

## Res. Asst. PhD MİRAY ETYEMEZ

### Personal Information

Office Phone: [+90 322 338 6074](tel:+903223386074)

Email: [metyemez@cu.edu.tr](mailto:metyemez@cu.edu.tr)

Web: <https://avesis.cu.edu.tr//metyemez>

Address: Çukurova Üniversitesi, Su Ürünleri Fakültesi, Yetiştiricilik Bölümü, Hastalıklar ABD 01250, Balcalı-Sarıçam/ADANA

### Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Turkey 2013 - 2019

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Turkey 2009 - 2011

Undergraduate Minor, Cukurova University, Fen Edebiyat Fakültesi, Biyoloji, Turkey 2008 - 2010

Undergraduate, Cukurova University, Su Ürünleri Fakültesi, Turkey 2005 - 2009

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Other, DNA Barkodlama ve Temel Filogenetik Analiz, Akdeniz Su Ürünleri Araştırma Üretme ve Eğitim Enstitüsü Müdürlüğü, 2015

Education Management and Planning, Uygulamalı Temel Mikrobiyoloji Eğitim Kursu, Çukurova Üniversitesi Biyoteknoloji Araştırma ve Uygulama Merkezi, 2014

Education Management and Planning, Uygulamalı Real Time PCR Eğitimi, Biyoakademi, 2014

Health&Medicine, Deney Hayvanları Kullanım Sertifikası, Çukurova Üniversitesi, 2013

### Dissertations

Doctorate, Tilapia (*Oreochromis niloticus*, Linnaeus 1758) için Koruyucu Probiyotiklerin Eldesi: Büyüme Performansı ve *Streptococcus iniae*'ye Karşı Etkisinin Araştırılması, Cukurova University, Su Ürünleri Fakültesi, Su Ürünleri Yetiştiricilik A.B.D., 2019

Postgraduate, Farklı Dozlarda Gama Işınlamanın Soğukta Depolanan(2C)Kurbağa bacaklarının (*Rana esculenta*)Duyusal,Kimyasal ve Mikrobiyolojik Kalitesi Üzerine Etkileri , Cukurova University, Fen Bilimleri Enstitüsü, Avlama Ve İşleme Ana Bilim Dalı, 2011

### Research Areas

Agricultural Sciences, Seafood, Aquaculture, Aquatic Diseases

### Academic Titles / Tasks

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

- I. **Effects of two host-associated probiotics *Bacillus mojavensis* B191 and *Bacillus subtilis* MRS11 on growth performance, intestinal morphology, expression of immune-related genes and disease resistance of Nile tilapia (*Oreochromis niloticus*) against *Streptococcus iniae***  
Etyemez M., Cengizler İ., Demirkale İ.  
DEVELOPMENTAL & COMPARATIVE IMMUNOLOGY, vol.138, pp.1-11, 2022 (SCI-Expanded)
- II. **Gamma-irradiation induced effects on biogenic amine formation and quality of frog legs (*Rana esculenta*) during storage**  
Buyukdeveci M., Boga E., ÖZYURT G.  
LWT-FOOD SCIENCE AND TECHNOLOGY, vol.99, pp.379-386, 2019 (SCI-Expanded)
- III. **Effects of garlic-supplemented diet on growth performance and intestinal microbiota of rainbow trout (*Oncorhynchus mykiss*)**  
Buyukdeveci M., Balcazar J. L., DEMİRKALE İ., DİKEL S.  
AQUACULTURE, vol.486, pp.170-174, 2018 (SCI-Expanded)
- IV. **Isolation and characterization of bacteria with antibacterial properties from Nile tilapia (*Oreochromis niloticus*)**  
ETYEMEZ M., BALCAZAR J. L.  
RESEARCH IN VETERINARY SCIENCE, vol.105, pp.62-64, 2016 (SCI-Expanded)
- V. **Changes of Fatty Acid Composition in Frog Legs (*Rana esculenta*) During Cold Storage Period: Irradiation Effect**  
ÖZYURT G., ETYEMEZ M.  
JOURNAL OF AQUATIC FOOD PRODUCT TECHNOLOGY, vol.24, no.5, pp.481-489, 2015 (SCI-Expanded)
- VI. **Bacterial community structure in the intestinal ecosystem of rainbow trout (*Oncorhynchus mykiss*) as revealed by pyrosequencing-based analysis of 16S rRNA genes**  
Etyemez M., Luis Balcazar J.  
RESEARCH IN VETERINARY SCIENCE, vol.100, pp.8-11, 2015 (SCI-Expanded)
- VII. **Parasitic copepods of the common sole, *Solea solea* (L.), from the Eastern Mediterranean coast of Turkey**  
ÖZAK A. A., DEMİRKALE İ., BOXSHALL G. A., ETYEMEZ M.  
SYSTEMATIC PARASITOLOGY, vol.86, no.2, pp.173-185, 2013 (SCI-Expanded)
- VIII. **Comparative seasonal sterol profiles in edible parts of Mediterranean fish and shellfish species**  
ÖZYURT G., Kuley E., ETYEMEZ M., ÖZOĞUL F.  
INTERNATIONAL JOURNAL OF FOOD SCIENCES AND NUTRITION, vol.64, no.4, pp.476-483, 2013 (SCI-Expanded)
- IX. **Fatty Acid Composition and Oxidative Stability of Fish Oil Products in Turkish Retail Market**  
Ozyurt G., ŞİMŞEK A., ETYEMEZ M., Polat A.  
JOURNAL OF AQUATIC FOOD PRODUCT TECHNOLOGY, vol.22, no.3, pp.322-329, 2013 (SCI-Expanded)
- X. **Effect of the Icing with Rosemary Extract on the Oxidative Stability and Biogenic Amine Formation in Sardine (*Sardinella aurita*) During Chilled Storage**  
ÖZYURT G., Kuley E., BALIKÇI E., KAÇAR C., GÖKDOĞAN S., ETYEMEZ M., ÖZOĞUL F.  
FOOD AND BIOPROCESS TECHNOLOGY, vol.5, no.7, pp.2777-2786, 2012 (SCI-Expanded)
- XI. **Effect of the type of frying oil on volatile compounds of goatfish (*Upeneus pori*) during cold storage**  
ÖZYURT G., Kafkas E., ETYEMEZ M.  
INTERNATIONAL JOURNAL OF FOOD SCIENCE AND TECHNOLOGY, vol.46, no.12, pp.2598-2602, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Kültür Gökkuşığı Alabalıklarında (*Oncorhynchus mykiss*) Tanımlanan Patojen Bakterilerin Antibiyotik Dirençliliğinin Belirlenmesi**  
ETYEMEZ BÜYÜKDEVECİ M., DEMİRKALE İ., KİLERCİOĞLU S.  
TURKISH JOURNAL OF MARITIME AND MARINE SCIENCES, 2024 (Peer-Reviewed Journal)
- II. **Comparison of the Aflatoxin levels in Fish Feeds from Rainbow Trout Farms Localized at Different Regions (Adana-Ağrı, TURKEY)**  
CENGİZLER İ., YAKAN S., DUMAN S., ETYEMEZ BÜYÜKDEVECİ M., ALDIK R.  
International Journal of Pure and Applied Sciences, vol.5, no.2, pp.78-84, 2019 (Peer-Reviewed Journal)
- III. **DETERMINATION OF PARASITIC TRANSMISSIONS BETWEEN JAPANESE FISH (*Carassius auratus*, GOLDFISH) AND FROGS (*Rana ridibunda*, *Rana viridis*)**  
CENGİZLER İ., YAKAN S., DUMAN S., ALDIK R., ETYEMEZ M.  
Aquatic Research, vol.1, no.4, pp.140-147, 2018 (Peer-Reviewed Journal)
- IV. **Sectoral Approaches In Tourism and Aquaculture In Turkey**  
CENGİZLER İ., ALDIK R., DUMAN S., ETYEMEZ M.  
Int'l Journal of Advances in Agricultural & Environmental Engg. (IJAAEE), vol.4, no.1, pp.78-79, 2017 (Peer-Reviewed Journal)
- V. **Nutritional and Physicochemical Characteristics of Bread Enriched with Microalgae *Spirulina platensis***  
AK B., AVŞAROĞLU E., IŞIK O., ÖZYURT G., YAŞA KAFKAS N. E., ETYEMEZ M., USLU L.  
International Journal of Engineering Research and Application, vol.6, no.12, pp.30-38, 2016 (Peer-Reviewed Journal)
- VI. **Oxidative stability and fatty acid profiles of fried goatfish during cold storage**  
ÖZYURT G., ŞİMŞEK A., ETYEMEZ M., ÖZOĞUL Y.  
Fleischwirtschaft International, vol.27, pp.58-62, 2012 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **Yetiştiricilikte Probiyotik ve Prebiyotik Kullanımı**  
Etyemez M.  
in: sorular ile su ürünleri yetiştiriciliği, Suat Dikel, İbrahim Demirkale, Editor, İksad Yayınevi, Ankara, pp.335-355, 2022

## Refereed Congress / Symposium Publications in Proceedings

- I. **SU ÜRÜNLERİ ALANINDA ORGANİK ASİTLERİN BALIK HASTALIKLARINA KARŞI ALTERNATİF KATKI MADDESİ OLARAK KULLANIMI**  
FAHİM A. W., DEMİRKALE İ., ETYEMEZ BÜYÜKDEVECİ M.  
4. INTERNATIONAL GÖBEKLİTEPE SCIENTIFIC RESEARCH CONGRESS, Şanlıurfa, Turkey, 7 - 08 October 2022, vol.1, pp.823-831
- II. **The Importance of Probiotic Use of agains to Fish Diseases (Balık Hastalıklarına Karşı Probiyotik Kullanımının Önemi)**  
DEMİRKALE İ., ETYEMEZ BÜYÜKDEVECİ M.  
International Science and Research Congress, ALTALYA, Turkey, 8 - 10 February 2019, pp.69-78
- III. **Phenotypic Characteristics and Antibacterial Susceptibility Of *Micrococcus* sp. Strains in Some Rainbow Trout (*Oncorhynchus Mykiss*, Walbaum 1792) Facilitiesin Şanlıurfa (Şanlıurfa'da Bulunan Bazı Gökkuşığı Alabalığı (*Oncorhynchus Mykiss*, Walbaum 1792) İşletmelerinden İzole Edilen İki Farklı *Micrococcus* sp. Suşlarının Fenotipik Özellikleri ve Antibiyotik Duyarlılıkları)**

DEMİRKALE İ., ETYEMEZ BÜYÜKDEVECİ M.

International Science and Research Congress, Antalya, Turkey, 8 - 10 February 2019, pp.31-36

- IV. **BALIKLARDA SİRKADİYEN RİTİM VE PİNEAL ORGAN**  
CENGİZLER İ., ETYEMEZ BÜYÜKDEVECİ M.  
INTERNATIONAL CONFERENCE OF STRATEGIC RESEARCH ON SCIENTIFIC STUDIES AND EDUCATION, Roma, Italy, 17 - 18 June 2019, pp.240-247
- V. **Bacillus subtilis ve Bacillus mojavensis Probiyotik Takviyesi İle Beslemenin Tilapia (Oreochromis niloticus, Linnaeus, 1758)'larda Büyüme Performansı Üzerine Etkisi**  
CENGİZLER İ., ETYEMEZ BÜYÜKDEVECİ M.  
3rd International Mediterranean Science and Engineering Congress (IMSEC 2018) October 24-26, 2018, Adana/Turkey, 24 - 26 October 2018
- VI. **INVESTIGATION OF AFLATOXIN IN FEEDS USED IN TWO RAINBOW TROUT OPERATIONS IN ADANA AND AĞRI PROVINCES IN DIFFERENT CLIMATIC CONDITIONS**  
CENGİZLER İ., DUMAN S., ŞAHAN A., Aldık R., ETYEMEZ M.  
4th International Conference on Engineering and Natural Sciences (ICENS 2018), Kiev, Ukraine, 2 - 06 May 2018, pp.109
- VII. **DETERMINATION OF PARASITIC TRANSMISSIONS BETWEEN JAPANESE FISH (CARASSIUS AURATUS, GOLDFISH) AND TOADS (RANA RIDIBUNDA, RANA VIRIDIS)**  
CENGİZLER İ., DUMAN S., ETYEMEZ M., Aldık R.  
4th International Conference on Engineering and Natural Sciences (ICENS 2018), Kiev, Ukraine, 2 - 06 May 2018, pp.110
- VIII. **Molecular Methods for Rapid Diagnosis of Fish Diseases**  
ETYEMEZ BÜYÜKDEVECİ M., DEMİRKALE İ., KIZILDIRIM S., CENGİZLER İ.  
6th International MOLECULAR BIOLOGY and BIOTECHNOLOGY CONGRESS (MOLBIOTECH), AFYON, Turkey, 22 - 25 December 2017, pp.85
- IX. **Molecular Methods for Rapid Diagnosis of Fish Diseases**  
ETYEMEZ BÜYÜKDEVECİ M., DEMİRKALE İ., KIZILYILDIRIM S., CENGİZLER İ.  
6th INTERNATIONAL MOLECULAR BIOLOGY and BIOTECHNOLOGY CONGRESS (MOLBIOTECH), Afyon, Turkey, 22 - 25 December 2017
- X. **IMPACT OF LOW-DOSE GAMMA IRRADIATION THE MICROBIAL QUALITY OF FROG LEG (RANA ESCULENTA) DURING COLD STORAGE**  
ETYEMEZ BÜYÜKDEVECİ M., ÖZYURT G., KULEY BOĞA E.  
6TH INTERNATIONAL MOLECULAR BIOLOGY AND BIOTECHNOLOGY CONGRESS, AFYON, Turkey, 22 - 25 December 2017
- XI. **Occurrence of Antibiotic Resistance Genes in Candidate Probiotics Isolated from Intestine of Nile tilapia, Oreochromis niloticus L.**  
ETYEMEZ BÜYÜKDEVECİ M., KIZILYILDIRIM S., CENGİZLER İ., KÖKSAL F.  
2nd International Mediterranean Science and Engineering Congress (IMSEC 2017), Adana, Turkey, 25 - 27 October 2017
- XII. **Occurrence of Antibiotic Resistance Genes in Candidate Probiotics Isolated from Intestine of Nile Tilapia Oreochromis niloticus L.**  
ETYEMEZ BÜYÜKDEVECİ M., KIZILYILDIRIM S., CENGİZLER İ., KÖKSAL F.  
2 nd International Mediterranean Science and Engineering Congress, Turkey, 25 - 27 October 2017
- XIII. **CHANGES IN BACTERIAL COMMUNITY STRUCTURE IN THE INTESTINAL MICROBIOTA OF RAINBOW TROUT (ONCORHYNCHUS MYKISS), FED WITH GARLIC SUPPLEMENTED DIET BY NEXT-GENERATION SEQUENCING**  
ETYEMEZ BÜYÜKDEVECİ M., DEMİRKALE İ., DİKEL S.  
ULUSLARARASI TIBBİ VE AROMATİK BİTKİLER KONGRESİ TABİİ VE SAĞLIKLI HAYAT, Konya, Turkey, 10 - 12 May 2017
- XIV. **Sectoral Approaches to Tourism and Aquaculture in Turkey**  
CENGİZLER İ., Aldık R., DUMAN S., ETYEMEZ M.

7th International Conference on Chemical, Biological, and Environmental Sciences (ICCBES'17), Pattaya, Thailand, 8 - 09 February 2017, pp.216

- XV. **Prevalence and Diversity of Antimicrobial Resistance Genes in Nile Tilapia (*Oreochromis niloticus*)**  
ETYEMEZ BÜYÜKDEVECİ M., CENGİZLER İ., KIZILYILDIRIM S., KÖKSAL F.  
6 th International Conference of Aquaculture Indonesia, Indonesia, 27 - 29 October 2016
- XVI. **Prevalence And Diversity Of Antimicrobial Resistance Genes İn Nile Tilapia (*Oreochromis niloticus*)**  
ETYEMEZ BÜYÜKDEVECİ M., CENGİZLER İ., KIZILYILDIRIM S., KÖKSAL F.  
ICAI 2016, Balvi, Latvia, 27 - 29 October 2016
- XVII. **isolation of Lactic acid bacteria from the Intestine of nile Tilapia (*Oreochromis niloticus*) captured from farms and their local aquatic Environment**  
CENGİZLER İ., ETYEMEZ M., KÖKSAL F.  
5th International Conference on Agriculture, Environment and Biological Sciences (ICAEBs-16), Pattaya, Thailand, 28 - 29 April 2016, pp.97
- XVIII. **SCREENING OF PROBIOTIC BACTERIA FOR THE CONTROL OF *Streptococcus iniae* AND *Edwardsiella piscicida* IN TILAPIA *Oreochromis niloticus* Linneus 1758**  
ETYEMEZ M., CENGİZLER İ., TABAKOĞLU Ş.  
17th International Conference on Diseases of Fish and Shellfish, Las Palmas, Spain, 7 - 11 September 2015, pp.257
- XIX. **Investigation of parasites in some fish cultured in VI Regional Directorate of State Hydraulic Works Fisheries Head Engineering**  
TABAKOĞLU Ş., CENGİZLER İ., ETYEMEZ M.  
17th International Conference on Diseases of Fish and Shellfish, Las Palmas, Spain, 7 - 11 September 2015, pp.277
- XX. **Tilapia (*O.niloticus*)larda *Edwardsiella tarda* Türünün Türkiye'den İlk Bildirimi**  
ETYEMEZ BÜYÜKDEVECİ M., KIZILYILDIRIM S., DEMİRKALE İ., ALDIK R., CENGİZLER İ.  
İç Anadolu Bölgesi 2. Tarım ve Gıda Kongresi, Nevşehir, Turkey, 28 - 30 April 2015
- XXI. **Tilapialarda *Edwardsiella tarda* türünün Türkiyeden ilk bildirimi**  
ETYEMEZ M., DEMİRKALE İ., CENGİZLER İ.  
2. İç Anadolu Bölgesi Tarım ve Gıda Kongresi, Nevşehir, Turkey, 28 - 30 April 2015, vol.1, no.1, pp.468
- XXII. **Effects of Gamma Irradiation on the Biogenic Amines Formation in Frog (*Rana esculanta*) Legs during Cold Storage (+2°C).**  
ÖZYURT G., Ergüven M., ÖZKÜTÜK A. S., ETYEMEZ M.  
1 st International Symposium on Aquatic Sciences and Technology, Girne, Cyprus (Kktc), 15 - 17 May 2014, pp.74
- XXIII. **Parasitic copepods of the common sole (*solea solea*) from eastern mediterranean coast of turkey**  
ÖZAK A. A., DEMİRKALE İ., ETYEMEZ M.  
2. International Workshop on Symbiotic Copepoda, Cape Town, South Africa, 30 June - 05 July 2013, vol.1, no.1, pp.23
- XXIV. **Farklı dozlarda ışınlanan tütsülenmiş vakum paketli gökkuşağı alabalığının (*Oncorhynchus mykiss*) soğuk depolanması (+2°C) süresince kimyasal, duyuusal ve mikrobiyolojik kalite parametrelerinin değişimi.**  
ÖZKÜTÜK A. S., ETYEMEZ M., KÜLEY BOĞA E., ÖZYURT G.  
XVI. Ulusal Su Ürünleri Sempozyumu, Antalya, Turkey, 23 - 27 October 2011, pp.331
- XXV. **Effects of rosemary (*Rosmarinus officinalis*) extract addition on oxidative stability of fried sea bream (*Sparus aurata*) during chill storage (4°C)**  
ÖZYURT G., KARAKAYA B., ETYEMEZ M., AKSUN E. T.  
1st International Congress of Food Technology, Antalya, Turkey, 3 - 06 November 2010, pp.292

## Other Publications

- I. **Effects of frying oil type on oxidative stability and fatty acid profiles of goatfish during cold storage**  
ÖZOĞUL Y., ŞİMŞEK A., ÖZYURT G., ETYEMEZ M.  
Other, pp.58-62, 2011

## Supported Projects

DEMİRKALE İ., EVLİYAĞLU E., DİKEL S., CENGİZLER İ., GÜLNAZ O., ETYEMEZ M., KÜÇÜKGÜLMEZ YANDIM A., KIZILYILDIRIM S., Project Supported by Higher Education Institutions, Farklı Bakteriye Balık Patojenlerine Karşı Lignin'in Etkinliğinin Araştırılması, 2018 - Continues

ETYEMEZ M., CENGİZLER İ., BÜYÜKDEVECİ F., KIZILYILDIRIM S., DEMİRKALE İ., KILERCİOĞLU S., Project Supported by Higher Education Institutions, Yetiştiriciliği Yapılan Gökkuşluğu Alabalık (*Oncorhynchus mykiss*)'lardan İzole Edilen Patojen Bakterilerin Antibiyotik Direnç Profillerinin Belirlenmesi, 2019 - 2024

KILERCİOĞLU S., SANGÜN L., DİKEL S., ATLI G., CENGİZLER İ., AYDIN F., ETYEMEZ M., Project Supported by Higher Education Institutions, Bor nanoparçacıklarının Nil Tilapyası (*Oreochromis niloticus*)'nın antioksidan enzim aktivitesi, gen ekspresyonu ve bağırsak mikrobiyotası üzerine etkilerinin belirlenmesi, 2019 - 2023

DİKEL S., ÖZŞAHİNOĞLU I., ÖZ M., DEMİRKALE İ., ETYEMEZ M., Project Supported by Higher Education Institutions, Farklı sazan türlerinin kafes ve tank koşullarında polikültür amaçlı yetiştirme olanaklarının incelenmesi, 2018 - 2019

CENGİZLER İ., DUMAN S., ETYEMEZ M., ALDIK R., Project Supported by Higher Education Institutions, Sectoral Approaches to Tourism and Aquaculture in Turkey, 2017 - 2017

DİKEL S., ÖZ M., DEMİRKALE İ., Yabacı F. S., ETYEMEZ M., Project Supported by Higher Education Institutions, Sarımsak (*Allium sativum*) Tozu Katkısı ile Beslenmiş Gökkuşluğu Alabalıklarında Yeni Nesil DNA Dizileme Yöntemi Kullanılarak Barsak Florasındaki Değişimlerin Belirlenmesi, 2016 - 2017

CENGİZLER İ., ETYEMEZ M., KÖKSAL F., Kızılyıldırım S., Project Supported by Higher Education Institutions, Isolation of Lactic Acid Bacteria from the Intestine of Nile Tilapia (*Oreochromis niloticus*) Captured From Farms and Their Local Aquatic Environment, 2016 - 2016

CENGİZLER İ., YANEN R., DEMİRKALE İ., ETYEMEZ M., KIZILYILDIRIM S., ALDIK R., SARI H., Project Supported by Higher Education Institutions, Yetiştiriciliği Yapılan ve Doğadan Avlanan Nil Tilapia (*Oreochromis niloticus*)'larında Karşılaştırmalı Probiyotik Araştırmaları, 2014 - 2016

CENGİZLER İ., TABAKOĞLU Ş., ETYEMEZ M., Project Supported by Higher Education Institutions, SCREENING OF PROBIOTIC BACTERIA FOR THE CONTROL OF *Streptococcus iniae* AND *Edwardsiella piscicida* IN TILAPIA *Oreochromis niloticus* Linneus 1758, 2015 - 2015

## Metrics

Publication: 45

Citation (WoS): 219

Citation (Scopus): 253

H-Index (WoS): 7

H-Index (Scopus): 7

## Congress and Symposium Activities

17th International Conference On Diseases of Fish and Shellfish, Attendee, Spain, 2015

2nd IWOSC, Attendee, South Africa, 2013