

## Prof. DAVUT KARAYEL

### Personal Information

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### International Researcher IDs

ScholarID: rH9t8kkAAAAJ

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Publons / Web Of Science ResearcherID: C-2485-2016

ScopusID: 6602408103

Yoksis Researcher ID: 123310

### Biography

Davut KARAYEL, graduated from the Cukurova University (Adana/Turkey) with a degree in Agricultural Engineering (1995) and obtained his master's and doctoral degree at Akdeniz University (Antalya/Turkey). He defended his doctoral dissertation in the field of Agricultural Engineering (2005). In 2008, he obtained the title of associate professor, and in 2014, the title of professor at Akdeniz University (Antalya/Turkey). He is currently a professor at Akdeniz University, Turkey and a chief researcher at Vytautas Magnus University, Lithuania (performed remotely).

Davut KARAYEL is associate editor of Journal of Computers and Electronics in Agriculture and member of editorial board of Turkish Journal of Agriculture and Forestry. He has published more than 100 scientific papers on agricultural engineering (of which, 27 articles are included in the 'CA Web of Science' database and have a certain level citation impact). He is author of two chapters in 2 international books.

Research interests: technological processes of sowing and crop care machines, technological and environmental assessment of the impact of agricultural technological operations on soil and environment.

### Education Information

Doctorate, Akdeniz University, Institute of Science, Tarım Makinaları Abd, Turkey 1999 - 2005

Postgraduate, Akdeniz University, Institute of Science, Tarım Makinaları Abd, Turkey 1996 - 1999

Undergraduate, Cukurova University, Ziraat Fakültesi, Tarım Makinaları Bölümü, Turkey 1991 - 1995

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, Hassas Ekimde Farklı Tip Gömücü Ayak ve Derinlik Ayar Sistemlerinin Ekim Kalitesine Etkisi , Akdeniz

University, Institute of Science, Tarım Makinaları Abd, 2005  
Postgraduate, Düşey Plakalı Hava Emişli Bir Hassas Ekim Makinasının Bazı Sebze Tohumları İçin Ekim Etkinliği  
Değerlerinin Laboratuvar ve Tarla Şartlarında Karşılaştırılması, Akdeniz University, Institute of Science, Tarım Makinaları  
Abd, 1999

## Research Areas

Agricultural Sciences, Agriculture, Farm Machinery, Agricultural Tools and Machines, Mechanization in Plant Production

## Academic Titles / Tasks

Professor, Akdeniz University, Faculty of Agriculture, Department of Agricultural Machinery and Technologies  
Engineering, 2014 - Continues  
Associate Professor, Akdeniz University, Faculty of Agriculture, Department of Agricultural Machinery and Technologies  
Engineering, 2009 - 2014  
Lecturer PhD, Akdeniz University, Technical Sciences Vocational School, Department of Mechanical and Metal  
Technologies, 2007 - 2009  
Research Assistant, Akdeniz University, Institute of Science, Agricultural Machinery, 1996 - 2005

## Academic and Administrative Experience

Dean, Akdeniz University, Faculty of Agriculture, 2017 - 2020  
Director of Vocational School, Akdeniz University, Technical Sciences Vocational School, 2014 - 2017  
Vice Dean, Akdeniz University, Faculty of Agriculture, 2012 - 2014

## Courses

Diferansiyel Denklemler, Undergraduate, 2018 - 2019  
Pompaj Tesisi ve Makinaları, Undergraduate, 2013 - 2014  
Mühendislik Matematiği, Undergraduate, 2013 - 2014  
Akişkanlar Mekaniği, Undergraduate, 2013 - 2014  
Teknik Resim, Undergraduate, 2012 - 2013  
Ekim Bakım ve Gübreleme Mekanizasyonu, Undergraduate, 2013 - 2014  
Matematik, Undergraduate, 2010 - 2011

## Advising Theses

KARAYEL D., El ile Çekilebilir Ekim Makinası Prototipinin Geliştirilmesi, Postgraduate, H.ÖZENÇ(Student), 2018  
KARAYEL D., Tahıl Ekim Makinalarının Tohum Dağılımını İyileştirmek için Yeni Bir Tohum Borusu Tasarımının  
Geliştirilmesi, Postgraduate, A.AKTAŞ(Student), 2018  
KARAYEL D., Potlu Domates ve Karpuz Fidesi Dikiminde Farklı Toprak İşleme Yöntemlerinin Dikim Kalitesine Etkisi,  
Postgraduate, H.AYTEM(Student), 2012

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

- I. Influence of tillage methods and soil crust breakers on cotton seedling emergence in silty-loam soil

- KARAYEL D., Šarauskis E.  
Soil and Tillage Research, vol.239, 2024 (SCI-Expanded)
- II. Improving the seed detection accuracy of piezoelectric impact sensors for precision seeders. Part II:  
Evaluation of different plate materials  
Rossi S., Rubio Scola I., Bourges G., Šarauskis E., KARAYEL D.  
Computers and Electronics in Agriculture, vol.215, 2023 (SCI-Expanded)
- III. Investigation of the performance of a cylindrical hopper and metering device of a carrot seeder  
Valentin M. T., Białowiec A., KARAYEL D., Jasinskas A., Ciolkosz D., Lavarias J. A.  
Scientific Reports, vol.13, no.1, 2023 (SCI-Expanded)
- IV. Improving the seed detection accuracy of piezoelectric impact sensors for precision seeders. Part I:  
A comparative study of signal processing algorithms  
Rossi S., Rubio Scola I., Bourges G., Šarauskis E., KARAYEL D.  
Computers and Electronics in Agriculture, vol.215, 2023 (SCI-Expanded)
- V. In-situ pelletization of campus biomass residues: Case study for Akdeniz University  
Yilmaz H., ÇANAKCI M., TOPAKCI M., KARAYEL D., Yiğit M., ORTAÇEŞME D.  
Renewable Energy, vol.212, pp.972-983, 2023 (SCI-Expanded)
- VI. Technical evaluation of transplanters' performance for potted seedlings  
KARAYEL D., ÇANAKCI M., TOPAKCI M., Aktaş A., Aytem H., Kriauciuniene Z.  
Turkish Journal of Agriculture and Forestry, vol.47, no.1, pp.116-123, 2023 (SCI-Expanded)
- VII. Estimation of Optimum Vacuum Pressure of Air-Suction Seed-Metering Device of Precision Seeders  
Using Artificial Neural Network Models  
KARAYEL D., Güngör O., Šarauskis E.  
Agronomy, vol.12, no.7, 2022 (SCI-Expanded)
- VIII. Effect of Torrefaction Conditions on Physical and Thermal Properties of High- and Low- Quality Palm  
Pruning Residue Pellets  
Yilmaz H., TOPAKCI M., VAROL M., KARAYEL D., ÇANAKCI M.  
Bioenergy Research, vol.15, no.1, pp.530-543, 2022 (SCI-Expanded)
- IX. The effect of raw material moisture and particle size on agri-pellet production parameters and  
physical properties: A case study for greenhouse melon residues  
YILMAZ H., ÇANAKCI M., TOPAKCI M., KARAYEL D.  
BIOMASS & BIOENERGY, vol.150, 2021 (SCI-Expanded)
- X. Design and development of the PLC based sensor and instrumentation system for self-propelled  
pruning residue mulcher prototype  
ÜNAL İ., ÇANAKCI M., TOPAKCI M., KARAYEL D., ÇAKIR M.  
COMPUTERS AND ELECTRONICS IN AGRICULTURE, vol.186, 2021 (SCI-Expanded)
- XI. Development of a mobile robot-based combined sensor platform to determine the correlation  
between soil penetration resistance and electrical conductivity  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., YILMAZ E., KABAŞ Ö.  
TURKISH JOURNAL OF AGRICULTURE AND FORESTRY, vol.45, no.3, pp.365-379, 2021 (SCI-Expanded)
- XII. Comparison of the physical properties of cotton and sesame stalk pellets produced at different  
moisture contents and combustion of the finest pellets  
YILMAZ H., TOPAKCI M., KARAYEL D., ÇANAKCI M.  
ENERGY SOURCES PART A-RECOVERY UTILIZATION AND ENVIRONMENTAL EFFECTS, 2020 (SCI-Expanded)
- XIII. EFFECTS OF DIFFERENT SOIL TILLAGE-SOWING SYSTEMS ON PLANT DEVELOPMENT AND  
EMERGENCE TRAITS OF SECOND CROP SOYBEAN  
KABAŞ Ö., Kocaturk M., Ozkan C. F., Gumrukcu E., ÇANAKCI M., KARAYEL D.  
BIOSCIENCE JOURNAL, vol.36, no.6, pp.2092-2107, 2020 (SCI-Expanded)
- XIV. Optimization of an Industrial Type Prototype Shelf Dryer by Response Surface Methodology "A Case  
Study for Potato"  
Heybeli N., ERTEKİN C., KARAYEL D.  
AMA-AGRICULTURAL MECHANIZATION IN ASIA AFRICA AND LATIN AMERICA, vol.46, no.2, pp.53-60, 2015 (SCI-

- Expanded)
- XV. **Using real-time kinematic (RTK) global positioning system (GPS) for the determination of seedling distributions over the field**  
KARAYEL D., TOPAKCI M., Unal I., ŠARAUSKIS E., ÇANAKCI M.  
ZEMDIRBYSTE-AGRICULTURE, vol.99, no.4, pp.425-430, 2012 (SCI-Expanded)
- XVI. **The effects of different tillage methods on the post-wheat second crop sesame: seed yield, energy budget, and economic return**  
UZUN B., YOL E., Furat S., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
TURKISH JOURNAL OF AGRICULTURE AND FORESTRY, vol.36, no.4, pp.399-407, 2012 (SCI-Expanded)
- XVII. **SESAME HILL DROPPING PERFORMANCE OF A VACUUM SEEDER FOR DIFFERENT TILLAGE PRACTICES**  
TOPAKCI M., KARAYEL D., ÇANAKCI M., FURAT S., UZUN B.  
APPLIED ENGINEERING IN AGRICULTURE, vol.27, no.2, pp.203-209, 2011 (SCI-Expanded)
- XVIII. **Design of a Horizontal Penetrometer for Measuring On-the-Go Soil Resistance**  
TOPAKCI M., Unal I., ÇANAKCI M., ÇELİK H. K., KARAYEL D.  
SENSORS, vol.10, no.10, pp.9337-9348, 2010 (SCI-Expanded)
- XIX. **Improvement of field efficiency measurement system based on GPS for precision agriculture applications**  
TOPAKCI M., Unal I., ÇANAKCI M., Yiğit M., KARAYEL D.  
JOURNAL OF FOOD AGRICULTURE & ENVIRONMENT, vol.8, no.3-4, pp.288-292, 2010 (SCI-Expanded)
- XX. **Determination of basic machinery management data for PTO driven pruning residue chopper**  
ÇANAKCI M., TOPAKCI M., AGSARAN B., KARAYEL D.  
TARIM BİLİMLERİ DERGİSİ-JOURNAL OF AGRICULTURAL SCIENCES, vol.16, no.1, pp.46-54, 2010 (SCI-Expanded)
- XXI. **Kuyruk Milinden Hareketli Budama Artığı Parçalama Makinasının Temel İşletmecilik Verilerinin Belirlenmesi**  
ÇANAKCI M., TOPAKCI M., AĞSARAN B., KARAYEL D.  
JOURNAL OF AGRICULTURAL SCIENCE, vol.16, no.1, pp.46-54, 2010 (SCI-Expanded)
- XXII. **Deep tillage tool optimization by means of finite element method: Case study for a subsoiler tine**  
TOPAKCI M., ÇELİK H., ÇANAKCI M., Rennie A. E. W., AKINCI İ., KARAYEL D.  
JOURNAL OF FOOD AGRICULTURE & ENVIRONMENT, vol.8, no.2, pp.531-536, 2010 (SCI-Expanded)
- XXIII. **Kuyruk milinden hareketli budama artığı parçalama makinasının temel işletmecilik verilerinin belirlenmesi**  
ÇANAKCI M., TOPAKCI M., AĞSARAN B., KARAYEL D.  
JOURNAL OF AGRICULTURAL SCIENCE, vol.16, no.1, pp.46-54, 2010 (SCI-Expanded)
- XXIV. **Evaluation of Seed Distribution in the Horizontal Plane and Plant Growing Area for Row Seeding Using Voronoi Polygons**  
Karayel D.  
JOURNAL OF AGRICULTURAL SCIENCES-TARIM BİLİMLERİ DERGİSİ, vol.16, no.2, pp.97-103, 2010 (SCI-Expanded)
- XXV. **Determination of Basic Machinery Management Data for PTO Driven Pruning Residue Chopper**  
ÇANAKCI M., TOPAKCI M., Ağsaran B., KARAYEL D.  
JOURNAL OF AGRICULTURAL SCIENCES-TARIM BİLİMLERİ DERGİSİ, vol.16, no.1, pp.46-54, 2010 (SCI-Expanded)
- XXVI. **PERFORMANCE OF A NO-TILL SEEDER UNDER DRY AND WET SOIL CONDITIONS**  
ÇANAKCI M., KARAYEL D., TOPAKCI M., KOC A.  
APPLIED ENGINEERING IN AGRICULTURE, vol.25, no.4, pp.459-465, 2009 (SCI-Expanded)
- XXVII. **Performance of a modified precision vacuum seeder for no-till sowing of maize and soybean**  
Karayel D.  
SOIL & TILLAGE RESEARCH, vol.104, no.1, pp.121-125, 2009 (SCI-Expanded)
- XXVIII. **Evaluation of three depth-control components on seed placement accuracy and emergence for a precision planter**  
KARAYEL D., ÖZMERZİ A.  
APPLIED ENGINEERING IN AGRICULTURE, vol.24, no.3, pp.271-276, 2008 (SCI-Expanded)

- XXIX. **Comparison of vertical and lateral seed distribution of furrow openers using a new criterion**  
 Karayel D., ÖZMERZİ A.  
 SOIL & TILLAGE RESEARCH, vol.95, no.1-2, pp.69-75, 2007 (SCI-Expanded)
- XXX. **Laboratory measurement of seed drill seed spacing and velocity of fall of seeds using high-speed camera system**  
 Karayel D., Wiesehoff M., Özmerzi A., Müller J.  
 COMPUTERS AND ELECTRONICS IN AGRICULTURE, vol.50, no.2, pp.89-96, 2006 (SCI-Expanded)
- XXXI. **Effect of forward speed on hill dropping uniformity of a precision vacuum seeder**  
 Karayel D., Özmerzi A.  
 HORTTECHNOLOGY, vol.14, no.3, pp.364-367, 2004 (SCI-Expanded)
- XXXII. **Mathematical modelling of vacuum pressure on a precision seeder**  
 Karayel D., Barut Z., Özmerzi A.  
 BIOSYSTEMS ENGINEERING, vol.87, no.4, pp.437-444, 2004 (SCI-Expanded)
- XXXIII. **Effect of sowing depth on precision seeder uniformity**  
 Ozmerzi A., KARAYEL D., TOPAKCI M.  
 BIOSYSTEMS ENGINEERING, vol.82, no.2, pp.227-230, 2002 (SCI-Expanded)
- XXXIV. **Effect of sowing depth on precision seeder uniformity**  
 Özmerzi A., KARAYEL D., TOPAKCI M.  
 Biosystems Engineering, vol.82, no.2, pp.227-230, 2002 (SCI-Expanded)

### Articles Published in Other Journals

- I. **Design and Experiment of a Helicoidal Seed Tube to Improve Seed Distribution Uniformity of Seed Drills**  
 KARAYEL D., Šarauskis E., Aktaş A.  
 Processes, vol.10, no.7, 2022 (Scopus)
- II. **Effect of Die Geometry and Moisture Content on Pelletizing of Palm Pruning Residues**  
 Yilmaz H., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
 Journal of Tekirdag Agricultural Faculty, vol.19, no.2, pp.204-214, 2022 (Scopus)
- III. **Çim Peleti Üretiminde Kalıp Delik Çapı ve Nem İçeriğinin Üretim Parametreleri ve Pelet Fiziksel Özelliklerine Etkisi**  
 YILMAZ H., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
 ÇOMÜ ZİRAAT FAKÜLTESİ DERGİSİ, vol.9, no.1, pp.47-56, 2021 (Peer-Reviewed Journal)
- IV. **The effects of pelletizing moisture on pellet physical properties of olive cake pellets**  
 Yilmaz H., Topakci M., Karayel D., Çanakci M.  
 Mediterranean Agricultural Sciences, vol.34, no.1, pp.55-61, 2021 (Peer-Reviewed Journal)
- V. **Performance of a large seed vacuum planter for bare and pelleted onion seeds**  
 KARAYEL D., HACIYUSUFOĞLU A. F., ÇANAKCI M., TOPAKCI M.  
 MEDITERRANEAN AGRICULTURAL SCIENCES, vol.33, no.2, pp.253-258, 2020 (Peer-Reviewed Journal)
- VI. **Performance of a large seed vacuum planter for bare and pelleted onion seeds**  
 KARAYEL D., HACIYUSUFOĞLU A. F., ÇANAKCI M., TOPAKCI M.  
 MEDITERRANEAN AGRICULTURAL SCIENCES, vol.33, no.2, pp.253-258, 2020 (Peer-Reviewed Journal)
- VII. **Performance of a large seed vacuum planter for bare and pelleted onion seeds**  
 KARAYEL D., HACIYUSUFOĞLU A. F., ÇANAKCI M., TOPAKCI M.  
 MEDITERRANEAN AGRICULTURAL SCIENCES, vol.33, no.2, pp.253-258, 2020 (Peer-Reviewed Journal)
- VIII. **The effect of different blades on the performance values of a pruning chopper used to improve soil properties**  
 ÇANAKCI M., TOPAKCI M., KARAYEL D., Agsaran B., Kabas O., Yigit M.  
 Bulgarian Journal of Agricultural Science, vol.25, no.5, pp.1052-1059, 2019 (Scopus)
- IX. **Environmental impact of no-tillage farming**

- KARAYEL D., Šarauskis E.  
Environmental Research, Engineering and Management, vol.75, no.1, pp.7-12, 2019 (Scopus)
- X. **Farklı Gömücü Ayak ve Tohum Borusu Tasarımları ile Tahıl Ekim Makinalarının Tohum Dağılımının İyileştirilmesi**  
KARAYEL D., AKTAŞ A.  
TARIM MAKİNALARI BİLİMİ DERGİSİ, vol.14, no.2, pp.99-103, 2018 (Peer-Reviewed Journal)
- XI. **Farklı Gömücü Ayak ve Tohum Borusu Tasarımları ile Tahıl Ekim Makinalarının Tohum Dağılımının İyileştirilmesi**  
KARAYEL D., AKTAŞ A.  
Tarım Makinaları Bilimi Dergisi (Journal of Agricultural Machinery Science), vol.14, no.2, pp.99-103, 2018 (Peer-Reviewed Journal)
- XII. **Kendi Yürürl Bir Budama Artığı Parçalama Makinası İşletme Giderlerinin Belirlenmesi**  
ÇANAKCI M., TOPAKCI M., KARAYEL D., ÜNAL İ., ÇAKIR M., YİĞİT M., ÖZDEMİR E.  
Tarım Makinaları Bilimi Dergisi, vol.4, no.14, pp.127-134, 2018 (Peer-Reviewed Journal)
- XIII. **Real Time Stubble Cover Ratio Determination by Using an Autonomous Robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
ANNALS of Faculty Engineering Hunedoara – International Journal of Engineering, vol.4, pp.79-86, 2017 (Peer-Reviewed Journal)
- XIV. **EVALUATION OF SOIL TILLAGE PROCESS TO IMPROVE SEEDBED PREPARATION AND CROP DENSITY**  
KRIAUCIÜNIEN Z., RIMANDAS V., CEKANAUSKAS S., BUTKEVICIEN L., MASILIONYT L., SARAUSKIS E., KARAYEL D., LAZAUSKAS S.  
ACTA TECHNICA CORVINIENSIS- Bulletin of Engineering, vol.9, no.4, 2016 (Peer-Reviewed Journal)
- XV. **Determination of head losses in drip irrigation laterals with cylindrical in-line type emitters through CFD analysis**  
ÇELİK H. K., KARAYEL D., Lupeanu M., Rennie A., AKINCI İ.  
Bulgarian Journal of Agricultural Science, vol.21, no.3, pp.703-710, 2015 (Scopus)
- XVI. **An Empirical Study of the Efficiency of the Light Bar Usage on Field Sprayer**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
Tarım Makinaları Bilimi Dergisi, vol.10, no.3, pp.213-217, 2014 (Peer-Reviewed Journal)
- XVII. **An Empirical Study of the Efficiency of the Light Bar Usage on Field Sprayer**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
Tarım Makinaları Bilimi Dergisi, vol.10, no.3, pp.213-217, 2014 (Peer-Reviewed Journal)
- XVIII. **An Empirical Study of the Efficiency of the Light Bar Usage on Field Sprayer**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
Journal of Agricultural Machinery Science, vol.10, no.3, pp.213-217, 2014 (Peer-Reviewed Journal)
- XIX. **Akdeniz Üniversitesi Ziraat Fakültesi Tarım Makineleri Bölümü Hassas Tarım Çalışmaları**  
TOPAKCI M., ÜNAL İ., ÇANAKCI M., KARAYEL D.  
Tarım Makinaları Bilimi Dergisi, vol.9, no.4, pp.279-286, 2013 (Peer-Reviewed Journal)
- XX. **Theoretical analysis of interaction of disc coulters and straw residues under no-tillage conditions**  
Šarauskis E., Romanekas K., Sakalauskas A., Vaiciukevičius E., Vaitauskiene K., KARAYEL D., Petrauskas R.  
Agronomy Research, vol.11, no.1, pp.89-96, 2013 (Scopus)
- XXI. **Linearity Comparison of Single and Dual Frequency GPS Receivers under Dynamic Conditions**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., YİĞİT M.  
Akdeniz Üniversitesi Ziraat Fak. Derg., no.25, pp.85-92, 2012 (Peer-Reviewed Journal)
- XXII. **Linearity Comparison Of Single And Dual Frequency Gps Receivers Under Dynamic Conditions**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., YİĞİT M.  
AKDENİZ ÜNİVERSİTESİ ZİRAAT FAKÜLTESİ DERGİSİ, pp.85-92, 2012 (Peer-Reviewed Journal)
- XXIII. **Determination of Efficiency of Lightened Guidance System on Agricultural Machinery: A Case Study on Fertilizer Broadcaster**  
TOPAKCI M., HAS M., ÜNAL İ., ÇANAKCI M., KARAYEL D., KOÇ A.  
Journal of Agricultural Machinery Science, no.7, pp.13-17, 2011 (Peer-Reviewed Journal)

- XXIV. **Rapid Prototyping and Flow Simulation Applications in Design of Agricultural Irrigation Equipment: Case Study for a Sample In Line Drip Emitter**  
 ÇELİK H. K., KARAYEL D., ÇAĞLAYAN N., Rennie A., AKINCI İ.  
 VIRTUAL AND PHYSICAL PROTOTYPING, no.6, pp.47-56, 2011 (Scopus)
- XXV. **Determination of Flow Parameters through CFD Analysis for Agricultural Irrigation Equipment: A Case Study for a Mini Valve**  
 ÇELİK H. K., Rennie A. E. W., KARAYEL D., AKINCI İ.  
 Journal of Agricultural Machinery Science, vol.7, no.3, pp.231-239, 2011 (Peer-Reviewed Journal)
- XXVI. **Rapid prototyping and flow simulation applications in design of agricultural irrigation equipment: Case study for a sample in-line drip emitter: The paper is to study CFD and RP application samples on the design issues associated with agricultural irrigation equipment**  
 Çelik H. K., Karayel D., Çağlayan N., Rennie A. E., Akinci İ.  
 Virtual and Physical Prototyping, vol.6, no.1, pp.47-56, 2011 (Scopus)
- XXVII. **Structural optimisation of a subsoiler**  
 TOPAKCI M., ÇELİK H. K., ÇANAKCI M., KARAYEL D., Rennie A.  
 Pakistan Journal of Scientific and Industrial Research, vol.53, no.5, pp.281-287, 2010 (Scopus)
- XXVIII. **Industry of pressurized irrigation system components and its characteristics in West Mediterranean Region**  
 ÇANAKCI M., AYTEM H., KARAYEL D., TOPAKCI M., AKINCI İ.  
 Tarım Makinaları Bilimi Dergisi, vol.6(3), pp.153-161, 2010 (Peer-Reviewed Journal)
- XXIX. **Antalya ilinde yürütülen koruyucu toprak işleme ve doğrudan ekim çalışmaları**  
 ÇANAKCI M., KARAYEL D., TOPAKCI M.  
 TARIM MAKİNALARI BİLİMİ DERGİSİ, vol.6, no.4, pp.209-219, 2010 (Peer-Reviewed Journal)
- XXX. **Structural optimization of a subsoiler**  
 Topakci M., Çelik H. K., Çanakci M., Karayel D., Rennie A.  
 PAKISTAN JOURNAL OF AGRICULTURAL SCIENCES, vol.53, no.5, pp.281-287, 2010 (Peer-Reviewed Journal)
- XXXI. **Rapid Prototyping and Flow Simulation Applications in Design of Agricultural Irrigation Equipment: Case Study for A Sample In-Line Drip Emitter**  
 ÇELİK H. K., KARAYEL D., ÇAĞLAYAN N., AKINCI İ., Rennie A. E. W.  
 Virtual and Physical Prototyping, Vol. 6 (1): 147-156, vol.6, no.1, pp.147-156, 2010 (Peer-Reviewed Journal)
- XXXII. **Effect of Different Seedbed Preparation Methods on Physical Properties of Soil**  
 KARAYEL D., Özmerzi A.  
 AMA, Agricultural Mechanization in Asia, Africa and Latin America, vol.34, no.3, pp.9-11, 2003 (Scopus)
- XXXIII. **Effect of tillage methods on sowing uniformity of maize**  
 KARAYEL D., Özmerzi A.  
 Canadian Biosystems Engineering / Le Genie des biosystems au Canada, vol.44, 2002 (Scopus)

## Books & Book Chapters

- I. **Palme Budama Artığı Peletlerinde Torefikasyon Sıcaklığı ve Bekleme Süresinin Su Emilim Direncine Etkisi**  
 Yılmaz H., Topakci M., Çanakci M., Karayel D., Varol M.  
 in: Tarımsal Mekanizasyon ve Enerji Üzerine Güncel Araştırmalar, Deniz YILMAZ, Osman GÖKDÖĞAN, Önder UYSAL, Mehmet Emin GÖKDUMAN, Ahmet SÜSLÜ, Editor, Akademisyen Yayınevi Kitabevi, Isparta, pp.151-163, 2021
- II. **Bölüm 11. Palme Budama Artığı Peletlerinde Torefikasyon Sıcaklığı ve Bekleme Süresinin Su Emilim Direncine Etkisi**  
 YILMAZ H., TOPAKCI M., ÇANAKCI M., KARAYEL D., VAROL M.  
 in: TARIMSAL MEKANİZASYON VE ENERJİ ÜZERİNE GÜNCEL ARAŞTIRMALAR, Deniz YILMAZ, Osman GÖKDÖĞAN, Önder UYSAL, Mehmet Emin GÖKDUMAN, Editor, Akademisyen Kitabevi A.Ş., Ankara, pp.151-164, 2021
- III. **Direct Seeding of Soybean Using a Modified Conventional Seeder**

KARAYEL D.

in: Soybean - Applications and Technology, Tzi-Bun Ng, Editor, Intech, Rijeka, pp.1-17, 2011

## Refereed Congress / Symposium Publications in Proceedings

- I. **Palmiye Budama Artığı Peletlerinde Torefikasyon Sıcaklığı ve Bekleme Süresinin Su Emilim Direncine Etkisi**  
YILMAZ H., TOPAKCI M., ÇANAKCI M., KARAYEL D., VAROL M.  
33. Ulusal Tarımsal Mekanizasyon ve Enerji Kongresi, Isparta, Turkey, 01 October 2021, pp.27
- II. **Determination of Pasture Cover Ratio Using Image Processing Technique**  
ÜNAL İ., TOPAKCI M., KARAYEL D., ÇANAKCI M.  
12th International Congress on Mechanization and Energy in Agriculture, Cappadocia, Nevşehir, Turkey, pp.284
- III. **An Overview of Change in Pellet Fuel Properties by Torrefaction Process**  
YILMAZ H., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
3. Bioenergy Studies Symposium, Samsun, Turkey, 20 - 21 May 2021
- IV. **An Overview of Change in Pellet Fuel Properties by Torrefaction Process**  
YILMAZ H., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
3. Bioenergy Studies Symposium, Samsun, Turkey, 20 - 21 May 2021
- V. **An Overview of Change in Pellet Fuel Properties by Torrefaction Process**  
YILMAZ H., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
3. Bioenergy Studies Symposium, Samsun, Turkey, 20 - 21 May 2021
- VI. **An Overview of Change in Pellet Fuel Properties by Torrefaction Process**  
YILMAZ H., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
3. Bioenergy Studies Symposium, Samsun, Turkey, 20 - 21 May 2021
- VII. **Farklı Hammaddelerden Üretilen Peletlerin Renk Özellikleri ile Termokimyasal Özellikleri Arasındaki İlişkinin Araştırılması**  
YILMAZ H., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
32. Tarımsal Mekanizasyon ve Enerji Kongresi, Çanakkale, Turkey, 4 - 06 September 2019, pp.1
- VIII. **El İle Çekilebilir Ekim Makinası Prototipi Geliştirilmesi**  
ÖZENÇ H., KARAYEL D.  
32. Tarımsal Mekanizasyon ve Enerji Kongresi, Çanakkale, Turkey, 4 - 06 September 2019, pp.1-2
- IX. **Farklı Hammaddelerden Üretilen Peletlerin Renk Özellikleri ile Termokimyasal Özellikleri Arasındaki İlişkinin Araştırılması**  
YILMAZ H., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
32. Tarımsal Mekanizasyon ve Enerji Kongresi, Çanakkale, Turkey, 4 - 06 September 2019, pp.1
- X. **Farklı Hammaddelerden Üretilen Peletlerin Renk Özellikleri ile Termokimyasal Özellikleri Arasındaki İlişkinin Araştırılması**  
YILMAZ H., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
32. Tarımsal Mekanizasyon ve Enerji Kongresi, Çanakkale, Turkey, 4 - 06 September 2019, pp.1
- XI. **Kendi Yürürl Bir Budama Artığı Parçalama Makinası İşletme Giderlerinin Belirlenmesi**  
ÇANAKCI M., TOPAKCI M., KARAYEL D., ÜNAL İ., ÇAKIR M., YİĞİT M., ÖZDEMİR E.  
31. Ulusal Tarımsal Mekanizasyon ve Enerji Kongresi, Bursa, Turkey, 5 - 07 September 2018, pp.77
- XII. **Kendi Yürürl Bir Budama Artığı Parçalama Makinası İşletme Giderlerinin Belirlenmesi**  
ÇANAKCI M., TOPAKCI M., KARAYEL D., ÜNAL İ., ÇAKIR M., YİĞİT M., ÖZDEMİR E.  
31. Ulusal Tarımsal Mekanizasyon ve Enerji Kongresi, Bursa, Turkey, 5 - 07 September 2018, pp.77
- XIII. **Kendi Yürürl Bir Budama Artığı Parçalama Makinası İşletme Giderlerinin Belirlenmesi**  
ÇANAKCI M., TOPAKCI M., KARAYEL D., ÜNAL İ., ÇAKIR M., YİĞİT M., ÖZDEMİR E.  
31. Ulusal Tarımsal Mekanizasyon ve Enerji Kongresi, Bursa, Turkey, 5 - 07 September 2018, pp.77
- XIV. **ASSESSMENT OF EMISSIONS AND COMBUSTION EFFICIENCY OF PALM TREE PRUNING RESIDUE PELLETS**

- KOÇER A., YILMAZ H., YİĞİT M., KÜRKLÜ A., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.107
- XV. **SEEDING PERFORMANCE COMPARISON OF THREE DIFFERENT PROTOTYPES OF A SEED SINGULATOR USED IN A PRECISION VACUUM SEEDER**  
ÖZDEMİR E., KUNT G., YILMAZ H., KARAYEL D., TOPAKCI M., ÇELİK H. K., ÜNAL İ.  
19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.279
- XVI. **Comparison of Sieving Method and Image Processing Method Used to Determine the Size of Shredded Pruning Residues**  
YİĞİT M., ÇANAKCI M., YILMAZ H., TOPAKCI M., KARAYEL D.  
XIX. World Congress of CIGR, Antalya, Turkey, 22 April - 25 May 2018, pp.291
- XVII. **ASSESSMENT OF EMISSIONS AND COMBUSTION EFFICIENCY OF PALM TREE PRUNING RESIDUE PELLETS**  
KOÇER A., YILMAZ H., YİĞİT M., KÜRKLÜ A., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.107
- XVIII. **Comparison of Sieving Method and Image Processing Method Used to Determine the Size of Shredded Pruning Residues**  
YİĞİT M., ÇANAKCI M., YILMAZ H., TOPAKCI M., KARAYEL D.  
XIX. World Congress of CIGR, Antalya, Turkey, 22 - 25 April 2018, pp.291
- XIX. **Comparison of Sieving Method and Image Processing Method Used to Determine the Size of Shredded Pruning Residues**  
YİĞİT M., ÇANAKCI M., YILMAZ H., TOPAKCI M., KARAYEL D.  
19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.291
- XX. **SEEDING PERFORMANCE COMPARISON OF THREE DIFFERENT PROTOTYPES OF A SEED SINGULATOR USED IN A PRECISION VACUUM SEEDER**  
Özdemir E., Kunt G., Yilmaz H., Karayel D., Topakci M., Celik H. K., Ünal İ.  
19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.279
- XXI. **ASSESSMENT OF EMISSIONS AND COMBUSTION EFFICIENCY OF PALM TREE PRUNING RESIDUE PELLETS**  
KOÇER A., YILMAZ H., YİĞİT M., KÜRKLÜ A., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.107
- XXII. **ESTIMATION OF PARTICLE DENSITY OF BIOMASS PELLETS BY IMAGE PROCESSING TECHNIQUE**  
YILMAZ H., YİĞİT M., KARAYEL D., ÇANAKCI M., TOPAKCI M.  
19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.135
- XXIII. **SEEDING PERFORMANCE COMPARISON OF THREE DIFFERENT PROTOTYPES OF A SEED SINGULATOR USED IN A PRECISION VACUUM SEEDER**  
ÖZDEMİR E., KUNT G., YILMAZ H., KARAYEL D., TOPAKCI M., ÇELİK H. K., ÜNAL İ.  
19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.279
- XXIV. **Comparison of Sieving Method and Image Processing Method Used to Determine the Size of Shredded Pruning Residues**  
YİĞİT M., ÇANAKCI M., YILMAZ H., TOPAKCI M., KARAYEL D.  
XIX. World Congress of CIGR, Antalya, Turkey, 22 April - 25 May 2018, pp.291
- XXV. **Seeding Performance Comparison of Three Different Prototypes of A Seed Singulator used in A Precision Vacuum SeederR**  
ÖZDEMİR E., KUNT G., YILMAZ H., KARAYEL D., TOPAKCI M., ÇELİK H. K., ÜNAL İ.  
CIGR 2018 XIX. World Congress of CIGR (Commission Internationale du Génie Rural), Antalya, Turkey, 22 - 24 April 2018, vol.1, no.1, pp.279
- XXVI. **ASSESSMENT OF EMISSIONS AND COMBUSTION EFFICIENCY OF PALM TREE PRUNING RESIDUE PELLETS**  
KOÇER A., YILMAZ H., YİĞİT M., KÜRKLÜ A., TOPAKCI M., ÇANAKCI M., KARAYEL D.  
19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.107
- XXVII. **Comparison of Sieving Method and Image Processing Method Used to Determine the Size of**

**Shredded Pruning Residues**

YİĞİT M., ÇANAKCI M., YILMAZ H., TOPAKCI M., KARAYEL D.

XIX. World Congress of CIGR, Antalya, Turkey, 22 April - 25 May 2018, pp.291

**XXVIII. ESTIMATION OF PARTICLE DENSITY OF BIOMASS PELLETS BY IMAGE PROCESSING TECHNIQUE**

YILMAZ H., YİĞİT M., KARAYEL D., ÇANAKCI M., TOPAKCI M.

19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.135

**XXIX. ESTIMATION OF PARTICLE DENSITY OF BIOMASS PELLETS BY IMAGE PROCESSING TECHNIQUE**

YILMAZ H., YİĞİT M., KARAYEL D., ÇANAKCI M., TOPAKCI M.

19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.135

**XXX. ASSESSMENT OF EMISSIONS AND COMBUSTION EFFICIENCY OF PALM TREE PRUNING RESIDUE PELLETS**

KOÇER A., YILMAZ H., YİĞİT M., KÜRKÜLÜ A., TOPAKCI M., ÇANAKCI M., KARAYEL D.

19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.107

**XXXI. ASSESSMENT OF EMISSIONS AND COMBUSTION EFFICIENCY OF PALM TREE PRUNING RESIDUE PELLETS**

KOÇER A., YILMAZ H., YİĞİT M., KÜRKÜLÜ A., TOPAKCI M., ÇANAKCI M., KARAYEL D.

19. World Congress of CIGR, Antalya, Turkey, 22 - 25 April 2018, pp.107

**XXXII. ESTIMATION OF PARTICLE DENSITY OF BIOMASS PELLETS BY IMAGE PROCESSING TECHNIQUE**

YILMAZ H., YİĞİT M., KARAYEL D., ÇANAKCI M., TOPAKCI M.

19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.135

**XXXIII. ESTIMATION OF PARTICLE DENSITY OF BIOMASS PELLETS BY IMAGE PROCESSING TECHNIQUE**

YILMAZ H., YİĞİT M., KARAYEL D., ÇANAKCI M., TOPAKCI M.

19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.135

**XXXIV. ASSESSMENT OF EMISSIONS AND COMBUSTION EFFICIENCY OF PALM TREE PRUNING RESIDUE PELLETS**

KOÇER A., YILMAZ H., YİĞİT M., KÜRKÜLÜ A., TOPAKCI M., ÇANAKCI M., KARAYEL D.

19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.107

**XXXV. SEEDING PERFORMANCE COMPARISON OF THREE DIFFERENT PROTOTYPES OF A SEED SINGULATOR USED IN A PRECISION VACUUM SEEDER**

ÖZDEMİR E., KUNT G., YILMAZ H., KARAYEL D., TOPAKCI M., ÇELİK H. K., ÜNAL İ.

19. World Congress of Cigr, Antalya, Turkey, 22 - 25 April 2018, pp.279

**XXXVI. SEEDING PERFORMANCE COMPARISON OF THREE DIFFERENT PROTOTYPES OF A SEED SINGULATOR USED IN A PRECISION VACUUM SEEDER**

ÖZDEMİR E., KUNT G., YILMAZ H., KARAYEL D., TOPAKCI M., ÇELİK H. K., ÜNAL İ.

CIGR 2018 XIX. World Congress of CIGR (Commission Internationale du Génie Rural), Antalya, Turkey, 22 - 24 April 2018, vol.1, no.1, pp.279

**XXXVII. Effect of biological preparation on changes in soil organic carbon and its environmental impact applying precision farming**

Juknevicius D., Sarauskis E., Rimkuviene D., Rukaite J., KARAYEL D.

17th International Scientific Conference Engineering for Rural Development, ERD 2018, Jelgava, Latvia, 23 - 25 May 2018, vol.17, pp.330-334

**XXXVIII. Determining the Performance Values of a Disc Chipper in Operation With Palm Pruning Residues**

YİĞİT M., ÇANAKCI M., YILMAZ H., TOPAKCI M., KARAYEL D.

13th International Congress on Mechanization and Energy in Agriculture & International Workshop on Precision Agriculture, İzmir, Turkey, 13 - 15 September 2017, pp.81

**XXXIX. Determining the Performance Values of a Disc Chipper in Operation With Palm Pruning Residues**

YİĞİT M., ÇANAKCI M., YILMAZ H., TOPAKCI M., KARAYEL D.

13th International Congress on Mechanization and Energy in Agriculture & International Workshop on Precision Agriculture, İzmir, Turkey, 13 - 15 September 2017, pp.81

**XL. Determining the Performance Values of a Disc Chipper in Operation With Palm Pruning Residues**

YİĞİT M., ÇANAKCI M., YILMAZ H., TOPAKCI M., KARAYEL D.

- 13th International Congress on Mechanization and Energy in Agriculture & International Workshop on Precision Agriculture, İzmir, Turkey, 13 - 15 September 2017, pp.81
- XLI. **Determining the Performance Values of a Disc Chipper in Operation With Palm Pruning Residues**  
YİĞİT M., ÇANAKCI M., YILMAZ H., TOPAKCI M., KARAYEL D.  
13th International Congress on Mechanization and Energy in Agriculture & International Workshop on Precision Agriculture, İzmir, Turkey, 13 - 15 September 2017, pp.81
- XLII. **Determining the Performance Values of a Disc Chipper in Operation With Palm Pruning Residues**  
YİĞİT M., ÇANAKCI M., YILMAZ H., TOPAKCI M., KARAYEL D.  
13th International Congress on Mechanization and Energy in Agriculture & International Workshop on Precision Agriculture, İzmir, Turkey, 13 - 15 September 2017, pp.81
- XLIII. **REAL TIME STUBBLE COVER RATIO DETERMINATION BY USING AN AUTONOMOUS ROBOT**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
INTERNATIONAL SYMPOSIUM ISB-INMA TEH' 2016, 27 - 29 October 2016
- XLIV. **Real Time Stubble Cover Ratio Determination by Using an Autonomus Robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
International Symposium - AGRICULTURAL AND MECHANICAL ENGINEERING, Bükkreş, Romania, 27 - 29 October 2016
- XLV. **Real Time Stubble Cover Ratio Determination by Using Autonomous Robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
ISB-INMA TEH' 2016 International Symposium, Bükkreş, Romania, 27 - 29 October 2016, vol.1, no.1, pp.227-238
- XLVI. **Real Time Stubble Cover Ratio Determination by Using Autonomous Robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
ISB-INMA TEH' 2016 International Symposium, Bükkreş, Romania, 27 - 29 October 2016, vol.1, no.1, pp.227-238
- XLVII. **Real Time Stubble Cover Ratio Determination by Using Autonomous Robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
ISB-INMA TEH' 2016 International Symposium, Bükkreş, Romania, 27 - 29 October 2016, vol.1, no.1, pp.227-238
- XLVIII. **Real Time Stubble Cover Ratio Determination by Using Autonomous Robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
ISB-INMA TEH' 2016 International Symposium, Bükkreş, Romania, 27 - 29 October 2016, vol.1, no.1, pp.227-238
- XLIX. **Real Time Stubble Cover Ratio Determination by Using Autonomous Robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
ISB-INMA TEH' 2016 International Symposium, Bükkreş, Romania, 27 - 29 October 2016, vol.1, no.1, pp.227-238
- L. **Palmiye Budama Artıklarının Briketlenmesi**  
BİLGİN S., KARAYEL D., YILMAZ H.  
29. Tarımsal Mekanizasyon ve Enerji Kongresi, Diyarbakır, Turkey, 2 - 05 September 2015, pp.100-107
- LI. **Palmiye Budama Artıklarının Briketlenmesi**  
BİLGİN S., KARAYEL D., YILMAZ H.  
29. Tarımsal Mekanizasyon ve Enerji Kongresi, Diyarbakır, Turkey, 2 - 05 September 2015, pp.100-107
- LII. **Determination of Seedling Distributions over the Field using Global Positioning Systems GPS**  
KARAYEL D., TOPAKCI M., ÜNAL İ., ÇANAKCI M., ŠARAUSKIS E.  
XXXVI CIOSTA & CIGR Section V Conference, 26 - 28 May 2015, pp.434-439
- LIII. **Determination of Seedling Distributions over the Field using Global Positioning Systems**  
KARAYEL D., TOPAKCI M., ÜNAL İ., ÇANAKCI M., ŠARAUSKIS E.  
XXXVI CIOSTA&CIGR Section V Conference, Saint Petersburg, Russia, 26 - 28 May 2015, vol.1, no.1, pp.518-524
- LIV. **Determination of Seedling Distributions over the Field using Global Positioning Systems**  
KARAYEL D., TOPAKCI M., ÜNAL İ., ÇANAKCI M., ŠARAUSKIS E.  
XXXVI CIOSTA&CIGR Section V Conference, Saint Petersburg, Russia, 26 - 28 May 2015, vol.1, no.1, pp.518-524
- LV. **RESEARCH IN STRIP TILLAGE MACHINE ROW CLEANER TECHNOLOGY PROCESS**  
Sarauskis E., Vaitauskiene K., Romaneckas K., Sakalauskas A., Jasinskas A., Butkus V., KARAYEL D., Kriauciuniene Z.  
14th International Scientific Conference Engineering For Rural Development, Jelgava, Latvia, 20 - 22 May 2015,  
pp.51-56

- LVI. **Determination of Pasture Cover Ratio Using Image Processing Technique**  
ÜNAL İ., TOPAKCI M., KARAYEL D., ÇANAKCI M.  
12th International Congress on Mechanization and Energy in Agriculture, Cappadocia, Nevşehir, Turkey, 3 - 06 September 2014, pp.284-289
- LVII. **Determination of Pasture Cover Ratio Using Image Processing Technique**  
ÜNAL İ., TOPAKCI M., KARAYEL D., ÇANAKCI M.  
12th International Congress on Mechanization and Energy in Agriculture, Nevşehir, Turkey, 3 - 06 September 2014, vol.1, no.1, pp.284-289
- LVIII. **Determination of Pasture Cover Ratio Using Image Processing Technique**  
ÜNAL İ., TOPAKCI M., KARAYEL D., ÇANAKCI M.  
12th International Congress on Mechanization and Energy in Agriculture, Cappadocia, Nevşehir, Turkey, 3 - 06 September 2014, pp.284-289
- LIX. **DEEP, SHALLOW AND NO-TILLAGE EFFECTS ON SOIL COMPACTION PARAMETERS**  
Sarauskis E., Buragiene S., Romanekas K., Masilionyte L., Kriauciuniene Z., Sakalauskas A., Jasinskas A., KARAYEL D.  
13th International Scientific Conference on Engineering for Rural Development, Jelgava, Latvia, 29 - 30 May 2014, pp.31-36
- LX. **Pnömatik Etkili Budama Sistemlerinin Bağlarda ve Nar Bahçelerinde Kullanılması Üzerinde Bir Araştırma**  
ÇANAKCI M., Ağsaran B., KARAYEL D.  
19. Ulusal Ergonomi Kongresi, Balıkesir, Turkey, 27 - 29 September 2013, vol.1, pp.418-429
- LXI. **Pnömatik Etkili Budama Sistemlerinin Bağlarda ve Nar Bahçelerinde Kullanılması Üzerinde Bir Araştırma**  
ÇANAKCI M., Ağsaran B., KARAYEL D.  
19. Ulusal Ergonomi Kongresi, Balıkesir, Turkey, 27 - 29 September 2013, vol.1, pp.418-429
- LXII. **Determination of stubble density with the image processing method by using an autonomous robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
9 th European Conference on Precision Agriculture, Spain, 1 - 04 July 2013, no.1, pp.1
- LXIII. **Determination of stubble density with the image processing method by using an autonomous robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
9 th European Conference on Precision Agriculture, Spain, 1 - 04 July 2013, no.1, pp.1
- LXIV. **Determination of stubble density with the image processing method by using an autonomous robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
9 th European Conference on Precision Agriculture, Spain, 1 - 04 July 2013, no.1, pp.1
- LXV. **Determination of stubble density with the image processing method by using an autonomous robot**  
ÜNAL İ., TOPAKCI M., ÇANAKCI M., KARAYEL D., KABAŞ Ö.  
9 th European Conference on Precision Agriculture, Spain, 1 - 04 July 2013, no.1, pp.1
- LXVI. **EFFECT OF DIFFERENT DESIGN COULTERS ON SEEDBED HARDNESS**  
Sarauskis E., Masilionyte L., Romanekas K., Kriauciuniene Z., Jasinskas A., KARAYEL D.  
12th International Scientific Conference on Engineering for Rural Development, Jelgava, Latvia, 23 - 24 May 2013, pp.79-84
- LXVII. **WORKING TIME, FUEL CONSUMPTION AND ECONOMIC ANALYSIS OF DIFFERENT TILLAGE AND SOWING SYSTEMS IN LITHUANIA**  
Sarauskis E., Buragiene S., Romanekas K., Sakalauskas A., Jasinskas A., Vaiciukevicius E., KARAYEL D.  
11th International Scientific Conference on Engineering for Rural Development, Jelgava, Latvia, 24 - 25 May 2012, pp.52-59
- LXVIII. **Effect of environmentally friendly tillage machinery on soil properties**  
Sarauskis E., Romanekas K., Vaiciukevicius E., Jasinskas A., Sakalauskas A., Buragiene S., Katkevicius E., KARAYEL D.  
10th International Scientific Conference on Engineering for Rural Development, Jelgava, Latvia, 26 - 27 May 2011, pp.70-75
- LXIX. **Technical and Economical Comparison of Conventional, Modified and No-till Seeders for No-till Seeding of Maize**

- KARAYEL D., ÇANAKCI M., TOPAKCI M., KOÇ A.  
XXXIVth CIOSTA CIGR V Confrence, Viyana, Austria, 29 June - 01 July 2011, pp.463
- LXX. **Technical and Economical Comparison of Conventional, Modified and No-till Seeders for No-till Seeding of Maize**  
KARAYEL D., ÇANAKCI M., TOPAKCI M., KOÇ A.  
XXXIVth CIOSTA CIGR V Confrence, Viyana, Austria, 29 June - 01 July 2011, pp.463
- LXXI. **Technical and Economical Comparison of Conventional, Modified and No-till Seeders for No-till Seeding of Maize**  
KARAYEL D., ÇANAKCI M., TOPAKCI M., KOÇ A.  
XXXIVth CIOSTA CIGR V Confrence, Viyana, Austria, 29 June - 01 July 2011, pp.279
- LXXII. **Görüntü işleme tekniği kullanılarak toprak yüzey düzgünliğünün belirlenmesi**  
TOPAKCI M., ÜNAL İ., KARAYEL D., AKINCI İ.  
Tarımsal Mekanizasyon 26. Ulusal Kongresi, Mustafa Kemal Üniversitesi, Ziraat Fakültesi, Tarım Makinaları Bölümü, Hatay, Turkey, 22 - 23 September 2010, pp.220-227
- LXXIII. **Görüntü işleme tekniği kullanılarak toprak yüzey düzgünliğünün belirlenmesi**  
TOPAKCI M., ÜNAL İ., KARAYEL D., AKINCI İ.  
Tarımsal Mekanizasyon 26. Ulusal Kongresi, Mustafa Kemal Üniversitesi, Ziraat Fakültesi, Tarım Makinaları Bölümü, Hatay, Turkey, 22 - 23 September 2010, pp.220-227
- LXXIV. **Görüntü işleme tekniği kullanılarak toprak yüzey düzgünliğünün belirlenmesi**  
Topakci M., Ünal İ., Karayel D., Akinci İ.  
Tarımsal Mekanizasyon 26. Ulusal Kongresi, Mustafa Kemal Üniversitesi, Ziraat Fakültesi, Tarım Makinaları Bölümü, Hatay, Turkey, 22 - 23 September 2010, pp.220-227
- LXXV. **Görüntü İşleme Yöntemi Kullanılarak Toprak Yüzey Düzgünliğünün Belirlenmesi**  
TOPAKCI M., ÜNAL İ., KARAYEL D., AKINCI İ.  
Tarımsal Mekanizasyon 26. Ulusal Kongresi, Hatay, Turkey, 1 - 04 September 2010, vol.1, no.1, pp.1
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## **Activities in Scientific Journals**

TURKISH JOURNAL OF AGRICULTURE AND FORESTRY, Committee Member, 2019 - Continues  
Computers and Electronics in Agriculture, Committee Member, 2015 - Continues  
Akdeniz Üniversitesi Ziraat Fakültesi Dergisi, Assistant Editor/Section Editor, 2011 - 2013

## **Memberships / Tasks in Scientific Organizations**

Tarım Makineleri Derneği, Member, 2005 - Continues

## **Scientific Refereeing**

Artificial Intelligence in Agriculture, Other Indexed Journal, December 2020  
Journal of Agricultural and Biological Engineering, SCI Journal, September 2020  
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## **Congress and Symposium Activities**

International Congress on Agriculture and Animal Science, Invited Speaker, Antalya, Turkey, 2018  
Tarımsal Mekanizasyon 28. Ulusal Kongresi, Attendee, Konya, Turkey, 2013

## **Artistic Activity**

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