

Assoc. Prof. SEMRA AYDIN

Personal Information

Office Phone: [+90 0312 305 3494](tel:+9003123053494) Extension: 13

Fax Phone: [+90 0312 305 3493](tel:+9003123053493)

Email: semra.aydin@hacettepe.edu.tr

Web: <https://avesis.hacettepe.edu.tr/semra.aydin>

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 Science And Letters, Department Of Biology, 2011 - 2012

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

Courses

Aşılarda Kalite ve Kontrol , Postgraduate, 2021 - 2022

Articles Published in Journals That Entered SCI, SSCI and AHCI Indexes

- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)
- 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 (Journal Indexed in SCI)

Articles Published in Other Journals

- I. **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 (Refereed Journals of Other Institutions)
- II. **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 (Refereed Journals of Other Institutions)
- III. **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 (Refereed Journals of Other Institutions)
- IV. **A role of catalase CAT in detoxification of reactive oxygen species ROS in tomato *Lycopersicum esculentum* contaminated with manganese Mn²**
SOYDAM AYDIN S., BÜYÜK İ., ÇELİKKOL P., ARAS E. S.
Biological Diversity and Conservation, vol.6, pp.140-145, 2013 (Refereed Journals of Other Institutions)
- V. **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 (Refereed Journals of Other Institutions)
- VI. ***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 (Refereed Journals of Other Institutions)
- VII. **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 (Refereed Journals of Other Institutions)

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 Cu² and Zn² heavy metals**
BÜYÜK İ., SOYDAM AYDIN S., CANSARAN DUMAN D., ARAS E. S.

- IV. **Defense responses in tomato *Lycopersicum esculentum* L contaminated with different concentration of Cu²**
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 *Lycopersicum 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 *Lycopersicum 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 *Lycopersicum 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 *Lycopersicum 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 KNO₃ and Strong acid HCl H₂SO₄ 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

Citations

Total Citations (WOS):76

h-index (WOS):6

Non Academic Experience

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