



TAGEM
R&D AND INNOVATION

ARZU KÖSE, Assoc. Prof Agricultural Engineer

EDUCATION

Assoc. Prof
2018-

PhD Uludag University Institute of Science and
1999-2004 Technology

MSc Uludag University Institute of Science and
1999-2004 Technology

Bachelor's Degree Uludag University Faculty of Agriculture
1991-1995

LANGUAGE KPDS-76

CAREER

2000- Transtional Zone Agricultural Research Institue

1996-2000 - Uludag University Faculty of Agriculture-
Research Assistance

ABOUT ME

She was born in 1972, Ankara and graduated from Uludag University, Faculty of Agriculture in 1995.

She takes part in projects on Industrial Plant Breeding and Varieties

CONTACT



Ziraat cad. No:396 (Karabayır yolu 6.
km) Tepebaşı - Eskişehir



0222 324 03 00



ARZU KÖSE, Assoc. Prof Agricultural Engineer



▪ **PROJECTS**

▪ **Projects Conducted**

A Research on the Evaluation of Advanced Poppy Lines in terms of Yield and Quality Criteria, TÜBİTAK PROJECT, KÖSE ARZU, CAMCI HÜSEYİN, ÇELİKOĞLU KOŞAR FERDA, KÖSE TEVFIK FİKRET, ŞENTÜRK ŞAHİN, KOÇ HASAN, 01/07/2007 - 01/07/2010.

Molecular Genetic Analysis in Poppy (Papaver somniferum), TÜBİTAK PROJECT, KÖSE ARZU, CAMCI HÜSEYİN, ÇELİKOĞLU KOŞAR FERDA, FRARY ANNE, 01/04/2010 - 01/04/2013.

Safflower Halfway Material and Variety Development Project with High Quality and Yield Values within the Framework of Public-Private Sector Cooperation, PRIVATE ORGANIZATIONS, KÖSE ARZU, 15/10/2011 - 15/09/2016.

Determination of Irrigation Program for Poppies Irrigated with Drip Irrigation System in Eskişehir Conditions, TAGEM, LEBLEBİCİ FATİH, KÖSE ARZU, ALTAY ABDULLAH, CAMCI HÜSEYİN, ÇELİKOĞLU KOŞAR FERDA, UYGAN DEMET, GÖNÜLTAŞ GÖNEN, 01/01/2013 - 31/12/2016.

The Effect of Phosphorus Applied in Different Amounts on Biodiesel Yield and Quality in Safflower, TAGEM, ÖZEN DİDEM, YALÇIN GÜLSER, ATEŞ ÖZGÜR, KÖSE ARZU, DAYIOĞLU RAMİS, ÖZDEMİR SUAT, ÖĞÜT HÜSEYİN, GEZGİN SAİT, ERDİNÇ SAVAŞLI, 01/04/2013 - 30/12/2015.

National Poppy Breeding Project, TAGEM, ÇELİKOĞLU KOŞAR FERDA, CAMCI HÜSEYİN, KÖSE ARZU, 01/01/2014 - 31/12/2019.

Adaptation and Stability of Safflower (Carthamus tinctorius L.) Lines with High Seed Yield, Oil and/or Oleic Acid Content Improved by Crossbreeding, TÜBİTAK PROJECT, ERBAŞ SABRİ, BAYDAR HASAN, BABAOĞLU METİN, HATİPOĞLU HALİL, KOÇ HASAN, KÖSE ARZU, 15/12/2014 - 15/08/2016.

Transtional Zone Safflower Breeding Research Project, TAGEM ÇELİKOĞLU KOŞAR FERDA, KÖSE ARZU, 01/01/2015-31/12/2019.

Dissemination of Developed Poppy Varieties and Cultivation Techniques to Afyonkarahisar, Denizli, Eskişehir and Uşak Producers, TAGEM, ÇELİKOĞLU KOŞAR FERDA, YAVUZ RAMAZAN, ATALAY ABDULKADİR, ERCAN YÜCEL, LEBLEBİCİ FATİH, ZENGİN MUHAMMED, AKTİN ENGİN, BALCI RIZA, DOĞAN OZAN, DAL AKBULUT MERVE, KÖSE ARZU, 01/01/2017-31/12/2019.

▪ **Ongoing Projects**

Transtional Zone Safflower Breeding Research Project, TAGEM, Arzu KÖSE, Ferda KOŞAR, Ceyda Nur YURDAGÜL, 01/01/2020-31/12/2024

National Poppy Breeding Project TAGEM, Ferda KOŞAR, Arzu KÖSE, Ceyda Nur YURDAGÜL, 01/01/2020-31/12/2024



ARZU KÖSE, Assoc. Prof Agricultural Engineer



- **PUBLICATIONS**
- **INTERNATIONAL ARTICLES AND PAPERS**
- **Articles Published in International Journals**

ÇELİK İBRAHİM, CAMCI HÜSEYİN, KÖSE ARZU, ÇELİKOĞLU KOSAR FERDA, FRARY ANNE, DOĞANLAR SAMİ (2016). Molecular Genetic Diversity and Association Mapping of Morphine Content and Agronomic Traits in Turkish Opium Poppy (*Papaver somniferum*) Germplasm. *Molecular Breeding*, 36(4), 1-13. Doi: 10.1007/s11032-016-0469-8.

KÖSE ARZU, ÖZEK TEMEL, ÖZEK GÜLMİRA, KÖSE YAVUZ BÜLENT (2017). Volatile Compositions of Safflower (*Carthamus tinctorius* L.) Genotype Flowers Cultivated Under Rainfed And Irrigated Conditions. *Fresenius Environmental Bulletin*, 26(8), 5458-5464.

KÖSE ARZU (2017). Gene Action and Combining Ability in Line X Tester Population of Safflower (*Carthamus tinctorius* L.). *Turkish Journal of Field Crops*, 22(2), 197-203.

KÖSE ARZU, KOSAR FERDA, BİLİR ÖZLEM (2018). Agricultural Performances of Some Safflower (*Carthamus tinctorius* L.) Lines Developed by Single Plant Selection Method. *Journal of Agricultural Science*, 24(1), 1-11.

KÖSE ARZU, ÖNDER OĞUZ, BİLİR ÖZLEM, ÇELİKOĞLU KOSAR FERDA (2018). Application of Multivariate Statistical Analysis For Breeding Strategies Of Spring Safflower (*Carthamus tinctorius* L.). *Turkish Journal Of Field Crops*, 23(1): 12-19. Doi: 10.17557/tjfc.413818.

KÖSE ARZU, HATİPOĞLU HALİL, ARSLAN HÜSEYİN (2018). Genotype Reaction and Effect of the Sowing Time Under Arid Ecological Conditions in Safflower (*Carthamus tinctorius* L.). *Fresenius Environmental Bulletin*, 27(5), 3577-3586.

KAYAÇETİN FATMA, ÖNEMLİ FADUL, YILMAZ GÜNGÖR, KINAY AHMET, HATİPOĞLU HALİL, KIVILCIM MEHMET NİYAZİ, KARA NİMET, KÖSE ARZU, SEFAOĞLU FIRAT (2018). Effect of Row Spacing on Yield, Yield Components and Crude Oil of Autumn and Spring Sowed Mustard (*Sinapis arvensis* L.) in Eight Locations of Turkey, *Journal of Agricultural Sciences* 24(4): 471-487.

KAYAÇETİN FATMA, ÖNEMLİ FADUL, YILMAZ GÜNGÖR, KHAWAR KHALİD MAHMOOD, KINAY AHMET, HATİPOĞLU HALİL, KIVILCIM MEHMET NİYAZİ, KARA NİMET, KÖSE ARZU, SEFAOĞLU FIRAT, ÖZAYDIN KADİR AYTAÇ (2019). Growing Degree Day and Seed Yield Relationships in Mustard (*Brassica juncea* L.) Under Different Sowing Seasons and Locations of Turkey, *Journal of Agricultural Sciences* 25 (3): 259-400.

KÖSE ARZU (2021). Registration of “Yektay” Safflower (*Carthamus tinctorius* L.) Variety, *Ekin Journal of Crop Breeding and Genetics* 7(1):66.



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▪ International Papers, Seminars, etc.

BAYRAKTAR NILGÜN, CAN ÖMÜR, ÇELİKOĞLU KOSAR FERDA, BALCI ARZU, URANBEY SERKAN (2005). Production and Development Potential of Oil Crops in Central and Transitional Anatolia Zone. Sixth International Safflower Conference. 257-260.

BALCI ARZU, CAMCI HÜSEYİN, ÇELİKOĞLU KOSAR FERDA (2007). A Research for Thebaine and Morphine Percentage of Opium Poppy (*Papaver somniferum* L.) Lines Selected and Evaluated in Ankara conditions. I. International Medical and Aromatic Plants Conference on Culinary Herbs.

KÖSE ARZU, BILIR ÖZLEM, ÇELİKOĞLU KOSAR FERDA (2013). Safflower Breeding Research and the Varieties Developed by Transitional Zone Agricultural Research Institute. International Plant Breeding Congress, 375.

KÖSE ARZU, ÇELİKOĞLU KOSAR FERDA (2017). Farklı Kullanım Alanları ile Aspir (*Carthamus tinctorius* L.) Bitkisine Bakış. International Symposium on Medicinal, Aromatic and Dye Plants, 458.

KÖSE ARZU (2019). Assessment for Factors Limiting Production of Safflower in Turkey. 6th International Multidisciplinary Studies Congress. Agriculture Forestry and Aquaculture Proceeding Book, ISBN: 978-605-7602-49-7, pp:23-28, 26-27 April 2019, Gaziantep, Türkiye.

ÇELİKOĞLU KOŞAR FERDA, KÖSE ARZU, AKIN ARZU, DOĞAN SEDA (2019). Evaluation of Some Poppy Varieties in Terms of Yield and Morphine Contents, 1th International Field Crops Congress, pp.106-109, 01-04 November 2019, Antalya, Türkiye.

▪ NATIONAL ARTICLES AND PAPERS

▪ Articles Published in National Journals

BALCI ARZU, TURGUT ILHAN (2002). Research on Combining Ability in Some Bread Wheat (*Triticum aestivum* var. *aestivum*) Varieties and Lines. Journal of Agricultural Faculty of Uludag University, 16(1):225-234, 2002..

TURGUT ILHAN, BALCI ARZU (2002). Effect Of Different Sowing Dates On Fresh Ear Yield And Yield Component Of Sweet Corn Cultivars Under Bursa Conditions. Journal of Agricultural Faculty of Uludag University 16(2):79-91, 2002

TURGUT ILHAN, DUMAN AHMET, BALCI ARZU (2003). Heterosis and Combining Ability in Maize Inbred Lines and Their Testcross for Yield and Yield Components. Journal of Agricultural Faculty of Uludag University 17(2):47-56, 2003.

BALCI ARZU, TURGUT ILHAN, DUMAN AHMET (2004). A Research On Determination Of Superior Hybrid Combinations In Corn (*Zea mays indentata* Sturt.). Anadolu, J. of AARI 14 (2) 1-15, 2004.



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Agricultural Engineer

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BALCI ARZU, TURGUT ILHAN (2006). Research on Genetical Structure of Ten Inbred Maize (*Zea mays indentata* Sturt.) Lines and Their Diallel Crosses in Some Agronomic Traits. Journal of Agricultural Faculty of Uludag University 20 (1): 2006.

KÖSE ARZU, TURGUT ILHAN (2011). The Determination Of General, Specific Combining Ability And Heterosis İn Maize İnbred Lines And Their Diallel Crosses. Journal of Agricultural Faculty of Akdeniz University (2011) 24(1): 39-46.

HATİPOĞLU HALİL, ARSLAN HÜSEYİN, KARAKUS MEHMET, KÖSE ARZU (2012). Determination Suitable Sowing Time of Different Safflower (*Carthamus Tinctorius* L.) Cultivars on Sanliurfa Conditions. Journal of Agricultural Faculty of Uludag University. 26(1), 1-16.

KÖSE ARZU (2016). A Research on Determining of Seed Setting Rate in Safflower (*Carthamus tinctorius* L.). Turk J Agric Res. 3 (2): 152-158.

ÖGÜT HÜSEYİN, OGUZ HİDAYET, BACAK SEDA, MENGEÇ HAKAN O, KÖSE ARZU, ERYILMAZ TANZER (2012). Investigation of the characteristics of biodiesel from Balci species of safflower. Journal of Agricultural Machinery Science, 8(3),297-300.

KÖSE ARZU, BİLİR ÖZLEM (2017). The Influence of Row Spacing and Seeding Rate on Yield and Yield Components of Safflower (*Carthamus tinctorius* L.). Turkish Journal Of Agricultural and Natural Sciences4 (1), 40–47, 26 (1), 45-52.

KÖSE ARZU (2018). Researches on Hybrid Vigor in Safflower (*Carthamus tinctorius* L.). Biological Diversity and Conservation, 11(1), 133-138.

KÖSE ARZU, BİLİR ÖZLEM, KATAR DURAN, ARSLAN YUSUF (2018). A Research on the Determination of Agronomic Properties in Some False Flax (*Camelina sativa* (L.) Crantz Journal of Agricultural Faculty of Uludag University 32, Sayı 1, 115-125.

National Papers, Seminars, etc.

BALCI, A. TURGUT, İ. 1999. Research on the Hybrid Vigor in Some Bread Wheat (*Triticum aestivum* var. *aestivum*)



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TURGUT ILHAN, ÇAKMAK FEVZİ, BALCI ARZU (1999). The Researches on Yield and Yield Components of Maize (*Zea mays indentata sturt*) under Bursa Conditions and the Heredity of These Components. Turkey III. Field Crops Congress, 15-20 November 1999, Adana, pp. 269-274 .

ÖZ AHMET, YANIKOĞLU SEMRA, KAPAR HALİL, BALCI ARZU, YILMAZ YUSUF, ÇALISKAN MURAT (2005). Determination of Yield, Some Yield Components and Yield Stability Parameters of Promosing Maize Hybrids Improvement in Samsun and Sakarya Condition. Turkey VI. Field Crops Congress, 5-9 September 2005, Antalya, pp. 995-1000.

BALCI ARZU, CAMCI HÜSEYİN, ÇELİKOĞLU KOSAR FERDA, SENTÜRK SAHİN (2007). Research on Yield and Quality Characteristics of Some Safflower Lines and Varieties Under Dry and Irrigated Conditions. 1. National Oil Seed and Biodiesel Symposium, 28-31 May 2007, Samsun.

KÖSE TEVFIK FIKRET, SENTÜRK SAHİN, KARAMAN YAKUP, KÖSE ARZU (2008). Safflower Seed Production in Anatolian Agricultural Research Instititue. III. Turkey Seed Congress 25-28 June 2008, Kapadokya, 57-60 s.

KÖSE TEVFIK FIKRET, KARAMAN YAKUP, KÖSE ARZU (2009). Evaluation of Safflower as Alternative Plant in Dry Areas I. National Drought and Desertification Symposium, 16-18 June 2009, Konya.

KÖSE ARZU, HATİPOĞLU HALİL, KÖSE TEVFIK FIKRET, ARSLAN HÜSEYİN, ÇELİKOĞLU KOSARFERDA, KARAKUS MEHMET (2011). Determination of Some Safflower Lines and Varieties Performance in Eskişehir and Şanlıurfa Condition. GAP VI. Agriculture Congress. 09-12 May 2011, Sanlıurfa, 292-299.

SAVASLI ERDİNÇ, ÇEKİÇ CEMAL, ÖNDER OGUZ, DAYIOĞLU RAMİS, CAMCI HÜSEYİN, ÇELİKOĞLU KOSAR FERDA, BALCI ARZU, KALAYCI MÜFİT (2011). The effects of nitrogen fertilization on seed and capsule yields and morphine content of opium poppy (*Papaver Somniferum L*). I. Ali Numan Kıraç Agriculture Congress 27-30 April, 2011. Cilt: 1, Sayfa 463-473. 2011



ARZU KÖSE, Assoc. Prof Agricultural Engineer



▪ **OTHER PUBLICATIONS**

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

Ph.D. Thesis, Studies on the Genetic Structure of Some Agricultural Characters in Diallel Hybrid Progeny of Inbred Corn Lines

Master Thesis, Research On Hybrid Vigor İn Some Bread Lines and Varieties

KÖSE, A. A View from Agricultural Researches-2015, (Safflower), Ministry of Food, Agriculture and Livestock, General Directorate of Agricultural Research and Policy, Agricultural Economy and Policy Development Institute, ISBN: 978-605-9175-31-9, pp: 301-306 , Ankara, 2015.

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

Plant Breeders Sub-Association (BİSAB), Member, 2018.

Horizon 2020 Turkey Project, Konya, Certificate, 16.02.2016 -16.02.2016

Research Management, Certificate, 14.11.2006 -15.11.2006

Statistics and Genetic Methods in Plant Breeding, General Directorate of Agricultural Research, Course, 12.09.2005 - 16.09.2005

Plant Breeding 3rd Level, General Directorate of Agricultural Research, Course, 29.11.2004 -03.12.2004

Applied Corn Breeding, Antalya West Mediterranean Agricultural Research Institute, Course, 12.07.2004 -16.07.2004

Plant Breeding, General Directorate of Agricultural Research and Plant Breeders Association, Course, 26.01.2004 - 30.01.2004

III. National Mutation Breeding Course, Turkish Atomic Energy Agency, Course, 16.09.2002 -20.09.2002

Plant Biosafety Research and Applied Training Program-II, Genetic Engineering and Biotechnology Research Institute, Course, 20.05.2002 -31.05.2002

Statistics and Trial Technique, Black Sea Agricultural Research Institute, Course, 29.04.2002 -03.05.2002

☒ Safflower Workshop, Selcuk University Biofuels Application and Research Center, KOP Administration, Workshop, 12.05.2016 -13.05.2016

