



TAGEM
R&D AND INNOVATION

WESTERN MEDITERRANEAN AGRICULTURAL
RESEARCH INSTITUTE/ ANTALYA

DEMET YILDIZ TURGUT, PhD

Food Engineer

EDUCATION

- Assoc. prof**
- PhD** 2013-2019 Akdeniz Üniversitesi
Gıda Mühendisliği
- MSc** 2009-2012 Süleyman Demirel Üniversitesi
Gıda Mühendisliği
- Bachelor's Degree** 1996-2000 Selçuk Üniversitesi
Gıda Mühendisliği
- LANGUAGE** English YDS 56

CAREER

- 2008-devam Araştırmacı, BATEM, Batı Akdeniz Tarımsal Araştırma Enstitüsü- ANTALYA
- 2007-2008 Mühendis, Bozkır İlçe Tarım ve Orman Müdürlüğü - KONYA
- 2001-2006 Mühendis, Özel Sektör- ANTALYA

ABOUT ME


She was born in 1979 in Elmalı. In 2000, She graduated from Selçuk University, Department of Food Engineering. She continued her professional career in the private sector in the field of fruit juice and dairy products until 2007.

Since 2008, she has carried out projects on food science, fruit and vegetable drying, jam, and marmalade technology at the Batı Akdeniz Agricultural Research Institute.

CONTACT

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DEMET YILDIZ TURGUT, PhD

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▪ **PROJECTS**

▪ **Projects Conducted**

1. The effects of different debittering methods on flavonoid content in traditional bitter orange peel jam (2013-2015, TAGEM, Project leader).
2. Processing of kumquat (*Fortunella margarita* Swing) fruit into different products and determination of some quality characteristics of the products (2017-2018, TAGEM, Project leader).
3. The investigation of possibilities for using steviol glikozid rebaudioside A in the production of bitter orange marmalade with low sugar content (2019-2021, TAGEM, Project leader).
4. Production of dried pomegranate aril and the effects of drying methods packaging technique and storage time on its quality parameters (2010-2013, TAGEM, Researcher).
5. The effects of some postharvest applications on cold storage of washington navel and Valencia Late oranges produced in Antalya (2011-2014, TAGEM, Researcher).
6. Researching the effects of some essential oils and antioxidant compounds on product quality and shelf stability of dehydrated tomatoes (2014-2016, TAGEM, Researcher).
7. Determination of chemical composition of *Erwinia amylovora* resistant breeding with hybridization of pear genotypes (2016-2018, TAGEM, Researcher).
8. The effects of different storage conditions and storage period on the quality parameters of some medicinal and aromatic plants oils. (2015-2018, TAGEM, Researcher).
9. Determination of in vitro release behavior of encapsulated *Origanum minutiflorum* and *Citrus sinensis* essential oil and isolated carvacrol (2017-2021, TAGEM, Researcher).
10. Determination of the performance of some pecan (*Carya illinoensis*) rootstock and varieties in Antalya conditions (2018-2021, TAGEM, Researcher).
11. Determination of biological, physical and chemical characteristics of strawberry tree (*Arbutus unedo* L.) and greek strawberry tree (*Arbutus andrachne* L.) distributed in natural flora of Antalya (2017-2021/ TAGEM, Researcher).
12. Determination of high quality dry leaves and microencapsulated stevia extract production conditions from stevia plant (*Stevia Rebaudiana* B.) and determination of their suitability for the formulations of some low energy products (2018-2020/ TAGEM, Researcher).



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▪ Ongoing Projects

1. Effects of harvesting times and extraction techniques on the essential oil yield and compositions of some citrus species and cultivars (2021-2023, TAGEM, Researcher)
2. Crops for change; Tackling the global warming effects in crops (2021-2024, ERA-NET Cofund FOSC, Researcher).
3. Investigation of the effects of different maceration, deacidification and evaporation techniques on quality and toxic compounds in pekmez processing (2022- 2023, TAGEM, Researcher).



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▪ **PUBLICATIONS**

▪ **INTERNATIONAL ARTICLES AND PAPERS**

▪ **Articles Published in International Journals**

1. YILDIZ TURGUT D., Seydim, A.C., 2013. Determination of phenolic composition and antioxidant activities of some pomegranate (*Punica granatum*, L.) cultivars and genotypes grown in the Mediterranean Region of Turkey. *Akademik Gıda*, 11 (2): 51-59.
2. YILDIZ TURGUT, D., Seydim, A.C., 2014. Organic acid and sugar composition of some pomegranate (*Punica granatum* L.) cultivars and genotypes grown in the Mediterranean Region of Turkey. *Akademik Ziraat Dergisi*, 2 (1): 35-42.
3. YILDIZ TURGUT, D., Gölükcü, M., Tokgöz, H., 2015. Some physical and chemical properties of kumquat (*Fortunella margarita* Swing.) fruit and jam. *Derim*, 32 (1): 71-80.
4. Tokgöz, H., Gölükcü, M., Toker, R., YILDIZ TURGUT, D., 2015. Effects of grafting and harvesting time on some physical and chemical parameters of watermelon (*Citrullus lanatus*). *Gıda*, 40 (5): 263-270.
5. Gölükcü, M., Toker, R., Tokgöz, H., YILDIZ TURGUT, D., 2015. Bitter orange (*Citrus aurantium* L.) peel essential oil compositions obtained with different methods. *Derim*, 32 (2): 161-170.
6. Toker, R., Gölükcü, M., Tokgöz, H., Özdemir, M., YILDIZ TURGUT, D., 2015. Oil content and fatty acid composition of some pecan cultivars. *Akademik Gıda*, 13 (4): 299-303.
7. Gölükcü, M., Toker, R., Tokgöz, H., YILDIZ TURGUT, D., 2015. Effects of harvesting time on oil content and fatty acid composition of bitter orange (*Citrus aurantium* L.) seed. *Bahçe*, 44(2): 65-70.
8. YILDIZ TURGUT, D., Tokgöz, H., Gölükcü, M., Toker, R., Bayır Yeğın, A., 2016. The effects of different debittering methods on total phenolic matter and flavonoid content in traditional bitter orange peel jam. *Gıda*, 41 (3): 155-162.
9. Gölükcü, M., Tokgöz, H., YILDIZ TURGUT, D., 2018. Effect of distillation time on essential oil compositions of bay leaf (*Laurus nobilis* L.) *Food and Health*, 4(1): 37-42.
10. YILDIZ TURGUT, D., Çınar, O., Seçmen, T., 2019. Determination of functional properties of kumquat (*Fortunella margarita* Swing.) powders obtained by different methods. *Gıda*, 44 (4): 605-617.
11. YILDIZ TURGUT, D., Bayır Yegin, A. 2019. Effect of different drying treatments on the physicochemical properties of kumquat powders. *Harran Journal of Agricultural and Food Science*, 23(4): 477-488.



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12. YILDIZ TURGUT, D., Topuz, A. 2019. Bioactive compounds and biological activities of kumquat (*Fortunella* spp.) Turkish Journal of Agriculture-Food Science and Technology, 7(10): 1581-1588.
13. YILDIZ TURGUT, D., Topuz, A. 2020. Effect of storage time on some quality characteristics of dried kumquat slices by different drying methods. Yüzüncü Yıl Üniversitesi Tarım Bilimleri Dergisi, 30(1), 44-56.
14. TURGUT, D. Y., Özdemir, M., Seçmen, T., ÇINAR, O. 2020. Antioxidant properties of some pecan [*Carya illinoensis* (Wangenh.) K. Koch] cultivars. Anadolu Journal of Agricultural Sciences, 35(3): 526-533.
15. Gölükçü, M., Tokgöz, H., TURGUT, D. Y. 2020. Harvest times effect on some quality parameters of bergamot (*Citrus bergamia* Risso et Poiteau) peel essential oil. Bahçe, 49(2): 67-73.
16. TURGUT, D. Y., Tokgöz, H., Gölükçü, M., Yeğın, A. B. 2021. Physico-chemical and antioxidant properties of traditional citrus peel jams some quality characteristics of citrus peel jams. Gıda, 46(1): 216-228.
17. TURGUT, D. Y., Tokgöz, H., Gölükçü, M. 2021. Physicochemical and phytochemical properties kumquat jams produced with whole fruits and small pieces of fruits. Akademik Gıda, 19(3): 267-274.
18. Guler, A., TURGUT, D. Y., 2021. Fatty acids, phenolic compounds and antioxidant capacity of the seeds from nine grape cultivars (*Vitis vinifera* L.). Ciência e Técnica Vitivinícola, 36(2): 116-125.

▪ International Papers, Seminars, etc.

1. Tokgöz, H., Gölükçü, M., Toker, R., YILDIZ TURGUT, D., 2014. Effects of extraction techniques on compositions of bergamot (*Citrus bergamia*) peel essential oil. International Symposium on Essential Oils. 7-10 September 2014. İstanbul.
2. Gölükçü, M., Toker, R., Tokgöz, H., YILDIZ TURGUT, D., 2014. Determination of difference in bitter orange (*Citrus aurantium*) peel essential oil compositions obtained with cold press and hydro-distillation. International Symposium on Essential Oils. 7-10 September 2014. İstanbul.
3. Toker, R., YILDIZ TURGUT, D., Gölükçü, M., H., Tokgöz, H., 2014. Evaluation of changes in lemon (*Citrus limon*) essential oil compositions obtained by different extraction techniques. International Symposium on Essential Oils. 7-10 September 2014. İstanbul.
4. Toker, R., YILDIZ TURGUT, D., Gölükçü, M., H., Tokgöz, H., 2015. Changing phenolic compositions of traditional grapefruit (*Citrus paradisi*) and bergamot (*Citrus bergamia*) peel jams at production steps. The 3rd International Symposium on "Traditional Foods from Adriatic to Caucasus". 01-04 October 2015 Sarajevo / Bosnia and Herzegovina.



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5. YILDIZ TURGUT, D., Çınar, O., Yüksel, K., Tanriseven, M., Seçmen, T. and Tanır, A. 2018. Determination of phytochemical properties of kumquat (*Fortunella margarita* Swing.) peel and seed extracts. 4th International Symposium of Medicinal and Aromatic Plants, 2-4 October 2018, İzmir, Turkey, p. 86.
6. YILDIZ TURGUT, D., Seçmen, T. and Tanır, A. 2018. A comparative study the antioxidant properties of different citrus juices. International Agricultural, Biological and Life Science Conference, 2-5 September 2018, Edirne, Turkey, pp. 179-185.
7. Yıldırım, I., YILDIZ TURGUT, D., Bayır Yeğın, A., Yüksel, K. 2018. Drying dipping in some essential oil emulsions on quality and nutrients of dehydrated tomatoes. 30. International Horticultural Congress. 12-16 August, İstanbul.
8. Dal, B., YILDIZ TURGUT, D. 2018. Effect of some chemical treatments on storability and fruit quality of Washington Navel under cold storage. 30. International Horticultural Congress. 12-16 August, İstanbul.
9. YILDIZ TURGUT, D., Çınar, O., 2019. Total phenolic, flavonoid and antioxidant activity of different citrus fruits. International Erciyes Agriculture, Animal and Food Sciences Conference. 24-27 April, Kayseri, TURKEY.
10. YILDIZ TURGUT, D., Yüksel, K., Çınar, O. 2019. Effect of different drying methods on the essential oil content and composition of kumquat (*Fortunella margarita* Swingle). 1st International / 11th National Food Engineering Congress. 7-9 November, Antalya-Turkey.
11. Konak, R., YILDIZ TURGUT, D., Çiçek, E., Tan, N. 2019. Fatty acid composition of fig seed oil obtained by different methods. 1st International / 11th National Food Engineering Congress. 7-9 November, Antalya-Turkey.



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▪ NATIONAL ARTICLES AND PAPERS

▪ Articles Published in National Journals

▪ National Papers, Seminars, etc.

1. YILDIZ TURGUT, D., Ayas, F., Ve Çınar, O.,2014. Jam processing of tomato by traditional method and some chemical properties of the product. 4. Traditional Foods Symposium. Çukurova University, 17-19 April 2014, Adana.
2. YILDIZ TURGUT, D., Gölükcü, M., Toker, R., ve Tokgöz, H., 2014. Essential oil composition of Bergamot (*Citrus bergamia*) peel essential oil. II. Medicinal and Aromatic plants symposium, 23-25 September 2014, Yalova.
3. Tokgöz, H., Gölükcü, M., Toker, R., YILDIZ TURGUT, D., 2014. Effects of extraction techniques on essential oil composition of of blood orange (*Citrus sinensis* L. osbeck) peel. II. Medicinal and Aromatic plants symposium, 23-25 September 2014, Yalova.
4. YILDIZ TURGUT, D., Toker, R., Gölükcü, M., Tokgöz, H., 2015. Effects of adding bergamot peel essential oil on sensorial quality and fatty acid composition of olive oil. YABİTED II. Bitkisel Yağ Kongresi, 7-9 May 2015, p:65. Tekirdağ.
5. Toker, R., Gölükcü, M., Tokgöz, H., Özdemir, M., YILDIZ TURGUT, D., 2015. Oil content and fatty acid composition of some pecan cultivars. YABİTED II. Vegetable Oil Congress, 07-09 May 2015. Tekirdağ.
6. Gölükcü, M., Toker, R., Tokgöz, H., YILDIZ TURGUT, D., 2015. Oil content and fatty acid composition of bitter orange (*Citrus aurantium*) seeds. YABİTED II. Vegetable Oil Congress, 07-09 May 2015. Tekirdağ.
7. YILDIZ TURGUT, D., Bayır, Yeğın, A., Yüksel, K., Er, E.E. 2015.The strawberry (*Arbutus unedo* L.) fruits and marmalade of some chemical and physical properties. 9. Food Engineering Congress. 12-14 November 2015. Selçuk-İzmir.
8. YILDIZ TURGUT, D., Bayır Yeğın, A., Gölükcü, M., Tokgöz, H., 2016. Antioxidant properties of flavedo extracts obtained from some citrus fruits. III. Medicinal and Aromatic plants symposium, 4-6 October 2016, Antalya
9. YILDIZ TURGUT, D., Bayır Yeğın, A., Gölükcü, M., Tokgöz, H., 2017. Some functional properties of traditional citrus peel jams. 10. Food Engineering Congress, 9-11 November 2017, Antalya.



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▪ **OTHER PUBLICATIONS**

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

1. Determination of Phenolic Composition and Antioxidant Activities of Some Pomegranate (*Punica granatum*, L.) Cultivars and Genotypes Grown in the Mediterranean Region of Turkey (Master thesis).
2. Some Quality Properties of Kumquat (*Fortunella margarita* Swing.) Dried With Different Drying Methods And Their Changes During Storage (Ph.D. Thesis).
3. TURGUT, D., 2008, Modified atmosphere packaging of fruits and vegetables, Tarımın Sesi Dergisi, Sayı 9.
4. YILDIZ TURGUT, D., 2010, Mis Kokulu Turunç Reçeli, Antalya Kültür ve Turizm Dergisi, Sayı 2, 122-123 s.
5. YILDIZ TURGUT, D., Dal, B., Ayas, F., 2014. The effect of different harvest times on some phytochemical properties of Valencia Late orange. Hasad Bitkisel Üretim . 29 (346): 44-48.
6. YILDIZ TURGUT, D.,2014. Katkı Maddesiz, Ev Yapımı Tarifleriyle; Akdeniz Yöresinin Ünlü Reçelleri. Agroskop. 26: 56-57.
7. YILDIZ TURGUT, D., Gölükcü, M., Tokgöz, H., 2014. Pomegranate and possibilities as food products. Türkiye Tohumcular Birliği Dergisi. 3(9): 47-49.



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▪ Membership, Training, Course, Meeting, Congress, Symposium and Other Activities

1. 4. Traditional Foods Symposium. Çukurova University, 17-19 April 2014, Adana.
2. Yabited II. Vegetable Oil Congress, 07-09 May 2015. Tekirdağ.
3. TUBITAK Research Project Preparation Training – Belconti hotel- Belek-Antalya- February 2014.
4. 9. Food Engineering Congress- November 2015.
5. III. Medicinal and Aromatic plants symposium, 4-6 October 2016, Antalya
6. Pomegranate workshop, 24 November 2014, Antalya.
7. V. International Food R&D Project Market, 25 May 2017, İzmir
8. 10. Food Engineering Congress, 9-11 November 2017, Antalya
9. 4th International Symposium of Medicinal and Aromatic Plants, 2-4 October 2018, İzmir
10. 1st International / 11th National Food Engineering Congress. 7-9 November, Antalya.
11. Antalya Chamber of Commerce and Industry (ATSO) citrus and bergamot peel jam geographical indication, inspection commission membership.
12. Süleyman Demirel University, Department of Food Engineering, advisory board member