by Higher Education Institutions, Farklı Ana Materyale Sahip Toprakların Bitki Genom Boyutu Üzerine Etkilerinin Araştırılması, 2017 - 2018

TÜRKTAŞ ERKEN M., Project Supported by Higher Education Institutions, Zeytinde Yağ Biosentezi ve Meyve Olgunlaşması İle İlgili MikroRNA ların Tespiti ve Gerçek Zamanlı PZR İle İfade Seviyelerinin Ölçülmesi, 2016 - 2017

TÜRKTAŞ ERKEN M., TUBITAK Project, Yabani ve Kültür Zeytinde Metillenmiş DNA İmmunoçöktürme Dizileme MeDID Seq ile Tüm Genom Metilasyon Profilinin Çıkarılması, 2015 - 2017

TÜRKTAŞ ERKEN M., TUBITAK Project, Yeni Nesil Dizileme İle Zeytin in Olea europaea L Tüm Genom ve Transkriptom Dizilemesi, 2013 - 2016

TÜRKTAŞ ERKEN M., Project Supported by Higher Education Institutions, Zeytinde Transpozon Aktivitesinin Gerçek Zamanlı RT PZR İle Ölçülmesi, 2015 - 2015

TÜRKTAŞ ERKEN M., Project Supported by Higher Education Institutions, Yeni Nesil Dizileme Teknolojisi ile Zeytinin Olea europea Ayvalık Pedisel Dokusunun Transkriptom Dizilemesi, 2015 - 2015

## Activities in Scientific Journals

TARIM BILIMLERI DERGISI, Committee Member, 2022 - Continues

## Metrics

Publication: 36

Citation (WoS): 1072

Citation (Scopus): 1210

H-Index (WoS): 16

H-Index (Scopus): 17

## Non Academic Experience

TÜBİTAK MAM Genetik Mühendisliği ve Biyoteknoloji Enstitüsü

Sabancı Üniversitesi

TÜBİTAK Başkanlık TBAG

Refik Saydam Hıfzıssıhha Merkezi

Universitaet für Bodenkultur

ODTÜ