

## Prof. ESRA KOÇ

### Personal Information

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### International Researcher IDs

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Publons / Web Of Science ResearcherID: AAG-8428-2020

ScopusID: 36337882600

Yoksis Researcher ID: 112773

### Education Information

Doctorate, Ankara University, Fen Bilimleri Enstitüsü, Biyoloji (Dr), Turkey 2004 - 2010

Postgraduate, Gazi University, Eğitim Bilimleri Enstitüsü, Eğitim Bilimleri Enstitüsü, Turkey 2003 - 2004

Postgraduate, Ankara University, Fen Bilimleri Enstitüsü, Biyoloji (YI) (Tezli), Turkey 2001 - 2004

Undergraduate, Ankara University, Fen Fakültesi, Biyoloji Bölümü, Turkey 1996 - 2000

### Foreign Languages

English, C1 Advanced

### Certificates, Courses and Trainings

Occupational Health and Safety, İş sağlığı ve güvenliği, Ankara Üniversitesi, 2022

Other, GC-GAS CHROMATOGRAPHY METHOD, FQC International Certification , 2020

Other, HPLC-HIGH PERFORMANCE LIQUID CHROMATOGRAPHY METHOD, FQC International Certification, 2020

### Dissertations

Doctorate, Phytophthora capsici Leon.'xxun farklı inokulum konsantrasyonlarının biberde (Capsicum annuum L.) antioksidanlara etkisi, Ankara University, Fen Bilimleri Enstitüsü, Biyoloji (Dr), 2010

Postgraduate, Phytophthora capsici Leon.(kök boğazı yanıklığı) etmeni ile enfekte edilen biberlerin (Capsicum annuum L.) yaprak ve gövdelerinde PR proteinlerinin incelenmesi, Ankara University, Fen Bilimleri Enstitüsü, Biyoloji (YI) (Tezli), 2004

### Research Areas

Plant Tissue Culture, Plant Physiology, Plant Growth and Development, Plant Biotechnology

## Academic Titles / Tasks

Professor, Ankara University, Fen Fakültesi, Biyoloji Bölümü, 2023 - Continues  
Associate Professor, Ankara University, Fen Fakültesi, Biyoloji Bölümü, 2017 - 2023  
Research Assistant PhD, Ankara University, Fen Fakültesi, Biyoloji Bölümü, 2010 - 2017  
Research Assistant, Ankara University, Fen Fakültesi, Biyoloji Bölümü, 2004 - 2010

## Courses

Plant cell and tissue culture, Undergraduate, 2022 - 2023  
Ecophysiology, Undergraduate, 2022 - 2023, 2018 - 2019  
Bitki Fizyolojisi, Undergraduate, 2021 - 2022  
Sekonder Bitki Metabolitleri, Postgraduate, 2020 - 2021  
HÜCRE AKTİVİTESİNİN BİYOKİMYASI, Doctorate, 2018 - 2019, 2017 - 2018  
BİY 442 Bitki Biyoteknolojisi, Undergraduate, 2018 - 2019, 2017 - 2018  
Büyüme ve Gelişme Fizyolojisi, Postgraduate, 2018 - 2019  
BİY 114 BOTANİK, Undergraduate, 2018 - 2019, 2017 - 2018  
BİY 113 BOTANİK, Undergraduate, 2018 - 2019, 2017 - 2018  
GENEL BİYOLOJİK TEKNİKLER, Postgraduate, 2018 - 2019, 2017 - 2018

## Advising Theses

KOÇ E., Investigation of relationship with growth and soluble carbonhydrates of boron toxicity and calcium interaction in wheat, Postgraduate, Y.KAPTANBAŞ(Student), 2019

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

- I. **The protective role of exogenous proline in pepper callus exposed to long-term cold stress**  
KOÇ E., Karayigit B.  
BOTANICA SERBICA, vol.48, no.2, pp.185-193, 2024 (SCI-Expanded)
- II. **Aluminum Toxicity: A Case Study on Tobacco (Nicotiana tabacum L.)**  
Ozturk M., Metin M., Altay V., Kawano T., Gul A., Unal B. T., Ünal D., Bhat R. A., Dervash M. A., Toderich K., et al.  
PHYTON-INTERNATIONAL JOURNAL OF EXPERIMENTAL BOTANY, vol.92, no.1, pp.165-192, 2023 (SCI-Expanded)
- III. **Physiological responses of resistant and susceptible pepper plants to exogenous proline application under Phytophthora capsici stress**  
KOÇ E.  
ACTA BOTANICA CROATICA, vol.81, no.1, pp.89-100, 2022 (SCI-Expanded)
- IV. **Assessment of Biofortification Approaches Used to Improve Micronutrient-Dense Plants That Are a Sustainable Solution to Combat Hidden Hunger**  
Koç E., Karayigit B.  
JOURNAL OF SOIL SCIENCE AND PLANT NUTRITION, vol.22, no.1, pp.475-500, 2022 (SCI-Expanded)
- V. **Using high hydrostatic pressure as an abiotic elicitor strategy for improving capsaicin production in free and immobilized cell suspension cultures of Capsicum annum L.**  
Islek C., KOÇ E., ALTUNER E. M., ALPAS H.  
HIGH PRESSURE RESEARCH, vol.41, no.2, pp.198-208, 2021 (SCI-Expanded)
- VI. **Spermine and its interaction with proline induce resistance to the root rot pathogen Phytophthora capsici in pepper (Capsicum annum)**  
Koç E., Islek C., Kaşko Arıcı Y.  
HORTICULTURE ENVIRONMENT AND BIOTECHNOLOGY, vol.58, no.3, pp.254-267, 2017 (SCI-Expanded)
- VII. **Alleviation of Phytophthora capsici-induced oxidative stress by foliarly applied proline in Capsicum**

**annuum L.**

Koç E.

ARCHIVES OF BIOLOGICAL SCIENCES, vol.69, no.4, pp.733-742, 2017 (SCI-Expanded)

- VIII. **Pretreatment with spermidine and proline reverses inhibitory effects of *Phytophthora capsici* stress in pepper**  
Koç E., Kaşko Arıcı Y., Islek C.  
ZEMDIRBYSTE-AGRICULTURE, vol.103, no.4, pp.411-418, 2016 (SCI-Expanded)
- IX. **Exogenous Application of Spermidine Enhanced Tolerance of Pepper against *Phytophthora capsici* Stress**  
Koç E.  
PLANT PROTECTION SCIENCE, vol.51, no.3, pp.127-135, 2015 (SCI-Expanded)
- X. **THE EFFECTS OF CELLULASE ON CAPSAICIN PRODUCTION IN FREELY SUSPENDED CELLS AND IMMOBILIZED CELL CULTURES OF *CAPSICUM ANNUUM L.***  
Islek C., Ustun A. S., Koç E.  
PAKISTAN JOURNAL OF BOTANY, vol.46, no.5, pp.1883-1887, 2014 (SCI-Expanded)
- XI. **Effect of exogenously applied salicylic acid on cadmium chloride-induced oxidative stress and nitrogen metabolism in tomato (*Lycopersicon esculentum L.*)**  
Koç E., Ustun A. S., Celik N.  
TURKISH JOURNAL OF BIOLOGY, vol.37, no.3, pp.361-369, 2013 (SCI-Expanded)
- XII. **The Effect of Exogenous Proline and Salicylic Acid Application on Proline and Apoplastic Protein in Cold Tolerance of Pepper Callus Cultures**  
Koç E.  
INTERNATIONAL JOURNAL OF AGRICULTURE AND BIOLOGY, vol.15, no.2, pp.382-385, 2013 (SCI-Expanded)
- XIII. **Phenylalanine ammonia lyase activity in stem of pepper (*capsicum annum L.*) infected by *phytophthora capsici L.***  
Koç E., Sülüüstün A.  
Gazi University Journal of Science, vol.25, no.2, pp.307-312, 2012 (SCI-Expanded)
- XIV. **Influence of *Phytophthora capsici L.* inoculation on disease severity, necrosis length, peroxidase and catalase activity, and phenolic content of resistant and susceptible pepper (*Capsicum annum L.*) plants**  
Koç E., Ustun A. S.  
TURKISH JOURNAL OF BIOLOGY, vol.36, no.3, pp.357-371, 2012 (SCI-Expanded)
- XV. **Defence responses in leaves of resistant and susceptible pepper (*Capsicum annum L.*) cultivars infected with different inoculum concentrations of *Phytophthora capsici* Leon**  
Koç E., Ustun A. S., Islek C., Arıcı Y. K.  
SCIENTIA HORTICULTURAE, vol.128, no.4, pp.434-442, 2011 (SCI-Expanded)
- XVI. **Differential Induction of Phenylalanine Ammonia Lyase and Phenolics in Peppers (*Capsicum annum*) in Response to Inoculation with *Phytophthora capsici***  
KOÇ E., Ustun A. S.  
INTERNATIONAL JOURNAL OF AGRICULTURE AND BIOLOGY, vol.13, no.6, pp.881-887, 2011 (SCI-Expanded)
- XVII. **Effect of cold on protein, proline, phenolic compounds and chlorophyll content of two pepper (*Capsicum annum L.*) varieties**  
Koç E., İşlek C., Üstün A. S.  
Gazi University Journal of Science, vol.23, no.1, pp.1-6, 2010 (SCI-Expanded)

## Articles Published in Other Journals

- I. **Nitrate content in roots of pepper seedlings exposed to *Phytophthora capsici***  
Koç E., Karayığit B.  
Anatolian Journal of Botany, vol.7, no.2, pp.122-127, 2023 (Peer-Reviewed Journal)

- II. **Lipoxygenase activity and antioxidant capacity in pepper (*Capsicum annum*) exposed to high concentration of copper sulphate**  
Koç E., Belgizar K.  
Environmental and Experimental Biology, vol.19, pp.73-79, 2021 (Peer-Reviewed Journal)
- III. **Proline accumulation in three closely related *Salsola L. taxa***  
Çınar İ. B., Aydoğdu G., Koç E., Tuğ G. N.  
International Journal of Science Letters , vol.3, no.1, pp.73-81, 2021 (Peer-Reviewed Journal)
- IV. **Effects of spermine and putrescine polyamines on capsaicin accumulation in *Capsicum annum L.* cell suspension cultures**  
Koç E., İşlek C., Karayigit B.  
Acta Agriculturae Slovenica, vol.115, no.2, pp.369-375, 2020 (Scopus)
- V. **THE EFFECT OF INTERACTION BETWEEN BORON TOXICITY AND CALCIUM ON GROWTH, SOLUBLE CARBOHYDRATES IN WHEAT PLANTS**  
KAPTANBAŞ Y., KOÇ E.  
Analele Universitatii din Oradea, Fascicula Biologie, vol.27, no.2, pp.187-194, 2020 (Scopus)
- VI. **Comparasion of phenylalanine ammonia lyase response to lead and zinc stress in different wheat genotypes**  
Koç E., İşlek C., Büyükkartal H. N.  
Commun. Fac. Sci. Univ. Ank. Series C., vol.27, no.1, pp.37-44, 2018 (Peer-Reviewed Journal)
- VII. **Effect of Thidiazuron Used as an Elicitor in the Production of Capsaicin on Total Protein and Phenolic Amounts Antioxidant Enzyme Activities of Pepper Plants**  
İşlek C., Türkyılmaz Ünal B., Koç E., Kaya D.  
INTERNATIONAL JOURNAL OF ENVIRONMENT , AGRICULTURE AND BIOTECHNOLOGY, vol.1, no.3, pp.603-609, 2016 (Peer-Reviewed Journal)
- VIII. **Kadmiyumun Biber *Capsicum annum L* Fidelerinde Fenilalanin Amonyum Liyaz Aktivitesi ve Lipid Peroksidasyonu Üzerine Etkisi**  
Koç E., İşlek C.  
Artvin Çoruh Üniversitesi Orman Fakültesi Dergisi, vol.16, no.1, pp.50-54, 2015 (Peer-Reviewed Journal)
- IX. **Effect of exogenously applied spermine and putrescine on germination and in vitro growth of pepper *Capsicum annum L* seed under salt stress**  
Koç E., Üstün A. S., İşlek C., Kaşko Arıcı Y.  
Anadolu Üniversitesi Bilim ve Teknoloji Dergisi :C-Yaşam Bilimleri ve Biyoteknoloji, vol.3, no.2, pp.63-71, 2014 (Peer-Reviewed Journal)
- X. **KEffect of Cadmium on Mineral Component in Kahramanmaraş-Hot Pepper (*Capsicum annum L.*) Seedlings**  
Koç E., Ergün N., Üstün A. S., Öncel I.  
Journal of Anatolian Natural Sciences, vol.4, no.2, pp.14-18, 2013 (Peer-Reviewed Journal)
- XI. **Salisilik Asitin Domateste *Lycopersicon esculentum* Mill Kadmiyum Stresini İyileştirici Etkinliğinin Bazı Fizyolojik Parametrelerde İncelenmesi**  
Koç E., Üstün A. S., Öncel I., Kaptanbaş Y.  
Süleyman Demirel Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.17, no.1, pp.22-28, 2013 (Peer-Reviewed Journal)
- XII. **Phytophthora capsici Leon ile Enfekte Edilen Duyarlı ve Dayanıklı Biber Genotiplerinin Köklerinde Antioksidatif Tepkiler ve Lipid Peroksidasyonu**  
KOÇ E., ÜSTÜN A. S.  
Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.28, no.5, pp.382-388, 2012 (Peer-Reviewed Journal)
- XIII. **Effect of Different Zinc Concentrations on Total Protein, Hydrogen Peroxide Content and Peroxidase Activity in Pepper (*Capsicum annum L.*) Seedlings**  
Koç E., Üstün A. S., Kaşko Arıcı Y.  
Artvin Çoruh Üniversitesi Orman Fakültesi Dergisi, vol.13, no.2, pp.210-217, 2012 (Peer-Reviewed Journal)
- XIV. **Biber *Capsicum annum L* tohumlarında bazı bitki büyüme düzenleyicilerinin in vitro çimlenme**

## **üzerine etkisi**

Koç E., İşlek C., Üstün A. S.

Balıkesir Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.12, no.2, pp.42-49, 2010 (Peer-Reviewed Journal)

- XV. **Pathogenesis related proteins in stem and leaf tissues of peppers *Capsicum annuum* L infected by the root fungus *Phytophthora capsici* Leon Yüksek Lisans Tezinden üretilmiştir**

KOÇ E., ÜSTÜN A. S.

ADVANCES IN FOOD SCIENCES, vol.31, no.3, pp.146-150, 2009 (Peer-Reviewed Journal)

- XVI. **Patojenlere karşı bitkilerde Savunma ve Antioksidanlar**

Koç E., Üstün A. S.

Erciyes Üniversitesi Fen Bilimleri Enstitüsü Dergisi, vol.24, no.(1-2), pp.82-100, 2008 (Peer-Reviewed Journal)

- XVII. **Bitkilerde Protein kinazların Rolü**

KOÇ E., ÜSTÜN A. S.

MARMARA ÜNİVERSİTESİ FEN BİLİMLERİ ENSTİTÜSÜ DERGİSİ, vol.20, no.1, pp.25-34, 2008 (Peer-Reviewed Journal)

## **Books & Book Chapters**

- I. **Plant Secondary Metabolites in Stress Tolerance**

Koç E., Karayığit B.

in: Climate-Resilient Agriculture, Vol 1 Crop Responses and Agroecological Perspectives, Mirza Hasanuzzaman, Editor, Springer, London/Berlin , Basel, pp.379-433, 2023

- II. **Production of Bioactive Secondary Metabolites in Medicinal and Aromatic Plants Cultivated in Turkey**

Koç E., Karayığit B.

in: Plants as Medicine and Aromatics: Conservation, Ecology and Pharmacognosy, Mohd Kafeel Ahmad Ansari, Bengü Türkyılmaz Ünal, Munir Ozturk, Gary Owens, Editor, CRC press Taylor & Francis group, Florida, pp.231-247, 2023

- III. **Involvement of phytohormones in the regulation of stress-related cellular responses in plants and their use in biotechnology**

Koç E.

in: PHYTOHORMONES AND STRESS RESPONSIVE SECONDARY METABOLITES, MUNIR OZTURK, ROUF AHMAD BHAT, MUHAMMAD ASHRAF, FERNANDA MARIA POLICARPO TONELLI, BENGU TURKYILMAZ UNAL, GOWHAR HAMID DAR, Editor, Elsevier Science, Oxford/Amsterdam , California, pp.63-72, 2023

- IV. **VERMICOMPOSTING: A BIOTECHNOLOGICAL PROCESS THAT SPEEDS UP THE ORGANIC WASTE RECYCLING PROCESS**

Koç E.

in: Introduction and Application of Organic Fertilizers as Protectors of Our Environment, Munir Oztürk, Nudrat Aisha Akram, Bengu Turkyilmaz Unal, Muhammad Ashraf, Editor, Cambridge Scholar Publishing, Newcastle Upon Tyne, pp.197-210, 2022

- V. **Effect of meta-topolin on the growth and physiological and biochemical parameters in plant tissue culture**

Koç E.

in: Metatopolin: A Plant Growth Regulator for Plant Biotechnology and Agriculture, Naseem Ahmad, Miroslav Strnad, Editor, Springer Nature Singapore Pte Ltd., Singapore, pp.265-278, 2021

- VI. **Agrodiversity in West Aisa: Pepper**

KOÇ E., Belgizar K.

in: Biodiversity, Conservation, and Sustainability in Asia, Öztürk Münir, Volkan Altay, Recep Efe, Editor, Springer International Publishing, pp.123-137, 2021

- VII. **Assessing Climate Change Impacts on Wheat Production in Turkey and Various Adaptation Strategies**

Koç E.

in: Climate Change and Food Security with Emphasis on Wheat, Öztürk Münir, Alvina Gul, Editor, ELSEVIER, ACADEMIC PRESS, California, pp.43-54, 2020

VIII. **Genetic engineering of plants; methodology**

İşlek C., Koç E.

in: Molecular Biotechnology; Principles and applications of recombinant DNA, fifth edition, Prof. Dr. Teoman Kankılıç, Editor, ASM press ; PALME yayın evi, Washington, pp.514-551, 2020

**Refereed Congress / Symposium Publications in Proceedings**

- I. **NITRATE CONTENT IN ROOTS OF RESISTANT AND SUSCEPTIBLE PEPPER (*Capsicum annum L.*) CULTIVARS INFECTED BY *Phytophthora capsici* L.**  
KOÇ E., Belgizar K.  
Karabakh, II- International congress of applied sciences., Azerbaijan, 08 November 2021
- II. **Effect of hydrostatic pressure and triacontanol on capsaicin production in immobilized pepper cell suspension culture.**  
Koç E., İşlek C., Altuner E. M., Alpas H.  
7th International Congress of Molecular Biology Association of Turkey, İstanbul, Turkey, 27 - 29 September 2019
- III. **The Effect of High Hydrostatic Pressure on the Production of Capsaicin in the Cell Suspension Culture of Free and Immobilized *Capsicum annum L.***  
İŞLEK C., KOÇ E., ALTUNER E. M., ALPAS H.  
International Eurasian Conference on Biological and Chemical Sciences (EurasianBioChem 2018), Ankara, Turkey, 26 - 27 April 2018, pp.741
- IV. **Study the effect of proline treatment on contents of antocyanin, carotenoid, chlorophyll, malondialdehyde and available water in the different pepper cultivars under *Phytophthora capsici* stress.**  
KOÇ E., İŞLEK C., BÜYÜKKARTAL H. N.  
International Congress on Applied Biological Sciences, 3 - 05 May 2018, pp.143
- V. **Achene ultrastructure in *Senecio salsuginea* and *Senecio olympicus* (Astraceae: Senecio).**  
BÜYÜKKARTAL H. N., KOÇ E.  
International Congress on Applied Biological Sciences, 3 - 05 May 2018
- VI. **Comparison of Phenylalanine Ammonia Lyase Response to Lead and Zinc Stress in Different Wheat Genotypes.**  
KOÇ E., BÜYÜKKARTAL H. N.  
International Eurasian Conference on Biological and Chemical Sciences, 26 - 27 April 2018
- VII. **Ultrastructural observations in endosperm cells of the natural tetraploid *Trifolium pratense L.* (*Fabaceae*) cv. Elçi.**  
BÜYÜKKARTAL H. N., KOÇ E.  
International Eurasian Conference on Biological and Chemical Sciences, 26 - 27 April 2018
- VIII. **The effect of different concentrations of polyamine spermidine on some physiological and biochemical parameters in pepper plants subjected to *Phytophthora capsici* stress.**  
KOÇ E.  
International congress of health and environment. USCEK 2017, 23 - 25 October 2017
- IX. **Effect of proline application on some physiological parameters in pepper (*Capsicum annum L.*) exposed to *Phytophthora capsici* stress.**  
KOÇ E.  
International Symposium on Biodiversity and Edible Wild Species.BEWS 2017., 3 - 05 April 2017
- X. **Spermidin ve Prolin Uygulamasının Biberde *Capsicum annum L.* *Phytophthora capsici* Stresine Karşı Koruyucu Etkisi**  
KOÇ E., KAŞKO ARICI Y., İŞLEK C.  
III. Ulusal Botanik Kongresi, Konya, Turkey, 23 - 26 December 2016

- XI. **Prolin uygulamasının Phytophthora capsici stresine karşı Biberin Capsicum annumL toleransının uyarılması üzerine etkisi**  
KOÇ E.  
23.Ulusal Biyoloji Kongresi, Gaziantep, Turkey, 5 - 09 September 2016
- XII. **Dışsal olarak uygulanan prolinin Biberde Phytophthora capsici nin neden olduğu oksidatif strese etkisi**  
KOÇ E., İŞLEK C., KAŞKO ARICI Y.  
II. Ulusal Bitki Fizyolojisi Sempozyumu, Mersin, Turkey, 31 August - 03 September 2016
- XIII. **Kalsiyum Aljinatta Tutuklanan Biber Hücre Süspansiyon Kültüründe Kapsaisin Üretimi Üzerine Triakontanol ün Etkisi**  
İŞLEK C., KOÇ E., kaya s., ALTUNER E. M.  
18. Biyoteknoloji kongresi, Turkey, 18 - 19 December 2015
- XIV. **Biber kalluslarında bakır sülfat uygulamalarının kapsaisin antioksidan enzimler ve fenolik bileşikler üzerine etkisi**  
TÜRKYILMAZ ÜNAL B., İŞLEK C., KOÇ E.  
I. Ulusal Bitki Fizyolojisi Sempozyumu, Erzurum, Turkey, 1 - 04 September 2015
- XV. **Biber hücre süspansiyon kültürlerinde kalsiyum aljinat ile tutuklanmanın kapsaisin üretimi üzerine etkisi**  
KAYA S., İŞLEK C., KOÇ E., ALTUNER E. M., ALPAS H.  
Ekoloji Sempozyumu SİNOP, Turkey, 6 - 09 May 2015
- XVI. **Effect of Thidizuron on Capsaicin Production in Capsicum annum L. Cell Suspension Cultures**  
Koç E.  
22. Ulusal biyoloji kongresi, Eskişehir, Turkey, 23 - 27 June 2014, pp.864
- XVII. **Kahramanmaraş Acı biber ( Capsicum annum L. ) fidelerinde mineral içerik üzerine kadmiyumun etkisi**  
Koç E., Ergün N.  
XI. Ekoloji ve Çevre Kongresi, Samsun, Turkey, 1 - 04 October 2013, pp.165
- XVIII. **Biber hücre süspansiyon kültüründe kapsaisin birikimi üzeribe bakır sülfatın etkisi.**  
İşlek C., Koç E., Arık D.  
XI. Ekoloji ve Çevre Kongresi, Samsun, Turkey, 1 - 04 October 2013, pp.238
- XIX. **Cd stresine maruz bırakılan Kahramanmaraş Acı biber (Capsicum annum L. ) fidelerinde Fenilalanin amonyum liyaz aktivitesi**  
Koç E., Ergün N., İşlek C.  
XI. Ekoloji ve Çevre Kongresi, Samsun, Turkey, 1 - 04 October 2013, pp.164
- XX. **Spermin'in biber hücre süspansiyon kültüründe kapsaisin birikimine etkisi.**  
Arık D., İşlek C., Koç E., Üstün S.  
21. Ulusal Biyoloji Kongresi Bildirileri, İzmir, Turkey, 3 - 07 September 2012, pp.708
- XXI. **Serbest ve tutuklanmış biber hücre süspansiyon kültürlerinde kapsaisin üretimi üzerine metil jasmonat' in etkisi**  
İşlek C., Üstün S., Koç E.  
21. Ulusal Biyoloji Kongresi, İzmir, Turkey, 3 - 07 September 2012, pp.696
- XXII. **Domates (Lycopersicon esculentum, Solanaceae) Yapraklarında Kadmiyum Stresine Karşı Salisilik Asitin Etkisinin Fizyolojik Yönden İncelenmesi**  
Koç E., Üstün S., Öncel I., Kaptanbaş Y.  
21. Ulusal Biyoloji Kongresi, İzmir, Turkey, 3 - 07 September 2012, pp.514-515
- XXIII. **Tuz stresi altında biber (Capsicum annum L.) tohumlarının çimlenmesi ve büyümesi üzerine spermin'in etkileri**  
Koç E., İşlek C., Üstün S.  
X. Ekoloji ve Çevre Kongresi, Çanakkale, Turkey, 4 - 07 October 2011, pp.391
- XXIV. **Phytophthora capsici Leon. ile Enfekte Edilen Dayanıklı ve Duyarlı Biber Genotiplerinin Köklerinde Peroksidaz Aktivitesi**

Koç E., Üstün S.

IV. Bitki Koruma Kongresi, Kahramanmaraş, Turkey, 28 - 30 June 2011, pp.337

XXV. **Bazı Bitki Büyüme Düzenleyicilerinin İn vitro Ortamda Biber (Capsicum annum L. ) tohumlarının çimlenmesi üzerine etkisi**

Koç E., Üstün S.

19. Ulusal Biyoloji Kongresi, Trabzon, Turkey, 23 - 27 June 2008, pp.420-421

## Supported Projects

Dumanoğlu H., Koç E., İslam A., Erdoğan V., Tuna Güneş N., TUBITAK Project, Fındıkta (Corylus Avellana L. Cv. Tombul) Yogun Dikim Sistemlerinde Yeni Bir Terbiye Yönteminin Bitkilerin Gençlik Döneminde Vejetatif Ve Generatif Gelismesi Üzerine Etkilerinin Araştırılması, 2023 - 2026

Koç E., TAGEM Tarımsal Araştırmalar ve Politikalar Genel Müdürlüğü Projesi, Kalker Ocaklarından Salınan Belirli Boyuttaki Toz Partiküllerinin Zeytin Ağaçlarının Anatomik, Fizyolojik ve Biyokimyasal Özellikleri Üzerindeki Etkileri, 2021 - 2023

Koç E., İşlek C., TUBITAK Project, Triakontanol ve yüksek hidrostatik basıncın serbest ve tutuklanmış Capsicum annum L.hücre süspansiyon kültüründe kapsaisin üretimi üzerine etkisi. TÜBİTAK TOVAG 1130518 , 2013 - 2016

Koç E., İşlek C., TUBITAK Project, Farklı biber genotiplerinde Phytophthora capsici'ye karşı dışsal olarak uygulanan serbest poliaminler ve prolinin bazı fizyolojik parametreler üzerine etkisi. TÜBİTAK TBAG 112T725, 2013 - 2014

Koç E., İşlek C., Project Supported by Higher Education Institutions, Capsicum annum L. hücre süspansiyon kültürlerinde kapsaisin üretimi üzerine çeşitli uyarıcıların etkisi. Niğde Üniversitesi FEB 2011 34, 2011 - 2013

## Activities in Scientific Journals

Annals of Glycomics & Lipidomics, Editor, 2019 - Continues

Communications/ Faculty of Sciences University of Ankara Series C: Biology and Geological Engineering and Geophysical Engineering, Assistant Editor/Section Editor, 2018 - Continues

Annals of Experimental and Molecular Biology, Assistant Editor/Section Editor, 2018 - Continues

INTERNATIONAL JOURNAL OF VEGETABLE SCIENCE, Publication Committee Member, 2018 - Continues

## Scientific Refereeing

ACTA PHYSIOLOGIAE PLANTARUM, SCI Journal, October 2024

BMC PLANT BIOLOGY, Journal Indexed in SCI-E, February 2024

JOURNAL OF PLANT GROWTH REGULATION, Journal Indexed in SCI-E, January 2024

ARCHIVES OF BIOLOGICAL SCIENCES, SCI Journal, June 2023

PLANT AND SOIL, SCI Journal, May 2023

PLANT AND SOIL, SCI Journal, March 2023

PHYSIOLOGICAL AND MOLECULAR PLANT PATHOLOGY, SCI Journal, December 2021

ACTA PHYSIOLOGIAE PLANTARUM, SCI Journal, September 2019

PHYTON, SCI Journal, August 2019

SCIENTIFIC REPORTS, SCI Journal, July 2019

BMC PLANT BIOLOGY, SCI Journal, October 2018

ENVIRONMENTAL AND EXPERIMENTAL BOTANY AN INTERNATIONAL JOURNAL, SCI Journal, August 2018

FUNCTIONAL PLANT BIOLOGY : AN INTERNATIONAL JOURNAL OF PLANT FUNCTION, SCI Journal, May 2018

CANADIAN JOURNAL OF MICROBIOLOGY, SCI Journal, July 2017

JOURNAL OF PLANT INTERACTIONS, SCI Journal, July 2017

JOURNAL OF PLANT GROWTH REGULATION, SCI Journal, March 2017

JOURNAL OF CROP IMPROVEMENT, SCI Journal, March 2016

FUNCTIONAL PLANT BIOLOGY : AN INTERNATIONAL JOURNAL OF PLANT FUNCTION, SCI Journal, February 2016

## **Metrics**

Publication: 67

Citation (WoS): 188

Citation (Scopus): 245

H-Index (WoS): 8

H-Index (Scopus): 8