

## **Asst. Prof. NESRİN ÇOLAK**

### **Personal Information**

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### **International Researcher IDs**

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### **Education Information**

Doctorate, Karadeniz Technical University, Fen Bilimleri Enstitüsü, Biyoloji Bölümü, Turkey 2013 - 2017

### **Foreign Languages**

English, B2 Upper Intermediate

### **Dissertations**

Doctorate, BUĞDAY BİTKİSİNDE (*Triticum aestivum L.*) N-ASETİLSİSTEİN'İN AĞIR METAL TOKSİSİTESİNE KARŞI İYİLEŞTİRİCİ ETKİSİNİN ARAŞTIRILMASI, Karadeniz Technical University, Biyoloji , Botanik, 2017

Postgraduate, İYONİZE RADYASYONA MARUZ BIRAKILAN ÇİMLENEN ARPA (*HORDEUM VULGARE L.*) TOHUMLARINDA ANTOSİYANİN MUAMELESİNİN FİZYOLOJİK VE BİYOKİMYASAL ETKİLERİNİN ARAŞTIRILMASI, Karadeniz Technical University, Biyoloji, Biyoloji-Botanik, 2013

### **Research Areas**

Life Sciences, Plant Biology, Plant Physiology, Natural Sciences

### **Academic Titles / Tasks**

Assistant Professor, Karadeniz Technical University, Fen Fakültesi, Biyoloji, 2017 - Continues

Research Assistant, Karadeniz Technical University, Fen Fakültesi, Biyoloji, 2010 - 2017

### **Academic and Administrative Experience**

Deputy Head of Department, Karadeniz Technical University, Fen Fakültesi, Biyoloji, 2017 - Continues

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

- I. **Salicylic acid priming before cadmium exposure increases wheat growth but does not uniformly reverse cadmium effects on membrane glycerolipids**  
ÇOLAK N., Kurt-Celebi A., Roth M., Welti R., Torun H., AYAZ F. A.  
Plant Biology, vol.27, no.1, pp.79-91, 2025 (SCI-Expanded)
- II. **Melatonin application enhances salt stress-induced decreases in minerals, betalains, and phenolic acids in beet (*Beta vulgaris* L.) cultivars**  
ÇOLAK N., Slatnar A., Medic A., Torun H., Kurt-Celebi A., Dräger G., Djahandideh J., Esatbeyoglu T., AYAZ F. A.  
PHYSIOLOGIA PLANTARUM, vol.176, no.6, 2024 (SCI-Expanded)
- III. **Ripening-Related Changes in the Nutritional Profile of a Little-Known Red 'Isabel' Grape (*Vitis vinifera* L. x *Vitis labrusca* L.)**  
ÇOLAK N., BENGÜ A. S.  
APPLIED FRUIT SCIENCE, vol.66, no.5, pp.1877-1889, 2024 (SCI-Expanded)
- IV. **The effect of exogenous N-acetylcysteine on the phenolic profile and antioxidant enzyme activities in two betalainic red beet (*Beta vulgaris* L.) leaves under salt stress**  
Çolak N.  
ACTA PHYSIOLOGIAE PLANTARUM, vol.46, no.9, 2024 (SCI-Expanded)
- V. **An evaluation of the antioxidant potential and *in vitro* enzyme inhibition profile of selected bryophytes from Northeast Anatolia (Türkiye)**  
YILDIRIM AKATIN M., AYAZ F. A., BOYRACI G. M., ER KEMAL M., BATAN N., ÇOLAK N.  
JOURNAL OF BIOMOLECULAR STRUCTURE & DYNAMICS, 2024 (SCI-Expanded)
- VI. **Melatonin Priming Regulates Mineral Uptake, Osmolite Accumulation, and Cell Wall Structure in Buckwheat Under Cadmium Stress**  
ÇOLAK N.  
Journal of Plant Growth Regulation, 2024 (SCI-Expanded)
- VII. **The chemical profile and seasonal variation of the composition of the phenolic acids in different plant parts of *Centaurea* sp.**  
Bouafia M., ÇOLAK N., AYAZ F. A., Gourine N., Yousfi M.  
JOURNAL OF PHARMACEUTICAL AND BIOMEDICAL ANALYSIS, vol.236, 2023 (SCI-Expanded)
- VIII. **Pre- and post-melatonin mitigates the effect of ionizing radiation-induced damage in wheat by modulating the antioxidant machinery**  
Kurt-Celebi A., ÇOLAK N., Zeljković S. Ć., Tarkowski P., Zengin A. Y., AYAZ F. A.  
PLANT PHYSIOLOGY AND BIOCHEMISTRY, vol.204, 2023 (SCI-Expanded)
- IX. **Exogenous melatonin ameliorates ionizing radiation-induced damage by modulating growth, osmotic adjustment and photosynthetic capacity in wheat seedlings**  
Kurt-Celebi A., Çolak N., Torun H., Dosedělová V., Tarkowski P., Ayaz F. A.  
PLANT PHYSIOLOGY AND BIOCHEMISTRY, vol.187, pp.67-76, 2022 (SCI-Expanded)
- X. **An evaluation of volatiles and phenolic compounds in conjunction with the antioxidant capacity of endemic endangered species of *Erodium hendrikii* Alpınar**  
Cüce M., ÇOLAK N., Ćavar Zeljković S., Tarkowski P., Strnad M., Gruz J., Vehbi İmamoğlu K., AYAZ F. A.  
South African Journal of Botany, vol.149, pp.458-467, 2022 (SCI-Expanded)
- XI. **The Phenolics and Antioxidant Properties of Black and Purple versus White Eggplant Cultivars**  
ÇOLAK N., Kurt-Celebi A., Gruz J., Strnad M., Hayırlioglu-Ayaz S., Choung M., Esatbeyoglu T., AYAZ F. A.  
MOLECULES, vol.27, no.8, 2022 (SCI-Expanded)
- XII. **< i>Vitis vinifera</i> Turkish novel table grape 'Karaerik'. Part II: Non-anthocyanin phenolic composition and antioxidant capacity**  
Perez-Navarro J., Hermosin-Gutierrez I., Gomez-Alonso S., Kurt-Celebi A., Çolak N., Hayırlioglu-Ayaz S., Ayaz F. A., Akpinar E.  
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, vol.102, no.2, pp.813-822, 2022 (SCI-Expanded)
- XIII. **The optimization of ultrasonic-assisted extraction of *Centaurea* sp. antioxidative phenolic**

- compounds using response surface methodology**  
Bouafia M., ÇOLAK N., AYAZ F. A., Benarfa A., Harrat M., Gourine N., Yousfi M.  
JOURNAL OF APPLIED RESEARCH ON MEDICINAL AND AROMATIC PLANTS, vol.25, 2021 (SCI-Expanded)
- XIV. **The protective effect of exogenous salicylic and gallic acids ameliorates the adverse effects of ionizing radiation stress in wheat seedlings by modulating the antioxidant defence system**  
Colak N., Kurt-Celebi A., Fauzan R., Torun H., Ayaz F. A.  
Plant Physiology and Biochemistry, vol.168, pp.526-545, 2021 (SCI-Expanded)
- XV. **The biogenic amine and mineral contents of different milling fractions of bread and durum wheat (*Triticum L.*) cultivars**  
Karayigit B., ÇOLAK N., ÖZOĞUL F., GÜNDÖĞDU A., İNCEER H., Bilgicli N., AYAZ F. A.  
FOOD BIOSCIENCE, vol.37, 2020 (SCI-Expanded)
- XVI. **Accumulation of Phenolic Compounds and Antioxidant Capacity during Berry Development in Black 'Isabel' Grape (<i>Vitis vinifera</i>L. x <i>Vitis labrusca</i>L.)**  
Kurt-Celebi A., Çolak N., Hayirlioglu-Ayaz S., Velickovska S. K., Ilieva F., Esatbeyoglu T., Ayaz F. A.  
MOLECULES, no.17, 2020 (SCI-Expanded)
- XVII. **<i>Vitis vinifera</i> Turkish grape cultivar Karaerik. Part I: anthocyanin composition, and identification of a newly found anthocyanin<sup>†</sup>**  
Hermosin-Gutierrez I., Gomez-Alonso S., Perez-Navarro J., KURT A., ÇOLAK N., AKPINAR E., Hayirlioglu-Ayaz S., AYAZ F. A.  
JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, no.3, pp.1301-1310, 2020 (SCI-Expanded)
- XVIII. **Effect of N-acetyl-L-cysteine (NAC) on soluble sugar and polyamine content in wheat seedlings exposed to heavy metal stress (Cd, Hg and Pb)**  
ÇOLAK N., Tarkowski P., AYAZ F. A.  
BOTANICA SERBICA, vol.44, no.2, pp.191-201, 2020 (SCI-Expanded)
- XIX. **Exogenous N-Acetylcysteine alleviates heavy metal stress by promoting phenolic acids to support antioxidant defence systems in wheat roots**  
ÇOLAK N., Torun H., Gruz J., Strnad M., AYAZ F. A.  
ECOTOXICOLOGY AND ENVIRONMENTAL SAFETY, vol.181, pp.49-59, 2019 (SCI-Expanded)
- XX. **Fatty acids of oil and antioxidant capacity of phenolics from fruits of 11 Cardueae (Carduoideae, Asteraceae) taxa from northeast Anatolia (Turkey)**  
Kurt A., ÖZCAN M., ÇOLAK N., ÖZOĞUL Y., Glew R., ÖZOĞUL F., Ahmet Ayaz F.  
BOTANICA SERBICA, vol.43, no.1, pp.31-45, 2019 (SCI-Expanded)
- XXI. **Microwave-Assisted Synthesis, Antioxidant, and Antimicrobial Evaluation of Piperazine-Azole-Fluoroquinolone Based 1,2,4-Triazole Derivatives**  
OZDEMIR S. B., DEMİRBAŞ N., DEMİRBAŞ A., AYAZ F. A., ÇOLAK N.  
JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.55, no.12, pp.2744-2759, 2018 (SCI-Expanded)
- XXII. **Synthesis, biological activity and structure activity relationship studies of novel conazole analogues via conventional, microwave and ultrasound mediated techniques**  
MERMER A., DEMİRBAŞ N., DEMİRBAŞ A., ÇOLAK N., AYAZ F. A., Alagumuthu M., Arumugam S.  
BIOORGANIC CHEMISTRY, vol.81, pp.55-70, 2018 (SCI-Expanded)
- XXIII. **Design, Microwave-Assisted and Conventional Synthesis of New Hybrid Compounds Derived From 1-(4-Fluorophenyl)piperazine and Screening for Their Biological Activities**  
OZDEMIR S. B., DEMİRBAŞ N., DEMİRBAŞ A., ÇOLAK N., AYAZ F. A.  
CHEMISTRYSELECT, vol.3, no.7, pp.2144-2151, 2018 (SCI-Expanded)
- XXIV. **Enzyme inhibitory and antioxidant activities of *Nerium oleander* L. flower extracts and activity guided isolation of the active components**  
Balkan I. A., Dogan H. T., Zengin G., ÇOLAK N., AYAZ F. A., Goren A. C., KIRMIZIBEKMEZ H., YEŞİLADA E.  
INDUSTRIAL CROPS AND PRODUCTS, vol.112, pp.24-31, 2018 (SCI-Expanded)
- XXV. **Phenolic compounds and antioxidant capacity in different-colored and non-pigmented berries of bilberry (*Vaccinium myrtillus* L.)**  
ÇOLAK N., Primetta A. K., Riihinens K. R., Jaakola L., Gruz J., Strnad M., TORUN H., AYAZ F. A.

- FOOD BIOSCIENCE, vol.20, pp.67-78, 2017 (SCI-Expanded)
- XXVI. Nutrient profiles of the hybrid grape cultivar 'Isabel' during berry maturation and ripening**  
 KURT A., Torun H., ÇOLAK N., Seiler G., HAYIRLIOGLU-AYAZ S., AYAZ F. A.  
 JOURNAL OF THE SCIENCE OF FOOD AND AGRICULTURE, no.8, pp.2468-2479, 2017 (SCI-Expanded)
- XXVII. Conventional and Microwave-assisted Total Synthesis, Antioxidant Capacity, Biological Activity, and Molecular Docking Studies of New Hybrid Compounds**  
 Demirci S., MERMER A., AK G., Aksakal F., ÇOLAK N., DEMİRBAŞ A., AYAZ F. A., DEMİRBAŞ N.  
 JOURNAL OF HETEROCYCLIC CHEMISTRY, vol.54, no.3, pp.1785-1805, 2017 (SCI-Expanded)
- XXVIII. Structure-Based Hybridization, Conventional and Microwave Irradiated Synthesis, Biological Evaluation and Molecular Docking Studies of New Compounds Derived from Thiomorpholin**  
 Demirci S., Aksakal F., ÇOLAK N., Ülker S., DEMİRBAŞ A., DEMİRBAŞ N.  
 LETTERS IN DRUG DESIGN & DISCOVERY, vol.14, no.4, pp.444-463, 2017 (SCI-Expanded)
- XXIX. Nutritional Evaluation of an Outstanding Apple Cultivar, Göbek (*i Malus /i i /i i communis /i L.*)**  
 Çolak N., Kolcuoğlu Y., Tarkowski P., Benicka S., Çolak A., Ayaz S., Ayaz F. A.  
 Journal Of Food And Nutrition Research, vol.5, no.12, pp.874-881, 2017 (SCI-Expanded)
- XXX. Comparison of Phenolics and Phenolic Acid Profiles in Conjunction with Oxygen Radical Absorbing Capacity (ORAC) in Berries of *Vaccinium arctostaphylos L.* and *V. myrtillus L.***  
 ÇOLAK N., Torun H., Gruz J., Strnad M., SUBRTOVA M., İNCEER H., AYAZ F. A.  
 POLISH JOURNAL OF FOOD AND NUTRITION SCIENCES, vol.66, no.2, pp.85-91, 2016 (SCI-Expanded)
- XXXI. Bog bilberry phenolics, antioxidant capacity and nutrient profile**  
 ÇOLAK N., TORUN H., GRUZ J., STRNAD M., Hermosin-Gutierrez I., HAYIRLIOGLU-AYAZ S., AYAZ F. A.  
 FOOD CHEMISTRY, pp.339-349, 2016 (SCI-Expanded)
- XXXII. Comparison of Nutrient Content in Fruit of Commercial Cultivars of Eggplant (*Solanum melongena L.*)**  
 AYAZ F. A., ÇOLAK N., TOPUZ M., Tarkowski P., Jaworek P., Seiler G., İNCEER H.  
 POLISH JOURNAL OF FOOD AND NUTRITION SCIENCES, vol.65, no.4, pp.251-259, 2015 (SCI-Expanded)
- XXXIII. The effect of anthocyanin-rich bilberry extract on the antioxidant system in roots of barley (*Hordeum vulgare L.*) cultivars under ionizing radiation**  
 ÇOLAK N., ZENGİN A. Y., AYAZ F. A.  
 ACTA PHYSIOLOGIAE PLANTARUM, vol.37, no.9, 2015 (SCI-Expanded)
- XXXIV. Evalution of chemical profile and antioxidant activity of *Tripleurospermum insular*, a new species from Turkey**  
 İNCEER H., Zeljkovic S. C., AYAZ F. A., AYAZ S., ÇOLAK N.  
 NATURAL PRODUCT RESEARCH, vol.29, pp.293-296, 2015 (SCI-Expanded)
- XXXV. Evaluation of chemical profile and antioxidant activity of *< i>Tripleurospermum insularum</i>*, a new species from Turkey**  
 ZELJKOVIC S. C., AYAZ F. A., İNCEER H., Hayirlioglu-Ayaz S., ÇOLAK N.  
 NATURAL PRODUCT RESEARCH, no.3, pp.293-296, 2015 (SCI-Expanded)

## Articles Published in Other Journals

- I. Erzincan Karaerik Üzümü (*Vitis vinifera L. 'Karaerik'*)'nın Fenolik Asit İçeriğinin Belirlenmesi  
 Çolak N.  
 Düzce Üniversitesi Bilim ve Teknoloji Dergisi, vol.11, no.2, pp.829-844, 2023 (Peer-Reviewed Journal)
- II. A nutritional evaluation of the berry of a new grape: 'Karaerik' (*Vitis vinifera L.*)  
 KURT A., ÇOLAK N., Bengu A. S., Gundoğdu A., Akpinar E., Hayirlioglu-Ayaz S., AYAZ F. A.  
 International Journal of Food Studies, vol.7, no.2, pp.98-116, 2018 (Scopus)
- III. ANTIOXIDANT CAPACITY OF PHENOLICS IN SOME REPRESENTATIVES OF THE TRIBE ANTHEMIDEAE (ASTERACEAE) FROM TURKEY  
 ÇOLAK N., İNCEER H., Griz J., Strnad M., HayirliogluAyaz S., AKSU KALMUK N., AYAZ F. A.

- International Journal of Pharmaceutical Sciences and Research, vol.8, no.8, pp.3265-3277, 2017 (ESCI)
- IV. **Phenolic acid content and free radical-scavenging activity of two differently processed carob tree (*Ceratonia siliqua L.*) pod**  
TORUN H., AYAZ F. A., ÇOLAK N., Gruz J., Strnad M.  
Food and Nutrition Sciences, vol.4, pp.547-553, 2013 (Peer-Reviewed Journal)

## Books

- I. **Grayanotoksinlerin (Gtx) Kimyasal Yapısı Ve Analitik Belirleme Yöntemlerine Genel Bir Bakış**  
AYAZ F. A., ÇOLAK N., KURT A.  
in: Bal ve Deli Bal, Gündüz A, Editor, Nobel Tıp Kitapevleri, Ankara, pp.45-51, 2015
- II. **Azot fiksasyonu bitkilere büyümeye için havanın azotunu kullanabilme olanağı sağlar**  
ÇOLAK N.  
in: Bitki Biyokimyası, Ayaz F. A., Sökmen A., Editor, Nobel Akademik Yayıncılık, Ankara, pp.307-321, 2015

## Papers Published in Refereed Scientific Meetings

- I. **The ameliorative effect of N-acetylcysteine (NAC) on the morphology and chlorophyll content in wheat seedling under heavy metals stress,**  
ÇOLAK N.  
XIII. Congress of Ecology and Environment with international participation, 12 - 15 September 2017, pp.246
- II. **The effect of anthocyanin-rich extract on morphology and chlorophyll content in wheat seedlings exposed to salt stress**  
ÇOLAK N.  
XIII. Congress of Ecology and Environment with international participation, 12 - 15 September 2017, pp.244
- III. **The ameliorative effect of anthocyanin-rich bilberry extract on the phenolic compounds content and antioxidant activity in wheat seedlings exposed to salt stress**  
ÇOLAK N.  
XIII. Congress of Ecology and Environment with international participation, 12 - 15 September 2017, pp.245
- IV. **The effect of anthocyanin-rich extract on the phenolic compounds content and antioxidant capacity in wheat (*Triticum aestivum L.*) under ionizing radiation**  
Kurt A., ÇOLAK N., AYAZ F. A.  
The Second Japan-Turkey International Symposium on Pharmaceutical and Biomedical Sciences, 11 - 12 September 2017, pp.71
- V. **The Effect of Anthocyanin-Rich Extract on the Morphology and Pigment Concentration in a Wheat Cultivar Under Ionizing Radiation (IR)**  
Kurt A., ÇOLAK N., AYAZ F. A.  
The Second Japan-Turkey International Symposium on Pharmaceutical and Biomedical Science, 11 - 12 September 2017, pp.72
- VI. **Sugars and organic acids in berries of Erzincan black grape (*Vitis vinifera 'xxKaraerik'xx*)**  
Kurt A., AYAZ S., ÇOLAK N., AKPINAR E., AYAZ F. A.  
International Congress on Medicinal and Aromatic Plants, 9 - 11 May 2017, pp.1348
- VII. **Polyamines and phenolic compounds content in the fruit of naturally growing *Malus sylvestris L.* in Gümüşhane (Turkey)**  
Kurt A., ÇOLAK N., ÇOLAK A., KOLCUOĞLU Y., AYAZ F. A.  
International Congress on Medicinal and Aromatic Plants, 9 - 11 May 2017
- VIII. **Phenolic Compound Content and Antioxidant Capacity of Endemic *Tripleurospermum baytopianum* and *T. repens* (Asteraceae) from Turkey**  
Karayığit B., İNCEER H., ÇOLAK N., AYAZ S., AYAZ F. A.

- . International Congress on Medicinal and Aromatic Plants, 9 - 11 May 2017, pp.1338
- IX. **Phenolic compound content and antioxidant capacity in fruits of some eggplant (*Solanum melongena L.*) cultivars**  
Karayığit B., AYAZ S., Kurt A., ÇOLAK N., AYAZ F. A.  
International Congress on Medicinal and Aromatic Plants, 9 - 11 May 2017
- X. **Polyamine and phenolic compounds content in the fruit of naturally growing *Malus sylvestris* L. in Gümüşhane Turkey**  
KURT a., ÇOLAK N., ÇOLAK A., KOLCUOĞLU Y., AYAZ F. A.  
international congress on medicinal and aromatic plants, 9 - 11 May 2017
- XI. **PHENOLICS CONTENT AND RADICAL SCAVENGINGACTIVITY OF BLACK FOX GRAPE *Vitis labrusca L* BERRY DURING RIPENING**  
TORUN H., Kurt A., ÇOLAK N., AYAZ F. A.  
2 INTERNATIONAL CONFERENCE ON SCIENCEECOLOGY AND TECHNOLOGY(ICONSETE'2016 ), Barcelona, Spain, 14 - 16 October 2016
- XII. **Phenolic Content and Radical Scavenging Activity of Black Fox Grape *Vitis Labrusca L* Berry During Ripening**  
TORUN H., Kurt A., ÇOLAK N., AYAZ F. A.  
2nd International Conference on Science, Ekology and Technology-2016, Amsterdam, Netherlands, 14 October - 16 November 2016
- XIII. **Total Phenolic Content and Antioxidant Capacity in Some Reprensentatives of the Tribe Anthemideae Asteraceae from Turkey**  
ÇOLAK N., İNCEER H., HAYIRLIOĞLU AYAZ S., AYAZ F. A.  
Symposium on EuroAsian Biodiversity, 23 - 27 May 2016
- XIV. **Total phenolic content and antioxidant capacity in some representatives of the tribe Anthemideae Asteraceae from Turkey**  
ÇOLAK N., İNCEER H., AYAZ S., AYAZ F. A.  
Symposium on EuroAsian Biodiversity, 23 - 27 May 2016
- XV. **Phenolics and Antioxidant Capacity of Erzincan Black Grape (*Vitis vinifera*'Karaerik'**  
ÇOLAK N., KURT A., AYAZ F. A., Akpinar E.  
Symposium on Euroasian Biodiversity, Antalya, Turkey, 23 - 27 May 2016, pp.265
- XVI. **Total Phenolic Content and Antioxidant Capacity in Some Representatives of Tribe Anthemideae (Asteraceae) from Turkey**  
ÇOLAK N., İNCEER H., AYAZ S., AYAZ F. A.  
symposium on euroasian biodiversity, Antalya, Turkey, 23 - 27 May 2016, vol.1, no.1, pp.264
- XVII. **Nutrient content of *Malis slyvestris* L. (apple), which groww naturally in Gümüşhane**  
ÇOLAK N., Günal M., KOLCUOĞLU Y., ÇOLAK A., AYAZ F. A.  
International Mesopotamia Agriculture Congress, Diyarbakır, Turkey, 22 - 25 September 2015, pp.201-202
- XVIII. **Nutrient content of *Malus Slyvestris* L apple which grows naturally in Gümüşhane**  
ÇOLAK N., Merve G., KOLCUOĞLU Y., ÇOLAK A., AYAZ F. A.  
International Mesopotamia Agriculture Congress, Diyarbakır, Turkey, 22 - 25 September 2014
- XIX. **Nutrient cotent of *Malus slyvestris* L. (apple), which grows naturally in Gümüşhane**  
ÇOLAK N., KOLCUOĞLU Y., ÇOLAK A., AYAZ F. A., GÜNAL M.  
International Mesopotamia Agiculture congress, Diyarbakır, Turkey, 23 - 26 September 2014, pp.201-202
- XX. **An invetigation of the physiologial and Biochemical effect of anthocyanin treatment in the shoots of barley (*Hordeum vulgare* L.) exposed to ionizing radiation**  
ÇOLAK N., AYAZ F. A., ZENGİN A. Y.  
International Mesopotamia Agicuture congress, Diyarbakır, Turkey, 23 - 27 September 2014, pp.198-199

## Supported Projects

ÇOLAK N., AYAZ F. A., Project Supported by Higher Education Institutions, Ön strigolakton GR24 uygulamasının fosfat stresinde mısır bitkisinin yaprak ve kök fenolik içeriğine olan etkisinin araştırılması, 2024 - Continues

Çolak N., Ayaz F. A., Turumtay H., TUBITAK Project, Investigation of the Effect of Pre-Strigolactone (GR24) Application on Remodeling and Hormonal Interaction of Leaf and Root Membrane Lipids of Corn Plant under Phosphate Stress, 2024 - 2026

Yıldırım Akatın M., Ayaz F. A., Batan N., Şentürk A., Alver A., Yuluğ E., Çolak N., ŞAHİN E., TUBITAK Project, Karayosunu Mnium Spinulosum Bruch & Schimp'dan Elde Edilen Yüksek Saflıktaki İzolatin Antidiyabetik Etkisinin In Vitro Ve In Vivo Olarak İncelenmesi, 2023 - 2026

ÇOLAK N., TÜRKAN N., Project Supported by Higher Education Institutions, Hesperis thyrsoidea Boiss türünün toprak üstü kısımlarının fenolik içeriğinin ve antioksidan potansiyellerinin incelenmesi, 2024 - 2025

ÇOLAK N., Project Supported by Higher Education Institutions, Kırmızı Isabel üzümünün Vitis vinifera x V labrusca flavonol flavan3ol hidroksisinamik asit ve stilben içeriği ile antosianin içeriklerinin analizi, 2024 - 2025

AYAZ F. A., TORUN H., ÇOLAK N., NDACAKOMEJE P., Project Supported by Higher Education Institutions, Triptofan önmuamelesinin mısır Zea mays L bitkisinin tuz stresine aklımasyondaki rolünün fizyolojik ve biyokimyasal düzeyde araştırılması, 2022 - 2025

AYAZ F. A., ÇOLAK N., Project Supported by Higher Education Institutions, Buğday Triticum aestivum L Bitkisinde Ön Salisilik Asit Uygulamasının Kadmiyum Stresi Koşullarında Gliserolipid İçeriğine olan Etkisinin Araştırılması, 2023 - 2024

ÇOLAK N., AYAZ F. A., Project Supported by Higher Education Institutions, Ön melatonin uygulamasının ve içsel fenolik maddelerin Karabuğday (Fagopyrum esculentum Moench Güneş) da kadmiyum toleransının artırılmasındaki rolünün araştırılması, 2021 - 2024

BELDÜZ A. O., ÇOLAK N., DUMAN ERBAŞ E., Project Supported by Higher Education Institutions, Kırmızı Isabel üzüm Vitis vinifera L x Vitis labrusca L kabuklarından hazırlanan antosianincezengin özütün model organizma Galleria mellonella L Lepidoptera Pyralidae larvaları üzerinde biyolojik ve immünotoksik etkilerinin belirlenmesi, 2022 - 2023

Şirin E., Ayaz F. A., Çolak N., Project Supported by Higher Education Institutions, Aubrieta canescens ve Aubrieta pinardii endemik türlerinin fenoliklerinin enzim inhibitor ve antioksidan potansiyellerinin incelenmesi, 2021 - 2023

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