



# HANDE MORGİL GERÇEK

## LECT. PHD

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAC-8720-2020

ScopusID: 55609289700

Yoksis Researcher ID: 41610



### Learning Knowledge

Doctorate 2014 - 2019	Istanbul University, Institute of Graduate Studies In Sciences, Fen Fakültesi Bölümü, Turkey
Postgraduate 2010 - 2012	Istanbul University, Institute of Graduate Studies In Sciences, Biyoloji/ Botanik Anabilim Dalı, Turkey
Masters (Non-Thesis) 2009 - 2010	Istanbul University, Institute of Graduate Studies In Sciences, Biyoloji Öğretmenliği, Turkey
Undergraduate 2005 - 2009	Istanbul University, Faculty Of Science, Biyoloji, Turkey

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, GMO and species testing with real-time PCR, Eurofins GeneScan, 2015

Foreign Language, English, Wall Street Institute, 2012

IT, Microsoft Office Programları, Bilişim Eğitim Merkezi, 2010

### Dissertations

Doctorate, Kuraklık Stresi Uygulanmış Mercimek (*Lens culinaris Medik.*) Bitkisinin RNA Dizileme Yöntemi ile Transkripsiyonel Analizi, Istanbul University, Faculty Of Science, Department of Biology, 2019

Postgraduate, "Expression Analyzes of ADP-Glucose Pyrophosphorylase in *Lens Culinaris Medik.* at the short-time

## Academic Titles / Tasks

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Lecturer PhD  
2014 - Continues

Istanbul University, Faculty of Science, Department of Biology

## Supported Projects

1. GERÇEK Y. C., YILDIRIM N., BAŞTÜRK F. N., KIRKINCI S., TARDU M., MORGİL GERÇEK H., Project Supported by Higher Education Institutions, Bitki veya bitkisel ürünlerde pestisit amino asit organik asit vitamin ve polifenollerin ekstraksiyonu metot validasyonu ve kantitatif analizleri, 2022 - Continues
2. SAĞLAM S., AKINCI Ş., GERÇEK Y. C., MORGİL GERÇEK H., SEVEN S., PINAR N. M., ECEM BAYRAM N., ACAR ŞAHİN A., Project Supported by Higher Education Institutions, Ispanak (*Spinacia oleracea* L cv Matador) fidelerinin tuz stresi toleransına eksojen epibrassinolid (eBL) ve GR24 uygulaması ile metabolik anatomik ve genomik tepkilerinin incelenmesi, 2022 - Continues
3. Tardu M., Morgil Gerçek H., Taşkin A. C., Project Supported by Other Official Institutions, Yeni nesil RNA aşılarda kullanılan mRNA moleküllerinin saflığının artırılmasına yönelik bir çalışma, 2023 - 2026
4. MORGİL GERÇEK H., Project Supported by Higher Education Institutions, Kuraklık stresi uygulanmış *Medicago truncatula* bitkisinde strigolakton hormon sinyalleme sinin transkripsiyonel analizi, 2021 - 2024
5. ÇALIŞKAN M., MORGİL H., TOYDEMİR G., ÇAPANOĞLU GÜVEN E., ÖZ G., GERÇEK Y. C., KARAMAN K., Project Supported by Higher Education Institutions, Giresun ve Çevresinde Yayılış Gösteren Kiraz Gen Kaynaklarının Fitokimyasal Analizleri Antioksidan Aktivitelerinin Tayin Edilmesi ve İn Vitro Biyoyararlılığının İncelenmesi, 2019 - 2024
6. MORGİL GERÇEK H., CAN A., SANSAR B., TAKMAZ Y. Y., Project Supported by Higher Education Institutions, *Medicago truncatula* bitkisine *Agrobacterium tumefaciens* aracılı gen aktarım yönteminin optimizasyonu, 2023 - 2023
7. MORGİL GERÇEK H., KAVAKLI İ. H., Project Supported by Higher Education Institutions, *Cyanidioschyzon merolae* alginde bitki benzeri kriptokrom gen yollarının Crispr Cas9 yöntemi ile susturularak global gen ifadelerinin belirlenmesi, 2020 - 2023
8. EROL O., ELDEM V., ÖZ G., GERÇEK Y. C., GEMİCİOĞLU A., MORGİL H., Project Supported by Higher Education Institutions, Çalı ve ağaçsı *Cerasus sensu Browicz* taksonlarının RADSeq yöntemiyle genom düzeyinde SNP profiline dayalı olarak genotiplendirilmesi ve filogenetik analizleri, 2018 - 2022
9. ÖZ G., GERÇEK Y. C., MORGİL H., BAYRAM S., CANLI D., ECEM BAYRAM N., Project Supported by Higher Education Institutions, Türkiyenin farklı bölgelerinde üretilen bazı monofloral balların mineral içerik uçucu bileşen ve antimikrobiyal aktivitelerinin incelenmesi, 2018 - 2020
10. ÖZ G., AVŞAR E. N., MORGİL H., Project Supported by Higher Education Institutions, *Oryza sativa* bitkisinde iki farklı ses türüne karşı serotonin miktarının gen ekspresyonu düzeyinde belirlenmesi, 2018 - 2019
11. ÖZ G., HASOĞLU İ., MORGİL H., Project Supported by Higher Education Institutions, Farklı hormon uygulaması ile in vitro yetiştirilmiş *Origanium vulgare* bitkisinden elde edilen kalluslarda eksozom miktarlarının karşılaştırılması, 2018 - 2019
12. ÖZ G., ÇALIŞKAN M., MORGİL H., GERÇEK Y. C., KAVAKLI H., Project Supported by Higher Education Institutions, Kuraklık Stresi Altında Yetiştirilen *Mercimek Lens culinaris* Medik Bitkisinde Transkriptom (RNA-sek) Analizi, 2016 - 2018
13. ÖZ G., GERÇEK Y. C., ÜNLÜ Y. S., HAKAVLI H., MORGİL H., Project Supported by Higher Education Institutions, Etil Metansulfonat (EMS) Mutantı *Chlorella vulgaris*'in Biyoreaktörde Yetiştirilmesi, Gelişimi ve Yağ Asidi İçeriğinin Araştırılması, 2016 - 2017

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

- 1. Comparative analysis of the complete chloroplast genome of endemic *Colchicum baytopiorum* CD. BRICKELL**  
Morgil Gerçek H., Unlu O., Boztaş K., Tulum I., Öz G.  
BRAZILIAN JOURNAL OF BOTANY, vol.47, no.3, pp.637-647, 2024 (SCI-Expanded)
- 2. Towards a better understanding of *Prunus* (Rosaceae): molecular and morphological notes on *Prunus* subgenus *Cerasus* in Turkey**  
ÇİFTÇİ A., GERÇEK Y. C., Mollman R., Ordu P. I. B., Yazici C., YAPRAK A. E., MORGİL GERÇEK H., SİK L., EROL O.  
BOTANICAL JOURNAL OF THE LINNEAN SOCIETY, 2023 (SCI-Expanded)
- 3. Transcriptomic and fatty acid analyses of *Neochloris aquatica* grown under different nitrogen concentration**  
AKGÜL R., Morgil H., TÜNEY KIZILKAYA İ., Sarayloo E., Cevahir G., AKGÜL F., Kavaklı I. H.  
FUNCTIONAL & INTEGRATIVE GENOMICS, vol.22, no.3, pp.407-421, 2022 (SCI-Expanded)
- 4. Expression analyses of soluble starch synthase and starch branching enzyme isoforms in stem and leaf tissues under different photoperiods in lentil (*Lens culinaris* Medik.)**  
Gerçek Y. C., Boztaş K., Aydın C., Morgil H., Baris I., Öz G., Tulum I.  
Biologia, vol.77, no.2, pp.593-607, 2022 (SCI-Expanded)
- 5. Transcriptome analysis of the circadian clock gene *BMAL1* deletion with opposite carcinogenic effects**  
Emisoglu-Kulahli H., Gul Ş., Morgil H., Ozcan O., Aygenli F., Selvi S., Kavaklı I. H., Öztürk N.  
FUNCTIONAL & INTEGRATIVE GENOMICS, vol.21, no.1, pp.1-16, 2021 (SCI-Expanded)
- 6. Macronutrient and micronutrient levels and phenolic compound characteristics of monofloral honey samples**  
Bayram N. E., Canli D., Gercek Y. C., Bayram S., Celik S., Guzel F., Morgil H., Öz G.  
JOURNAL OF FOOD AND NUTRITION RESEARCH, no.4, pp.311-322, 2020 (SCI-Expanded)
- 7. Comparative RNA-seq analysis of the drought-sensitive lentil (*Lens culinaris*) root and leaf under short- and long-term water deficits**  
Morgil H., Tardu M., Cevahir G., Kavaklı I. H.  
FUNCTIONAL & INTEGRATIVE GENOMICS, vol.19, no.5, pp.715-727, 2019 (SCI-Expanded)
- 8. Transcriptional regulation of the ADP-glucose pyrophosphorylase isoforms in the leaf and the stem under long and short photoperiod in lentil**  
Seferoglu A. B., Baris I., Morgil H., Tulum I., Ozdas S., Cevahir G., Kavaklı I. H.  
Plant Science, vol.205-206, pp.29-37, 2013 (SCI-Expanded)

## Articles Published in Other Journals

- 1. ORGANOSULFUR COMPOUNDS OF ALLIUM TUNCELIANUM (KOLLMANN) OZHATAY, B.MATHEW & ŞİRANECİ EXTRACTS BY SPME/GC-MS AND DETERMINING THEIR CYTOTOXIC EFFECT ON HELA CELLS**  
GERÇEK Y. C., AKMAN G., MORGİL H., ÇALIŞKAN M., ÖZ G.  
International Journal of Advances in Science Engineering and Technology, vol.5, no.2, pp.53-58, 2017 (Scopus)
- 2. Investigation of the Mechanism of Physiological Tolerance in Lentil (*Lens culinaris* Medik.) Cultivars under Drought Stress Conditions**  
Morgil H., Gercek Y. C., Caliskan M., Oz G. C.  
European Journal of Biology, pp.31-35, 2017 (Peer-Reviewed Journal)
- 3. Investigation of Genotoxic and Cytotoxic Effects of Some Novel Synthesized Iminothiazolidinone Derivatives on HeLa Cell Line CCL2**  
TUĞCU F. T., TOPÇUL M. R., ÇETİN İ., GERÇEK Y. C., Ünlü Y. S., MORGİL H., ÇALIŞKAN M., ÖZ G.  
IUFS Journal of Biology, vol.1, no.75, pp.15-33, 2016 (Peer-Reviewed Journal)

## Books & Book Chapters

1. **Algal Lipid Metabolism: Recent Advances in Growth and Adaptation**  
Ünlü Y. S., Morgil Gerçek H., Gerçek Y. C., Kösesakal T.  
in: Advances in Biology, Charles D. Grant, Editor, NOVA Science Publishers Inc. , New York, pp.75-102, 2024
2. **Single Nucleotide Polymorphisms (SNPs) in Plant Genetics and Breeding**  
MORGİL H., GERÇEK Y. C., TULUM I.  
in: The Recent Topics in Genetic Polymorphisms, Çalışkan, Mahmut, Editor, Intech Open, pp.100-110, 2020

## Refereed Congress / Symposium Publications in Proceedings

1. **24- Epibrassinolide Uygulamasının Cyanidioschyzon merolae Algi Phycocyanin Miktarı ve Gen İfadesi Üzerine Etkisi**  
MORGİL H.  
10. ULUSAL MOLEKÜLER BİYOLOJİ VE BİYOTEKNOLOJİ KONGRESİ, Turkey, 18 December 2021
2. **Physiological effect of foliar application of 24-epibrassinolide on Medicago sativa L. plant under heat stress**  
MORGİL H.  
4th International Eurasian Conference on Biological and Chemical Science, Turkey, 24 - 26 November 2021
3. **Phytochemical Analysis of Turkish Prunus L., Subgenus Cerasus (Mill.) Focke Taxa**  
Gerçek Y. C., Özyurt D., Morgil Gerçek H., Çiftçi A., Erol O., Öz G., Öztürk B.  
11th Aegean Analytical Chemistry Days (AACD2018), Hania, Greece, 25 - 29 September 2018, pp.1-2
4. **A Preliminary Molecular Sysyematic Study on Turkish Prunus L., subgenus Cerasus (Mill.) Focke**  
ÇİFTÇİ A., GERÇEK Y. C., HARPKE D., MORGİL H., EROL O.  
VII Balkan Botanical Congress, Novi-Sad, Serbia, 10 - 14 September 2018, vol.42
5. **Bitkilerin Klasik Türk Şiirine Yansımaları**  
GERÇEK Y. C., MORGİL H., EROL Ç., ÇİFTÇİ A., ŞIK L., ÇALIŞKAN M., ÖZ G.  
International and Interdisciplinary Environment and Literature Symposium, 1 - 03 October 2017
6. **Phytoremediation: Remove of Toxic Metals from the Environment Using Plants**  
GERÇEK Y. C., MORGİL H., EROL O., ÇİFTÇİ A., ŞIK L., EROL Ç., ÇALIŞKAN M., ÖZ G.  
International and Interdisciplinary Environment and Literature Symposium, 1 - 03 October 2017
7. **Determining The Germin Gene Expression in Auxin Induced Wheat Coleoptile Growth**  
Alanei Y., MORGİL H., GERÇEK Y. C., ÇALIŞKAN M., ÖZ G.  
II. International Conference on Advanced Engineering Technologies, 21 - 23 September 2017
8. **Salinity Impact On Fatty Acid Composition of Coriandrum Sativum L. Leaves**  
GERÇEK Y. C., MORGİL H., ECEM BAYRAM N., ÇALIŞKAN M., ÖZ G.  
The Second Japan – Turkey International Symposium on Pharmaceutical and Biomedical Sciences, Trabzon, Turkey, 11 - 12 September 2017, pp.85
9. **Validation of the Event-Specific Polymerase Chain Reaction Detection Methods for Genetically Modified Soy Products**  
GERÇEK Y. C., Mülâyim B., MORGİL H., ECEM BAYRAM N., ÇALIŞKAN M., ÖZ G.  
II. International Conference on Advanced Engineering Technologies, 21 - 23 September 2017
10. **Fatty Acid Composition of Chlorella vulgaris Byheterotrophic Growth In Fermenters**  
GERÇEK Y. C., Ünlü Y. S., MORGİL H., ECEM BAYRAM N., ÇALIŞKAN M., ÖZ G.  
The Second Japan – Turkey International Symposium on Pharmaceutical and Biomedical Sciences, Trabzon, Turkey, 11 - 12 September 2017, pp.84
11. **Comparative Analyses of Photosynthetic Parameters and AGPase Activity of Wild Type And Transgenic Oryza Sativa L. Plants**  
GERÇEK Y. C., Derecik K., MORGİL H., ECEM BAYRAM N., ÇALIŞKAN M., ÖZ G.  
II. International Conference on Advanced Engineering Technologies, 21 - 23 September 2017

12. **The Main Active Ingredients of Propolis**  
Ecem Bayram ., Bayram S., GERÇEK Y. C., MORGİL H., ÖZ G.  
2nd International Conference on Advanced Engineering Technologies (ICADET), Bayburt, Turkey, 21 - 23 September 2017, pp.1563-1564
13. **FATTY ACID COMPOSITION OF CHLORELLA VULGARIS GROWN IN OPEN POND**  
GERÇEK Y. C., Ünlü Y. S., Sarayloo E., Şimşek S., MORGİL H., ÇALIŞKAN M., ÖZ G.  
I. INTERNATIONAL CONGRESS on MEDICINAL and AROMATICPLANTS: "NATURAL and HEALTHY LIFE", 10 - 12 April 2017
14. **Oil content and fatty acid composition of Turkishhazelnuts (Corylus avellana L.)**  
GERÇEK Y. C., MORGİL H., ÇALIŞKAN M., ÖZ G.  
The Third International MediterraneanSymposium onMedicinal and Aromatic Plants, 13 - 16 April 2017
15. **ANALYSIS of ORGANOSULFUR COMPOUNDS of Allium tuncelianum (KOLLMANN) ÖZHATAY, B.MATHEW & SIRANECİ EXTRACTS with SPME-GC-MS and INVESTIGATION of THEIR CYTOTOXIC EFFECTS ON HELA CELLS**  
GERÇEK Y. C., MORGİL H., ÖZ G.  
"29th International Symposium on the Chemistry of Natural Products and the 9th International Conference on Biodiversity" (ISCNP-29 & ICOB-9), İzmir, Turkey, 24 - 27 September 2016, pp.6
16. **DETERMINATION of ESSENTIAL OIL CONTENT of Thuja orientalis L. MATURE CONES BY GC-MS**  
GERÇEK Y. C., Tuğcu F. T., MORGİL H., ÖZ G.  
"29th International Symposium on the Chemistry of Natural Products and the 9th International Conference on Biodiversity" (ISCNP-29 & ICOB-9), İzmir, Turkey, 24 - 27 September 2016, pp.6
17. **Molecular Phylogeny of Some Euphorbia Species (Euphorbiaceae) Implied from nrDNA and cpDNA Markers from Turkey**  
PATTERSON A., MORGİL H., KÜÇÜKER O., ÖZ G.  
The International Conference on Bioengineering and Biotechnology (ICBB), Barcelona, Spain, 13 - 17 July 2015, pp.1
18. **Amsonia orientalis Decne bitkisinin GC/MS analiz yöntemiyle kimyasal bileşiklerinin belirlenmesi**  
Ünlü Y. S., Morgil Gerçek H., Boztaş K., Öz G.  
Ulusal Botanik Kongresi, Antalya, Turkey, 25 - 28 October 2014, no.72
19. **Ticari Mısır Örneklerinde Genetiği Değiştirilmiş Ürünlerin Belirlenmesi**  
MORGİL H.  
Ulusal Botanik Kongresi, Antalya, Turkey, 25 - 28 October 2014
20. **Transcriptional Regulation Of The Starch Branching Enzyme Isoforms In The Leaf And The Stem Under Long And Short Photoperiod In Lentil**  
MORGİL H., KAVAKLI İ. H.  
FEBS EMBO 2014, Paris, France, 30 August - 04 September 2014

## Metrics

Publication: 33

Citation (WoS): 67

Citation (Scopus): 75

H-Index (WoS): 5

H-Index (Scopus): 4

## Congress and Symposium Activities

International Conference on Bioengineering and Biotechnology (ICBB), Attendee, Barcelona, Spain, 2015

Ulusal Botanik Kongresi, Attendee, Antalya, Turkey, 2014

FEBS EMBO 2014, Attendee, Paris, France, 2014

## Research Areas

Life Sciences, Plant Biology, Plant Breeding and Genetics, Biochemistry, Bioinformatics, Biotechnology, Plant Biotechnology, Molecular Biology and Genetics, Plant Molecular Genetics, Natural Sciences

## Non Academic Experience

Novartis

Zeytinburnu Tıbbi Bitkiler Bahçesi