



TAGEM

R&D AND INNOVATION

FIELD CROPS CENTRAL RESEARCH
INSTITUTE/ANKARA

EMİNE BURCU TURGAY, PhD

Agricultural Engineer

EDUCATION

Assoc. prof

PhD
2009
Ankara University
Plant Pathology

MSc
2004
Ankara University
Agriculture Faculty

Bachelor's Degree
1998-2001
Ankara University
Agriculture Faculty

LANGUAGE
İngilizce ÜDS 82 / KDPS 70

CAREER

2019- Present Head of Unit of Diseases and Pest Resistance, Field Crops Central Research Institute, ANKARA

2017-2019 Researcher, Turkish Seed Gene Bank, Field Crops Central Research Institute, ANKARA

2009-2017 Reseracher, Plant Plathology/Cereal and Micotoxin Lab, Directorate of Plant Protection Central Research Institute, ANKARA

2007-2009 Agriculture Engineer (Quarantine Department) General Directorate of Food and Control, ANKARA

2006-2007 Agriculture Engineer (Plant Pathology Department) Directorate of Provincial Food Agricultural and Livestock, İZMİR

2001-2006 Researcher (Plant Protection), University of Ankara, ANKARA

ABOUT ME

E. Burcu Turgay was born in 1979 in Ankara. She graduated from, Department of Plant Protection Faculty of Agriculture Ankara University in 2001. She completed her M.Sc study in the field of seed pathology and received her Ph.D. in molecular plant pathology at the same department.

E. Burcu Turgay is currently working Head of Unit of Disease and Pest Resistance, Field Crops Central Research and conducting research project relevant to related to fungal disease resistance. Her interest area plant pathology, molecular biology, cereals, and legumes fungal diseases

CONTACT

Şehit Cem Ersever Caddesi No:11
Yenimahalle, ANKARA

emineburcu.turgay@tarimorman.gov.tr

0312 343 10 50



■ **PROJECTS**

■ **Projects Conducted**

1. Determination of the prevalence, pathotypes and variety reactions of Septoria Leaf Blotch (*Septoria tritici* Rob. ex. Desm.) in wheat production areas in Central Anatolia Region/Turkey
2. Pathogenicity, Morphological Characterization and Molecular Identification of North. (*Exserohilum turcicum* (Pass)) and South (*Bipolaris maydis* (Nisk.&Miyale) Leaf Blight Diseases in Maize.
3. Determination of Resistance Development in Leaf Spot Diseases (*Zymoseptoria tritici*) Against to Azoles and Strobilurins Fungicides.
4. Haploid and In Vivo Using Molecular Marker Technology in Maize (*Zea mays* L.) Northern leaf blight (*Exserohilum turcicum* Pass .) Developing Robust Folded Line Against Disease
5. Determination of Reaction of Genotypes Developed by Marmara Region Breeding Studies Against to Stalk and Ear Rot Disease by *Fusarium moniliforme*.
6. Determination of Take-All Disease Agent (*Gaeumannomyces graminis* [Sacc.] Arx & Oliver var. Titici [J.Walker]); Its prevalence and reaction of Cultivars under Wheat Production Regions of Ankara, Eskişehir and Konya Provinces.
7. Insecticidal and fungicidal activities of Mandelic acid esters.
8. Creation of plant pathogenic bacteria, fungi and virus collections and preparations of their catalogues.
9. Determination of novo genome sequencing, identification of biotic - abiotic stress genes and cloning of candidate genes in some drought in the wild type beet species of *Beta Corolliflor* and *Beta procumbens*.
10. Determination the Reaction of Barley Cultivars from Central Anatolia against some fungal diseases.
11. Determination the Reaction of Wheat Cultivars from Central Anatolia against some fungal diseases.
12. Determination the Reaction of Durum Cultivars from Central Anatolia against some fungal diseases.
13. National Winter Cereal Grain Diseases Research Project.
14. Studies of Chickpea Breeding in Central Anatolia
15. Determination the Reaction of Chickpea Cultivars from Central Anatolia against Ascochyta blight (*Ascochyta rabiei* (Pass Labr.)
16. Determination of Resistant Wild Chickpea Relatives (*Cicer spp.*) against different pathotypes of Ascochyta Blight (*Ascochyta rabiei* (Pass Labr.) and Development of Resistant Cultivars



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■ **PUBLICATIONS**

■ **INTERNATIONAL ARTICLES AND PAPERS**

■ **Articles Published in International Journals**

1. Emine Burcu Turgay, Arzu Çelik Oğuz, Fatih Ölmez, Berna Tunalı, Şener Kurt, Efkân Akçali, Behzat Baran, Orhan Büyük, Özge Helvacıoğlu, Sevilay Enginsu, Bayram Kansu Genetic diversity and mating-type frequency of *Exserohilum turcicum* in Turkey. Journal of Phytopathology 2021. <https://doi.org/10.1111/jph.13029>
2. Christopher Stephens, Fatih Ölmez, Profile Hannah Blyth, Megan McDonald, Anuradha Bansa Emine Burcu Turgay, Florian Hahn, Cyrille Saintenac, Vladimir Nekrasov, Peter Solomon, Andrew Milgate, Bart Fraaije, Jason Rudd, Kostya Kanyuka 2021. Remarkable recent changes in genetic diversity of the avirulence gene AvrStb6 in global populations of the wheat pathogen *Zymoseptoria tritici* doi: <https://doi.org/10.1101/2020.09.18.303370>
3. Emine Burcu Turgay, Arzu Celik Oğuz, Fatih Ölmez 2020. Climate Change and Food Security with Emphasis on Wheat. Chapter 15. Karnal bunt (*Tilletia indica*) in wheat. Page; 229-241. Elsevier 2020. <https://doi.org/10.1016/B978-0-12-819527-7.00015-7>
4. 1. Ünal F, Turgay EB, Yıldırım AF (2011) First Report of Leaf Blotch on Sorghum Caused by *Bipolaris spicifera* in Turkey. Plant Disease 95: 4, 495-495p.2.
5. Turgay EB, Bak M, Özeren P, Katırcıoğlu YZ, Maden S (2010) Detection of Pathotypes and Genetic Diversity of *Cercospora beticola*. Plant Pathol. J. 26(4) : 306-312 (2010)
6. E. Burcu Turgay, Orhan Büyük, Fatih Kadir Akan, A. Faik Yıldırım 2017 The Reaction Of Some Turkish Bread And Durum Wheat Cultivars Against To *Zymoseptoria tritici* (Desm. Quaedvlieg & Crous) Works of the Faculty of Agriculture and Food Sciences, University of Sarajevo, Vol. LXII, No. 67/ 2 231-239.
7. E. Burcu Turgay, Orhan Büyük, Berna Tunalı, Özge Helvacıoğlu, Şener Kurt. 2019. Detection of the race of *Exserohilum turcicum* causing northern leaf blight diseases of corn in Turkey. Journal of Plant Pathology

■ **International Papers, Seminars, etc.**

- E. Burcu Turgay, Orhan Büyük, Fatih Kadir Akan, A. Faik Yıldırım 2017 The Reaction of Some Turkish Bread And Durum Wheat Cultivars Against To *Zymoseptoria tritici* (Desm. Quaedvlieg & Crous) Works of the Faculty of Agriculture and Food Sciences, University of Sarajevo, Vol. LXII, No. 67/ 2 231-239.

■ **NATIONAL ARTICLES AND PAPERS**

■ **Articles Published in National Journals**

- Turgay E.B., Büyük O., Tunalı B., Kurt Ş., Akçali E., Baran B., Helvacıoğlu Ö., Enginsu S., Kansu B., 2017 The spread of Northern [*Exserohilum turcicum* (Pass.) K.J. Leonard & Suggs] and Southern [*Bipolaris maydis* (Y.Nisk. & C. Miyake) Shoemaker] leaf blight diseases in main corn (*Zea mays* L.) production areas in Turkey. Plant Protection Bulletin 57(3) : 357 – 372



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■ **OTHER PUBLICATIONS**

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

1. Yıldırım A F., Araz A., Turgay E B., Ünal F., Büyük O., 2016. Root and crown rot diseases in Winter Cereals grain on their yesterday, today and protection. Book, Central Plant Protection, Ankara
2. Turgay E B., Büyük O., Ölmez.F, Yıldırım A. F., 2016. Determination of prevalence of the Septoria leaf blotch Zymoseptoria tritici (Desm.Quaedvlieg&Crous) in Central Anatolia and its molecular identification. Plant Protection Bulletin, 56:3.
3. Yıldırım A F., Araz A., Turgay E B., Ünal F., Büyük O., 2016. Root and crown rot diseases in Winter Cereals grain on their yesterday, today and protection. Book, Publications of Plant protection Central Research Institute, Ankara/Turkey,
4. Namli A., Akça O., Turgay E B., Soba R., 2014. Investigation of Potential Agricultural Use of Wood Vinegar. Soil-Water Journal, 3 (1): (44-52).
5. Ünal F., Turgay E B., Yıldırım A F., Yüksel C., 2011. First Report of Leaf Blotch on Sorghum caused by Bipolaris spicifera in Turkey. Plant Disease , 95(4):495.
6. Turgay E B., Funal, 2011. Detection of Seed Borne Mycoflora of Sorghum in Turkey. The Journal of Turkish Phytopathology, 38(1-3); 9-20.
7. Turgay E B., Bakır M., Özeren P., Katırcıoğlu Z., Maden S., 2010. Detection of Pathotypes and Genetic Diversity of Cercospora beticola. Plant Pathol. J. , 26(4) : 306-312.
Ünal F., Turgay E B., Yıldırım A F., 2010. First detection of Bipolaris spicifera on sorghum in Turkey and pathogenicity on important gramineous plants. Yüzüncü Yıl University of Agriculture Science Journal Van/Turkey, 20 :3 p: 153-158.



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

1. Plant Protection Congress with international Participation –poster. 05-08 September 2016, Konya, Turkey.
2. Turgay E. B, Büyük O Yıldırım A. F., Ölmez F. 2017 The Reaction of Some Bread and Durum Wheat Cultivars Against to *Zymoseptoria tritici* (Desm. Quaedvlieg&Crous) 28th International Scientific Expert Conference of Agriculture and Food Industry. 27-29. Ekim 2017 Saray-Bosna/ SarayBosna/Bosnahersek
3. Turgay E. B., Büyük O. Tunalı, B. Kurt Ş. Akçalı E. Baran B. Helvacioğlu Ö. Saygı, S. Kansu B. 2017. Pathogenic Races of (*Exserohilum Turcicum* (Pass.)) On Main Corn Production Areas In Turkey. 28th International Scientific-Expert Conference of Agriculture and Food Industry. 27-29. Ekim 2017 SarayBosna/Bosnahersek