

## Assoc. Prof. Ayşe ŞEN

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### International Researcher IDs

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### Education Information

Doctorate, Istanbul University, Institute of Graduate Studies In Sciences, Biyoloji Abd, Radyobiyoloji Programı, Turkey  
2005 - 2011

Postgraduate, Istanbul University, Institute of Graduate Studies In Sciences, Biyoloji Abd, Genel Biyoloji Programı, Turkey  
2002 - 2005

Undergraduate, Anadolu University, Faculty Of Business Administration, Department Of Business, Turkey 2001 - 2005

Undergraduate, Istanbul University, Faculty Of Science, Department of Biology, Turkey 1998 - 2002

### Foreign Languages

English, B2 Upper Intermediate

### Certificates, Courses and Trainings

Education Management and Planning, BREEDİNG TECHNIQUES FOR MUTANT TRAİTS WİTH SPECİAL REFERENCE TO UG99, : IAEA LABOROTORİES, SEİBERSDORF, AUSTRIA, 2013

Education Management and Planning, TRAINING COURSE ON PLANT MUTATION BREEDING: MUTATION INDUCTION, MUTATION DETECTION AND PRE-BREEDING, IAEA Laborotories, Seibersdorf, Austria, 2013

Education Management and Planning, AB Proje Yönetim Döngüsü Kursu, İstanbul Üniversitesi, Stratejik Araştırmalar Merkezi, 2012

Education Management and Planning, 4. Uluslararası Katılımlı Moleküler Biyoloji ve Genetik Araştırma ve Uygulama Platformu, Ege Üniversitesi, 2010

Education Management and Planning, Proteomİstanbul, Uluslararası Katılımlı Proteomik Çalıştayı, İstanbul Üniversitesi, 2010

### Dissertations

Doctorate, Gama Radyasyonu ile Şeker Pancarı (Beta vulgaris L.)'nda Kuraklığa Toleranslı Mutantların Eldesi ve Moleküler Analizleri, Istanbul University, Institute of Graduate Studies In Sciences, Biyoloji Bilim Dalı, Rdayobiyoloji Programı, 2011

Postgraduate, Buğday (*Triticum aestivum* L.) Doku Kültüründe Tuz Stresinin Etkileri , Istanbul University, Institute of Graduate Studies In Sciences, Biyoloji Anabilim Dalı, Genel Biyoloji Programı, 2005

## Research Areas

Agricultural Sciences, Agriculture, Infield Plants, Biotechnology and Genetics, Molecular Biotechnology, Life Sciences, Plant Biology, Plant Tissue Culture, Plant Breeding and Genetics, Biotechnology, Plant Biotechnology, Natural Sciences

## Academic Titles / Tasks

Associate Professor, Istanbul University, Faculty of Science, Department of Biology, 2019 - Continues

Assistant Professor, Istanbul University, Faculty of Science, Department of Biology, 2018 - 2019

Research Assistant PhD, Istanbul University, Faculty of Science, Department of Biology, 2011 - 2018

Research Assistant, Istanbul University, Faculty of Science, Department of Biology, 2006 - 2011

## Jury Memberships

Post Graduate, Yüksek Lisans Tez Savunma, Düzce Üniversitesi, June, 2018

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

- I. **Biochemical and Proteomic Analyses in Drought-Tolerant Wheat Mutants Obtained by Gamma Irradiation**  
Şen A., Gümüş T., Temel A., Öztürk İ., Çelik Ö.  
PLANTS, vol.13, no.19, pp.2702, 2024 (SCI-Expanded)
- II. **Differentiation of advanced generation mutant wheat lines: Conventional techniques versus Raman spectroscopy**  
ŞEN A., Kecoglu I., Ahmed M., Parlattan U., Unlu M. B.  
Frontiers in Plant Science, vol.14, 2023 (SCI-Expanded)
- III. **Quantification of salt stress in wheat leaves by Raman spectroscopy and machine learning**  
Kecoglu I., Sirkeci M., Unlu M. B., ŞEN A., Parlattan U., GÜZELÇİMEN F.  
Scientific Reports, vol.12, no.1, 2022 (SCI-Expanded)
- IV. **GUM ARABIC APPLICATION IMPROVE ANther CULTURE EFFICIENCY IN RICE**  
Sen A., Beser N.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.31, no.9, pp.9867-9877, 2022 (SCI-Expanded)
- V. **Phenolic contents and in vitro antioxidant, anti-tyrosinase, and anti-inflammatory effects of leaves and roots extracts of the halophyte *Limonium delicatulum***  
Bakhouché I. B., Aliat T., Boubellouta T., Gali L., Şen A., Bellik Y.  
South African Journal Of Botany, vol.139, pp.42-49, 2021 (SCI-Expanded)
- VI. **Integrative expressional regulation of TaHKT2;1, TaNa<sup>+</sup>/H<sup>+</sup> vacuolar antiporter, and TaSOS1 genes improve salt tolerance in gamma-ray induced bread wheat mutants**  
Şen A.  
Cereal Research Communications, vol.0, no.0, 2021 (SCI-Expanded)
- VII. **Drought Tolerance in Irradiated Wheat Mutants Studied by Genetic and Biochemical Markers**  
Sen A., Ozturk I., Yalcin O., Alikamanoglu S.  
JOURNAL OF PLANT GROWTH REGULATION, vol.36, no.3, pp.669-679, 2017 (SCI-Expanded)
- VIII. **Retrotransposon insertion variations in doubled haploid bread wheat mutants**  
Sen A.

PLANT GROWTH REGULATION, vol.81, no.2, pp.325-333, 2017 (SCI-Expanded)

- IX. **Effects of static magnetic field pretreatment with and without PEG 6000 or NaCl exposure on wheat biochemical parameters**  
Sen A., Alikamanoglu S.  
RUSSIAN JOURNAL OF PLANT PHYSIOLOGY, vol.61, no.5, pp.646-655, 2014 (SCI-Expanded)
- X. **Characterization of drought-tolerant sugar beet mutants induced with gamma radiation using biochemical analysis and isozyme variations**  
Sen A., Alikamanoglu S.  
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.94, no.2, pp.367-372, 2014 (SCI-Expanded)
- XI. **Antioxidant enzyme activities, malondialdehyde, and total phenolic content of PEG-induced hyperhydric leaves in sugar beet tissue culture**  
Sen A., Alikamanoglu S.  
IN VITRO CELLULAR & DEVELOPMENTAL BIOLOGY-PLANT, vol.49, no.4, pp.396-404, 2013 (SCI-Expanded)
- XII. **Analysis of drought-tolerant sugar beet (*Beta vulgaris* L.) mutants induced with gamma radiation using SDS-PAGE and ISSR markers**  
Sen A., Alikamanoglu S.  
MUTATION RESEARCH-FUNDAMENTAL AND MOLECULAR MECHANISMS OF MUTAGENESIS, vol.738, pp.38-44, 2012 (SCI-Expanded)
- XIII. **Stimulation of growth and some biochemical parameters by magnetic field in wheat (*Triticum aestivum* L.) tissue cultures**  
Alikamanoglu S., Sen A.  
AFRICAN JOURNAL OF BIOTECHNOLOGY, vol.10, no.53, pp.10957-10963, 2011 (SCI-Expanded)
- XIV. **Effect of gamma radiation on growth factors, biochemical parameters, and accumulation of trace elements in soybean plants (*Glycine max* L. Merrill)**  
Alikamanoglu S., Yacili O., Sen A.  
Biological Trace Element Research, vol.141, pp.283-293, 2011 (SCI-Expanded)
- XV. **EFFECT OF SALT STRESS ON GROWTH PARAMETERS AND ANTIOXIDANT ENZYMES OF DIFFERENT WHEAT (*Triticum aestivum* L.) VARIETIES ON IN VITRO TISSUE CULTURE**  
Sen A., Alikamanoglu S.  
FRESENIUS ENVIRONMENTAL BULLETIN, vol.20, pp.489-495, 2011 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Selection of Advanced Mutant Wheat (*Triticum aestivum* L.) Lines Based on Yield and Quality Parameters**  
Öztürk İ., Şen A., Kılıç T. H., Şili Ş.  
TURKISH JOURNAL of AGRICULTURAL and NATURAL SCIENCES, vol.7, no.1, pp.87-95, 2020 (Peer-Reviewed Journal)
- II. **OBTAINING CANDIDATE SALT TOLERANT WHEAT MUTANT LINES DERIVED FROM COMBINATION OF SODIUM AZIDE MUTAGENESIS AND SOMATIC EMBRYOGENESIS**  
Sen A., Sarsu F.  
TRAKYA UNIVERSITY JOURNAL OF NATURAL SCIENCES, vol.20, no.2, pp.129-134, 2019 (ESCI)
- III. **Variation and stability of the advanced bread wheat (*Triticum aestivum* L.) genotypes under various environment conditions in Trakia region**  
ÖZTÜRK İ., KAHRAMAN T., AVCI R., ŞEN A., KILIÇ T.  
AGRICULTURAL SCIENCE AND TECHNOLOGY, vol.11, no.1, pp.13-22, 2019 (Peer-Reviewed Journal)
- IV. **GENETIC DIVERSITY IN SODIUM AZIDE INDUCED WHEAT MUTANTS STUDIED BY SSR MARKERS**  
ŞEN A., Sarsu F.  
TRAKYA UNIVERSITY JOURNAL OF NATURAL SCIENCES, vol.19, no.2, pp.129-135, 2018 (Peer-Reviewed Journal)
- V. **Evaluating of Salt Stress Tolerance in Selected Wheat Mutant Progenies with Contributing**

### **Expression Analysis of TaWRKY Genes and Antioxidant Defence Parameters**

ŞEN A., Sarsu F.

Celal Bayar University Journal of Science, vol.14, no.3, pp.315-320, 2018 (Peer-Reviewed Journal)

- VI. **Investigation of both drought stress and in vitro culture conditions induced epigenetic alteration in genetically pure bread wheat line derived from Pehlivan cultivar**  
ŞEN A.  
HACETTEPE JOURNAL OF BIOLOGY AND CHEMISTRY, vol.45, no.1, pp.27-33, 2017 (Peer-Reviewed Journal)
- VII. **Interactive effect of static magnetic field and abiotic stressors on growth and biochemical parameters of germinating wheat cultivars**  
ŞEN A., ALİKAMANOĞLU S.  
IUFS JOURNAL OF BIOLOGY, vol.75, no.1, pp.1-14, 2016 (Peer-Reviewed Journal)
- VIII. **Three wheat cultivars' responses to NaCl treatments: changes in lipid peroxidation, cell viability, hydrogen peroxide content and antioxidant defence parameters**  
ŞEN A., ALİKAMANOĞLU S.  
IUFS JOURNAL OF BIOLOGY, vol.74, no.1, pp.13-24, 2015 (Peer-Reviewed Journal)

### **Books & Book Chapters**

- I. **Anther Culture of Rice for Haploidy Induction and Accelerated Development of Striga Resistant Germplasm**  
Şen A., Beşer N.  
in: Mutation Breeding and Efficiency Enhancing Technologies for Resistance to Striga in Cereals, Ghanim AMA, Sivasankar S., Rich PJ., Editor, Springer, London/Berlin, Berlin, pp.171-180, 2024
- II. **Rapid Cycling and Generation Advancement for Accelerated Mutation Breeding in Sorghum**  
Şen A.  
in: Mutation Breeding and Efficiency Enhancing Technologies for Resistance to Striga in Cereals, Ghanim AMA, Sivasankar S., Rich PJ., Editor, Springer, London/Berlin, Berlin, pp.161-170, 2024
- III. **A Protocol for Validation of Doubled Haploid Plants by Enzymatic Mismatch Cleavage**  
Till B., Hofinger B., ŞEN A., Huynh O., Jankowicz-Cieslak J., Gugsu L., Kumlehn J.  
in: Biotechnologies for Plant Mutation Breeding, Jankowicz-Cieslak J., Tai TH, Kumlehn J., Till BJ., Editor, Springer, Zürich, pp.253-262, 2017
- IV. **Oxidative Stress Studies in Plant Tissue Culture**  
ŞEN A.  
in: Antioxidant Enzyme, Mohammed Amr El-Missiry, Editor, Intech, Rijeka, pp.59-88, 2012

### **Refereed Congress / Symposium Publications in Proceedings**

- I. **Kuraklık hassasiyeti bakımından yerel ve elit buğday genotiplerinin karşılaştırılması**  
YAYCILI O., ŞEN A., ÖZTÜRK İ.  
Türkiye Yerel Buğdaylar Sempozyumu, Bolu, Turkey, 20 - 22 December 2018, pp.101
- II. **Drought tolerance level in BC2F2 wheat individuals using stress related biomarkers**  
ŞEN A., ÖZTÜRK İ.  
International Congress on Agriculture and Animal Science, Antalya, Turkey, 7 - 09 November 2018, pp.642-645
- III. **Association mapping study of agronomic traits in backcrossed mutant wheat germplasms under drought stress and non-stressed conditions,**  
ŞEN A., ÖZTÜRK İ.  
FAO/IAEA International Symposium on Plant Mutation Breeding and Biotechnology, Viyana, Austria, 27 - 31 August 2018, pp.166
- IV. **Developing mutant rice germplasm combining gamma ray mutagenesis with doubled haploidy in**

**national and international rice breeding programmes**

ŞEN A., BEŞER N.

FAO/IAEA International Symposium on Plant Mutation Breeding and Biotechnology, Viyana, Austria, 27 - 31 August 2018, pp.92

- V. **Salt stress tolerance in mutant wheat lines: Regulation in Redox Homeostasis"**  
ŞEN A.  
1st International Congress on Plant Biology, Konya, Turkey, 10 - 12 May 2018, pp.229
- VI. **Expression analysis of TaWRKY and TaHKT genes in drought tolerant advanced mutant lines under salt stress**  
ŞEN A.  
1st International Congress on Plant Biology, Konya, Turkey, 10 - 12 May 2018, pp.62
- VII. **Genetic Diversity in Backcross Wheat Mutant Population**  
ŞEN A., ÖZTÜRK İ.  
International Congress on Engineering and Life Science, Kastamonu, Turkey, 26 - 29 April 2018, pp.756-758
- VIII. **Evaluating of Drought Tolerance Level in Backcross Mutant Wheat Progenies Using Stress Related Biomarkers**  
ŞEN A., ÖZTÜRK İ.  
International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 26 - 27 April 2018, pp.403
- IX. **Screening of Salt Stress Tolerance Level in Drought Tolerant Advanced Wheat Mutant Lines**  
ŞEN A.  
International Congress on Engineering and Life Science, Kastamonu, Turkey, 26 - 29 April 2018, pp.811
- X. **Advanced Mutant Wheat Lines Screening for Salt Tolerance with Stress Related Biomarkers**  
ŞEN A.  
International Eurasian Conference on Biological and Chemical Sciences, Ankara, Turkey, 26 - 27 April 2018, pp.753
- XI. **SSR-based association mapping of drought tolerance in F2 segregated population derived from reciprocal cross of Sagittario x M6 Sagittario derived drought tolerant mutant(s)**  
ŞEN A., ÖZTÜRK İ.  
COST Action FA1306 Final Meeting, Leuven, Belgium, 20 - 21 March 2018, pp.74
- XII. **Effect of biomass at different growth stage on grain yield and quality in bread wheat (*Triticum aestivum* L.) genotypes**  
ÖZTÜRK İ., GİRĞİN V. Ç., KAHRAMAN T., AVCI R., ÇİFTÇİGİL T. H., ŞEN A., TUNA B.  
3rd International Symposium for Agriculture and Food-ISAF 2017, Ohrid, Macedonia, 18 - 20 October 2017, pp.115
- XIII. **Differing in agronomic and quality characters in some backcross-derived lines in bread wheat (*Triticum aestivum* L.) genotypes**  
ÖZTÜRK İ., ŞEN A., KAHRAMAN T., AVCI R., ÇİFTÇİGİL T. H., GİRĞİN V. Ç., TUNA B.  
3rd International Symposium for Agriculture and Food-ISAF 2017, Ohrid, Macedonia, 18 - 20 October 2017, pp.116
- XIV. **Evaluation of Bread Wheat (*Triticum aestivum* L.) Genotypes Based on Biotic Stress Factors and Agronomic Characters**  
ÖZTÜRK İ., ÇİFTÇİGİL T. H., KAHRAMAN T., GİRĞİN V. Ç., ŞEN A., SEİDİ M., AVCI R., TÜLEK A., TUNA B., AKIN K.  
AgroSym, 2017- 8th International Scientific Agriculture Symposium, Jahorina, Bosnia And Herzegovina, 5 - 08 October 2017, pp.399
- XV. **Yield and Quality of Bread Wheat (*Triticum aestivum* L.) Mutant Lines and Relation Among Traits**  
ÖZTÜRK İ., ŞENAY A., KAHRAMAN T., AVCI R., ÇİFTÇİGİL T. H., ŞEN A., GİRĞİN V. Ç.  
AgroSym, 2017- 8th International Scientific Agriculture Symposium, Jahorina, Bosnia And Herzegovina, 5 - 08 October 2017, pp.400
- XVI. **In vitro mutagenesis as a tool for speeding up conventional plant breeding: a case study with bread wheat**  
ŞEN A.  
COST WG1 / EPPN2020 workshop, Novi Sad, Serbia And Montenegro, 29 - 30 September 2017, pp.110

- XVII. Marker associated analysis of drought tolerance in F2 segregated population derived from reciprocal cross of Sagittario x M6 Sagittario derived drought tolerant mutant(s)**  
ŞEN A., ÖZTÜRK İ.  
COST WG1 / EPPN2020 workshop, Novi Sad, Serbia And Montenegro, 29 - 30 September 2017, pp.111
- XVIII. Enhanced antioxidant biomarkers as a tool for pre-field screening of stress tolerant advanced mutant wheat lines**  
ŞEN A.  
13th International Conference on Reactive Oxygen and Nitrogen Species in Plants: Emerging Roles in Plant Form and Function, Aydın, Turkey, 10 - 13 September 2017, pp.97
- XIX. Biochemical markers assisted selection of salt-tolerant wheat mutants**  
ŞEN A.  
13th International Conference on Reactive Oxygen and Nitrogen Species in Plants: Emerging Roles in Plant Form and Function, Aydın, Turkey, 10 - 13 September 2017, pp.98
- XX. The forward genetic approach combined with gamma ray mutagenesis to enhance in agricultural plant**  
ŞEN A.  
FIFTH INTERNATIONAL CONFERENCE ON RADIATION AND APPLICATIONS IN VARIOUS FIELDS OF RESEARCH (RAD-2017, Budva/Pogoritsa, Serbia And Montenegro, 12 - 16 June 2017, pp.273
- XXI. Evaluation of drought tolerant mutant lines under saline environment based on some agronomic and biochemical parameters**  
ŞEN A.  
EU Cost Action FA1306 - The quest for tolerant varieties: phenotyping at plant and cellular level, Oieres, Portugal, 27 - 28 March 2017, pp.41
- XXII. Efficiency of the antioxidant defense system in wheat breeding program: An assessment of candidate salt tolerant and salt sensitive doubled haploid mutant lines**  
ŞEN A.  
The third WG2 meeting Phenotyping SWOP analysis (SWOP) Strength, Weakness, Opportunity, Threat of COST action FA1306 "The quest for tolerant varieties - Phenotyping at plant and cellular level", Bratislava, Slovakia, 5 - 06 September 2016, pp.9
- XXIII. From the lab to the field: Combined mutagenesis and accelerated breeding approaches to obtain salt tolerant novel lines in wheat**  
Sen A.  
European Biotechnology Conference, Latvia, 5 - 07 May 2016, vol.231
- XXIV. Tuz Stresine Toleranslı Dihaploid Mutant Buğday Hatlarının Moleküler Karakterizasyonu**  
ŞEN A.  
5. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Konya, Turkey, 18 - 21 July 2016, pp.9
- XXV. Evaluation of gamma ray induced drought tolerant wheat mutants using the phenological parameters and molecular markers**  
ŞEN A., YAYCILI O., ALİKAMANOĞLU S., ÖZTÜRK İ.  
COST FA1306 - Work Group 2 - Phenotyping at the cell level Diving into integrative cell phenotyping through "omics", Paris, France, 1 - 02 February 2016, pp.47
- XXVI. Somatic Embryogenesis and Double Haploid Techniques for Improvement of Mutant Wheat**  
ŞEN A., Sarsu F.  
3rd International Conferences on Integrative Biology, Valencia, Spain, 4 - 06 August 2015, pp.99
- XXVII. Investigation of antioxidant defense parameters and retrotransposon based variations in gamma ray induced drought tolerant wheat mutants**  
ŞEN A., YAYCILI O., ALİKAMANOĞLU S.  
COST- Action FA-1306, WG2 Meeting in Carcavelos, Lizbon, Portugal, 26 - 27 February 2015, pp.25
- XXVIII. Detection and characterization of novel polymorphisms using SSR and ISSR markers in sodium azide-induced salt tolerant wheat mutants**  
Sen A., Sarsu F.

4th International Conference on Agriculture and Horticulture (AGRI), Amsterdam, Netherlands, 15 - 17 February 2015, vol.29, pp.67

- XXIX. **Induced of Salt Tolerance Wheat (*Triticum aestivum* L.) Mutants with Gamma Radiation and Determining Molecular Analysis by ISSR**  
Yaycili O., Sen A., Alikamanoglu S.  
4th International Conference on Agriculture and Horticulture (AGRI), Amsterdam, Netherlands, 15 - 17 February 2015, vol.29, pp.196
- XXX. **Mutation discovery platforms to facilitate forward and reverse genetics in cereals**  
ŞEN A., Jankowicz-Cieslak J., Huynh O. A., Till B. J.  
The 2nd Plant Genetics Congress: USA, St. Louis, United States Of America, 10 - 11 September 2014, pp.2
- XXXI. **Development of a TILLING Platform for Grass Pea, *Lathyrus sativus* L.,**  
ŞEN A., Emmrich P., Huynh O. A., Robson F., Chatterjee M., Martin C., Wang T., Till B. J.  
VISCEA-Plant Gen Discovery "Omics" Technology, Viyana, Austria, 17 - 18 February 2014, pp.39
- XXXII. **Adaptation of Induced Mutations and Omics Methods for Quality Trait Improvement in Rice**  
Jankowicz-Cieslak J., Maghuly F., Marzban G., Fagner L., ŞEN A., Huynh O. A., Weckwerth W., Laimer M., Till B. J., Vollmann J.  
VISCEA-Translational Cereal Genomics, Viyana, Austria, 9 - 11 February 2014, pp.33
- XXXIII. **Relationship between hyperxydricity and oxidative stress in sugarbeet tissue culture**  
Sen A., Alikamanoglu S.  
Eurobiotech Agriculture Symposium, Kayseri, Turkey, 12 - 14 April 2012, vol.161, pp.45
- XXXIV. **Biochemical analysis of drought tolerant sugarbeet mutants induced with gamma radiation**  
Sen A., Alikamanoglu S.  
Eurobiotech Agriculture Symposium, Kayseri, Turkey, 12 - 14 April 2012, vol.161, pp.14
- XXXV. **Gama radyasyonu ile şevik edilen kuraklığa toleranslı patates (*Solanum tuberosum* L.) mutantlarının moleküler karakterizasyon**  
ALİKAMANOĞLU S., YAYCILI O., ŞEN A.  
21. Ulusal Biyoloji Kongresi, İzmir, Turkey, 1 - 04 September 2012, pp.1423
- XXXVI. **Gama radyasyonu ile teşvik edile kuraklığa toleranslı patates (*Solanum tuberosum* L.) mutantlarının moleküler karakterizasyon**  
ALİKAMANOĞLU S., YAYCILI O., ŞEN A.  
21. Ulusal Biyoloji Kongresi, İzmir, Turkey, 1 - 04 September 2012, pp.1423
- XXXVII. **Yapay manyetik alanın çimlenmekte olan buğday (*Triticum aestivum* L.) tohumları üzerine etkileri,**  
ALİKAMANOĞLU S., ŞEN A.  
24. Ulusal Biyokimya Kongresi, Konya, Turkey, 1 - 04 July 2012, pp.126
- XXXVIII. **Impact of Static Magnetic Field on Growth and Biochemical Parameters under PEG 6000 and NaCl Exposures on Wheat (*Triticum aestivum* L.) Tissue Culture**  
ŞEN A., ALİKAMANOĞLU S.  
Plant Biology Congress Freiburg 2012, Germany, 1 - 04 July 2012, pp.424
- XXXIX. **RAPD-PCR Analysis of Drought Tolerant Potato (*Solanum tuberosum* L.) Mutants Induced with Gamma Radiation**  
ALİKAMANOĞLU S., YAYCILI O., ŞEN A.  
Plant Biology Congress Freiburg 2012, Germany, 1 - 04 July 2012, pp.292
- XL. **Relationship between hyperxydricity and oxidative stress in sugar beet (*Beta vulgaris* L.) tissue culture**  
ŞEN A., ALİKAMANOĞLU S.  
Eurobiotech 2012 Agriculture Symposium, Turkey, 1 - 04 April 2012, vol.161, pp.14
- XLI. **Biochemical analysis of drought tolerant sugar beet (*Beta vulgaris* L.) mutants induced with gamma radiation**  
ŞEN A., ALİKAMANOĞLU S.  
Eurobiotech 2012 Agriculture Symposium, Turkey, 1 - 04 April 2012, pp.14
- XLII. **In vitro mutagenesis for genetic improvement of drought tolerance in sugar beet (*Beta vulgaris* L.)**

### **and characterization by using ISSR marker**

ŞEN A., ALİKAMANOĞLU S.

Medicinal and Aromatic Plants in Generating of New Values in 21st Century, Bosnia And Herzegovina, 1 - 04 November 2011, vol., pp.109

**XLIII. Biochemical analysis of potato (Solanum tuberosum L.) mutants induced by gamma radiation**

ALİKAMANOĞLU S., YAYCILI O., ŞEN A.

Medicinal and Aromatic Plants in Generating of New Values in 21st Century, Bosnia And Herzegovina, 1 - 04 November 2011, pp.116

**XLIV. Manyetik Alanın Buğday (Triticum aestivum L.) Doku Kültürü Üzerine Etkileri**

ALİKAMANOĞLU S., ŞEN A.

Ekoloji 2011 Sempozyumu, Düzce, Turkey, 1 - 04 May 2011, pp.106

**XLV. Gama radyasyonu ile teşvik edilmiş tuza toleranslı patates (solanum tuberosum l.) mutantlarında biyokimyasal değişmelerin incelenmesi**

ALİKAMANOĞLU S., YAYCILI O., ŞEN A., AYAN A.

X. Ulusal Nükleer Bilimler ve Teknolojileri Kongresi, Muğla, Turkey, 1 - 04 October 2009, pp.302

**XLVI. Gama radyasyonu ile teşvik edilmiş tuza toleranslı patates (Solanum tuberosum L.) mutantlarında biyokimyasal değişmelerin incelenmesi.**

ALİKAMANOĞLU S., YAYCILI O., ŞEN A., AYAN A.

X. Ulusa Nükleer Bilimler ve Teknolojileri Kongresi, Muğla, Turkey, 1 - 04 October 2009, pp.312

**XLVII. Soya (Glycine max L. Merrill) Bitkisinde Gama Radyasyonunun Süperoksid Dismutaz Enzimi ve Malondialdehit Miktarı Üzerine Etkis**

ALİKAMANOĞLU S., YAYCILI O., ŞEN A.

15. Ulusal Biyoteknoloji Kongresi, Antalya, Turkey, 1 - 04 October 2007, pp.12

**XLVIII. Soya (Glycine max L.Merrill) Bitkisinde Gama Radyasyonunun Süperoksid Dismutaz Enzimi ve Malondialdehit Miktarı Üzerine Etkisi**

ALİKAMANOĞLU S., YAYCILI O., ŞEN A.

XV. Biyoteknoloji Kongresi, Antalya, Turkey, 1 - 04 October 2007, pp.12

**XLIX. Buğday (Triticum aestivum L.) Doku Kültüründe Tuz Stresinin Çeşitli Parametreler Üzerine Etkisi**

ŞEN A., ALİKAMANOĞLU S.

15. Ulusal Biyoteknoloji Kongresi, Antalya, Turkey, 1 - 04 October 2007, pp.160

**L. Buğday (Triticum aestivum L.) Doku Kültürlerinde Tuz Stresinin Çeşitli Parametreler Üzerine Etkisi**

ŞEN A., ALİKAMANOĞLU S.

XV. Biyoteknoloji Kongresi, Antalya, Turkey, 1 - 04 October 2007, pp.160

## **Supported Projects**

Şen A., Açıkgoz S., Yorgancı S., Yiğit A., Furan M. A., Yılmaz O., Gençsoyulu İ., TÜBİTAK Project, Bazı Buğday Genotiplerinde Barley Yellow Dwarf Virüs (BYDV - PAV, MAV) ile ilgili Yeni Dayanıklılık Bölgelerinin 90 K SNP BeadChip Teknolojisi Kullanılarak Genoma Dayanlı İlişkilendirme Çalışmaları ile Belirlenmesi, 2021 - 2024

Şen A., IAEA International Atomic Energy Agency Supported Project, STRIGA -Doubled Haploidy Combined with Gamma Ray Mutagenesis to Enhance Induction of Host-Plant Resistance/Tolerance to Striga Infestation in Cereals(Rice and Sorghum), 2016 - 2022

ŞEN A., Project Supported by Higher Education Institutions, Kuraklığa tolerans kapasitesi geliştirmiş ileri buğday hatlarının tuz stresine tolerans potansiyellerinin araştırılması, 2017 - 2018

ŞEN A., Project Supported by Higher Education Institutions, Somatic Embryogenesis and Double Haploid Techniques for Improvement of Mutant Wheat, 2015 - 2015

ŞEN A., Project Supported by Higher Education Institutions, Mutation discovery platforms to facilitate forward and reverse genetics in cereals, 2014 - 2014

ŞEN A., Project Supported by Higher Education Institutions, KURAKLIĞA TOLERANSLI ŞEKERPANCARI MUTANTLARINDA BİYOKİMYASAL ANALİZLER, 2012 - 2013



ŞEN A., Project Supported by Higher Education Institutions, IMPACT OF STATIC MAGNETIC FIELD ON GROWTH AND BIOCHEMICAL PARAMETERS UNDER PEG 6000 AND NaCl EXPOSURES ON WHEAT (*Triticum aestivum* L.) TISSUE CULTURE, 2012 - 2012

## Scientific Refereeing

Iranian Journal of Science and Technology, Transactions A: Science, SCI Journal, October 2019  
Journal of Proteome Research, SCI Journal, October 2019  
Pakistan Journal of Botany, SCI Journal, May 2018  
Turkish Journal of Biology, SCI Journal, May 2018  
Journal of Agricultural Science and Technology, SCI Journal, February 2018  
Gene Expression Patterns, SCI Journal, October 2017  
Acta Agriculturae Scandinavica, Section B - Plant Soil Science, SCI Journal, September 2017  
Journal of Plant Growth Regulation, SCI Journal, June 2017  
Biologia Plantarum, SCI Journal, May 2017  
Pakistan Journal of Botany, SCI Journal, April 2017  
Archive of Agronomy and Soil Science, SCI Journal, April 2017  
Turkish Journal of Biology, SCI Journal, March 2017  
Archive of Agronomy and Soil Science, SCI Journal, October 2016  
Environmental Science and Pollution Research, SCI Journal, September 2016  
Bioelectromagnetics, SCI Journal, May 2016  
Bioelectromagnetics, SCI Journal, April 2016  
Türk Biyoloji Dergisi, SCI Journal, April 2016  
Bioelectromagnetics, SCI Journal, March 2016  
Environmental Science and Pollution Research, SCI Journal, January 2016  
Biochemical Systematics and Ecology, SCI Journal, March 2015  
Environmental Science and Pollution Research, SCI Journal, July 2014  
Environmental Science and Pollution Research, SCI Journal, March 2014  
Environmental Science and Pollution Research, SCI Journal, January 2014  
Advances in Space Research, SCI Journal, December 2013  
Türk Biyoloji Dergisi, SCI Journal, December 2013  
Environmental Science and Pollution Research, SCI Journal, November 2013  
Theoretical and Applied Genetics, SCI Journal, October 2013  
Türk Biyoloji Dergisi, SCI Journal, February 2013  
Polish Journal of Environmental Study, SCI Journal, October 2012  
African Journal of Biotechnology, Other Indexed Journal, July 2012  
African Journal of Biotechnology, SCI Journal, October 2011  
Acta Botanica Croatica, SCI Journal, May 2011

## Metrics

Publication: 77  
Citation (WoS): 186  
Citation (Scopus): 219  
H-Index (WoS): 8  
H-Index (Scopus): 8

## Congress and Symposium Activities

Türkiye Yerel Buğdaylar Sempozyumu, Attendee, Bolu, Turkey, 2018  
International Congress on Agriculture and Animal Science,, Attendee, Antalya, Turkey, 2018  
IConPB, 2018, Attendee, Turkey, 2018  
ICELIS, 2018, Attendee, Kastamonu, Turkey, 2018  
EroasiaBioChem, 2018, Attendee, Ankara, Turkey, 2018  
COST FA 1306 Final Meeting, Attendee, Leuven, Belgium, 2018  
AgroSym, 2017-8th International Scientific Agriculture Symposium, Attendee, Sarajevo, Bosnia And Herzegovina, 2017  
13th International Conference on Reactive Oxygen and Nitrogen Species in Plants: Emerging Roles in Plant Form and Function, Attendee, Aydın, Turkey, 2017  
COST WG1 / EPPN2020 workshop, Attendee, Novi Sad, Serbia And Montenegro, 2017  
FIFTH INTERNATIONAL CONFERENCE ON RADIATION AND APPLICATIONS IN VARIOUS FIELDS OF RESEARCH (RAD-2017, Attendee, Podgorica, Serbia And Montenegro, 2017  
EU Cost Action FA1306 - The quest for tolerant varieties: phenotyping at plant and cellular level, Attendee, Lisboa, Portugal, 2017  
Threat of COST action FA1306 "The quest for tolerant varieties - Phenotyping at plant and cellular level, Attendee, Bratislava, Slovakia, 2016  
5. Ulusal Moleküler Biyoloji ve Biyoteknoloji Kongresi, Attendee, Konya, Turkey, 2016  
EUROPEAN BIOTECHNOLOGY CONGRESS 2016, Attendee, Rīga, Latvia, 2016  
COST- Action FA-1306, WG2 Meeting in INRA, Paris, Attendee, Paris, France, 2016  
3rd International Conferences on Integrative Biology, Attendee, Valencia, Spain, 2015  
COST- Action FA-1306, WG2 Meeting in Carcavelos, Attendee, Lisboa, Portugal, 2015  
Agriculture and Climate Change: Adapting Crops to Increased Uncertainty, Attendee, Amsterdam, Netherlands, 2015  
The 2nd Plant Genetic Congress:USA, Attendee, St.Louis, United States Of America, 2014  
VISCEA-Plant Gen Discovery "Omics" Technology, Attendee, Viyana, Austria, 2014  
24. Ulusal Biyokimya Kongresi, Attendee, Konya, Turkey, 2012  
Plant Biology Congress Freiburg 2012, Attendee, Freiburg, Germany, 2012  
Eurobiotech 2012 Agriculture Symposium, Attendee, Kyseri, Turkey, 2012  
Medicinal and Aromatic Plants in Generating of New Values in 21st century, Attendee, Saraybosna, Bosnia And Herzegovina, 2011  
Ekoloji 2011 Sempozyumu, Attendee, Düzce, Turkey, 2011  
X. Ulusa Nükleer Bilimler ve Teknolojileri Kongresi, Attendee, Muğla, Turkey, 2009  
15. Ulusal Biyoteknoloji Kongresi, Attendee, Antalya, Turkey, 2007

## Scholarships

FAO/IAEA Nuclear Application Food and Agriculture, Plant Breeding and Genetics, Seibersdorf, Austria (Mayıs, 2013 – Mayıs, 2014), YOK, 2013 - Continues  
TEV-Doktora Bursu, Foundation, 2005 - Continues

## Awards

ŞEN A., İ.Ü. BAP Yayın teşvik ödülü, İ.Ü. BAP, May 2015  
ŞEN A., TÜBİTAK ULUSLARARASI BİLİMSEL YAYIN TEŞVİK ÖDÜLÜ (UBYT), TÜBİTAK, February 2014  
ŞEN A., İ.Ü. BAP Yayın Teşvik Ödülü, İstanbul Üniversitesi, April 2013  
ŞEN A., TÜBİTAK ULUSLARARASI BİLİMSEL YAYIN TEŞVİK ÖDÜLÜ (UBYT), TÜBİTAK, April 2013

## Non Academic Experience

Birleşmiş Milletler'e bağlı Uluslararası Tarım ve Gıda Organizasyonu ile Uluslararası Atom Enerjisi Ajansı Ortaklığı ile kurulan Bitki Islahı ve Genetiği Laboratuvarı, Viyana, Avusturya (Join FAO/IAEA Nuclear Techniques in Food and Agriculture, Plant Breeding and Genetics Laboratory, Seibersdorf, Vienna, Austria)