



TAGEM
R&D AND INNOVATION

TRANSITIONAL ZONE AGRICULTURAL
RESEARCH INSTITUTE/ ESKİŞEHİR

GÜLSER YALÇIN

Agricultural Engineer

EDUCATION

Bachelor's Degree 1986-1990
Çukurova University
Faculty of Agriculture

LANGUAGE English

CAREER

2011-... Head of Department, Transitional Zone Agricultural Research Institute - Plant Nutrition and Soil Unit - ESKİŞEHİR .

2005 – 2011 Head of Department, Soil and Water Resources Research Institute – Soil Management Department - ESKİŞEHİR.

2003 – 2005, Head of Department, Soil and Water Resources Research Institute, Soil Management Department, ESKİŞEHİR


1992 -2003, Research Engineer, The Institute laboratory, Rural Services Research Institute, ESKİŞEHİR

1991 – 1992, Agricultural Engineer, Pazaryeri Mayoralty , BİLECİK / Pazaryeri

ABOUT ME

I was born in 1969 in Kırşehir. In 1990, I graduated from Çukurova University Faculty of Agriculture Department of Plant protection. I have been working as a researcher in research institutes since 1992. I have been working on plant nutrition, soil fertility, soil pollution and soil- water analysis.

CONTACT

 Eskişehir Transitional Zone Agricultural Research Institute
Ziraat Cad. No: 396 Tepebaşı / Eskişehir

 gulser.yalcin@tarimorman.gov.tr

 0 222 324 03 00



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▪ **PROJECTS**

▪ **Projects Conducted**

1. Nitrogen and Phosphorus Requirement of Eggplant in Bursa conditions, (1994-1999), Project manager.
2. Nitrogen and Phosphorus Requirement of plum trees under Eskişehir conditions, (1994 – 2000), Asistant Researcher.
3. Bor and Calcium Applications to Quince Tree, Postharvest Decay and Physiological Caused the Effect of Some Fruit Quality Features (2001-2002), Project manager
4. The Use of Sewage Sludge in Different Rotation Systems (2003-2008) Project manager.
5. Sustainable Waste Management in Agricultural Areas (2007-2009) Asistant Researcher.
6. Determination of Heavy Metal and Plant Nutrient Content of intensive agricultural areas of Eskisehir Province. (2008 – 2010) Asistant Researcher.
7. The effects of nitrogen manure application on yield of no-till-aftercrop safflower growing under irrigated conditions in Eskisehir"(2011-2015) Asistant Researcher.
8. Application of the Narrowed Area for Fertilizer Consumption in Wheat Fields. (2011-2015) Project manager.
9. Researching Possibilities of Phosphorus Dissoves Plant Promotion Rhizobacteria Using As Biofertilizers (2011-2015) Asistant Researcher.
10. Effects of Nitrogen, Phosphorus and Potassium Applications on Yield and Quality of Chestnut in Bursa region (2011-2013) Asistant Researcher
11. Potassium Application with Different Plant Densities sugar beet Effect of Sugar Beet Yield and Quality (2011-2013), Asistant Researcher.
12. Wheat and sugar beet of Rotations (Interim Plant) Determining the Effects of Sugar Beet Yield Using as a Green Manure and Application of Reduced Nitrogen aqueous conditions Eskişehir (2011-2016) Project manager.
13. Effects of Different Calcium and Potassium Applications on Yield and Quality of Cherry, in Afyonkarahisar / Sultandağı (2012-2016), Asistant Researcher.
14. Effect of Soil and Foliar Boron Applications on Yiled and Qualiyl of Sugar Beet In Central Anatolia (2012-2015), Asistant Researcher.



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15. The water retaining polymers Determination of Water Use Efficiency Used for Agricultural Purposes (2012 – 2014), Asistant Researcher.
16. Applied Different Amount Of Phosphorus Effect on Biodiesel Yield and Quality in Sufflower (2013-2015), Asistant Researcher.
17. Determination of Plant Nutrition Status and Potential Toxic Element Contents of Eskişehir, Kutahya and Bilecik Provinces Soils, Preparation of Soil Data Base and Soil Maps (2013-2016), Asistant Researcher.
18. Effect of Soil and Foliar Boron Applications on Yield and Qualiyl of Wheat In Central Anatolia (2013-2015) Asistant Researcher
19. Transitional Zone Agricultural Research Institute Innovation of the Soil-Plant-Water Analysis Laboratory and Physiology Laboratory (2014-2015), Project manager.

▪ Ongoing Projects

1. Determining Quality Parameters of Bread Wheat Breeding Material in Transitional Zone Agricultural Institute, (2018-2022), Asistant Researcher.
2. Isolation and characterization of plant growth promoting rhizobacteria from Eskişehir -Afyon providences and determination of the effectiveness of phosphorus-solubilizing bacteria. (2019-2023), Asistant Researcher
3. Determination of the Effects of Nitrogenous and Phosphorus Fertilizer Applications on Nutrient Content, Yield and Quality Characteristics of Quinoa in Eskişehir Conditions, (2020-2023), Asistant Researcher.
4. Determination of the Efficiency of Wheat-Chickpea and Wheat-The Narbon Vetch Planting Rotation with Different Sowing Methods in Eskişehir Rainfall Conditions, (2020-2025), Asistant Researcher.
5. The Effect of Soil and Foliar Iron Compounds on Biofortification in Bean (*Phaseolus vulgaris*) Plant, (2021 – 2023), Project manager.
6. Determination of the effectiveness of biofertiliser and biological fungicides in cumin (*Cuminum cyminum*) and material development studies by physical mutation application, (2021 – 2023), Asistant Researcher.



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▪ **PUBLICATIONS**

▪ **INTERNATIONAL ARTICLES AND PAPERS**

▪ **Articles Published in International Journals**

1. Çetin, Ö., Boyacı, H., **Yalçın, G.**, 2004. Effect of Irrigation Water Containing High Fluorine on Soil and Some Field Crops. Anadolu University, Journal of Science and Technology. No/Number 2, pp. 85-96
2. Özkan, A., Banar, M., Çokaygil, Z., Kulaç, A., **Yalçın, G.**, Taşpınar, K., Altay, A. Pyrolysis of Zinc Contaminated Biomass from Phytoremediation. ANADOLU UNIVERSITY JOURNAL OF SCIENCE AND TECHNOLOGY – A Applied Sciences and Engineering cilt16. Sayı: 2 (2015)
3. Özkan, A., Banar, M., **Yalçın, G.**, Taşpınar, K., Altay, A. Pyrolysis of Plants After Phytoremediation of Contaminated Soil with Lead, Cadmium and Zinc. Bulletin of Environmental Contamination and Toxicology. ISSN 0007-4861. Volume 96. Number 3. Bull Environ Contam Toxicol 96:415-419 DOI 10.1007/s00128-016-1746-2. (2016)
4. Taşpınar, K., Ateş, Ö., Pınar, MÖ., **Yalçın, G.**, Kızılaslan F., Fidantemiz, YF. Soil Contamination Assessment and Potential Sources of Heavy Metals of Alpu Plain Eskisehir Turkey, INTERNATIONAL JOURNAL OF ENVIRONMENTAL HEALTH RESEARCH, 0960-3123, (2021).
5. Toprak, S., Ateş, Ö., **Yalçın G.**, Taşpınar, K. How Does N: P: K Fertilizer Applications in Different Levels Affect The Nutrition of Anatolian Chestnut (CastaneasativaMill.) ?, INTERNATIONAL JOURNAL OF ANATOLIA AGRICULTURAL ENGINEERING, 2021, 2667-7571, 2021, 3(1), 1-9. RESEARCH, 0960-3123. (2021)
6. Taşpınar, K., Ateş, Ö., **Yalçın, G.**, Kızılaslan F., Pınar MÖ. Soil Contamination and Healthy Risk Assessment Of Peach Orchards Soil Of Bilecik Province Turkey, INTERNATIONAL JOURNAL OF ENVIRONMENTAL HEALTH RESEARCH, 2021. DOI: 10.1080/09603123..1926439, (2021)
7. Toprak, S., Ateş, Ö., **Yalçın G.**, Taşpınar, K. Changes in Qualitative and Quantitative Traits of Anatolian Chestnuts (CastaneasativaMill.) Fruit Due to Balanced Macro Fertilization. Yüzüncü Yıl University Journal of Agricultural Science Volume 31, Issue 2, (2021)

▪ **International Papers, Seminars, etc.**

1. Özkan, A., Banar, M., Çokaygil, Z., Kulaç, A., **Yalçın, G.**, Taşpınar, K., Altay, A., 2013. Pyrolysis of Used Hyperaccumulator Plants in Phytoremediation of Soil Contaminated with Zinc. Digital Proceeding Of THE ICOEST'2013 - , June 18 – 21, 2013, Cappadocia Nevsehir, Turkey.
2. Özkan, A., Banar, M., Çokaygil, Z., Kulaç, A., **Yalçın, G.**, Taşpınar, K., Altay., 2013. Phytoremediation of Cadmium Contaminated Soil and Pyrolysis of Used Hyperaccumulator Plants. International Solid Waste, Water and Waste water Congress 2013, İstanbul.



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3. **Yalçın, G.**, Çakır, S., Yavuz, R., Taşpınar, K., Ateş, Ö., Alveroğlu, V., 2015. Effect on different wheat in the October-December the yield and yield components 4. National Land and Water Resources Congress. 1-4/09/2015 KAHRAMANMARAŞ.
4. Ateş, Ö., **Yalçın, G.**, Taşpınar, K., Yılmaz, M., 2016. Determination of in Agricultural Land of Eskişehir Sarıcakaya District. 16-21 October 2016, Eurosoil 2016, İSTANBUL.
5. Emiroğlu, Ö., Aksu, S., Başkurt, S., Kızılaslan, F., Ateş, Ö., Taşpınar, K., **Yalçın, G.** 2017. Investigation the Contribution of Fish-Grown Ponds in Aquaculture to Plant Production, International Plant Science and Technology Congress. 21-25/08/2017, Üsküp/MAKEDONYA.
6. Emiroğlu, Ö., Aksu, S., Başkurt, S., Yaylacı, K., Kızılaslan, F., Ateş, Ö., Taşpınar, K., **Yalçın, G.**, 2017. Investigation of the Usability of an Ecological Harmful species, *Carassius gibelio* as an Organic Fertilizer in the Fresh Waters Involved in Plant Production. International Plant Science and Technology Congress. 21-25/08 /2017, MAKEDONYA/ ÜSKÜP.
7. Taşpınar, K., **Yalçın, G.**, Ateş, Ö., Kızılaslan F. Fertility Status of Agricultural Soils in Bilecik Province. 5th International Participation Soil and Water Resources Congress. 12-15 September 2017. KIRKLARELİ /TÜRKİYE.
8. Taşpınar K., **Yalçın, G.**, Ateş, Ö., Kızılaslan F., Pınar M.Ö., Alveroğlu V., Toprak S., 2019. Fertility Status and Potential Nutrition Problems of Soil Orchards in Bilecik Province. 6 th Congress on Soil & Water Resources with International Participation, 12 -14 November 2019, Menemen-İZMİR.
9. Kızılaslan F., Ateş, Ö., Alveroğlu, V., **Yalçın, G.**, Taşpınar, K., Turhan, E., 2019. Determination of the Effects of Calcium at Different Levels on Yield and Quality of Sweet Chery, 6 th Congress on Soil & Water Resources with International Participation, 12 -14 November 2019, Menemen-İZMİR.



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▪ NATIONAL ARTICLES AND PAPERS

▪ Articles Published in National Journals

1. **Yalçın, G.**, Yavuz, R., Taşpınar, K., Ateş, Ö., Yılmaz, M. 2011. Evaluation Of Sewage Sludge On Agricultural Lands. Yıldız Technical University Sigma 3; 156-164.
2. **YALÇIN, G.**, YAVUZ, R., ALTINEL, B., PROF. DR. ÖZGÜMÜŞ, A., DOÇ. DR. ÖZELKÖK, S., 2010. Calcium Applications to Quince Tree, Postharvest Decay and Physiological Caused the Effect of Some Fruit Quality Features. Hasad journal, Ağustos 2011 sayı 315. s.102.

▪ National Papers, Seminars, etc.

1. **YALÇIN, G.**, Altinel, B., Yavuz, R., 2000. Efficiency of Agricultural Soil Removal of Soil and Water Sample. Agricultural Potential symposium of Eskisehir Province - 3, 15/02/ 2000, ESKİŞEHİR.
2. YAVUZ, R., **Yalçın, G.**, 2001. Macro and Micro Nutrient Fertilizer Effect on Yield. Agricultural Potential symposium of Eskisehir Province - 5 (Plant, Soil, Water, Climate Relations), 10 Ocak 2001, ESKİŞEHİR.
3. **YALÇIN, G.**, ALTINEL, B., YAVUZ, R., Nitrogen and Phosphorus Requirement of Eggplant in Bursa conditions, IV. Vegetable Farming Symposium, Proceedings pp. 189-196, 17-20/09/ 2002, BURSA
4. UYGAN, D., ÇETİN, Ö., **YALÇIN, G.** , 2003. High boron content of Irrigation Water Effects on Soil and Plant of Eskişehir Seyitgazi Irrigation Network. 2. National Irrigation Congress, Proceedings, 16-19/10/ 2003, AYDIN, pp. 199-211
5. **YALÇIN, G.**, YAVUZ, R., ALTINEL, B., PROF. DR. ÖZGÜMÜŞ, A., DOÇ. DR. ÖZELKÖK, S., 2007, Bor Applications to Quince Tree, Postharvest Decay and Physiological Caused the Effect of Some Fruit Quality Features, 4 -7/09/2007, ERZURUM
6. YAVUZ, R.,**YALÇIN, G.**, YILMAZ, M., 118., Evaluation of Sewage Sludge on Agricultural Lands, II. National Ecology and Environment Congress, Proceedings pp.10- 13/09/ 2007, MALATYA
7. POLAT,H.,**YALÇIN,G.**, YAVUZ,R.,2008. Sustainable Waste Management in Agricultural Area. Environmental Issues Symposium, 14-17/05/2008, KOCAELİ
8. ATEŞ, Ö., **YALÇIN,G.**, YAVUZ,R.,2008. Soil pollution Caused by excessive fertilizer use Eskişehir in Mihalgazi. Environmental Issues Symposium, 14-17/05/2008, KOCAELİ.
9. YAVUZ, R.,**YALÇIN, G.**, YILMAZ, M., Effect on yield of biosolids used in agriculture, 19. Biology Congress , 23-27/06/ 2008, TRABZON



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10. POLAT,H.,**YALÇIN,G.**,YAVUZ,R.,2008. Sugar beet yield of waste composted Polar Effect of Agricultural and Sugar rate. 4. National Congress of Plant Nutrition and Fertilizer - 8-10/10/2008-KONYA
11. **YALÇIN,G.**, YURDAKUL, A., 2008. Slempe's, wheat and sugar beet yield and its Impact on the Environment Şlempenin, Buğday ve Şekerpancarı verimine ve Çevreye Etkileri. 4.National Congress of Plant Nutrition and Fertilizer - 8-10/10/2008-KONYA.
12. **YALÇIN, G.**, YAVUZ, R., TAŞPINAR, K., ATEŞ, Ö., YILMAZ, M., "Evaluation of Sewage Sludge on Agricultural Lands" "Seminar On The Urban Waste Water Treatment Directive – Legislations & Implementations" TAIEX Symposium, 06-07/05/2009 ESKİŞEHİR
13. **Yalçın, G.**, Yavuz, R., Taşpınar, K., Ateş, Ö., Yılmaz, M.,Effects of Sludge application on Yield of Wheat and Potential Toxic Elements of Soil and Plants. National Solid Waste Management Congress, 27-29 May 2009 ESKİŞEHİR.
14. **Yalçın, G.**, Yavuz, R., Taşpınar, K., Ateş, Ö., Yılmaz, M., Solid Waste Assessment in the Field of Agriculture. TÜRKAY 2009 Solid Waste Management Symposium in Turkey, 15-17 June, 2009 İSTANBUL.
15. Taşpınar, K. , Polat, H. , **Yalçın, G.**2009. Determine The Leguminosae Plant Fixed The Most Nitrogen After Wheat Harvest in Eskişehir Conditions. Turkey VIII. field crops congress, 19-22 October 2009, Mustafa Kemal Üniversitesi, HATAY.
16. Polat, H., Taşpınar, K. , **Yalçın, G.** , Almaca, N.D. 2009. Using Agricultural Wastes on Organic Agriculture via Environmental and Natural Source Approach. 1.GAP Organic Agriculture Congress, 17-20 November 2009, ŞANLIURFA.
17. Taşpınar, K. , Polat, H. , Toprak, S. ,**Yalçın, G.**, 2009. . Application of the Narrowed Area Method for Weed Control in Organic Wheat Fields. 1.GAP Organic Agriculture Congress, 17-20 November 2009, ŞANLIURFA.
18. **YALÇIN, G.**, YAVUZ, R., TAŞPINAR, K., ATEŞ, Ö., YILMAZ, M., Evaluation of Sewage Sludge on wheat Agricultural Lands, 1. National Solid Waste Management Congress, 27-29/05/2009 ESKİŞEHİR
19. **Yalçın G.**, Yavuz R., Yılmaz M., Taşpınar K., Ateş Ö., 2010. Evaluation of Solid Waste Zinc Source in Agricultural Areas 1. National Land and Water Resources Congress. 1-4 June 2010, ESKİŞEHİR.
20. Taşpınar, K. , Polat, H. , **Yalçın, G.**, 2010. Production of Leguminous Forage Crops as Second Crop in Organic Agriculture Enterprises, I. Organic Livestock Congress, 1-4 July 2010, Kelkit-GÜMÜŞHANE.
21. **YALÇIN, G.**, YAVUZ, R., ALTINEL, B., PROF. DR. ÖZGÜMÜŞ, A., DOÇ. DR. ÖZELKÖK, S., 2010. Calcium Applications to Quince Tree, Postharvest Decay and Physiological Caused the Effect of Some Fruit Quality Features. 5. Plant Nutrition and Fertilizer Conference. 14-17/10/2010, İZMİR



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22. **YALÇIN, G.**, YAVUZ, R., ALTINEL, B., PROF. DR. ÖZGÜMÜŞ, A., DOÇ. DR. ÖZELKÖK, S., 2011. Effect of Potassium Intake of calcium in the fruit of the quince tree Implemented. International participation 1. Ali Numan Kırac Agriculture Congress 27- 30/04/2011, ESKİŞEHİR.
23. Taşpınar K., **Yalçın G.**, 2011. Comparison Oil Contents of Main Crop Sunflower and No-Tillage Aftercrop Sunflowerın Eskişehir Irrigated Conditions, II. National Soil and Water Sources Congress, 22-25 November 2011, ANKARA.
24. Özkan, A., Banar, M., Çokaygil, Z., Kulaç, A., **Yalçın, G.**, Taşpınar, K., Altay., 2013. Evaluation Lead, Cadmium and Zinc Soil contaminated with the hyperaccumulators Plants With Treatment And this Plant 5. National Solid Waste Management Congress UKAY 2013, KOCAELİ.
25. **YALÇIN, G.**, ÇAKIR, S., YAVUZ, R., TAŞPINAR, K., ATEŞ, Ö., ALVEROĞLU, V., 2015. Effect on different wheat in the October-December the yield and yield components 4. National Land and Water Resources Congress. 1-4/09/2015 KAHRAMANMARAŞ.
26. **Yalçın, G.**, Taşpınar, K., Ateş, Ö., Kızılaslan, F., Toprak S., 2016. The Effect of Green Fertilizer on Soil Properties as a Intermediate Plant in Alternation. 7. Plant Nutrition and Fertilization Congress, 12-16/Ekim/2016, ADANA.
27. **Yalçın, G.**, Ateş, Ö., Taşpınar, K., Kızılaslan, F., Isolation and Determination of Efficacy of Phosphorus Solvent Bacteria in Eskişehir Province. Türkiye 12th Field Crops Congress. 12-15/September/ 2017, KAHRAMANMARAŞ.

▪ **OTHER PUBLICATIONS**

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

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

1. Fertilizer and Water Resources Control Research Institute, ANKARA. Soil analysis laboratory training, 1993.
2. Satellite and Space Sciences Research Institute- Anatolian University, ESKİŞEHİR, Remote sensing and geographic information systems course, 1998
3. Texas tech universty, Texas, ABD, Soil Management, 18/09/1999 – 10/10/1999
4. Fertilizer and Water Resources Control Research Institute, ANKARA. Laboratory Operations, Management, Analysis and Evaluation, 05-09/04/2000
5. General Directorate of Agricultural Research, ANKARA Research Administration 2000
6. The accreditation process TS EN ISO/IEC 17025 (General requirements for the competence of testing and calibration laboratories), TS EN ISO/IEC 17025 According to the standard documentation, TS EN ISO/IEC 17025 According to the standard internal audits, 2013, Transitional Zone Agricultural Research Institute, ESKİŞEHİR,