

## Assoc. Prof. SEMRA SOYDAM

### Personal Information

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### International Researcher IDs

ORCID: 0009-0007-4394-7009

Publons / Web Of Science ResearcherID: GXH-3075-2022

Yoksis Researcher ID: 134545

### Education Information

Doctorate, Ankara University, Institute Of Science, Turkey 2007 - 2011

Postgraduate, Anadolu University, Institute Of Educational Sciences, Department Of Secondary School Branch Teaching, Turkey 2004 - 2006

Undergraduate, Anadolu University, Faculty Of Science, Department Of Biology, Turkey 1999 - 2004

### Foreign Languages

English, C1 Advanced

### Dissertations

Doctorate, Soğuk, kuraklık ve tuz gibi abiyotik stres koşulları altındaki domates bitkisinde (*Lycopersicum esculentum* L.) süperoksid dismutaz (SOD) gen ekspresyon profilinin real time PCR aracılığı ile araştırılması, Ankara University, Institute Of Science, 2011

### Research Areas

Health Sciences

### Academic Titles / Tasks

Assistant Professor, Hacettepe University, Vaccine Institute, Aşı Teknolojisi, 2019 - Continues

Assistant Professor, Nigde Omer Halisdemir University, Ulukışla Vocational School, Department Of Plant And Animal Production, 2012 - 2013

Research Assistant, Nigde Omer Halisdemir University, Faculty Of Arts And Sciences, Department Of Biology, 2011 - 2012

Research Assistant, Ankara University, Institute Of Science, Biyoloji, 2007 - 2011

## Courses

Aşılarda Kalite ve Kontrol , Postgraduate, 2021 - 2022

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

- I. **Evaluation of in vitro Anticancer Activity of Vulpinic Acid and its Apoptotic Potential Using Gene Expression and Protein Analysis**  
Kilic N., Derici M. K., Buyuk I., Aydin S., Aras S., Cansaran-Duman D.  
INDIAN JOURNAL OF PHARMACEUTICAL EDUCATION AND RESEARCH, vol.52, no.4, pp.626-634, 2018 (SCI-Expanded)
- II. **Effects of Lead (Pb) and Cadmium (Cd) Elements on Lipid Peroxidation, Catalase Enzyme Activity and Catalase Gene Expression Profile in Tomato Plants**  
Soydam Aydin S., Buyuk I., Gokce Gunduzer E., Buyuk B. P., Kandemir I., Cansaran-Duman D., Aras S.  
TARIM BILIMLERI DERGISI-JOURNAL OF AGRICULTURAL SCIENCES, vol.22, no.4, pp.539-547, 2016 (SCI-Expanded)
- III. **Roles of catalase (CAT) and ascorbate peroxidase (APX) genes in stress response of eggplant (Solanum melongena L.) against Cu+2 and Zn+2 heavy metal stresses**  
Soydam-Aydin S., Buyuk I., Cansaran-Duman D., Aras S.  
ENVIRONMENTAL MONITORING AND ASSESSMENT, vol.187, no.12, 2015 (SCI-Expanded)
- IV. **Presence of Dianthus roseoluteus Velen. (Caryophyllaceae) in Turkey and a New Species: Dianthus macroflorus Hamzaoglu**  
Hamzaoglu E., Koc M., Buyuk I., AKSOY A., Aydin S.  
SYSTEMATIC BOTANY, vol.40, no.1, pp.208-213, 2015 (SCI-Expanded)
- V. **A new serpentine-adapted carnation (Caryophyllaceae) from Turkey: Dianthus serpentinus sp nov.**  
Hamzaoglu E., Koc M., Buyuk I., AKSOY A., Aydin S.  
NORDIC JOURNAL OF BOTANY, vol.33, no.1, pp.57-63, 2015 (SCI-Expanded)
- VI. **Expression of SOD gene and evaluating its role in stress tolerance in NaCl and PEG stressed Lycopersicum esculentum**  
Aydin S., Buyuk I., Aras E. S.  
TURKISH JOURNAL OF BOTANY, vol.38, no.1, pp.89-98, 2014 (SCI-Expanded)
- VII. **Genotoxic effect of cadmium in okra seedlings: Comparative investigation with population parameters and molecular markers**  
Aydin S., Basaran E., Cansaran-Duman D., Aras S.  
JOURNAL OF ENVIRONMENTAL BIOLOGY, vol.34, no.6, pp.985-990, 2013 (SCI-Expanded)
- VIII. **Detection of superoxide radicals in tomato plants exposed to salinity, drought, cold and heavy metal stress using CMC-G-SOD biosensor**  
Kocabay O., Emregul E., Aydin S., Aras S.  
ARTIFICIAL CELLS NANOMEDICINE AND BIOTECHNOLOGY, vol.41, no.5, pp.352-358, 2013 (SCI-Expanded)
- IX. **Relationships among lipid peroxidation, SOD enzyme activity, and SOD gene expression profile in Lycopersicum esculentum L. exposed to cold stress**  
Aydin S., Buyuk I., Aras S.  
GENETICS AND MOLECULAR RESEARCH, vol.12, no.3, pp.3220-3229, 2013 (SCI-Expanded)
- X. **Characterization of stress induced by copper and zinc on cucumber (Cucumis sativus L.) seedlings by means of molecular and population parameters**  
Aydin S., Gokce E., Buyuk I., Aras S.  
MUTATION RESEARCH-GENETIC TOXICOLOGY AND ENVIRONMENTAL MUTAGENESIS, vol.746, no.1, pp.49-55, 2012 (SCI-Expanded)
- XI. **Genetic Analysis of Grapevine Cultivars from the Eastern Mediterranean Region of Turkey, Based on SSR Markers**  
Tangolar S. G., Soydam S., Bakir M., Karaagac E., TANGOLAR S., Ergul A.  
TARIM BILIMLERI DERGISI-JOURNAL OF AGRICULTURAL SCIENCES, vol.15, no.1, pp.1-8, 2009 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Influenza/B Yamagata Strain and Influenza Vaccines**  
SOYDAM S., VARAN G., ÜNAL S.  
FLORA INFEKSIYON HASTALIKLARI VE KLINIK MIKROBIYOLOJİ DERGİSİ, vol.29, no.2, pp.165-171, 2024 (ESCI)
- II. **Peptide Based Vaccine Strategies**  
AYDIN S., VARAN G., ÜNAL S.  
FLORA INFEKSIYON HASTALIKLARI VE KLINIK MIKROBIYOLOJİ DERGİSİ, vol.27, no.2, pp.189-195, 2022 (ESCI)
- III. **New insight into evaluation of DNA methylation levels with CRED RA technique in the genome of *Lycopersicum esculentum* subjected to NaCl ve PEG**  
ALTUNKAYNAK E., BÜYÜK İ., SOYDAM AYDIN S., ARAS E. S.  
Biological Diversity and Conservation, vol.9, pp.163-171, 2016 (Peer-Reviewed Journal)
- IV. **Assesment of genotoxicity induced by lead pollution in tomato *Lycopersicum esculentum* by molecular and population markers**  
SOYDAM AYDIN S., KILIÇ Z., DÖNMEZ Ç., ALTUNKAYNAK E., ARAS E. S.  
Biological Diversity and Conservation, vol.8, pp.83-89, 2015 (Peer-Reviewed Journal)
- V. **RNA interference in plants**  
ARAS E. S., SOYDAM AYDIN S., FAZLIOĞLU A., CANSARAN DUMAN D., DERİCİ M. K.  
Turkish Bulletin of Hygiene and Experimental Biology, vol.72, pp.255-262, 2015 (Scopus)
- VI. **A role of catalase CAT in detoxification of reactive oxygen species ROS in tomato *Lycopersicum esculentum* contaminated with manganese Mn<sup>2</sup>**  
SOYDAM AYDIN S., BÜYÜK İ., ÇELİKKOL P., ARAS E. S.  
Biological Diversity and Conservation, vol.6, pp.140-145, 2013 (Peer-Reviewed Journal)
- VII. **Molecular Responses of Plants to Stress Conditions**  
BÜYÜK İ., SOYDAM AYDIN S., ARAS E. S.  
Turkish Bulletin of Hygiene and Experimental Biology, vol.69, pp.97-110, 2012 (Scopus)
- VIII. ***Myriophyllum spicatum* Spiked water milfoil as a biomonitor of heavy metal pollution in Porsuk Stream Turkey**  
YÜCEL E., EDİRNELİOĞLU E., SOYDAM S., ÇELİK S., ÇOLAK G.  
Biological Diversity and Conservation, 2010 (Peer-Reviewed Journal)
- IX. **Determination Of Appropriate Planting Season Seedling Type and Wooden Species for Restoration of Unproductive Ecosystem at Semi Arid Zones**  
YÜCEL E., ÇELİK S., ÖZKAN K., SOYDAM S.  
Journal of International Research Publications, vol.2, 2007 (Peer-Reviewed Journal)

## Books & Book Chapters

- I. **"Comparative Genotoxicity Analysis of Heavy Metal Contamination In Higher Plants**  
Aras E. S., Aydın S., Aksoy Körpe D., Dönmez Ç.  
in: Ecotoxicology, Ghousia Begum, Editor, Intech, Rijeka, pp.107-124, 2012

## Refereed Congress / Symposium Publications in Proceedings

- I. **Screen a Usnic Acid Lichen Seconder Metabolite to Determine Their Cytotoxic Effects and mRNA Expression Level**  
DİNÇSOY A. B., SOYDAM AYDIN S., BÜZKAYA H., DERİCİ M. K., ARAS E. S., CANSARAN DUMAN D.  
4th International Congress of the Molecular Biology Association of Turkey, 27 - 29 November 2015
- II. **Cytotoxic Effect of Vulpinic Acid in Epithelial Derived Cancer Cell Lines and Evaluation of the Expression Patterns by Quantitative RT PCR Assay**

SOYDAM AYDIN S., BÜZKAYA H., DERİCİ M. K., ARAS E. S., CANSARAN DUMAN D.

4th International Congress of the Molecular Biology Association of Turkey, 27 - 29 November 2015

- III. **Expression analysis of APX and CAT genes in eggplants subjected to Cu<sup>2+</sup> and Zn<sup>2+</sup> heavy metals**  
BÜYÜK İ., SOYDAM AYDIN S., CANSARAN DUMAN D., ARAS E. S.  
16th European Congress on Biotechnology, 15 May - 18 April 2014, vol.31, pp.138
- IV. **Defense responses in tomato *Lycopersicon esculentum* L contaminated with different concentration of Cu<sup>2+</sup>**  
BÜYÜK İ., SOYDAM AYDIN S., BÖLÜKBAŞI E., ARAS E. S.  
Eurobiotech 2012 Agriculturae Symposium, 12 - 14 April 2012
- V. **Expression analysis of Catalase and Superoxide Dismutase Genes in *Lycopersicon esculentum* L Under Zinc Stress**  
BÜYÜK İ., SOYDAM AYDIN S., ALTUNKAYNAK E., ARAS E. S.  
Eurobiotech 2012 Agriculturae Symposium, 12 - 14 April 2012, vol.161, pp.31
- VI. **Relationships among Lipid Peroxidation Enzyme Activity and Gene Expression Profiles of Superoxide Dismutase in *Lycopersicon esculentum* L Exposed to Cold Stress**  
SOYDAM AYDIN S., GÖKÇE E., ARAS E. S.  
Eurobiotech 2012 Agriculturae Symposium, 12 - 14 April 2012, vol.161, pp.47
- VII. **Catalase Gene Expression Profiles of *Lycopersicon esculentum* L Under Salinity and Drought Stress**  
GÖKÇE E., SOYDAM AYDIN S., ARAS E. S.  
European Biotechnology Congress 2011, 28 September - 01 October 2011, vol.22, pp.74
- VIII. **Heavy metal induced gene expression profiles of catalase in *Lycopersicon esculentum* L**  
SOYDAM AYDIN S., BÜYÜK İ., ARAS E. S.  
European Biotechnology Congress 2011, 28 October - 01 November 2011, vol.22, pp.74
- IX. **Bamya *Abelmoschus esculentus* L genetik yapısı üzerine kadmiyum Cd etkilerinin RAPD tekniği ile araştırılması**  
SOYDAM S., GÖKÇE E., ARAS E. S.  
21. Ulusal Biyokimya Kongresi, Turkey, 28 - 31 October 2009
- X. **Ecotoxicological Effect of Some Different Alkaline Metal Salts NaCl KNO<sub>3</sub> and Strong acid HCl H<sub>2</sub>SO<sub>4</sub> Concentration on Germination of *Cedrus libani* Seeds**  
YÜCEL E., ÖZKAN K., SOYDAM S.  
International Conference on Environment: Survival and Sustainability, 19 - 24 February 2007
- XI. **Türkiyede Süs Bitkileri Olarak Yetiştirilen Ağaçlar Ve Çalılar**  
YÜCEL E., OCAK A., KÜRŞAT Ö., SOYDAM S.  
III. Ulusal Süs Bitkileri Kongresi, Turkey, 8 - 10 November 2006
- XII. **Asma Gen Kaynaklarının High Throughput Moleküler Yöntemlerle Tanımlanması I**  
BOZ Y., ÖZER C., YAŞASIN A. S., AKMAN B., YILMAZ F., BAKIR M., ASLANTAŞ Ş., SOYDAM S., AYGÜN H., SÖYLEMEZOĞLU G., et al.  
Türkiye V. Ulusal Bahçe Bitkileri Kongresi, Turkey, 4 - 11 September 2007
- XIII. **Nar Genetik Tanımlamalarına Yönelik SSR Geliştirme Projesi**  
BAKIR M., AYGÜN H., ERGÜL A., SOYDAM S.  
Türkiye V. Ulusal Bahçe Bitkileri Kongresi, Turkey, 4 - 11 September 2007
- XIV. **Bazı Meyve Türlerine Ait Gen Kaynaklarının High Throughput Moleküler Yöntemlerle Tanımlanması I**  
BURAK M., AYANOĞLU H., AKÇAY M. E., KOCATAŞ H., ÖZ M. H., DEMİRTAŞ İ., AKPINAR A. E., ASLANTAŞ Ş., SOYDAM S., YÜKSEL C., et al.  
Türkiye V. Ulusal Bahçe Bitkileri Kongresi, Turkey, 4 September - 11 July 2007
- XV. **Asmanın Anavatanı Anadolu V *vinifera* L nin Gen Merkezlerinden Birisinin Anadolu Olduğunu Kanıtlayan Kloroplast SSR Bulguları**  
SÖYLEMEZOĞLU G., BAKIR M., YILAZ F., ASLANTAŞ Ş., SOYDAM S., BOZ Y., ÖZER C., ERGÜL A.  
Türkiye V. Ulusal Bahçe Bitkileri Kongresi, Turkey, 4 September - 11 April 2007
- XVI. **Doğu Anadolu Erik Ve Kiraz Gen Kaynaklarının SSR a Dayalı Moleküler Analizi**  
AYGÜN H., ÖZ M. H., SOYDAM S., ÇUKADAR K., BAKIR M., YILMAZ F., ÜNLÜ H. M., KARADOĞAN B., VURGUN H.,

ERGÜL A.

Türkiye V. Ulusal Bahçe Bitkileri Kongresi, Turkey, 4 - 11 September 2007

## **Activities in Scientific Journals**

Biological Diversity and Conservation, Publication Committee Member, 2018 - Continues

## **Metrics**

Publication: 37

Citation (WoS): 121

Citation (Scopus): 153

H-Index (WoS): 7

H-Index (Scopus): 8

## **Non Academic Experience**

Public Corporation, Turkish Medicine and Medical Devices Agency, Biyoteknolojik Ürünler Laboratuvar Birimi