



TAGEM
R&D AND INNOVATION

CENTRAL FISHERIES RESEARCH INSTITUTE
SUMAE / TRABZON

Dr. GÜLSÜM BALÇIK MISIR

Food Engineer

EDUCATION

- PhD**
2014-2019
Recep Tayyip Erdoğan University
Department of Fishing and Processing
- MSc**
2006-2010
Karadeniz Technical University
Department of Fisheries Technology
- Bachelor's Degree**
1989-1994
Ege University
Department of Food Engineering
- LANGUAGE**
English KPDS 71

CAREER

1997-Currently, Engineer, SUMAE- TRABZON

ABOUT ME

She started her working life in Central Fisheries Research Institute within the scope of "The Fish Culture Development Project in the Black Sea", which was started to in cooperation with the Japan International Cooperation Agency (JICA) in 1997. She has been working as a researcher in the Department of Food Technology as a project leader and researcher in various projects at the institute.

She worked as a technical editor between 2001- 2017 in the scientific journal "Turkish Journal of Fisheries and Aquatic Sciences" published by the Institute, and has been working as a Section editor since 2020. She worked as the managing editor in the journal "Genetics of Aquatic Organisms" between 2017-2021, and continues to work as the managing editor in the journal "Aquatic Food Studies", which started its publication life in 2021. Fluent in English, the researcher is married and has 2 children.

CONTACT

Vali Adil Yazar Ave. No:14 Kaşüstü,
Yomra, 61250, TRABZON



Gulsum.balcikmisir@tarimorman.gov.tr



0462 342 10 53



Dr. GÜLSÜM BALÇIK MISIR

Food Engineer



■ **PROJECTS**

■ **Projects Conducted**

1. TAGEM The Effect of Ultrasound Assisted Protein Hydrolyzate Production and the Possibility of Use in Some Processed Foods Proje Leader (2019-)
2. TÜBİTAK-2221- Fish Protein Hydrolysate Added Food Formulation and Optimization (2018)
3. TAGEM Determination of Storage Stability of Protein Isolates and Hydrolyzates Obtained from Sprat (*Sprattus sprattus* L., 1758)(2018-2020) Researcher
4. Tagem- Monitoring economically important pelagic fish stocks in the Black Sea (2018-2020)
5. TAGEM Country Guided Project "Determination of the parameters that can be benchmarks for young farmers' support and the tendency of young people to be in agriculture" Sub-Project Researcher (2017-2018)
6. TAGEM Monitoring of *Rapana venosa* (*Rapana valenciennes*, 1846) Fisheries in the Black Sea (2016-2018)
7. TAGEM -Development of Farming Methods of Turbot (*Psetta maxima*) – Researcher - (2011-2013)
8. TAGEM-Development and Farming of Protection Strategy of Sturgeon – Researcher - (2011-2013)
9. TAGEM-Determination of Storage Stability and Consumer Acceptance of Some Smoked Fish Species in Eastern Black Sea Preliminary) – Researcher - (2013-2015)
10. TR90/Fish Consumption Preferences of Consumers Living in Trabzon Province –Project Leader , DOKA Technical Support Project of DOKA 2014
11. TAGEM-Investigation of the Effect of the Black Sea and the Fishery Extension Net” project-Researcher (2014-2019)
12. TAGEM-Investigation of aquaculture Possibilities of Red snapper (*Chelidonichthys lucerna* L., 1758) - Researcher (2014-)
13. Fisheries Sector Report of TR90 Region –Researcher 2012 DOKA Direct Activity Support
14. TARAL 1007 - Determination of National Food Composition and Formation of a Widely Available and Sustainable System, National Project, District Chief, Researcher (2008-2012)
15. TAGEM- Anchovy Monitoring in the Eastern Black Sea Project (2006-)
16. “The Technical Development of Sustainable Seed Production for Black Sea Turbot” International Project Japan International Corporation Agency Project Coordinator (2002–2005)
17. “The Fish Culture Development Project in the Black Sea” International Project Cooperation with Japan International Corporation Agency-JICA Proje Sekretariat (1997-2002)



Dr. GÜLSÜM BALÇIK MISIR

Food Engineer

TAGEM
R&D AND INNOVATION

Ongoing Projects

1. TAGEM - The Effect of Ultrasound Assisted Protein Hydrolyzate Production and the Possibility of Use in Some Processed Foods – Researcher (2019-2022)
2. TAGEM – The Ultrasound Assisted Fish Gelatin Extraction - Researcher (2022-2025)
3. TAGEM- Determination of Biochemical Contents of Macroalgae Species in the Eastern Black Sea Coasts - Researcher-(2018-)
4. Investigation of Intensive Production Possibilities of Local Microalg Isolates Isolated from the Black Sea (2022-)

■ **PUBLICATIONS**

■ **INTERNATIONAL ARTICLES AND PAPERS**

■ **Articles Published in International Indexed Journals (SCI, SCI-Expanded)**

- BALÇIK MISIR, G.** and Koral, S. 2021. [The impacts of ultrasound-assisted protein hydrolysate coating on the quality parameters and shelf life of smoked bonito fillets stored at 4±1°C](#). Ege Journal of Fisheries and Aquatic Sciences 38, 4, 427-435 DOI: 10.12714/egejfas.38.4.04
- DAĞTEKİN, M., MISIR, D. S., ŞEN, İ. ALTUNTAŞ, C., **BALÇIK MISIR, G.**, ÇANKAYA, A. 2021. Small-scale fisheries in the southern Black Sea: Which factors affect net profit? Acta Ichthyologica et Piscatoria 51(2), 2021, 145–152 | DOI 10.3897/aiep.51.62792
- Balcık Misir, G.**, and Koral, S. 2019. Effects Of Ultrasound Treatment on Structural, Chemical And Functional Properties of Protein Hydrolysate of Rainbow Trout (*Oncorhynchus Mykiss*) By-Products, Italian J. of Food Science, 31(2) 205-223 doi: <https://doi.org/10.14674/IJFS-1218>
- Balcık Misir, G.**, and Koral, S. 2019. Effects of edible coatings based on ultrasound-treated fish proteins hydrolysate in quality attributes of chilled Bonito Fillets, *Journal of Aquatic Food Product Technology*
- Tufan , B. **Balçık Mısır G.** and Köse S. 2018. Comparison of Seasonal Fatty Acid Composition in Relation to Nutritional Value of Three Commercial Fish Species Caught from Different Zones of Eastern Black Sea, Aquatic Sciences and Engineering, 33, 1, 11 – 19 DOI: 10.18864/ASE201803
- Dagtekin, M., Ozyurt, C. E., Misir, D. S., Altuntas, C., Cankaya, A., **Misir, G. B.**, & Aydin, E. Rate and Causes of Lost" Gillnets and Entangling Nets" in The Black Sea Coasts of Turkey. Turkish Journal of Fisheries and Aquatic Sciences, 19(8), http://doi.org/10.4194/1303-2712-v19_8_08
- Balçık Misir¹ G.**, Tufan B². and Köse S^{2,*} 2014. Monthly variation of total lipid and fatty acid contents of Atlantic bonito, *Sarda sarda* (Bloch, 1793) of Black Sea, International Journal of Food Science & Technology, 49, 2668-2677, DOI: 10.1111/ijfs.12578.



Dr. GÜLSÜM BALÇIK MISIR

Food Engineer

TAGEM
R&D AND INNOVATION

Balçık Misir¹ G., Tufan B². and Köse S². 2014. Variations in Total Lipid and Fatty Acid Contents of Edible Muscle, Liver and Roes of Spotless Shad, *Alosa immaculata* during Catching Season in Black Sea DOI: 10.1080/10498850.2013.816402

Balçık Mısır, G., Kutlu, S. and Çibuk, S. 2013. Determination of Total Lipid and Fatty Acid Composition of Pearl Mullet (*Chalcalburnus tarichi*, Pallas 1811), Turkish Journal of Fisheries and Aquatic Sciences 13: (777-783), www.trjfas.org ISSN 1303-2712 DOI: 10.4194/1303-2712-v13_5_01

Articles Published in Other International Journals

Kutlu, S., **Balçık Mısır, G.**, and Erteken A. 2021. Fatty Acid Composition and Cholesterol Content of Some Economic Marine Fish in Turkish Waters. Aquatic Food Studies2021-07-30 | journal-article, DOI: [10.4194/AFS25](https://doi.org/10.4194/AFS25)

Balcık Misir, G. (2018). Molecular Technologies and Applications in Seafood Safety. Genetics of Aquatic Organisms, 2, 61-67. http://doi.org/10.4194/2459-1831-v2_2_01

Dagtekin (Gozu), B.B., **Balçık Mısır, G.**, Kutlu, S., Basturk O., (2018). Comparison of Biochemical, Fatty Acids and Lipid Quality Indexes of Prussian Carp (*Carassius gibelio*) Caught from Lake Çıldır on Different Seasons, MedFAR., 1(1):2-14.

Balcık Misir, G., Kutlu, S., Erteken, A., Yaman, M. And Akkus Cevikkalp, S. 2017. Comparison of flesh quality of deep water pink shrimp (*Parapenaeus longirostris*, Lucas 1846) from Marmara, Aegean and Mediterranean Seas in Turkey” J Food Nutr Disor 2017, 6:510.4172/2324-9323.1000235

International Papers, Seminars, etc.

Kutlu, S., **Balçık Mısır, G.**, Dagtekin, M., Yesilsu, A.F., Alp Erbay, E., And Erteken A. 2019. Determination of Consumer Preferences on Trout, Seabass Shad and Bonito Smoked with Beech and Oak Sawdust, Icaforp /3. International Conference on Agriculture, Food Veterinary and Pharmacy Science, 16-18 April, Trabzon, Turkey.

Dagtekin, B.B., **Balcık Misir, G.**, Kutlu, S., & Yesilsu, A.F. **2019**. A Preliminary Study on Protein Isolates and Hydrolyzate Production from Sprat (*Sprattus sprattus* L., 1758). 3th International Conference on Agriculture, Food, Veterinary and Pharmacy Sciences, April, 16-18, 2019, Trabzon, Turkey (Oral).

Balcık Misir, G. (2018). Global and Turkish Seafood Processing Sectors, Design of Innovative Foods, Trabzon-DIF 2018 Workshop, May, 11 2018(Oral Presentation).

Balcık Misir, G. (2018). Global Protein Hydrolysate market and Research studies of FPH in Turkey, Design of Innovative Foods, Trabzon- DIF 2018 Workshop, May, 11 2018(Oral Presentation).

Erik, G., Aydın, İ., Dağtekin M., Genç, Y., Çankaya A., Mısır, D.S., Kutlu S., **Balçık Mısır G.**, Özaydın E., & Özkaya E. (2018). Monitoring of Rapa Whelk Fisheries in the Black Sea. General Fisheries Commission for the Mediterranean (GFCM), Subregional Group on Stock Assessment in the Black Sea (SGSABS), 26 Nov-01 Dec 2018, Constanta, Romania (Oral Presentation).



Dr. GÜLSÜM BALÇIK MISIR

Food Engineer

TAGEM
R&D AND INNOVATION

- Mısır D. S., Altuntaş, Cemil., C. Özyurt, E., Dağtekin, M., Genç, Y., Başçınar, N.S., Kasapoğlu, N., Erbay, M., **Balçık Mısır, G.** Aydın, E. 2017. Av Verimi ve Boy Seçiciliği Açısından, Sade Multifilament Uzatma Ağları ile Sade Monofilament Uzatma Ağları Arasında Fark Var mı?, "2nd International Science Symposium" 5-8 Sept. 2017.Sözlü sunum
- Balçık Mısır G.***, KUTLU, S., ERTEKEN, A., YAMAN, M. and AKKUŞ ÇEVİKKALP., S. 2016. Some Nutritional Quality Parameters of Deep Water Pink Shrimp (P. Longirostris, Lucas 1846) Meat Harvested From Marmara, Aegean And Mediterranean Seas In Turkey. Faba International Symposium on Fisheries and Aquatic Sciences, 3-5 Nov. 2016, Antalya (Sözlü Sunum)
- TUFAN, B., **BALÇIK MISIR, G.** and KÖSE, S. 2014. Comparison of Seasonal Fatty Acid Composition Of Three Fish Species Living In Different Zones Of Eastern Black Sea, FABA 2014: International Symposium on Fisheries and Aquatic Sciences, Bildiriler Kitapçığı25-27 September 2014 / Trabzon sayfa 148 (sözlü sunum)
- Mısır, D. S., Altuntas, C., Ozyurt, C. E., Dagtekin, M., Genc, Y., Bascinar, N. S., Erbay, M., Kasapoglu, N., **Balcik Mısır, G.**, Aydın, İ. (2018). What Should be the Minimum Landing Size and Minimum Mesh Size in The Whiting Fisheries with Gillnets on Black Sea. Forum on Fisheries Science in the Mediterranean and the Black Sea "FISH FORUM 2018", 10-14 December 2018, FAO Headquarters, Rome, Italy (Poster)
- Mısır, D. S., Altuntas, C., Ozyurt, C. E., Dagtekin, M., Bascinar, N. S., Genc, Y., Erbay, M., Kasapoglu, N., & **Mısır, G. B.** (2018). Effect of Fishing Net Material on Size Selectivity. 2nd International Congress on Advances in Bioscience and Biotechnology (ICABB), Symposium Abstract Book, 40. June 26-30, 2018 Podgorica, Montenegro. (Poster)
- Balçık Mısır G. 2016.** Applications of Ultrasound for Enhancement Of Seafood Processing, Faba International Symposium on Fisheries and Aquatic Sciences, 3-5 Nov. 2016, Antalya (Poster)
- Balçık Mısır G.**, 2015. Innovative Packaging Solutions for Seafood: Active Packaging, MOCADESU 2015, 1st International Conference on Sea and Coastal Development in the Frame of Sustainability, Abstract Book, 197 p (poster)
- Kutlu, S., Yeşilsu, A.F., **Mısır-Balçık, G.**, Alp, E., Erteken, A., Türe, M.,and Dağtekin, M., **2015.** Determination of Storage Stability of Hot Smoked Atlantic Bonito and Trout with Different Wood Chips. 1st International Conference on Sea and Coastal Development in the Frame of Sustainability, (MACODESU-2015), 18-20 September 2015, Trabzon, Turkey. Abstract Book, p:189. (Poster).
- Kutlu, S., Dağtekin, M., **Mısır-Balçık, G.**, Yeşilsu, A.F., Alp, E. and , Erteken, A., **2015.** Determination of Consumer Trends on Shad an Seabass Smoked with Beech and Oak Sawdust. 1st International Conference on Sea and Coastal Development in the Frame of Sustainability, (MACODESU-2015), 18-20 September 2015, Trabzon, Turkey. Abstract Book, p:186. (Poster).
- Kutlu, S. **Balçık Mısır, G.** and Erteken, A. 2011. Method Validation Studies on Fatty Acid Analysis in the Turkish Food Database, International Food Congress: Novel Approaches in Food Industry "NAFI 2011"(poster)



Dr. GÜLSÜM BALÇIK MISIR

Food Engineer



BALÇIK MISIR G., KUTLU, S., and AYYILDIZ, H. 2014 Fish Consumption Preferences of Consumers in Trabzon Province, Turkey Faba 2014: International Symposium On Fisheries and Aquatic Sciences, Bildiriler Kitapçığı 25-27 September 2014 / Trabzon Sayfa 471-472 (poster)

Kutlu, S., **Balçık Misir, G.** Erteken, A. and Yaman, M. 2014. The Nutrient Composition of Some Economic Marine Fish in Turkey Faba 2014: International Symposium On Fisheries and Aquatic Sciences, Bildiriler Kitapçığı 25-27 September 2014 / Trabzon, Sayfa 485 (poster)

Balçık Mısır, G., Kutlu, S. ve Çibuk, S. 2013. "Determination of total Lipids and Fatty Acids composition of Pearl mullet (*Chalcalburnus tarichi*) FABA Fisheries and Aquatic Sciences Symposium, Proceedings Book, 30 May-1 June 2013, Erzurum page 427

NATIONAL ARTICLES AND PAPERS

Articles Published in National Journals

BALÇIK MISIR, G., KUTLU, S., AYYILDIZ, H., 2015. Fish Consumption Preferences of Consumers in Trabzon, Turkey, Yunus Araştırma Research Bulletin, 2015(2) 45-57.

BALÇIK MISIR, G. 2014. Lipids, fatty acids and their some important metabolic functions in Fish, Yunus Research Bulletin, 1:51-61.

Balçık Mısır G., 2012. Some Functional foods and Food Ingredients Originated from Sea, Yunus Research Bulletin, 12 (1): 1-7.

BALÇIK MISIR, G. 2010. HACCP in Food Safety, Food Safety Periodic, 4(11) 28-29 p. May-August 2010.

Yaman, M., Akkuş, S., Erdoğan, Ş., Işık, T., Arslan, F., Kutlu, S., Erteken, A., **Balçık Mısır, G.,** 2009. Homogenisation Validation Report on Foods, TÜBİTAK TARAL 1007 107G208, Gebze Kocaeli

BALÇIK MISIR, G. 2008. HACCP Food Safety and Risk Management System, Yunus Research Bulletin, September, 2008.

KUTLU, S. and **BALÇIK MISIR, G.** 2007. Development of Seafood Processing and Evaluation Facilities in our Region, Yunus Research Bulletin, 1:15-16, March, 2007.

KUTLU, S. and **BALÇIK MISIR, G.** 2007. Development of Sea Food Sector in the Black Sea, Yunus Research Bulletin December, 2007



Dr. GÜLSÜM BALÇIK MISIR

Food Engineer



BALÇIK, G. 2002. Behind the Workshop, Yunus Research Bulletin, Vol. 2, no.4, 4-5 p. December 2002.

Balçık, G. (Eds), 2000. Su Ürünleri Merkez Araştırma Enstitüsü, "Central Fisheries Research Institute" 1987-2000, Trabzon1-14

■ **National seminars**

Balçık Mısır, G., Kutlu, S., Dağtekin, B.B., Yeşilsu, A.F., Alp Erbay, E. 2019. "Ultrasound Destekli Balık Protein Hidrolizati Üretimi ve Bazı İşlenmiş Gıdalarda Kullanım Olanaklarının Belirlenmesi", KTÜ Proje Pazarı, 29-30-31 Mayıs 2019, KTÜ (Poster sunumu)

Çankırılıgil E. C., Güven, A. **Balçık Mısır, G.** 2017. Kültüre Alınan Altınbaş Kefalin (*Liza aurata*) Kas Dokusu ve Atıklarının Amino Asit Kompozisyonunun Belirlenmesi, 19. Ulusal Su Ürünleri Sempozyumu, 12-15 Eylül 2017, Poster sunumu

Balçık Mısır, G. 2015. An Environmental Friendly Application Using By-Products and Wastes "Fish Protein Hydrolysate" Ecology 2015 Symposium Proceedings Abstract Book, Page 309.

Kutlu, S. ve **Balçık Mısır*, G.** 2015. "National Food Composition Database "Turkomp" 18. National Fisheries Symposium, Proceedings Abstract Book, Page 294.

Dağtekin*, B. B. **Balçık Mısır, G. ve** Kutlu, S. 2015. Seasonal Changes in Lipid Quality Indexes of Prussian Carp (*Carassius gibelio*, Block 1782) 18. National Fisheries Symposium, Proceedings Abstract Book, Page 293.

Dağtekin, B.B, **Balçık Mısır, G. ve** Kutlu S. 2014. Seasonal Changes in biochemical and fatty acids composition of Prussian carp (*Carassius gibelio* Bloch,1782), 5. East Anatolia Region Fisheries Symposium Proceedings Book, pages 262-263

Dağtekin, B.B, **Balçık Mısır, G. ve** Kutlu S. 2014. Seasonal Variations of the biochemical and Fatty Acid Composition of Prussian Carp (*Carassius gibelio* Bloch,1782) inhabiting in Lake Çıldır, 5. East Anatolia Region Fisheries Symposium Proceedings Book, pages 264-265.

■ **OTHER PUBLICATIONS**

■ **Ph.D. Thesis, Master Thesis, Reports, Books etc.**

Master Thesis : Investigation of Total Lipid and Fatty Acid Composition of Some Fish Species Caught from Northeast Black Sea During Fishing Season

Ph.D Thesis : Production of Ultrasound Assisted Protein Hydrolysates from Trout By-products and Determining Their Effects on the Shelf Life of Seafood

■ **Membership, Training, Course, Meeting, Congress, Symposium and Other Activities**



Dr. GÜLSÜM BALÇIK MISIR

Food Engineer



Symposium Organisation Committee -Workshop on Aquaculture in Turkey, November 7-9, 2001, Trabzon, Turkey

Symposium Organization Committee - FABA 2014: International Symposium on Fisheries and Aquatic Sciences

Editorial

Ongoing

Turkish Journal of Fisheries and Aquatic Sciences – Section Editor (2020-)
Aquatic Food Studies – Managing Editor (2021-)
Current Research in Nutrition and Food Science Journal-Editorial board (2018-)
Oceanography & Fisheries -Assistant Editor (2013-)

Past

Turkish Journal of Fisheries and Aquatic Sciences – Technical Editor (2001-2017)
Yunus Research Bulletin - Technical Editor (2001-2014)
Genetics of Aquatic Organisms -Managing Editor (2017-2021)

Trainings

<u>Title of the Training</u>		<u>Start</u>	<u>Ending</u>	<u>Unit</u>
PRIMA Program 2021 Calls and Project Writing Training	24.01.2021	25.01.2021	TÜBİTAK	
Project preparation Programme	08.03.2021	08.03.2021	TÜBİTAK	

Diğer eğitimler

Agilent HPLC Software Hardware

and Certificate of Use 2017 (2 days) SEM (TRABZON)

Administrative and Financial Principles Training in EU Projects 2014 (2 days) Trabzon Valiliği (TRABZON)



Dr. GÜLSÜM BALÇIK MISIR

Food Engineer

TAGEM
R&D AND INNOVATION

Certificate for Using Experimental Animals (Class B-For Researchers) 2010 (10 days)

SUMAE(TRABZON)

Trainmic-Importance of Quality and Quality Assurance in Chemical Measurement:Training in Metrology in Chemistry 2009 (2 days)

TUBİTAK-JRC (KOCAELİ)

True Food Traditional United Europe Food EU Framework Program Project training - Food Safety Analysis in Traditionally Processed Food Products 2008 (5 days)

TRUEFOOD-6. Framework Programme-Karadeniz Teknik Üni. (TRABZON)

True Food Traditional United Europe Food-Training Course on "Food Packaging, Food Processing and Technological Needs-Innovation on foods through process and packaging development 2007 (3 days)

TRUEFOOD-6. Framework Programme-Karadeniz Teknik Üni

Social Networks

Google Scholar : <https://scholar.google.com.tr/citations?user=mwey4DUAAAAJ&hl=tr>

Researchgate : <https://www.researchgate.net/profile/Guelsuem-Balcik-Misir>

ORCID : <https://orcid.org/0000-0001-8675-8768>

Publons : <https://publons.com/researcher/1434388/gulsum-balcik-misir/>