

## Res. Asst. PhD MERT ACAR

### Personal Information

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### International Researcher IDs

ORCID: 0000-0002-9971-4470

Publons / Web Of Science ResearcherID: E-5653-2018

Yoksis Researcher ID: 207707

### Education Information

Doctorate, Cukurova University, Fen Bilimleri Enstitüsü, Toprak, Turkey 2016 - 2023

Postgraduate, Cukurova University, Fen Bilimleri Enstitüsü, Toprak, Turkey 2014 - 2016

Undergraduate, Gaziosman Paşa Üniversitesi, Ziraat Fakültesi, Toprak Bilimi, Turkey 2007 - 2011

### Foreign Languages

English, B1 Intermediate

### Dissertations

Postgraduate, Uzun süreli farklı işleme uygulamalarının agregat boyut dağılımındaki organik karbon ve yarayışlı su içeriğine etkileri, Cukurova University, 2016

### Research Areas

Agricultural Sciences, Agriculture, Soil and Plant Feed, Soil Physics (moisture and hydromechanics, gas content, thermal phenomena), Soil and Water Storage and Management

### Academic Titles / Tasks

Research Assistant, Cukurova University, Ziraat Fakültesi, Toprak Bilimi ve Bitki Besleme, 2013 - Continues

### Published journal articles indexed by SCI, SSCI, and AHCI

#### I. Field-Scale Evaluation of the Soil Quality Index as Influenced by Dairy Manure and Inorganic Fertilizers

Ozlu E., GÖZÜKARA G., ACAR M., BİLEN S., Babur E.

SUSTAINABILITY, vol.14, no.13, 2022 (SCI-Expanded)

- II. **A soil quality index using Vis-NIR and pXRF spectra of a soil profile**  
GÖZÜKARA G., ACAR M., Ozlu E., Dengiz O., Hartemink A. E., Zhang Y.  
CATENA, vol.211, 2022 (SCI-Expanded)
- III. **Evaluating the long-term effects of tillage systems on soil structural quality using visual assessment and classical methods**  
ÇELİK İ., Gunal H., ACAR M., Acir N., Barut Z. B., Budak M.  
SOIL USE AND MANAGEMENT, vol.36, no.2, pp.223-239, 2020 (SCI-Expanded)
- IV. **Sub-Surface Drip Irrigation in Associated with H2O2 Improved the Productivity of Maize under Clay-Rich Soil of Adana, Turkey**  
Sariyev A., BARUTÇULAR C., ACAR M., Hossain A., El Sabagh A.  
PHYTON-INTERNATIONAL JOURNAL OF EXPERIMENTAL BOTANY, vol.89, no.3, pp.519-528, 2020 (SCI-Expanded)
- V. **Tarım topraklarının jeostatistiksel modelleme ile kalitesinin değerlendirilmesi**  
KOCA Y. K., ACAR M., TURGUT Y. Ş.  
Harran Üniversitesi Ziraat Fakültesi Dergisi, vol.23, no.4, pp.489-499, 2019 (SCI-Expanded)
- VI. **Strategic tillage may sustain the benefits of long-term no-till in a Vertisol under Mediterranean climate**  
ÇELİK İ., Gunal H., ACAR M., Acir N., Barut Z. B., BUDAK M.  
SOIL & TILLAGE RESEARCH, vol.185, pp.17-28, 2019 (SCI-Expanded)
- VII. **Environmental sensitivity to desertification in northern Mesopotamia; application of modified MEDALUS by using analytical hierarchy process**  
Budak M., Gunal H., ÇELİK İ., Yıldız H., Acir N., ACAR M.  
ARABIAN JOURNAL OF GEOSCIENCES, vol.11, no.17, 2018 (SCI-Expanded)
- VIII. **SOIL QUALITY ASSESMENT OF UPPER TIGRIS BASIN**  
Budak M., GÜNAL H., ÇELİK İ., Yıldız H., ACİR N., ACAR M.  
CARPATHIAN JOURNAL OF EARTH AND ENVIRONMENTAL SCIENCES, vol.13, no.1, pp.301-316, 2018 (SCI-Expanded)
- IX. **Long-term tillage and residue management effect on soil compaction and nitrate leaching in a Typic Haploxerert soil**  
ÇELİK İ., Gunal H., ACAR M., GÖK M., Barut Z. B., PAMİRALAN H.  
INTERNATIONAL JOURNAL OF PLANT PRODUCTION, vol.11, no.1, pp.131-149, 2017 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Tarla koşullarında doymamış toprak hidrolik iletkenliğinin belirlenmesi ve matematiksel modellenmesi**  
Sariyev A., Sesveren S., Tülün Y., Kaman H., Acar M.  
Mediterranean Agricultural Sciences (Akdeniz Üniversitesi Ziraat Fakültesi Dergisi), vol.33, no.2, pp.291-298, 2020 (Peer-Reviewed Journal)
- II. **Long-Term Tillage Induced Changes in Physical Attributes of a Clayey Soil in Eastern Mediterranean Region**  
ÇELİK İ., GÜNAL H., ACAR M., BERKET BARUT Z., ACİR N., BUDAK M.  
Scienco, vol.1, no.1, pp.32-39, 2018 (Peer-Reviewed Journal)
- III. **TILLAGE EFFECTS ON SOIL ORGANIC CARBON, MICROBIAL BIOMASS CARBON AND BETA-GLUCOSIDASE ENZYME ACTIVITY IN A TYPIC HAPLOXERERT SOIL**  
ACAR M., ÇELİK İ., Gunal H., Acir N., Barut Bereket Z., BUDAK M.  
SCIENTIFIC PAPERS-SERIES A-AGRONOMY, vol.61, no.1, pp.13-20, 2018 (ESCI)
- IV. **Effects of long-term tillage systems on aggregate-associated organic carbon in the eastern mediterranean region of Turkey**  
ACAR M., ÇELİK İ., Günal H.  
Eurasian Journal of Soil Science, vol.7, no.1, pp.51-58, 2018 (Scopus)

- V. **EFFECTS OF LONG-TERM TILLAGE SYSTEMS ON SOIL WATER CONTENT AND WHEAT YIELD UNDER MEDITERRANEAN CONDITIONS**  
ACAR M., ÇELİK İ., GÜNAL H.  
Journal of New Theory, vol.17, pp.98-108, 2017 (Peer-Reviewed Journal)
- VI. **Çukurova koşullarında toprak işleme yöntemlerinin agregatlara bağlı toplam karbon ve azot üzerine etkileri**  
ÇELİK İ., ACAR M.  
Anadolu Tarım Bilimleri Dergisi, vol.32, no.3, pp.383-390, 2017 (Peer-Reviewed Journal)
- VII. **Tokat Kazova Koşullarında Farklı Arazi Kullanım Türlerinin Bazı Toprak Özellikleri Üzerine Etkisinin Araştırılması**  
OĞUZ İ., ACAR M.  
GOÜ, Ziraat Fakültesi Dergisi, vol.28, no.2, pp.171-178, 2011 (Peer-Reviewed Journal)

## **Books & Book Chapters**

- I. **Soil Temperature**  
Sarıyev A., Acar M.  
in: Soil Science, Ahmet Ruhi Mermut, Editor, Nobel Yayın Dağıtım, Ankara, pp.235-255, 2022
- II. **Tarımsal ve Çevresel Sürdürülebilirliğin Sağlanmasında Toprak İşlevselliği**  
Acar M., Günal H., Çelik İ.  
in: Ziraat, Orman ve Su Ürünleri Alanında Akademik Çalışmalar - II, Ali Bolat, Editor, Gece Kitaplığı, Ankara, pp.37-57, 2020

## **Refereed Congress / Symposium Publications in Proceedings**

- I. **SPATIAL VARIABILITY OF SOIL CARBON STOCK AND STRUCTURAL STABILITY INDEX OF VERTISOLS IN ÇUKUROVA REGION, TURKEY**  
Acar M., Çelik İ., Günal H., Budak M., Acir N.  
EUROSOIL 2021, Geneve, Switzerland, 23 - 27 August 2021, pp.353
- II. **DETERMINATION OF SOIL QUALITY IN FLUVIAL LANDS AFFECTED BY AKSU RIVER**  
Demirel B. Ç., Altunbaş S., Gözükara G., Acar M.  
EUROSOIL 2021, Geneve, Switzerland, 23 - 27 August 2021, pp.146
- III. **PREDICTION OF SOILS BASED ON TEXTURAL DIFFERENCES BY MEANS OF VIS-NIR SPECTROSCOPY**  
Turgut Y. Ş., Acar M., Işık M., Wahab T. S., Şenol S.  
EUROSOIL 2021, Geneve, Switzerland, 23 - 27 August 2021, pp.218
- IV. **Çukurova Bölgesinde Verim Kapasitesi Yüksek İki Mısır Çeşidinin Farklı Sulama Düzeylerinde Verim-Nem İlişkilerinin Araştırılması**  
Demir M., Acar M., Sesveren S., Sarıyev A.  
International Online Conferences On Engineering And Natural Sciences, Gümüşhane, Turkey, 5 - 07 July 2021, pp.150
- V. **Soil Carbon Stock and Structural Stability Index Affected by Organic and Inorganic Fertilization**  
KAYA Ö., ACAR M., Wahab T., Işık M., ORTAŞ İ., SARIYEV A.  
4th Agriculture, Environment and Health Congress, Aydın, Türkiye, Aydın, Turkey, 20 June 2021
- VI. **ESTIMATION OF MAIZE YIELD UNDER DIFFERENT SUB-SURFACE IRRIGATION REGIMES WITH CROPSYST MODEL**  
Wahab T. S., Çilek A., Acar M., Barutçular C., Sarıyev A.  
The 4th International Congress of Agriculture, Environment and Health, Aydın, Turkey, 20 - 22 May 2021, pp.6
- VII. **MAPPING OF SOIL QUALITY OF ALPARSLAN STATE FARM**  
KOCA Y. K., ACAR M.

INTERNATIONAL AGRICULTURAL CONGRESS OF MUŞ PLAIN, Muş, Turkey, 24 - 27 September 2019, pp.508-518

- VIII. **Effects of Tillage Systems on Soil Carbon Stock and Structural Stability of A Typic Haploxerert**  
ACAR M., ÇELİK İ., GÜNAL H., ACİR N., BERKET BARUT Z.  
International Soil Congress 2019 "Successful Transformation toward Land Degradation Neutrality: Future Perspective", Ankara, Turkey, 17 - 19 June 2019, pp.237
- IX. **Soil water response to conventional, reduced and no-till systems in eastern mediterranean region of Turkey**  
ACAR M., ÇELİK İ., GÜNAL H., BERKET BARUT Z., ACİR N.  
Environment and Soil Resources Conservation, Almati, Kazakhstan, 17 - 19 October 2018, pp.56
- X. **Effects of ten-year conventional and conservational tillage practices on resistance to physical degradation function**  
ÇELİK İ., GÜNAL H., ACAR M., BERKET BARUT Z., ACİR N.  
Environment and Soil Resources Conservation, Almati, Kazakhstan, 17 - 19 October 2018, pp.48
- XI. **Biological soil quality as affected by reduced and strategic tillage practices in an alluvial field**  
ÇELİK İ., GÜNAL H., ACAR M., ACİR N., BERKET BARUT Z., BUDAK M.  
Environment and Soil Resources Conservation, Almati, Kazakhstan, 17 - 19 October 2018, pp.141
- XII. **Tillage effects on soil organic carbon, microbial biomass carbon and betaglucosidase enzyme activity in a Typic Haploxerert Soil**  
ACAR M., ÇELİK İ., GÜNAL H., ACİR N., BERKET BARUT Z., BUDAK M.  
Agriculture for Life, Life for Agriculture, Bükreş, Romania, 7 - 09 June 2018, pp.17
- XIII. **Long-term tillage induced changes in physical attributes of a clayey soil in eastern Mediterranean region**  
ÇELİK İ., GÜNAL H., ACAR M., BERKET BARUT Z., ACİR N., BUDAK M.  
Agriculture for Life, Life for Agriculture, Bükreş, Romania, 7 - 09 June 2018, pp.25
- XIV. **Soil Carbon Storage Potential as Affected by Long Term Conventional and Conservational Tillage Practices**  
ACAR M., ÇELİK İ., GÜNAL H., ACİR N., BERKET BARUT Z.  
International Agricultural Science Congress, Van, Turkey, 9 - 12 May 2018, pp.534
- XV. **Changes in Soil Physical Quality Induced by the Reduction of Soil Tillage in a Long-term Experiment in Eastern Mediterranean Region**  
ÇELİK İ., GÜNAL H., ACAR M., BERKET BARUT Z., ACİR N., BUDAK M.  
International Agricultural Science Congress, Van, Turkey, 9 - 12 May 2018, pp.531
- XVI. **Importance Of Expert Opinion In Soil Quality Assessment Of Upper Tigris Basin**  
BUDAK M., GÜNAL H., ÇELİK İ., ACİR N., ACAR M., SIRRI M.  
International Conference on Multidisciplinary, Engineering, Science, Education and Technology, Bitlis, Turkey, 27 - 29 October 2017, pp.365
- XVII. **Importance of visual evaluation in assessing the effects of soil tillage systems**  
ÇELİK İ., GÜNAL H., ACAR M.  
Central Anatolia Region Third Agriculture and Food Congress, Sivas, Turkey, 26 - 28 October 2017, pp.239-240
- XVIII. **Comparison of minimum data sets for soil quality using expert opinion and principal component analyses for Diyarbakır basin**  
BUDAK M., GÜNAL H., ÇELİK İ., ACİR N., SIRRI M., ACAR M.  
Central Anatolia Region Third Agriculture and Food Congress, Sivas, Turkey, 26 - 28 October 2017, pp.241-242
- XIX. **Use of multivariate statistic and analytical hierarchy process in soil quality assessment**  
Budak M., Günal H., Çelik İ., Acir N., Acar M., Sırrı M.  
Central Anatolia Region Third Agriculture and Food Congress, Sivas, Turkey, 26 - 28 October 2017, pp.245-246
- XX. **Tillage induced modifications in stability of soil aggregates**  
ÇELİK İ., GÜNAL H., ACAR M., ACİR N., BERKET BARUT Z.  
Central Anatolia Region Third Agriculture and Food Congress, Sivas, Turkey, 26 - 28 October 2017, pp.236
- XXI. **Effects of tillage systems on distribution of soil chemical attributes in surface horizon of a clayey soil.**

- ÇELİK İ., GÜNAL H., ACAR M., ACİR N., BERKET BARUT Z.  
Central Anatolia Region Third Agriculture and Food Congress, Sivas, Turkey, 26 - 28 October 2017, pp.510
- XXII. **Can conservational soil tillage systems reduce physical soil quality ?**  
ACAR M., ÇELİK İ., GÜNAL H., BERKET BARUT Z., ACİR N.  
5th International Participation Soil and Water Resources Congress, Kırklareli, Turkey, 12 - 14 September 2017, pp.16
- XXIII. **Effects of long-term soil tillage and crop rotation on soil biological quality**  
ÇELİK İ., GÜNAL H., ACAR M., ACİR N., BERKET BARUT Z.  
5th International Participation Soil and Water Resources Congress, Kırklareli, Turkey, 12 - 14 September 2017, pp.17
- XXIV. **Variation of chemical soil quality under different soil tillage systems**  
ÇELİK İ., GÜNAL H., ACAR M., ACİR N., BERKET BARUT Z.  
5th International Participation Soil and Water Resources Congress, Kırklareli, Turkey, 12 - 14 September 2017, pp.167
- XXV. **Effects of Long-Term Soil Tillage Practices on Soil Chemical Characteristics**  
ÇELİK İ., ACİR N., GÜNAL H., ACAR M., BERKET BARUT Z.  
INTERNATIONAL CONFERENCE ON AGRICULTURE, FOREST, FOOD SCIENCES AND TECHNOLOGIES, Nevşehir, Turkey, 15 - 17 May 2017, pp.903
- XXVI. **Tillage Induced Changes in Biological Characteristics of A Typic Haploxerert Soil**  
ACİR N., ÇELİK İ., ACAR M., GÜNAL H., BERKET BARUT Z.  
INTERNATIONAL CONFERENCE ON AGRICULTURE, FOREST, FOOD SCIENCES AND TECHNOLOGIES, Nevşehir, Turkey, 15 - 17 May 2017, pp.902
- XXVII. **Effects of long-term tillage systems on soil water content and wheat yield under Mediterranean conditions**  
ACAR M., ÇELİK İ.  
International Conference on Agriculture, Forest, Food Sciences and Technologies (ICAFOT 2017), Nevşehir, Turkey, 15 - 17 May 2017, pp.108
- XXVIII. **Effects of occasional tillage on compaction of a clayey soil**  
ÇELİK İ., GÜNAL H., ACAR M., ACİR N., BERKET BARUT Z.  
INTERNATIONAL CONFERENCE ON AGRICULTURE, FOREST, FOOD SCIENCES AND TECHNOLOGIES, Nevşehir, Turkey, 15 - 17 May 2017, pp.279
- XXIX. **Mean Weight Diameter and Water Holding Capacity of Aggregates Under Contrasting Soil Tillage Systems**  
ACAR M., ÇELİK İ., GÜNAL H., SARIYEV A.  
Eurosoil İstanbul 2016, İstanbul, Turkey, 16 - 21 October 2016, pp.588
- XXX. **Organic Carbon Distributions in Aggregates Under Different Tillage Practices in Mediterranean Conditions**  
ACAR M., ÇELİK İ., GÜNAL H., BERKET BARUT Z.  
Eurosoil İstanbul 2016, İstanbul, Turkey, 16 - 21 October 2016, pp.605

## **Supported Projects**

ACAR M., TUBITAK Project, Aşağı Seyhan Ovasında Toprak Kalitesinin Değerlendirilmesi ve İzlenmesinde Amenajmana Hassas İndikatörlerin Belirlenmesi, 2019 - Continues

SARIYEV A., BARUTÇULAR C., SAĞIR H., KOÇ L., HASANOĞLU A., BYKOVA A., ACAR M., Project Supported by Higher Education Institutions, Ağır Killi Topraklarda Farklı Sulama Düzeylerinde Sulama Suyuna Uygulanan Hidrojen Peroksitin H2O2 Mısır Bitkisinin Gelişimine ve Dane Verimine Etkisi, 2016 - 2018

ÇELİK İ., ACAR M., Project Supported by Higher Education Institutions, Farklı Toprak İşleme Yöntemlerinin Topraktaki Agregat Büyüklük Dağılımına ve Agregatların Total Karbon ve Azot İçeriğine Etkileri, 2015 - 2016

## **Metrics**

Publication: 48

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