



**TAGEM**  
R&D AND INNOVATION

TRANSITIONAL ZONE AGRICULTURAL  
RESEARCH INSTITUTE/ ESKISEHIR

## OGUZ ONDER, PhD Agricultural Engineer

### EDUCATION

- **Assoc. prof**
- **PhD.** Selcuk University  
2008-2015 Agriculture Faculty
- **MSc.** Eskisehir Osmangazi University  
2005-2007 Agriculture Faculty
- **Bachelor's Degree** Mustafa Kemal University  
1993-1999 Agriculture Faculty

**LANGUAGE** English KPDS 57 / UDS 58

### CAREER

- 2002- Agricultural Engineer, Transitional Zone  
Agricultural Research Institute - Eskisehir
- 1994-2002 Agricultural Engineer, Directorate of  
Provincial Agriculture-Hatay
- 1992-1994 Agricultural Technician, Directorate of  
Provincial Agriculture-Tercan-Erzincan

### ABOUT ME

I was born in 1974 in Frankfurt (Germany). In 1999, he graduated from Mustafa Kemal University, Faculty of Agriculture.

I worked in the "A research on the effects of in-season nitrogen management systems on bread wheat yield and quality in Eskisehir conditions" and "Determination of drought tolerance parameters on wheat" projects and currently carrying out "Determination of morphological and physiological traits in Transitional Zone Agricultural Research Institute winter bread wheat breeding materials" project.

### CONTACT

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### ■ **PROJECTS**

#### ■ **Projects Conducted**

1. Determination of drought tolerance parameters on wheat, TAGEM/TA/03/03/01/006,2005.
2. Research of Bed Planting Method on Irrigated Wheat in Transitional Zone. TAGEM/TA/02/03/01/09, 2005.
3. Determination of Relationship Between Different Nitrogen Doses, Sowing Time, Seed Rate with Quality Criteria on Bread Wheat. TAGEM/TA/02/03/01/15, 2007.
4. Study of Opium Poppy Cultivation Techniques. TAGEM/TA /01/02/03/001,2007.
5. National Sunn pest (*Eurygaster integriceps*) Project. DPT,200K120160, 2010.
6. A Research on the Effects of In-Season Nitrogen Management Systems on Bread Wheat Yield and Quality in Eskisehir Conditions. TUBITAK - KAMAG (1007), Project No: 106G111, 2011.
7. Determination of Physiological Parameters usable in Bread Wheat Breeding. TAGEM/TA/08/07/01/012, 2013.
8. Determination of Effects of Different Nitrogen Doses on Carbohydrate Translocation of Some Bread Wheat Varieties. (PhD. Project) TAGEM/TBAD/12/A12/P01/07-001, 2015.
9. Calibration of Nitrogen Fertilization on Wheat in Eskisehir Conditions. TAGEM/TBAD/12/A12/P01/07-002, 2011-2014.
10. Effect of Deep Nitrogen Application on Grain Protein Content in Bread Wheat. TAGEM/TBAD/13/A12/P01/007, 2013-2015
11. Determination of phenotypic variation and genotype x environment interaction in terms of agronomic, quality and disease resistance in a newly developed bread wheat mapping population. TUBITAK (1001), Project No:122013
12. Calibration of Nitrogen Fertilization on Wheat in Eskisehir Conditions. TAGEM/TBAD/12/A12/P01/07-002, (2011-2015)
13. Determination of wheat boron nutritional status Ankara and Eskisehir regions and effect of different boron application on wheat yield and quality. National Boron Res. Inst. (20123.Ç0413) 2013-2016
14. HarvestPlus-Zinc Fertilizer Project, (4nd Phase) (2018-2021) Prof.Dr. İsmail Çakmak (Sabancı Univ.)
15. Calibration of Nitrogen Fertilization on Wheat in Eskisehir Conditions. TAGEM/TBAD/16/A12/P01/004, (2016-2021)



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### ▪ Ongoing Projects

1. Determination of Morphological and Physiological Traits in Transitional Zone Agricultural Research Institute Winter Bread Wheat Breeding Materials. TAGEM/TBAD/15/A12/P01/004.
2. Solutions for Improving Agroecosystem and Crop Efficiency for Water and Nutrient Use. (2017-2022) Horizon 2020. Leader; Prof. Dr. Ismail Cakmak (Sabanci Univ.)
3. Research of Sugar Beet Production and Water Save Opportunities by Mobile Drip Irrigation. TUBITAK 1001. Leader; Assoc. Prof. Dr. Ismail Tas.

### ▪ PUBLICATIONS

#### ▪ INTERNATIONAL ARTICLES AND PAPERS

#### ▪ Articles Published in International Journals

1. Savaşlı, E., Reşit Brohi, A., Karaman, M.R., Gökmen, S., Dayıoğlu, R., Önder O. 2005. Effect of Nitrogen Fertilizers (2) On Quality Characteristics Of Wheat Crop Revue de Cytologie et Biologie vegetales-Le Botaniste 2005-28 (s. i.): 161 8211; 169 Amiens-France, 29 August- 2 September 2005.
2. M. Kalayci, C. Cekic, E. Savasli, O. Onder, R. Dayıoğlu, Y. Kaya, A. Taner, A. Yazici, I. Cakmak. 2007. The Effect of Various Cultural Practices on Zinc Concentrations of Winter Wheat Grains in Central Anatolia. Zinc Crops 2007 "Improving crop production and human health" 24-26 May 2007, Istanbul, Turkey. <http://www.zinc-crops.org/publications>.
3. C. Q. Zou, Y. Q. Zhang, A. Rashid, H. Ram, E. Savasli, R. Z. Arisoy, I. Ortiz-Monasterio, S. Simunji, Z. H. Wang, V. Sohu, M. Hassan, Y. Kaya, O. Onder, O. Lungu, M. Yaqub Mujahid, A. K. Joshi, Y. Zelenskiy, F. S. Zhang, I. Cakmak. 2012. Biofortification of wheat with zinc through zinc fertilization in seven countries. Plant Soil (2012) 361:119–130.
4. Zou, C., Du, Y., Rashid, A., Ram, H., Savasli, E., Pieterse, P.J., Ortiz-Monasterio, I., Yazici, A., Kaur, C., Mahmood, K., Singh, S., Le Roux, M.R., Kuang, W., Onder, O., Kalayci, M., Cakmak, I., 2019. Simultaneous biofortification of wheat with zinc, iodine, selenium, and iron through foliar treatment of a micronutrient cocktail in six countries. J. Agric. Food Chem. 67 (29), 8096–8106. <https://doi.org/10.1021/acs.jafc.9b01829>.
5. Karaduman, Y; Önder, O; Sayaslan, A; Aydın, N; 2019. Utilisation of GlutoPeak tester on whole-wheat flour for gluten quality assessment, Quality Assurance and Safety of Crops & Foods, 11, 3, 295-304, Wageningen Academic Publishers.
6. Savasli, E; Onder, O; Cekic, C; Kalayci, H.M; Dayıoğlu, R; Karaduman, Y; Gokmen, F; Dursun, N; Gezgin, S. 2020. Sensor based calibration study for in-season nitrogen management of winter wheat in Turkey. Asian Journal of Medical and Biological Research, 6, 2, 204-211, 2020
7. Savaşlı, E., Karaduman, Y., Önder, O. and Ateş, Ö., 2021. Prediction of grain protein content and gluten quality of bread wheat in the early vegetation period by optical sensors. Journal of Cereal Science, 102, p.103354.



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### International Papers, Seminars, etc.

1. Kalayci, M., Arisoy, Z., Çekiç, C., Kaya, Y., Savaşlı, E., Tezel, M., Onder, O., Yazici, A., Cakmak, I. 2011. The Effects of Soil and Foliar Applications of Zinc on Grain Zinc Concentrations of Wheat and Maize. ,3rd International Zinc Symposium Hyderabad, India.10-14, October 2011.

### NATIONAL ARTICLES AND PAPERS

#### Articles Published in National Journals

1. Çekiç, C., Savaşlı, E., Önder, O., Dayıoğlu, R., Gökmen, F., Dursun, N., Gezgin, S., Kalaycı, H.M. 2008. Important of in-season nitrogenous fertilizer management in the increasing of nitrogen use activity of the plants. 4th National Congress of Plant Nutrition and Fertilizer. p. 83. 8-10 October 2008 Konya
2. Çekiç, C., Savaşlı, E., Dayıoğlu, R., Önder, O., Karaduman, Y., Avcioglu, R. 2008. Determination of Relationship Between Different Nitrogen Doses, Sowing Time, Seed Rate with Quality Criteria on Bread Wheat. National Cereal Symp., Page: 201-209, Konya, 2-5 June 2008.
3. Savaşlı, E., Çekiç, C., Önder, O., Dayıoğlu, R., Kalaycı, H.M. 2012. Evaluation of Some Bread Wheat Cultivars and Advanced Breeding Lines for Yield, Biomass and Vegetation Index in Eskisehir Conditions. International Journal of Agricultural and Natural Sciences, 5(2), 33-37
4. Savaşlı, E; Onder, O; Cekiç, C; Kalaycı, H.M; Dayıoglu, R; Karaduman, Y; Gokmen, F; Dursun, N; Gezgin, S. 2017. The Effects of Foliar Nitrogen Treatments at Heading Stage on Grain Protein Contents of Bread Wheat Cultivars. Selcuk Journal of Agriculture and Food Sciences,31,1,42-47,2017
5. Savaşlı, E; Onder, O; Cekiç, C; Kalaycı, H.M.; Dayıoglu, R; Gokmen, F; Dursun, N; Gezgin, S. 2017. Effects of nitrogen treatment methods on yield, nitrogen loss and nitrogen up-take efficiency of wheat cultivars. Selcuk Journal of Agriculture and Food Sciences. 31,2,86-91,2017
6. Savaşlı, E., Cekiç, C., Önder, O., Dayıoğlu, R. and Kalaycı, H.M., 2012. Evaluation of some bread wheat cultivars and advanced breeding lines for yield, biomass and vegetation index. *TABAD, Tarım Bilimleri Araştırma Dergisi*, 5(2), pp.33-37.
7. Savaşlı, E; Önder, O; Cekiç, C; Kalaycı, H.M; Dayıoglu, R; Karaduman, Y; Gökmen, F; Dursun, N; Gezgin, S. 2018. The Effects of Foliar Nitrogen Treatments at Heading Stage on Grain Protein Contents of Bread Wheat Cultivars in in Irrigated Condition. Turkish Journal of Agriculture-Food Science and Technology,6,1,84-90,2018
8. Kose, A; Onder, O; Bilir, O; Kosar, F. 2018. Application of multivariate statistical analysis for breeding strategies of spring safflower (*Carthamus tinctorius L.*). Turkish Journal of Field Crops,23,1,12-19,2018
9. Savaşlı, E; Önder, O; Karaduman, Y; Dayıoğlu, R; Özen, D; Özdemir, S; Akın, A; Tunca, Z.S; Demir, B; Aydın, N. 2019. The Effect of Soil and Foliar Urea Application at Heading Stage on Grain Yield and Quality Traits of Bread Wheat (*Triticum aestivum L.*). Turkish Journal of Agriculture-Food Science and Technology,7,11,1928-1936,2019
10. Savaşlı, E; Önder, O; Çekiç, C; Kalaycı, H.M; Dayıoğlu, R; Karaduman, Y; Dursun, N; Gezgin, S. 2018. The Effects of Foliar Nitrogen Treatments at Heading Stage on Grain Protein Contents of Bread Wheat Cultivars in in Irrigated Condition. Turkish Journal of Agriculture-Food Science and Technology, 6,1,84-90,2018



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11. Savaşlı, E; Önder, O; Dayıoğlu, R; Özen, D; Özdemir, S; Karaduman, Y; Ateş, Ö; Özsayın, M. 2020. A Calibration Study for Sensor-Based In-Season Nitrogen Management of Irrigated Winter Wheat. Turkish Journal of Agriculture-Food Science and Technology,8,9,1882-1891,2020
12. Savaşlı, E., Önder, O., Cekic, C., Kalaycı, H.M., Dayıoğlu, R., Karaduman, Y., Yılmaz, F., Dursun, N., Gezgin, S. 2021. Calibration Optimization for Sensor-Based In-Season Nitrogen Management of Rainfed Winter Wheat in Central Anatolian Conditions. Journal of Agriculture and Nature. Kahramanmaraş Sutcu Imam University, e-ISSN: 2619-9149. 24(1), pp.130-140
13. Savaşlı, E., Önder, O., Dayıoğlu, R., Özen, D., Karaduman, Y., Özdemir, S., Ateş, Ö., Özsayın M. 2021. Nitrogen Fertilizer Recommendation with Optical Sensor for Bread Wheat Varieties. Yüzüncü Yıl University. Journal of Agricultural Science. 31(2):453-465. DOI: 10.29133/yyutbd.726039.

### ▪ **National Papers, Seminars, etc.**

1. Savaşlı, E., Önder O. 2010. Wheat Cultivation Techniques in Central Anatolian Conditions. Page:26-28, Issue:1, Eskişehir Trade Exchange, Jan-March 2010.

### ▪ **OTHER PUBLICATIONS**

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

1. Önder O., Tolay, İ. 2007. A Research on Tillering Dynamics of Some Bread Wheat Varieties Grown in Central Anatolian Dry Conditions (MSc. Thesis project).
2. Önder O., Gezgin S. 2015. Determination of Effects of Different Nitrogen Doses on Carbohydrate Translocation of Some Bread Wheat Varieties (Ph.D. Thesis project, BAP 11201088, TAGEM/TBAD/12/A12/P01/07-001).



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

1. Çekiç, C., Savaşlı, E., Önder, O. ve Dayıoğlu, R. 2007. For sustainable agriculture bed planting method. 2.nd Protective Soil Tillage and Direct Seeding Workshop, E.Ü.Z.F. Agr.Mach.Dept. n.10 p.149-157 Izmir.
2. Savaşlı, E., Çekiç, C., Önder, O., Dayıoğlu, R., Karaduman, Y., Avcioglu, R., Kalaycı, H.M. 2010. Determination of relationship between nitrogen fertilization and some quality parameters on bread wheat. 1st. National congress of soil and water sources. Page : 611-618, June 1-4, 2010, Eskisehir.
3. Önder, O., Tolay, İ., Çekiç, C., Savaşlı, E., Dayıoğlu, R., Kalaycı, H.M. 2011. A research on tillering dynamics of some bread wheat varieties grown in Central Anatolian dry conditions. 1st International Agriculture Congress of Ali Numan Kirac. April 27-30, 2011. Vol: 1, Page: 781-793. Eskisehir.
4. Savaşlı, E., Çekiç, C., Önder, O., Dayıoğlu, R., Camcı, H., Koşar F.Ç., Balcı A., Kalaycı, H.M. 2011. The Effects of Nitrogen Fertilization on Seed and Capsule Yields and Morphine Content of Opium Poppy. 1st International Agriculture Congress of Ali Numan Kirac. April 27-30, 2011. Vol: 1, Page: 463-473. Eskisehir.
5. XVII. International Plant Nutrition Colloquium 19-22 August 2013. Istanbul
6. Avdan U, Bilget Ö, Resul Ç, Erdinç S, Önder O. 2014. Calculating Green Band Normalized Difference Vegetation Index on the Agricultural Area with the Help of Unmanned Aerial Vehicles. 5. Remote Sensing -CBS Symposium (UZAL-CBS 2014), 14-17 October 2014, Istanbul
7. Sayaslan, A., Aydın, N., Demir, B., Çıbık, C., Bayramoğlu, H.O., Şermet, C., Savaşlı, E., Önder, O., Özcan, H., Orhan, Ş., Demir. L. 2015. High and Low Molecular Weight Glutenin Lower Unit and Rye Translocations Effects on Agronomic and Quality Properties on White Hard Grain Bread Wheat. 11. Field Crop Congress, 7-10 Sep. 2015 Çanakkale.
8. Tunca, Z.Ş., Karaduman, Y., Topal, A., Önder, O., Arzu, A.K.I.N., Belen, S., Dayıoğlu, R. And Sönmez, A.C. 2020. Determination of Biscuit Quality Characteristics of Selected Soft Bread Wheat Genotypes in Rained and Irrigated Conditions. Journal of the Faculty of Agriculture, pp.1-7. Turkey XIII. National, I. International Field Crops Congress Special Issue:1-7, 2020. ISSN 1304-9984
9. Karaduman, Y., Akın, A., Türkölmez, S., Tunca, Z.S., Belen, S., Çakmak, M., Yüksel, S., Yorgancılar, Ö., Önder, O., Server, B.B. 2017. Evaluation of Bread Wheat Breeding Program by Technological Quality Parameters. Poster Statement-XII. Field Crops Congress. TAH04, Kahramanmaraş.



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

1. Oklahoma State University–CIMMYT Sensor Workshop. 11th – 12th October, 2005, held at Soil and Fertilizer Research Institute, Ankara.
2. Course on Conservation Agriculture: “Laying the ground for sustainable and productive cropping systems” from May 23 to June 24, 2011, International Maize and Wheat Improvement Center, El Batan, Texcoco, Mexico.
3. Statistical Design and Data Analysis Training Workshop for International Winter Wheat Improvement Program (IWWIP) 12-16 December 2011, Ankara.
4. Improvement of Station Management and Enhancement of Experimental Work Precision, (IWWIP), 26-27 September 2013, BDUTAE Konya.
5. Statistical Analyses of Plant Breeding Trials. (CIMMYT), November, 17-23, 2013 Ankara
6. Crop Modeling for Identification of Promising Agricultural Technologies: the use of the APSIM Model. 2-5 June 2014. Amman, Jordan.
7. Regional training course on “Innovation Platforms; On-farm Trials – Design and Analysis. 24 August- 4 September 2014. Amman, Jordan.
8. Turkey – United Kingdom Workshop “Wheat Improvement: Opportunities for Collaboration”, 23-27 May 2015, Konya.
9. Understanding linear mixed models from the ground up: Statistical tools for the Turkish National Breeding Programs. 2-3 September 2015, Eskisehir.