



**TAF**  
R&D AND INNOVATION

CENTRAL FISHERIES RESEARCH INSTITUTE  
SUMAE / TRABZON

## OSMAN TOLGA ÖZEL, Ph.D

### Agriculture engineer

#### EDUCATION

- Bachelor's Degree**  
2022- Istanbul University  
Sociology
- PhD**  
2007-2015 Ondokuz Mayıs University  
Faculty of Agriculture
- MSc**  
2002-2006 Ondokuz Mayıs University  
Faculty of Agriculture
- Bachelor's Degree**  
1998-2002 Uludag University  
Faculty of Agriculture

#### ABOUT ME

He was born in 1978 in Trabzon. His high educations were completed outside Trabzon. While his doctoral thesis work on lamp continued, He was appointed as an engineer to the Trabzon Central Fisheries Research Institute. Subsequently, He focused his studies on feeds and fish nutrition. He still works at department of aquaculture at Institute, and takes part in various project.

#### CAREER

- 2011- Researcher, SUMAE - TRABZON
- 2005-2006 Engagement director, private sector - Samsun

#### CONTACT

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

osmantolga.ozel@tarimorman.gov.tr

0462 342 10 53



# OSMAN TOLGA ÖZEL, Ph.D

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### ▪ PROJECTS

#### ▪ Projects Conducted

1. TAGEM - Improvement of Sturgeon Culture and Conservation Strategy (Researcher) 2011-2013
2. TAGEM - The Determination of Nutritional Requirements in Blacksea Trout (*Salmo trutta labrax*) (Researcher) 2011-2015
3. TAGEM - Preliminary Study for fish Gen Bank: Cryopreservation (Researcher) 2013-2015
4. TAGEM - Broadstock Management in Sturgeon Breeding (Researcher) 2015- 2017
5. TAGEM - Determination of the Bioecology and Aquaculture Characteristics of the Mullet Species (*Mugil cephalus*, *Liza aurata*) in the Eastern Black Sea (Researcher) 2015- 2019
6. TAGEM - Investigation of the possibilities of using some phytobiotic added diets in nutrition of Black sea trout (Project manager) 2017-2021
7. TAGEM - Determination of the Success of Usage Cryopreserved Sperm (Artificial Insamination) in Rainbow Trout (*Oncorhynchus mykiss*) Aquaculture (Researcher) 2017-2021
8. TAGEM - Black Soldier Fly (*Hermetia illucens*, L.) and Mealworm (*Tenebrio molitor*, L.) Larvae Usage on Fish Feed Instead of Fish Meal and Effects of Growth Parameters, Amino Acid and Fatty Acid Compositions in Rainbow trout (*Oncorhynchus mykiss*) (Researcher) 2020 - 2023.
9. TÜBİTAK 1002 - Evaluation of the Health Status of Mediterranean Mussels (*Mytilus galloprovincialis* Lamarck, 1819) in the Dardanelles Strait (Researcher) 2022 - 2023.

#### ▪ Ongoing Projects

1. TÜBİTAK 1002 - Changes in Growth, Smoltification and Immune Markers of Black Sea Trout (*Salmo labrax*) under Ocean Acidification Conditions (Researcher) 2023 - 2024.
2. BAP (A4) - Effect of Addition of Different Aromatic Plant Powders to Quail Feeds on Performance, Internal Organ Development, Intestinal Microbiota, Histology and Meat Quality (Researcher) 2023 - 2024.

### ▪ PUBLICATIONS

#### ▪ INTERNATIONAL ARTICLES AND PAPERS

#### ▪ Articles Published in International Indexed Journals (SCI-Expanded )

1. **Özel, O.T.**, Düzgüneş, Z.D., Ertürk Gürkan, S., Çakmak, E., 2024. Impact of oregano (*Origanum vulgare*) supplementation on antioxidant status, and related gene expression in Black Sea salmon, *Salmo labrax*. Journal of Hellenic Veterinary Medical Society. In press.
2. **Özel, O.T.**, Çimgil, R., Ertürk-Gürkan, S., Coskun, I., Türe M., Kutlu, İ. 2023. The effects of fennel (*Foeniculum vulgare*) essential oils on growth performance and digestive physiological traits in Black Sea



# OSMAN TOLGA ÖZEL, Ph.D

## Agriculture engineer

**TAGEM**  
R&D AND INNOVATION

salmon (*Salmo labrax*) juveniles. Journal of Agricultural Sciences. 29(1): 362-370. doi: 10.15832/ankutbd.981751.

3. **Özel, O.T.**, Çankırılıgil, E.C., Ertürk-Gürkan, S., Coskun, I., Türe M. 2022. Influence of laurel (*Laurus nobilis*) essential oil on gut function of Black Sea salmon (*Salmo labrax*) juveniles. Tropical Animal Health and Production. 54:390. doi: 10.1007/s11250-022-03396-0.
4. Çankırılıgil, E.C., Berik N., Cakmak, E., **Özel, O.T.**, Erbay-Alp, E. 2022. Dietary carotenoids influence growth, fillet pigmentation, and quality characteristics of Black Sea trout (*Salmo labrax* Pallas, 1814). Thalassas: An International Journal of Marine Sciences. doi.org/10.1007/s41208-022-00407-7.
5. **Özel, O.T.**, Cakmak, E., Ertürk-Gürkan, S., Coskun, I., Türe M. 2022. Evaluation of oregano (*origanum vulgare*) essential oil supplementation on growth performance, digestive enzymes, intestinal histomorphology and gut microbiota of Black Sea salmon, *salmo labrax*. Annals of Animal Science. 22(2): 763-772. doi: 10.2478/aoas-2021-0068.
6. Aydın, İ., Öztürk, R.Ç., Polat, H., Beken, A.T., Terzi, Y., Özel, O.T., Alp-Erbay, E., Düzgüneş, Z.D., Altuntaş, A., Küçük, E. 2021. Sperm characteristics of wild-caught and hatchery-reared turbot, *Scophthalmus maximus*, originated from the Black Sea. Journal of Applied Ichthyology. doi.org/10.1111/jai.14272.
7. **Özel, O.T.**, Cakmak, E., Oztürk, E. 2018. Effects of alternative oil sources on growth performance, lipid metabolism and mRNA level of some genes in juvenile Black Sea trout (*Salmo trutta labrax* Pallas, 1811). Turkish Journal of Fisheries and Aquatic Sciences. 18: 891-903. doi:10.4194/1303-2712-v18-7-07.
8. Akbulut, B., Cakmak, E., **Özel, O.T.**, Dülger, N. 2012. Effect of anaesthesia with clove oil and benzocaine on feed intake in siberian sturgeon (*Acipenser baerii* Brandt, 1869). Turkish Journal of Fisheries and Aquatic Sciences. 12: 487-493.

### Articles Published in International Indexed Journals (Emerging-SCI)

1. **Özel, O.T.**, Çakmak, E., Çankırılıgil, E.C., Düzgüneş, Z.D., Çimgil, R., Batır, E. 2023. Comparison of reproductive performance of Black Sea salmon broodstock (*Salmo labrax* PALLAS, 1814) reaching first sexual maturity at different ages. Ege Journal of Fisheries and Aquatic Sciences, 40(3), 166-173. doi: 10.12714/egefjas.40.3.02.
2. Çakmak, E., Firidin, Ş. Aksungur, N., Çavdar, Y., Kurtoğlu, İ.Z., Aksungur, M., **Özel, O.T.**, Cankırılıgil, E.C, Düzgünes, Z. D., Batır, E. 2022. Improving the reproductive yield of Black Sea salmon (*Salmo labrax* PALLAS, 1814) with a selective breeding program. Aquatic Sciences and Engineering. 37(3):161-168. doi.org/10.26650/ASE20221079847.
3. Kasapoglu, N., Cankırılıgil, E.C., Cakmak, E., **Özel, O.T.** 2020. Meristic and morphometric characteristics of the Black Sea salmon, *Salmo labrax* Pallas, 1814 culture line: an endemic species for Eastern Black Sea. Journal of fisheries. 8(3):935-939.
4. **Özel, O.T.**, Cakmak, E., Coskun, I., Cankırılıgil, E.C. 2018. Evaluation of growth performance and intestine villi morphology of Black Sea trout (*Salmo labrax* Pallas, 1814) fed with different protein levels containing diets. Ege Journal of Fisheries and Aquatic Sciences, 35(2), 125-130. doi: 10.12714/egefjas.2018.35.2.04
5. Cakmak, E., Cankırılıgil, E.C, **Özel, O.T.** 2018. The fifth culture generation of Black Sea trout (*Salmo trutta labrax*): culture characteristics, meat yield and proximate composition. Ege Journal of Fisheries and Aquatic Sciences, 35(1), 103-110. doi: 10.12714/egefjas.2018.35.1.16.



# OSMAN TOLGA ÖZEL, Ph.D

## Agriculture engineer

**TAGEM**  
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### Articles Published in International Indexed Journals (TRDizin)

1. Batır, E., Çakmak, E., **Özel, O.T.** 2023. Black Sea salmon (*Salmo labrax* PALLAS 1814) journey: From pond to plate. Journal of Limnology and Freshwater Fisheries Research. Baskıda
2. **Özel, O.T.**, Çakmak, E., Çankırılıgil, E.C., Cimgil, R., Düzgüneş, Z.D. 2023. Reproductive performance of hatchery origin Black Sea salmon broodstock (*Salmo labrax* PALLAS, 1814). Acta Aquatica Turcica. Baskıda
3. Zengin, M., Çakmak, E., **Özel, O.T.** 2023. Effects of environmental deterioration on Northeast Anatolian trout (*Salmo sp.*) populations. Aquatic Research, 6(2), 145-158. doi.org/10.3153/AR23015.
4. Uslu, A.A., **Özel, O.T.**, Örnekçi, G.N., Çelik, B., Çankırılıgil, E.C., Coşkun, İ., Uslu Şenel, G. 2023. Insect larval meal as a possible alternative to fish meal in Rainbow trout (*Oncorhynchus Mykiss*) diets: Black soldier fly (*Hermetia illucens*), mealworm (*Tenebrio Molitor*). Journal of Limnology and Freshwater Fisheries Research. Baskıda.
5. **Özel, O.T.**, Ertürk-Gürkan, S. 2022. Monitoring of enzymatic activity in the gastrointestinal tract of Black Sea salmon (*Salmo labrax* Pallas, 1814). Acta Aquatica Turcica. 18(2). 236-246. doi.org/10.22392/actaquatr.1020183.
6. **Özel, O.T.**, Ertürk-Gürkan, S. 2021. Time-dependent change of the digestive enzyme activity of Black Sea salmon (*Salmo labrax* Pallas, 1814) fed at suboptimal temperature. Marine Science and Technology Bulletin. 10(3):244-250. doi:10.33714/masteb.932281.
7. **Özel, O.T.**, Coskun, I., Cakmak, E., Cimgil, R. 2019. Histomorphological Study on The Pyloric Caeca and Intestine of Black Sea Trout (*Salmo labrax* Pallas 1814). Turkish Journal of Agriculture - Food Science and Technology. 7(12): 2159-2164. doi.org/10.24925/turjaf.v7i12.2159-2164.2918.
8. **Özel, O.T.**, Coskun, I., Cakmak, E. 2018. Intestine Villi Morphology of Black Sea Trout (*Salmo labrax* Pallas, 1814). Journal of Limnology and Freshwater Fisheries Research. 4(1):42-46. doi:10.17216/LimnoFish.365434.

### Articles Published in Other International Indexed Journals

1. Çakmak, E., Cankırılıgil, E.C, Düzgünes, Z. D., **Özel, O.T.**, Eroglu, O., Firidin, S. 2019. Triploid Black Sea Trout (*Salmo labrax* Pallas, 1814) Induced by Heat Shock and Evaluation of Triploidy with Different Techniques. Genetics of Aquatic Organisms 3(1), 01-07. doi.org/10.4194/2459-1831-v3\_1\_01.
2. Çakmak, E., **Özel, O.T.**, Batır, E. 2022. The biggest Black Sea salmon (*Salmo labrax* PALLAS, 1814) in Turkey. Mediterranean Fisheries and Aquaculture research. 5(1):21-26.
3. Sarıcıçek, B.Z., **Özel, O.T.** 2010. Determination of Rumen Microbial population Changed Depend on Feeding in the Ruminants. Trends in Animal & Veterinary Sciences Journal. 1(1):36-41.

### ▪ International Papers, Seminars, etc.

1. Çakmak, E., **Özel, O.T.**, Aksungur, N., Aksungur, M., Ergün, H., Düzgünes, Z.D., Firidin, Ş., Özdemir, M.D. 2022. Reproductive performance of Black Sea salmon (*Salmo labrax* Pallas, 1814) fed with diets containing different lipid levels. International Symposium on Fisheries and Aquatic Sciences. 25-27 October 2022. Trabzon (Oral).
2. **Özel, O.T.** 2022. The zootechnical performance of the seventh generation Black Sea salmon in recirculating aquaculture system. VI. International Congress on Domestic Animal Breeding Genetics and Husbandry. 03-05 October 2022. Samsun (Oral).



# OSMAN TOLGA ÖZEL, Ph.D

## Agriculture engineer

**TAGEM**  
R&D AND INNOVATION

3. **Özel, O.T.**, Cakmak, E., Çimagil, R., Eroldoğan, O.T., Yılmaz, H.A., Evliyaoğlu, E. 2021. Influence of herbal essential oils supplementation on nutrient digestibility of Black Sea salmon, *Salmo Labrax* Pallas, 1814. 6<sup>th</sup> International Congress on Veterinary and Animal Sciences. 2-4 September 2021 (Oral).
4. Uslu, A.A., **Özel, O.T.**, Çelik, B., Çankırılıgil, E.C., Coşkun, İ. 2021. Fish meal replacement by mealworm (*Tenebrio molitor*) larvae meal in diets for Rainbow trout, *Oncorhynchus mykiss*. International Symposium on Fisheries and Aquatic Sciences. 7-8 September 2021, İzmir (Oral).
5. Uslu, A.A., **Özel, O.T.**, Örnekçi, G.N., Çankırılıgil, E.C., Coşkun, İ., Gülşad Uslu Şenel. 2021. Black soldier fly (*Hermetia illucens*) prepupae meal as a possible alternative to fish meal in Rainbow trout (*Oncorhynchus mykiss*) diets. 2nd International Congress of the Trukish Journal of Agriculture – Food Science and Technology. 25-29 October 2021, Niğde (Oral).
6. **Özel, O.T.**, Coskun, I., Cakmak, E. 2019. The morphologic examination of midgut section of Black Sea trout (*Salmo labrax* Pallas 1814). 11. International Animal Science Conference. 20-22 October 2019, Nevşehir (Oral).
7. Çakmak, E., **Özel, O.T.**, Perker, N., Altuntas, A., Aksungur, N., Aksungur, M., Ergün, H., Düzgünes, Z.D., Özdemir, M.D. 2019. The effects of diets with different protein levels on Black Sea trout (*Salmo labrax*, Pallas 1814) reproductive performance. 11. International Animal Science Conference. 20-22 October 2019, Nevşehir (Oral).
8. **Özel, O.T.**, Ertürk-Gürkan, S. 2019. Temporal variation of some digestive enzyme activities of Black Sea trout (*Salmo labrax*). International Erciyes Agriculture, Animal and Food Sciences Conference. 24-27 April 2019, Kayseri (Oral).
9. **Ozel, O.T.**, Türe M., Cakmak E., Cimogil R., Çankırılıgil E. C., Kutlu I. 2018. Effects of dietary daphne (*Laurus nobilis* L.) and fennel (*Foeniculum vulgare* L.) oils on some intestinal bacteria of Black Sea trout (*Salmo labrax* Pallas, 1814). IV. International Agriculture Congress. 05-08 July 2018, Nevşehir (Oral).
10. **Ozel, O.T.**, Cakmak, E., Coskun, I. 2017. Intestine villi morphology of Black Sea trout (*Salmo trutta labrax* Pallas, 1811): In seawater and after freshwater transfer. 1<sup>th</sup> International Symposium on Limnology and Freshwater Fisheries. 04-06 October 2017, Isparta (Oral).
11. Cankırılıgil, E.C., Cakmak, E., **Ozel, O.T.**, Kasapoglu, N. 2017. Black Sea trout (*Salmo trutta labrax* PALLAS, 1811) culture in Turkey and morphometric characteristics of fifth culture generation. International Symposium on EuroAsian Biodiversity 05-08 July 2017, Belarus, Ukrayna (Oral).
12. **Ozel, O.T.**, Coskun, I. 2017. Intestine villi morphology of Black Sea trout (*Salmo trutta labrax* Pallas, 1811): Different Weight of Similar Ages. 1<sup>th</sup> International Symposium on Limnology and Freshwater Fisheries. 04-06 October 2017, Isparta (Poster).
13. **Ozel, O.T.**, Coskun, I., Cakmak, E. 2017. Intestine villi morphology of Black Sea trout (*Salmo trutta labrax* Pallas, 1811): Age. 1<sup>th</sup> International Symposium on Limnology and Freshwater Fisheries. 04-06 October 2017, Isparta (Poster).
14. Akpinar, Z., **Ozel, O.T.**, Hasimoglu, A. 2016. The egg production of European seabass (*Dicentrarchus labrax*, L., 1758) on controlled conditios in Blacksea. International symposium on Fisheries and Aquatic Sciences, 04-06 November 2016, Antalya (Poster).
15. Akpinar, Z., Akpinar, I.O., **Ozel, O.T.**, Hasimoglu, A. 2016. A study on natural reproduction behavior of European seabass (*Dicentrarchus labrax*, lin. 1758) in the black sea. International symposium on Fisheries and Aquatic Sciences, 04-06 November 2016, Antalya (Poster).



# OSMAN TOLGA ÖZEL, Ph.D

## Agriculture engineer

**TAGEM**  
R&D AND INNOVATION

- **NATIONAL ARTICLES AND PAPERS**

- **Articles Published in National Journals**

1. **Özel, O.T.**, Öztürk, E., Garipoğlu, A.V. 2017. Balıklarda Lipid Metabolizması. Yunus Araştırma Bülteni, 17 (3): 303-317. doi: 10.17693/yunusae.vi.271321.
2. Akbulut, B., Aksungur, N., **Özel O.T.** 2011. Mersin Balıklarının Besin İhtiyaçları ve Beslenmeleri. Yunus Araştırma Bülteni, 11 (4).
3. **Özel, O.T.**, Sarıcıçek, B.Z. 2009. Ruminantlarda Rumen Mikroorganizmalarının Varlığı ve Önemi. Türk Bilim Araştırma Vakfı. Cilt:2, Sayı:3, Sayfa: 227-285.

- **International Papers, Seminars, etc.**

1. Çakmak, E., **Özel, O.T.**, Akpinar, Z., Ergün, H., Batır, E. 2023. Karadeniz somonu (*Salmo Labrax*) yetişiriciliğinde balık yağına alternatif olarak soya lesiaşini. 7. Ulusal Alabalık Sempozyumu. 8-9 Aralık 2023. Ankara (Oral).
2. Çakmak, E., **Özel, O.T.**, Akpinar, Z., Ergün, H. 2023. Farklı yağ seviyelerinin ön besleme dönemindeki Karadeniz somonu (*Salmo Labrax*)'nın kültür performansı üzerine etkisi. 7. Ulusal Alabalık Sempozyumu. 8-9 Aralık 2023. Ankara (Oral).
3. **Özel, O.T.**, Çakmak, E., Alp Erbay, E., Dağtekin, B.B., Yeşilsu, A.F. 2023. Fitojenik katkıların balık yemisinin depolama stabilitesi üzerine etkisi. 6. Balık Besleme ve Yem Teknolojisi Çalıştayı. 27-28 Eylül 2023. Antalya (Oral).
4. **Özel, O.T.**, Coşkun, İ., Çakmak, E. 2022. Açılığın Karadeniz somonu (*Salmo Labrax* PALLAS, 1814)'nın bağırsak histomorfolojisine etkisi. 6. Ulusal Alabalık Sempozyumu. 15-15 Eylül 2022. Isparta (Oral).
5. **Özel, O.T.**, Çakmak, E., Çankırılıgil, E.C., Düzgüneş, Z.D., Çimgil, R. 2022. Farklı yaşlarda cinsel olgunluğa ulaşan Karadeniz somonu anaçlarının (*Salmo labrax* PALLAS, 1814) üreme performansı. 6. Ulusal Alabalık Sempozyumu. 15-15 Eylül 2022. Isparta (Oral).
6. **Özel, O.T.**, Çakmak, E., Çankırılıgil, E.C., Çimgil, R., Düzgüneş, Z.D. 2022. Kuluçkahane kökenli F 5 ve F 6 nesil Karadeniz somonu anaçlarının (*Salmo labrax* PALLAS, 1814) üreme performansı ilişkisi. 6. Ulusal Alabalık Sempozyumu. 15-15 Eylül 2022. Isparta (Oral).
7. Çakmak, E., **Özel, O.T.**, Akpinar, Z., Ergün, H., Aksungur, N., Aksungur, M., Altuntaş, A., Batır, E. 2022. Karadeniz somonu (*Salmo labrax* PALLAS 1814)'nın büyümeye performansı üzerine farklı yağ düzeylerinin etkisi. 6. Ulusal Alabalık Sempozyumu. 15-15 Eylül 2022. Isparta (Oral).
8. Çakmak, E., **Özel, O.T.**, Akpinar, Z., Ergün, H., Aksungur, N., Aksungur, M., Altuntaş, A., Gülen, S. 2022. Diyetsel soya yağı ikamesinin Karadeniz somonu (*Salmo labrax* PALLAS 1814) büyümeye performansı üzerine etkisi. 6. Ulusal Alabalık Sempozyumu. 15-15 Eylül 2022. Isparta (Oral).
9. Batır, E., Çakmak, E., **Özel, O.T.** 2022. Sofrada Karadeniz somonu (*Salmo Labrax* PALLAS, 1814). 6. Ulusal Alabalık Sempozyumu. 15-15 Eylül 2022. Isparta (Oral).
10. Zengin, M., Çakmak, E., **Özel, O.T.**, Dağtekin, M. 2022. Çevresel bozulmaların Kuzeydoğu Anadolu alabalık (*Salmo labrax*) populasyonları üzerindeki etkileri. 6. Ulusal Alabalık Sempozyumu. 15-15 Eylül 2022. Isparta (Oral).
11. Özdemir, A., **Özel, O.T.** 2011. Ülkemizde balık besleme araştırmaları. Balık Besleme ve Yem Teknolojisi Çalıştayı. 30 Haziran-01 Temmuz 2011. Isparta (Oral).



# OSMAN TOLGA ÖZEL, Ph.D

## Agriculture engineer

**TAGEM**  
R&D AND INNOVATION

12. Polat, H., Aydın, İ., Küçük, E., **Özel, O.T.**, Alp, E. 2014. Kalkan balığında (*Psetta maxima*) fotoperiyod yöntemiyle erken dönemde elde edilen spermin özellikleri. 5. Doğu Anadolu Bölgesi Su Ürünleri Sempozyum, 31 Mayıs -02 Haziran 2014, Elazığ (Poster).
13. Akpinar, Z., Özdemir, A., Aksungur, N., Dülger, N., **Özel, O.T.**, Akbulut, B., Ergün, H., Çakmak, E., Melek, H. 2013. Gözlenmiş sibiry mersini (*Acipenser baerii* Brandt, 1869) yumurtalarının kapalı devre sistemde kuluçka ve yavru üretim başarısı. Balıkçılık ve Akvatik Bilimler Sempozyumu, 30 Mayıs - 1 Haziran 2013, Erzurum (Poster).
14. **Özel, O.T.**, 2012. Su ürünleri yetişiriciliğinde humik maddelerin kullanım olanakları. (Uluslararası katımlı) 1. Ulusal Humik Madde Kongresi. 06-09 Haziran 2012. Sakarya. SAÜ Fen Edebiyat Dergisi, 519-527.
15. **Özel, O.T.**, Sarıcıçek, B.Z. 2011. Ruminant beslemede bor mineralinin önemi. 7. Ulusal Zootekni Bilim Kongresi. 14-16 Eylül 2011. Adana, Bildiriler kitabı (Poster).
16. **Özel, O.T.**, Sarıcıçek, B.Z. 2011. Rumen anaerobik mantarları. 6. Ulusal Hayvan Besleme Kongresi (uluslararası katımlı). 29 Haziran-02 Temmuz 2011. Samsun, Bildiriler kitabı 515-519 (Poster).
17. **Özel, O.T.**, Sarıcıçek, B.Z. 2008. Rumen protozoaları. 4. Ulusal Zootekni Öğrenci Kongresi. 15-17 Mayıs 2008. Samsun, 312-315 (Poster).
18. Sarıcıçek, B.Z., **Özel, O.T.** 2004. Farklı yem hammadelerinin rumen mikroorganizma populasyonu üzerine etkisi. 4. Ulusal Zootekni Bilim Kongresi. 01-03 Eylül 2004. Isparta, 230-235.

### ■ **OTHER PUBLICATIONS**

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

Master Thesis : Determination of rumen microbial population changed depend on feeding in the ruminants

Ph.D Thesis : Effect of alternative oil sources on growth performance, lipid metabolisms and mRNA expression of some genes in Black Sea trout (*Salmo trutta labrax* Pallas, 1811) juvenile

Book section : Düzgüneş, Z.D., Çankırılıgil, E.C., Beken, A.T., **Özel, O.T.**, Cebeci, A. 2022. Akvatik biyoteknoloji. Usta, M. (Eds.). Her Yönüyle Biyoteknoloji. No.:3991. ISBN: 978-625-417-565-7, 366 sayfa. Ankara, Türkiye.

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

#### **Editorial**

Turkish Journal of Fisheries and Aquatic Sciences – Technical Editor (2013-2015)

#### **Trainings**

<u>Training title</u>	<u>Data</u>	<u>Unit</u>

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Statistics I	2011	TAGEM (İzmir)
EU Grant Funds and Project Cycle Management	2013	TCD Company (Trabzon)
R Statistical Software Program	2014	DOKA (Trabzon)
News Feeds and Feeding Technologies in Aquaculture	2021	IAMZ-CIHEAM (Spain)

### **Administration**

Recirculated aquaculture systems responsible (2012-2013)

Marine cages responsible (2012-2022)

Internship responsible (2015-2018)

### **Social Networks**

Researchgate <https://www.researchgate.net/profile/Osman-Oezel>

Google Academic <https://scholar.google.com/citations?user=FrC9B4AAAAJ&hl=tr>

Orcid <https://orcid.org/0000-0002-5414-6975>