

## Res. Asst. PhD BİRGÜL GÜDEN

### Personal Information

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### International Researcher IDs

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### Education Information

Doctorate, Akdeniz University, Tarla Bitkileri, Turkey 2016 - 2022

Postgraduate, Akdeniz University, Faculty of Agriculture, Tarla Bitkileri, Turkey 2013 - 2016

Undergraduate, Bursa Uludağ University, Ziraat Fakültesi, Tarla Bitkileri, Turkey 2007 - 2012

### Foreign Languages

English, B2 Upper Intermediate

### Dissertations

Doctorate, ŞEKER SORGUMDA BİYOENERJİ İLE İLİŞKİLİ QTL'LERİN YENİ NESİL SEKANSLAMA YÖNTEMLERİ KULLANILARAK HARİTALANMASI, Akdeniz University, Faculty Of Agriculture, Department of Field Crops, 2022

### Research Areas

Agricultural Sciences, Agriculture, Infield Plants, Biotechnology and Genetics, Molecular Biotechnology, Molecular Genetics

### Academic Titles / Tasks

Research Assistant, Akdeniz University, Faculty of Agriculture, Tarla Bitkileri, 2013 - Continues

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

- I. **QTL Mapping for Biomass and Seed-Related Traits in Sweet Sorghum [Sorghum Bicolor (L.) Moench]**  
GÜDEN B., YOL E., UZUN B.  
Tropical Plant Biology, vol.18, no.1, 2025 (SCI-Expanded)
- II. **Development and utilization of genome-wide InDel markers in Sorghum [Sorghum bicolor (L.) Moench]**

GÜDEN B., Kiemde O., YOL E., UZUN B.

Euphytica, vol.220, no.5, 2024 (SCI-Expanded)

- III. **Selective InDel marker identification across the peanut (*Arachis hypogaea* L.) genome using ddRADSeq**  
Qureshi M., Güden B., Tosun H. Ş., Kordrostami M., Gangurde S. S., Uzun B., Yol E.  
Turkish Journal of Botany, vol.48, no.SI-1, pp.441-453, 2024 (SCI-Expanded)
- IV. **The effects of foliar amino acid and Zn applications on agronomic traits and Zn biofortification in soybean (*Glycine max* L.)**  
Han Ş., SÖNMEZ İ., Qureshi M., GÜDEN B., Gangurde S. S., YOL E.  
Frontiers in Plant Science, vol.15, 2024 (SCI-Expanded)
- V. **Construction of a high-density genetic linkage map and QTL mapping for bioenergy-related traits in sweet sorghum [*Sorghum bicolor* (L.) Moench]**  
GÜDEN B., YOL E., Erdurmus C., Lucas S. J., UZUN B.  
Frontiers in Plant Science, vol.14, 2023 (SCI-Expanded)
- VI. **Evaluation of sweet sorghum genotypes for bioethanol yield and related traits**  
GÜDEN B., Erdurmus C., Erdal S., UZUN B.  
BIOFUELS BIOPRODUCTS & BIOREFINING-BIOFPR, vol.15, no.2, pp.545-562, 2021 (SCI-Expanded)
- VII. **Genome-Wide Discovery of InDel Markers in Sesame (*Sesamum indicum* L.) using ddRADSeq**  
Kızıl S., Başak M., GÜDEN B., UZUN B., YOL E.  
PLANTS-BASEL, vol.9, pp.1262, 2020 (SCI-Expanded)
- VIII. **Molecular and morphological evidence for resistance to sugarcane aphid (*Melanaphis sacchari*) in sweet sorghum [*Sorghum bicolor* (L.) Moench]**  
GÜDEN B., YOL E., İKTEN C., Erdurmus C., UZUN B.  
3 BIOTECH, vol.9, no.6, 2019 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Potential Bioenergy Crops: Sweet Sorghum and Globe Artichoke**  
GÜDEN B., KILIÇ T. Ö.  
Black Sea Journal of Agriculture, vol.7, no.5, pp.596-602, 2024 (Peer-Reviewed Journal)
- II. **SSR marker analysis of plant height in sweet sorghum [*Sorghum bicolor* (L.) Moench]**  
GÜDEN B., YOL E., Erdurmuş C., UZUN B.  
MEDITERRANEAN AGRICULTURAL SCIENCES, vol.33, no.3, pp.405-410, 2020 (Peer-Reviewed Journal)

## Papers Published in Refereed Scientific Meetings

- I. **EFFECTS OF DIFFERENT POLYETHYLENE GLYCOL (PEG) CONCENTRATIONS ON GERMINATION AND ROOT LENGTH OF SOYBEAN [*GLYCINE MAX* (L.) MERR.]**  
Kiemde O., Qureshi M., Güden B., Yol E., Uzun B.  
INTERNATIONAL CONGRESS ON OIL AND PROTEIN CROPS, Antalya, Turkey, 2 - 04 November 2023, pp.79
- II. **DEVELOPMENT AND VALIDATION OF INDEL MARKERS IN SORGHUM**  
Kiemde O., Güden B., Yol E., Uzun B.  
V. INTERNATIONAL AGRICULTURAL, BIOLOGICAL & LIFE SCIENCE CONFERENCE, Edirne, Turkey, 17 - 20 September 2023, pp.220
- III. **Determination and Molecular Characterization of Bacteria in Mix of Sweet Sorghum and Soybean Silage**  
ÜSTÜN R., GÜDEN B., ÇAT A., ÇATAL M., UZUN B.  
INTERNATIONAL EURASIAN CONFERENCE ON BIOTECHNOLOGY AND BIOCHEMISTRY, Ankara, Turkey, 16 - 18 December 2020, pp.167

- IV. **Identification of *Aspergillus niger* and *Aspergillus flavus* on Soybean Seed**  
ÜSTÜN R., ÇAT A., GÜDEN B., ÇATAL M., UZUN B.  
INTERNATIONAL EURASIAN CONFERENCE ON BIOTECHNOLOGY AND BIOCHEMISTRY, Ankara, Turkey, 16 - 18 December 2020, pp.166
- V. **Breeding for high sugar content, plant stalk juice and plant height characters in sweet sorghum**  
UZUN B., GÜDEN B.  
Plant Genetics, Genomics, Bioinformatics, and Biotechnology conferance, Novosibirsk, Russia, 24 - 29 June 2019, pp.221
- VI. **Breeding for high sugar content, plant stalk juice and plant height characters in sweet sorghum**  
UZUN B., GÜDEN B.  
Plant Genetics, Genomics, Bioinformatics, and Biotechnology conferance, Novosibirsk, Russia, 24 - 29 June 2019, pp.221
- VII. **Batı akdeniz iklim kuşağında Yürütülen yağ bitkileri ıslah çalışmaları ve yeni perspektifler**  
YOL E., ÜSTÜN R., GÜDEN B., Güçlü V., Başak M., Kızıl S., UZUN B.  
Bitki Islahı ve Genetiği Öğrenci kongresi, Niğde, Turkey, 2 - 03 May 2019, pp.11
- VIII. **Batı akdeniz iklim kuşağında Yürütülen yağ bitkileri ıslah çalışmaları ve yeni perspektifler**  
YOL E., ÜSTÜN R., GÜDEN B., Güçlü V., Başak M., Kızıl S., UZUN B.  
Bitki Islahı ve Genetiği Öğrenci kongresi, Niğde, Turkey, 2 - 03 May 2019, pp.11
- IX. **Yağ Bitkilerinde Yüksek oleik Asit içeriğine sahip yeni çeşitlerin Geliştirilmesi ve Bitkisel yağ sanayisine Etkileri**  
UZUN B., YOL E., ÜSTÜN R., GÜDEN B.  
YABİTED IV Ulusal yağ bitkileri kongresi, İstanbul, Turkey, 18 - 19 April 2019, pp.10
- X. **Yağ Bitkilerinde Yüksek oleik Asit içeriğine sahip yeni çeşitlerin Geliştirilmesi ve Bitkisel yağ sanayisine Etkileri**  
UZUN B., YOL E., ÜSTÜN R., GÜDEN B.  
YABİTED IV Ulusal yağ bitkileri kongresi, İstanbul, Turkey, 18 - 19 April 2019, pp.10
- XI. **Evaluation of Sweet Sorghum (*Sorghum bicolor* (L.) Moench) Genotypes for Salinity Tolerance**  
GÜDEN B., UZUN B.  
International Agricultural, Biological & Life Science Conference,, Edirne, Turkey, 2 - 05 September 2018, pp.297
- XII. **Improvement of New Sweet Sorghum Lines For Effective Sources of Bioenergy (Biofuels and Biomass)**  
GÜDEN B., UZUN B.  
International Agricultural, Biological & Life Science Conference, Edirne, Turkey, 2 - 05 September 2018, pp.517
- XIII. **Evaluation of Sweet Sorghum (*Sorghum bicolor* (L.) Moench) Genotypes for Salinity Tolerance**  
GÜDEN B., UZUN B.  
International Agricultural, Biological & Life Science Conference,, Edirne, Turkey, 2 - 05 September 2018, pp.12
- XIV. **Improvement of New Sweet Sorghum Lines For Effective Sources of Bioenergy (Biofuels and Biomass)**  
GÜDEN B., UZUN B.  
International Agricultural, Biological & Life Science Conference, Edirne, Turkey, 2 - 05 September 2018, pp.15
- XV. **Integration of Molecular Tools to Oil and Energy Crops Breeding: Case Studies in Groundnut, Sesame, Soybean and Sweet Sorghum**  
UZUN B., YOL E., ÜSTÜN R., GÜDEN B.  
INTERNATIONAL CONGRESS ON OIL AND PROTEIN CROPS, Kişinev, Moldova, 20 - 24 May 2018, pp.94
- XVI. **Integration of molecular tools to oil and energy crops breeding: case studies in groundnut, sesame, soybean and sweet sorghum**  
UZUN B., YOL E., ÜSTÜN R., GÜDEN B.  
International Congress on Oil and Protein Crops, Kişinev, Moldova, 20 - 24 May 2018, pp.94
- XVII. **Integration of Molecular Tools to Oil and Energy Crops Breeding: Case Studies in Groundnut, Sesame, Soybean and Sweet Sorghum**  
UZUN B., YOL E., ÜSTÜN R., GÜDEN B.

- INTERNATIONAL CONGRESS ON OIL AND PROTEIN CROPS, Kişinev, Moldova, 20 - 24 May 2018, pp.94
- XVIII. **Assessment of Sweet Sorghum (*Sorghum bicolor* L. Moench) Genotypes as a Bio-energy Source by the Aid of Indirect Selection**  
GÜDEN B., UZUN B.  
I. International Agricultural Science Congress, Van, Turkey, 9 - 12 May 2018, pp.13
- XIX. **Heterosis and Heterobeltiosis for Plant Height in Sweet Sorghum (*Sorghum bicolor* L. Moench)**  
GÜDEN B., UZUN B.  
I. International Agricultural Science Congress, Van, Turkey, 9 - 12 May 2018, pp.11
- XX. **Heterosis and Heterobeltiosis for Plant Height in Sweet Sorghum (*Sorghum bicolor* L. Moench)**  
GÜDEN B., UZUN B.  
I. International Agricultural Science Congress, Van, Turkey, 9 - 12 May 2018, pp.231
- XXI. **Assessment of Sweet Sorghum (*Sorghum bicolor* L. Moench) Genotypes as a Bio-energy Source by the Aid of Indirect Selection**  
GÜDEN B., UZUN B.  
I. International Agricultural Science Congress, Van, Turkey, 9 - 12 May 2018, pp.232
- XXII. **Yağ ve Enerji Bitkilerinde Moleküler Bitki Islahı ve Uygulamaları**  
UZUN B., YOL E., ÜSTÜN R., GÜDEN B.  
Bitki Islahı ve Genetiği Öğrenci kongresi, Niğde, Turkey, 25 - 26 April 2018, pp.13
- XXIII. **Yağ ve Enerji Bitkilerinde Moleküler Bitki Islahı ve Uygulamaları**  
UZUN B., YOL E., ÜSTÜN R., GÜDEN B.  
Bitki Islahı ve Genetiği Öğrenci kongresi, Niğde, Turkey, 25 - 26 April 2018, pp.13
- XXIV. **Yağ ve Enerji Bitkilerinde Moleküler Bitki Islahı ve Uygulamaları**  
UZUN B., YOL E., ÜSTÜN R., GÜDEN B.  
Bitki Islahı ve Genetiği Öğrenci kongresi, Niğde, Turkey, 25 - 26 April 2018, pp.13
- XXV. **Integration of Molecular Tools to Oil and Energy Crops Breeding: Case Studies in Groundnut, Sesame, Soybean and Sweet Sorghum**  
UZUN B., YOL E., ÜSTÜN R., GÜDEN B.  
INTERNATIONAL CONGRESS ON OIL AND PROTEIN CROPS, Kişinev, Moldova, 20 - 24 April 2018, pp.94
- XXVI. **Molecular selection for sugar content in sorghum (*Sorghum bicolor* (L.) Moench)**  
GÜDEN B., ERDURMUŞ C., UZUN B.  
III. International Plant Breeding', Girne, Cyprus (Kkct), 15 - 19 October 2017, pp.77
- XXVII. **Molecular selection for sugar content in sorghum (*Sorghum bicolor* (L.) Moench)**  
GÜDEN B., ERDURMUŞ C., UZUN B.  
III. International Plant Breeding', Girne, Cyprus (Kkct), 15 - 19 October 2017, pp.77
- XXVIII. **Morphological observations for host-plant resistance against aphids in sweet sorghum**  
GÜDEN B., ERDURMUŞ C., UZUN B.  
The International Conference on Agriculture, Forest, Food Sciences and Technologies, Nevşehir, Turkey, 15 - 17 May 2017, vol.1, pp.224
- XXIX. **Morphological observations for host-plant resistance against aphids in sweet sorghum**  
GÜDEN B., ERDURMUŞ C., UZUN B.  
The International Conference on Agriculture, Forest, Food Sciences and Technologies, Nevşehir, Turkey, 15 - 17 May 2017, vol.1, pp.224
- XXX. **Identification of chlorophyll content in soybean (*Glycine max* (L.) merrill) by using soil plant analytical development (Spad)-502 meter**  
Polat M., ÜSTÜN R., GÜDEN B., YOL E., UZUN B.  
II. International Plant Breeding Congress and EUCARPIA – Oil And Protein Crops Section Conference, Antalya, Turkey, 1 - 06 November 2015, pp.220
- XXXI. **Identification of chlorophyll content in soybean (*Glycine max* (L.) merrill) by using soil plant analytical development (Spad)-502 meter**  
POLAT M., ÜSTÜN R., GÜDEN B., YOL E., UZUN B.  
II. International Plant Breeding Congress and EUCARPIA – Oil And Protein Crops Section Conference, Antalya,

Turkey, 1 - 06 November 2015, pp.220

XXXII. **Marker screening for resistance to sorghum aphid (*Melanaphis sacchari* (Zehntner)) in sorghum (*Sorghum bicolor* ((L.) Moench)**

GÜDEN B., YOL E., İKTEN C., Erdurmuş C., UZUN B.

XXIIIrd EUCARPIA Maize and Sorghum Conference, Montpellier, France, 10 - 12 June 2015, pp.80

XXXIII. **Evaluation of a sorghum germplasm for plant height characteristic by using molecular markers**

GÜDEN B., Erdurmuş C., YOL E., ÜSTÜN R., İKTEN C., AKAR T., UZUN B.

European Biotechnology Congress, Lecce, Italy, 15 - 18 May 2014, vol.185

## **Metrics**

Publication: 43

Citation (WoS): 4

Citation (Scopus): 17

H-Index (WoS): 2

H-Index (Scopus): 3

## **Congress and Symposium Activities**

INTERNATIONAL AGRICULTURAL, BIOLOGICAL & LIFE SCIENCE CONFERENCE, Attendee, Edirne, Turkey, 2018

III. International Plant Breeding, Attendee, Girne, Cyprus (Gkry), 2017

The International Conference on Agriculture, Forest, Food Sciences and Technologies, Attendee, Turkey, 2017

II. International Plant Breeding Congress and EUCARPIA – Oil And Protein Crops Section Conference, Attendee, Antalya, Turkey, 2015

Sorghum Çalıştayı, Attendee, Konya, Turkey, 2015

Latest Technologies for Crop Improvement, Attendee, Antalya, Turkey, 2015