

TURJAF

10(SP1): 2022
TURKISH ISSUE



6TH INTERNATIONAL ANATOLIAN AGRICULTURE FOOD, ENVIRONMENT AND BIOLOGY CONGRESS

7 - 9 OCTOBER 2022 KÜTAHYA

On Behalf of

Prof. Dr. Mümtaz Turgut TOPBAŞ

Turkish Journal of Agriculture - Food Science and Technology

International Peer-Reviewed Journal | ISSN: 2148-127X

www.agrifoodscience.com

www.targid.net



Editorial Team

Editor in chief

1. [Prof.Dr. Musa Sarıca](#), Ondokuzmayıs University, Türkiye

Associate Editor

1. [Prof.Dr. Ahmet Sekeroğlu](#), Ömer Halisdemir University, Türkiye
2. [Prof.Dr. Hasan Eleroğlu](#), Cumhuriyet University, Türkiye

Editorial Board

1. [Prof.Dr. Ebubekir Altuntaş](#), Gaziosmanpaşa University, Türkiye
2. [Prof.Dr. Mustafa Avcı](#), Niğde Ömer Halisdemir University, Niğde, Türkiye
3. [Prof.Dr. Zeki Bayramoğlu](#), Selçuk University, Konya, Türkiye
4. [Prof.Dr. Kezban Candoğan](#), Ankara University, Türkiye
5. [Prof.Dr. Yusuf CUFADAR](#), Selçuk University, Konya, Türkiye
6. [Prof.Dr. Mahmut Çetin](#), Çukurova University, Adana, Türkiye
7. [Prof.Dr. Suat Dikel](#), Çukurova University, Türkiye
8. [Prof.Dr. Hasan Eleroğlu](#), Cumhuriyet University, Türkiye
9. [Prof.Dr. Naif Geboloğlu](#), Gaziosmanpaşa University, Türkiye
10. [Prof.Dr. Orhan Gündüz](#), Malatya Turgut Ozal University, Faculty of Agriculture, Department of Agricultural Economics, Türkiye
11. [Prof. Dr. Leyla İdiküt](#), Kahramanmaraş Sütçü İmam University, Türkiye
12. [Prof.Dr. Sedat Karaman](#), Gaziosmanpaşa University, Türkiye
13. [Prof.Dr. Mustafa Karhan](#), Akdeniz Üniversitesi, Türkiye
14. [Prof.Dr. Hüseyin Karlıdağ](#), İnönü University, Türkiye
15. [Prof.Dr. Muharrem Kaya](#), İsparta Uygulamalı Bilimler Üniversitesi, Ziraat Fakültesi, Tarla Bitkileri Bölümü, Türkiye
16. [Prof.Dr. Halil Kızılaslan](#), Gaziosmanpaşa University, Türkiye
17. [Prof.Dr. Kürşat Korkmaz](#), Ordu University, Türkiye
18. [Prof.Dr. Abdulrezzak Memon](#), Usak university Faculty of Science and Arts Department of Molecular Biology and Genetics, Türkiye
19. [Prof.Dr. Yusuf Ziya Oğrak](#), Cumhuriyet University, Faculty of Veterinary Medicine, Türkiye
20. [Prof. Dr. Bahri Devrim Özcan](#), Çukurova University, Türkiye
21. [Prof.Dr. Kadir Saltalı](#), Kahramanmaraş Sutcu İmam University, Türkiye
22. [Prof.Dr. Zeliha Selamoğlu](#), Niğde University, Türkiye
23. [Prof.Dr. Ahmet Şahin](#), Ahi Evran Üniversitesi, Türkiye
24. [Prof.Dr. Ahmet Sekeroğlu](#), Ömer Halisdemir University, Türkiye
25. [Prof.Dr. Yusuf Yanar](#), Gaziosmanpaşa University, Türkiye
26. [Prof. Dr. Arda Yıldırım](#), Tokat Gaziosmanpaşa University, Türkiye
27. [Prof.Dr. Metin Yıldırım](#), Niğde Ömer Halisdemir University, Türkiye
28. [Prof.Dr. Zeliha Yıldırım](#), Niğde Ömer Halisdemir University, Türkiye
29. [Associate Prof.Dr. Cem Baltacıoğlu](#), Niğde Ömer Halisdemir University (Niğde University), Türkiye
30. [Associate Prof.Dr. Hasan Gökhan Doğan](#), Kırşehir Ahi Evran University, Türkiye
31. [Doc.Dr. Sertac Günçör](#), Selçuk University, Türkiye
32. [Associate Prof.Dr. Ekrem Mutlu](#), Kastamonu University, Türkiye
33. [Assoc. Prof. Dr. Cem Okan ÖZER](#), Nevşehir Hacı Bektaş Veli University, Türkiye
34. [Associate Prof.Dr. Emre Şirin](#), Ahi Evran Üniversitesi, Ziraat Fakültesi, Tarımsal Biyoteknoloji Bölümü, Kırşehir, Türkiye
35. [Associate Prof.Dr. Hasan Tangüler](#), Ömer Halisdemir University, Türkiye
36. [Associate Prof. Dr. Hatıra Taşkın](#), Çukurova University, Türkiye
37. [Associate Prof. Dr. Adnan ÜNALAN](#), Niğde Ömer Halisdemir University, Türkiye
38. [Dr. Emre Aksoy](#), Ömer Halisdemir University, Faculty of Agricultural Sciences and Technologies, Türkiye
39. [Dr. Allah Bakhsh](#), Niğde Ömer Halisdemir University, Türkiye
40. [Dr. Mustafa Duman](#), Niğde University, Türkiye
41. [Dr. Burak Şen](#), Ömer Halisdemir University, Türkiye

Section Editors

1. [Prof.Dr. Alper Durak](#), Turgut Özal Üniversitesi, Türkiye
2. [Prof.Dr. Gülistan Erdal](#), Gaziosmanpaşa University, Türkiye
3. [Prof.Dr. Zeki Gökalg](#), Erciyes University, Türkiye
4. [Prof.Dr. Rüştü Hatipoğlu](#), Cukurova University, Türkiye
5. [Prof.Dr. Teoman Kankılıç](#), NİĞDE ÖMER HALİSDEMİR ÜNİVERSİTESİ
6. [Prof.Dr. Osman Karkacier](#), Akdeniz University, Türkiye
7. [Prof.Dr. G. Tamer Kayaalp](#), Cukurova University, Türkiye
8. [Prof.Dr. Nuray Kızılaslan](#), Gaziosmanpaşa University, Türkiye
9. [Prof.Dr. Hasan Rüştü Kutlu](#), Cukurova University, Türkiye
10. [Prof.Dr. Hülya Eminçe Saygı](#), Ege University, Türkiye
11. [Prof.Dr. İbrahim Tapkı](#), Mustaf Kemal University, Türkiye
12. [Prof.Dr. Faruk Toklu](#), Çukurova University, Türkiye
13. [Prof.Dr. Necati Barış Tuncel](#), Onsekiz Mart Üniversitesi, Türkiye
14. [Prof.Dr. Erkan Yalçın](#), Bolu Abant İzzet Baysal University
15. [Prof.Dr. Durdane Yanar](#), Gaziosmanpaşa University,
16. [Associate Prof.Dr. Hüsnü AKTAS](#), Mardin Artuklu Üniversitesi Kızıltepe Meslek Yüksekokulu MARDİN
17. [Associate Prof.Dr. Hatun Barut](#), Eastern Mediterranean Agricultural Research Institute. Adana, Türkiye
18. [Associate Prof. Dr. Berken Cimen](#), Cukurova University, Türkiye
19. [Associate Prof.Dr. Nazlı Ercan](#), Cumhuriyet University, Türkiye
20. [Associate Prof.Dr. Cemal Kurt](#), Cukurova University, Türkiye
21. [Assistant Prof. Muhammad Azhar Nadeem](#), Sivas bilim ve teknoloji üniversitesi, Türkiye
22. [Associate Prof.Dr. Senay Ugur](#), Türkiye
23. [Associate Prof.Dr. Uğur Serbester](#), Çukurova University, Türkiye
24. [Associate Prof.Dr. Mustafa Sevindik](#), Osmaniye Korkut Ata University, Türkiye
25. [Assoc. Prof. Özhan Şimsek](#), Erciyes University, Agriculture Faculty, Horticulture Department, Türkiye
26. [Associate Prof.Dr. Gülsüm Yıldız](#), Tıbbi ve aromatik bitkileri Abant izzet baysal üniversitesi, Türkiye
27. [Dr. Gökhan BAKTEMUR](#), Sivas University of Science and Technology, Türkiye
28. [Dr. Sara Yasemin](#), Siirt University, Türkiye

Regional Editors

1. [Prof.Dr. Himayatullah Khan](#), Institute of Development Studies KPK Agricultural University, Peshawar, Pakistan
2. [Prof. Dr. Abderrahim BENSLAMA](#), University of M'sila, Algeria
3. [Dr. Abdul Hannan](#), University of Agriculture, Pakistan
4. [Dr Aimee Sheree Adato Barrion](#), University of the Philippines Los Baños, Philippines
5. [Dr. Claudio Ratti](#), University of Bologna, Italy
6. [Dr. Dima Alkadri](#), University of the Bologna, Italy
7. [Dr. Fernanda Cortez Lopes](#), Federal University of Rio Grande do Sul, Brazil, Brazil
8. [Dr. Gheorghe Cristian Popescu](#), University of Pitesti · Department of Applied Sciences and Environment Engineering Romania, Romania
9. [Dr. Idrees A. Nasir](#), University of the Punjab, Pakistan
10. [Dr. Jelena Zindovic](#), University of Montenegro, Montenegro
11. [Dr. Muhammad Amjad Ali](#), University of Agriculture, Faisalabad, Pakistan, Pakistan
12. [Dr. Muhammad Naeem Sattar](#), University of the Punjab, Sweden
13. [Dr. Muhammad Rizwan ShafiqShafiq](#), R. Friedrich-Wilhelms-University, Germany
14. [Dr. Muhammad Qasim Shahid](#), South China Agricultural University, China
15. [Dr. Muhammad Younas Khan](#), University of Quetta, Pakistan
16. [Dr. Neelesh Sharma](#), Faculty of Veterinary Science & Animal Husbandry, India
17. [Dr. Noosheen Zahid](#), University of Nottingham, Malaysia

Statistics Editor

1. [Prof. Dr. Soner Çankaya](#), Ondokuz Mayıs University, Türkiye
2. [Prof.Dr. Hüdaverdi Bircan](#), Cumhuriyet Üniversitesi, Türkiye
3. [Associate Prof. Dr. Adnan ÜNALAN](#), Niğde Ömer Halisdemir University, Türkiye

Foreign Relations

1. [Emre Aksoy](#), Biological Sciences, Middle East Technical University, Türkiye



Vol 10 (2022)

Special Issue 1 (TARGID 2022)

Table of Contents

Research Paper

Determination of Phytochemicals and Antioxidant Capacity of <i>Satureja hortensis</i> L Fatma Ergün	2635-2639
Reproductive Characteristics of the Common Cuttlefish (<i>Sepia officinalis</i>, Linnaeus, 1758) Population Distributed in the Antalya Bay Olgaç Güven, Mehmet Özbaş	2640-2645
Determination Effects of Sulfur Applications on Some Fungal Diseases of Potato Tubers (<i>Solanum tuberosum</i> L.) Arif Şanlı, Hülya Özgönen Özkaya	2656-2661
Reactive Extraction of Lactic Acid Using Trioctylamine with Environmentally Friendly Solvents Mehmet Yetişen, Cem Baltacıoğlu, Hasan Uslu	2662-2667
Investigation of the Effect of Fertilizer Doses on Bean Pod Properties Leyla İdikut, Duygu Uskutoğlu	2668-2674
Investigation of Winter Cultivation of Different Chickpea Varieties Leyla İdikut, Duygu Uskutoğlu, Kazım Emre Gökteş, Songül Çiftçi Sakin, Samet Karadeniz	2675-2684
Expression of Some Metal Transporter ATPases in <i>Brassica rapa</i> Grown under Cadmium Stress Merve Sahan, Nuriye Meraklı, Abdulrezzak Memon	2685-2690
Effects of Addition of Compost and Fertilizer to Growth Media on Plant Growth and Flowering of <i>Gerbera</i> (<i>Gerbera jamesonii</i> Bolus ex Hooker f.) Onur Sefa Alkaç, Muhammed Esad Tuncel, Esra Öndeş, Rümeyza Temir, Mehmet Güneş	2691-2698
The Global Epidemic and Effects on Turkey Livestock Sibel Alapala Demirhan, Nuray Şahinler	2691-2695
The Effect of Post-Harvest Calcium Chloride Applications on the Shelf Life Quality of Strawberry Osman Nuri Öcalan, Fatmanur Çezik, Ala Asi Mohammed Al-Salihi, Muhammet Rahmetullah Çiğdem, Kenan Yıldız	2701-2707
Rooting Performances of Promising Black Mulberry (<i>Morus nigra</i> L.) Genotypes Determined in Tokat Province under Same Environmental Conditions Emircan Dinçer, Onur Saraçoğlu, Osman Nuri Öcalan	2708-2712
The Effects of IBA and Paclobutrazol Applications on the Rooting Performance of Blackberry Cuttings Muhammed Rahmetullah Çiğdem, Alperen Donat, Emircan Dinçer, Kenan Yıldız, Osman Nuri Öcalan	2713-2717
Effects of Light and Dark Conditions on Root Development of Black Mulberry (<i>Morus nigra</i> L.) Hardwood Cuttings Fatmanur Çezik, Çetin Çekiç, Kenan Yıldız, Hakan Karadağ, Osman Nuri Öcalan	2718-2721
Effects of Paclobutrazol Applications on Rooting Performance of Black Mulberry (<i>Morus nigra</i> L.) Hardwood Cuttings Mehmet Emin İşbilir, Onur Saraçoğlu, Emircan Dinçer, Alperen Donat, Ala Asi Mohammed Al-Salihi	2722-2724
Investigation of Stray Dogs Problem in Sivas Province Animal Shelter Example Yusuf Ziya Oğrak, Şahin Alıcı	2725-2729
A Research on Agricultural Products Storage Warehouses in Van Province Ünal Şirin, Sedat Karaman, Büşra Kabay	2730-2736
The Effect of Plant Growth Promoting Rhizobacteria and Mycorrhiza Applications on The Growth of <i>Zinnia elegans</i> L. and <i>Dahlia variabilis</i> L. Onur Sefa Alkaç, Sabriye Belgüzar, Zeliha Kayaaslan, Esat Tuncel, Sümeyye Aldırmaz	2737-2743
Connection of Fisheries Management and Ballast Water Management Contract (Bwm Convention, 2004) Serpil Yılmaz, Esra Erikçi Bilgin	2744-2750
Determination of Zinc Sorption Properties of Gytja, Leonardite and Compost Kadir Saltalı, Muhammed Alhashemi	2751-2757
Evaluation of Noise in Children's Playgrounds: The Case of Dokuma Park Rifat Olgun	2758-2764
The Effects of Some Rhizobacteria Species on Plant Development and Fruit Quality in Melons Grown Under Irrigated and Non-Irrigated Conditions Özlem Altuntaş, İbrahim Kutalmış Kutsal	2765-2771
Determination of Usability of Wastewater for Irrigation Purposes in Agriculture in Kırklareli Region Hacer Gülocak, Sultan Kıymaz	2772-2782
Biodegradation of Some Pesticides by <i>Enterobacter cloacae</i>: in vitro Tanık Balkan, Sabriye Belgüzar, Mehmet Kızıllarlan, Özlem Yılmaz	2783-2788



Determination of Some Virus Diseases Infecting Dahlia Species Grown for Landscape Purposes in Konya Province Parks and Home Gardens by Serological Methods	2789-2794
Serkan Yeşil	
Serological Detection of Three Common Tomato Viruses in Tomato Cultivation Areas of Ereğli District, Konya	2795-2800
Serkan Yeşil	
Investigation of Some Morphological Traits of Hair Goats in Under Breeder Conditions in Isparta Province	2801-2805
Mustafa Varol, Sibel Alapala Demirhan	
Research on the Bio-ecology, Morphology and Seasonal Variation of <i>Dendrobaena veneta</i> (Rosa, 1886)	2806-2810
Aysel Kekillioglu, Ali Aslan Erdoğan	
The Effect of Indole Acetic Acid on Forage Soybean under Drought Stress	2811-2814
Gizem Aksu	
Determination and Evaluation of Field Adequacy by Ankara Gökusu Park Users	2821-2826
Elif Nur Doğan, Sertaç Güngör	
Economic, Cultural and Environmental Impacts of EXPO`21 HATAY in the Scope of Sustainability	2827-2834
Sertaç Güngör, Sabriye Melis ÇİNÇİNOĞLU	
The Effects of Different Organic and Inorganic Fertilizer Applications on Yield and Improvement of Maize Plant	2835-2840
Hasan Durukan, Zekeriya Duran, Handan Saraç, Ahmet Demirbaş	
Determination of Biogas Energy Potential of Animal Manures in Van Province	2848-2854
Ünal Şirin, Sedat Karaman, Fatih Şevki Erkuş, Şefik Tüfenkçi, Koray Tuncay	
Impact of Microplastic Pollution on Biota in the Turkish Territorial Waters	2855-2861
İdris Koraltan, Olgaç Güven	
Investigation of the Expectations and Satisfactions of the Partners from Agricultural Credit Cooperatives in Trabzon	2862-2868
İbrahim Yılmaz, Seyfettin Demirci, Asaf Özalp	
Evaluation of Chemical Use in Beekeeping Activities in the Şile District of Istanbul Province	2869-2875
Canan Zafer Köse, İbrahim Yılmaz	
Determination of The Yield and Yield Parameters of Demre Sivrisi, Dogal Sarı Sivri and Dogal Carliston (<i>Capsicum annuum</i> L.) Pepper Varieties Grown By Fertigation Method in Greenhouse Conditions	2876-2881
Ahmet Demirbaş, Hasan Durukan, Mustafa Öztük, Handan Saraç	
Review Articles	
The Roles of Plant Peptide and Amino Acid Transporters in Iron Transport	2646-2655
Emre Aksoy, Amir Maqbool, Bayram Ali Yerlikaya, Fazli Wahid	
The Importance of Some Animal Products for Nutrition and Health	2696-2700
Sibel Alapala Demirhan, Nuray Şahinler	
Production of Vitamin B12 by Propionic Acid Bacteria and Investigation of Effective Parameters	2815-2820
Hayriye Gökür Ağca Küçükaydın, Göksel Tırpancı Sivri, Ömer Öksüz	
Quality Parameters of Honey, an Important Bee Product	2841-2847
Nesibe Özge Toy, Nuray Şahinler	
Bees in Pollination and the Effect of Global Warming on Bees	2882-2887
Nuray Şahinler, Nesibe özge Toy	

Indexing Services



This work is licensed under [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by-nc/4.0/)

[ISSN: 2148-127X](https://www.issn.org/issn/2148-127X)



Turkish JAF Sci.Tech.

Turkish Journal of Agriculture - Food Science and Technology (TURJAF) is indexed by the following national and international scientific indexing services:

- [Directory of Open Access Journals \(DOAJ\)](#),
- [Index Copernicus \(ICI\)](#),
- [National Library of Australia \(TROVE\)](#),
- [WorldCat libraries\(WorldCat\)](#),
- [Ingenta \(Ingenta \)](#),
- [World Agricultural Economics and Rural Sociology Abstracts \(CABI \)](#),
- [Google \(Scholar \)](#),
- [Crossref \(Journals\)](#),
- [Sobiad Citation Index](#),
- [SciMatic \(SciMatic\)](#),
- [The Food and Agriculture Organization \(AGRIS\)](#),
- [Idealonline Index](#),
- [Scilit \(SCILIT\)](#),
- [Weill Cornell Medicine - Qatar](#),
- [Indiana University Kokomo](#),
- [Academic Search Engine \(SCINAPSE\)](#),
- [Fatcat Editor \(FATCAT\)](#),
- [Academic Research Index \(ACARINDEX\)](#),
- [Information Matrix for the Analysis of Journals \(MIAR\)](#),
- [The Turkish Academic Network and Information Centre \(ULAKBIM\)](#),
- [ULAKBIM TR Index list of Journals \(TR-INDEX\)](#),

Türk Tarım - Gıda Bilim ve Teknoloji dergisi

(Turkish Journal of Agriculture - Food Science and Technology)

Editör: Hasan Eleroğlu Web: <http://www.agrifoodscience.com> ISSN: 2148-127X / 2148-127X Yayına Başladığı Yıl: 2013

Yayıncı: Yeni Adı: Eski Adı:

Yıllık Yayın Sayısı: 12

Yayın Yapması Gereken Aylar: Ocak, Şubat, Mart, Nisan, Mayıs, Haziran, Temmuz, Ağustos, Eylül, Ekim, Kasım, Aralık

Yayın Dili: İngilizce, Türkçe Yayın Formatı: Elektronik

Konu Kategorisi: Ziraat Mühendislik Konu Alanları: Ziraat Mühendisliği Gıda Bilimi ve Teknolojisi

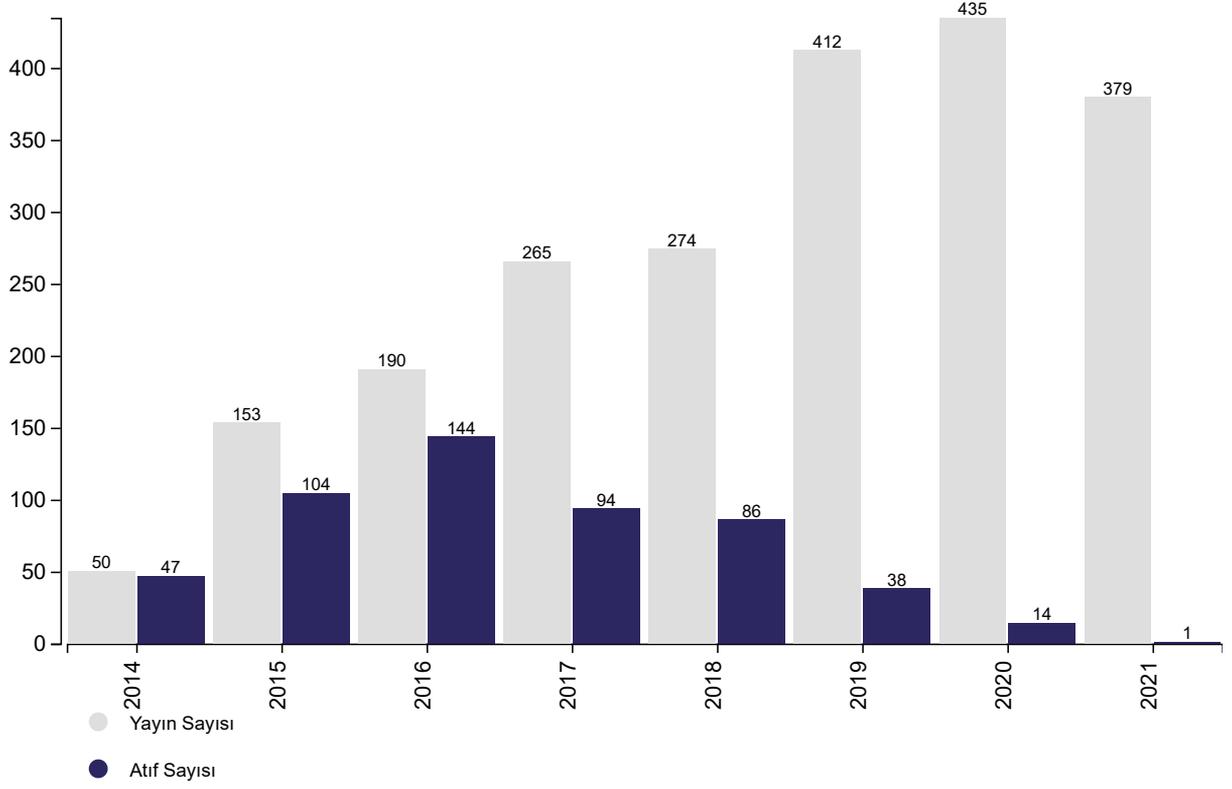
28631

Makale Sayısı	Aldığı Atıf Sayısı	Atıf Ortalaması	Kendine Atıf Sayısı	Kendine Atıf Oranı(%)	Atıf Alan Makale Sayısı
2189	546	0,25	239	43,77	293

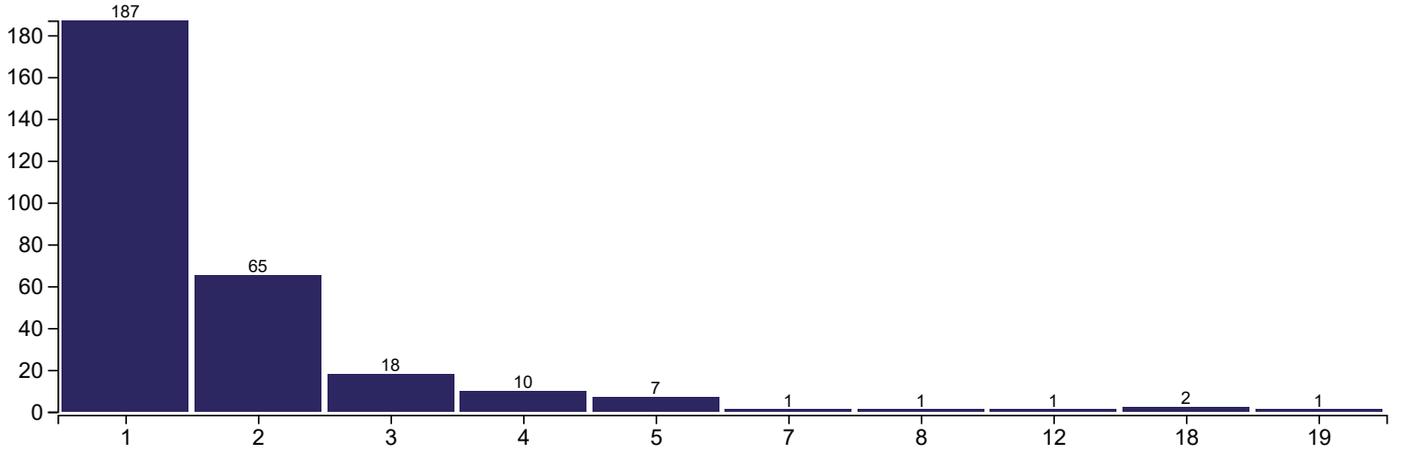
Dizinlendiği Yıllar

Yıl	Konu Alanı
2014	Fen
2015	Fen
2016	Fen
2017	Fen
2018	Fen
2019	Fen
2020	Fen
2021	Fen
2022	Fen

Makale ve Atıf Sayıları



Makalelerin Atıf Dağılımı



Makale Türleri

