

e-ISSN: 2148-6905

a peer-reviewed
online journal

hosted by **DergiPark**

International Journal of Secondary Metabolite

Volume: 11

Issue: 4

December 2024

<https://dergipark.org.tr/en/pub/ijsm>

Volume 11**Issue 4****2024**

Editor	Prof. Dr. Izzet KARA
Address	Pamukkale University, Education Faculty, Kinikli Campus, 20070 Denizli, Türkiye
Phone	+90 258 296 1036
E-mail	ikara@pau.edu.tr
Publisher	Prof. Dr. Izzet KARA
Address	Pamukkale University, Education Faculty, Kinikli Campus, 20070 Denizli, Türkiye
Phone	+90 258 296 1036
Fax	+90 258 296 1200
E-mail	ikara@pau.edu.tr ijsm.editor@gmail.com
Journal Contact	Prof. Dr. Gurkan SEMİZ
Address	Pamukkale University, Faculty of Science, Department of Biology, Kinikli Campus, Denizli, 20070, Türkiye
Phone	+90 258 296 3582
Fax	+90 258 296 1200
E-mail	gsemiz@pau.edu.tr
Frequency	4 issues per year (March, June, September, December)
Online ISSN	2148-6905
Website	https://dergipark.org.tr/en/pub/ijsm
Cover Design	IJSM

International Journal of Secondary Metabolite (IJSM) is a peer-reviewed and academic online journal. The scientific and legal responsibility for manuscripts published in our journal belongs to the authors(s).

International Journal of Secondary Metabolite

International Journal of Secondary Metabolite (IJSM) purposes the publication of articles related to secondary metabolites of plant and allied organisms (algae, fungi, and lichens). IJSM is open-access, peer-reviewed academic journal published electronically and quarterly. The journal is the goal to improve the research culture and help knowledge spread rapidly in the academic world by providing a common academic platform in the scope. The journal is published in English.

IJSM is published 4 issues per year (March, June, September, December), and accepting manuscripts related to secondary metabolites of plant and allied organisms (algae, fungi, and lichens). Research areas covered in the journal are phytochemistry, biochemistry, biotechnology, ethnopharmacology, biological and pharmacological activities (antimicrobial activity, antioxidant activity, antiulcer activity, anti-convulsant activity, anti-anxiety activity, antidiabetic activity, anti-gout activity, antiprotozoal activity, anti-inflammatory activity, antispasmodic activity, antiparasitic activity, anti-mutagenic activity, anticholinesterase activity, antidepressant activity, hepatoprotective activity, anti-anxiety activity, anti-convulsant activity, anti-spasmodic activity, anticancer activity). IJSM welcomes the submission of manuscripts that meet the general criteria of significance and scientific excellence. Authors are required to frame their research questions and discuss their results in terms of major questions in plant biology. Contribution is open to researchers of all nationalities. The following types of articles will be considered:

1. Research articles: Original research in various fields of plant and allied organisms (algae, fungi, and lichens) will be evaluated as research articles.
2. Research notes: These include articles such as preliminary notes on a study or manuscripts new records on secondary metabolites.
3. Reviews: Reviews of recent developments, improvements, discoveries, and ideas in various fields of plant and allied organisms (algae, fungi, and lichens) will be requested by the editor or advisory board.
4. Letters to the editor: These include opinions, comments relating to the publishing policy of the International Journal of Secondary Metabolite, news, and suggestions. Letters are not to exceed one journal page.

All articles accepted to the IJSM are published without charge for article submission, review or printing.

Indexes and Databases:

- SCOPUS
- TR Dizin
- EBSCOHOST databases
- MIAR (Information Matrix for Analysis of the Journals)
- SIS (Scientific Index Service) Database,
- ERIH PLUS
- CAB Abstracts
- DOAJ
- JournalTOCs
- idealonline
- CrossRef
- ASOS Index

Editors

Dr. Izzet KARA, *Pamukkale University, Türkiye*

Editorial Board

Dr. Adel Kadri, *Al Baha University, Saudi Arabia*

Dr. Alaattin Sen, *Abdullah Gül University, Türkiye*

Dr. Bui Thanh Tung, *Vietnam National University, Vietnam*

Dr. Cengiz Sarıkürkcü, *Afyonkarahisar University, Türkiye*

Dr. Ebru Ataslar, *Eskisehir Osmangazi University, Türkiye*

Dr. Eyup Bagci, *Firat University, Türkiye*

Dr. Faik Kantar, *Akdeniz University, Türkiye*

Dr. Fawzi Mahomoodally, *University of Mauritius, Réduit, Mauritius*

Dr. Fethi Ahmet Ozdemir, *Bingol University, Türkiye*

Dr. Gokhan Zengin, *Selcuk Üniversitesi, Türkiye*

Dr. Gurkan Semiz, *Pamukkale University, Türkiye*

Dr. Hakan Akca, *Pamukkale University, Türkiye*

Dr. Haniyeh Bidadi, *University of Tsukuba, Japan*

Dr. Huseyin Servi, *Altinbas University, Türkiye*

Dr. Ibrahim Kivrak, *Mugla Sitki Kocman University, Türkiye*

Dr. İlkay Erdoğan Orhan, *Gazi University, Türkiye*

Dr. Jelena Popovic Dordevic, *Belgrade University, Serbia*

Dr. Lucian Hritcu, *Alexandru Ioan Cuza University of Iasi, Romania*

Dr. Mehmet Emin Diken, *Balıkesir University, Türkiye*

Dr. Meriem Elaloui, *National Institute of Research in Rural Engineering, Tunisia*

Dr. Mohammad Asadi, *University of Mohaghegh Ardabili, Iran*

Dr. Muhammad Akram, *Government College University Faisalabad, Pakistan*

Dr. Namik M. Rashydov, *National Academy of Sciences of Ukraine, Ukraine*

Dr. Nazim A. Mamedov, *University of Massachusetts Amherst, USA*

Dr. Oktay Erdogan, *Pamukkale University, Türkiye*

Dr. Ozan Emre Eyupoğlu, *Istanbul Medipol University, Türkiye*

Dr. Sharad Vats, *Banasthali University, India*

Dr. Sibel Silici, *Erciyes University, Turkey*

Dr. Vahid Tavallali, *Payame Noor University, Iran*

Dr. Yesim Kara, *Pamukkale University, Türkiye*

Foreign Language Editor

Dr. R. Sahin Arslan, *Pamukkale University, Türkiye*

Dr. Hatice Altun, *Pamukkale University, Türkiye*

Latin Language Editor

Dr. Hasan Genc, *Burdur Mehmet Akif Ersoy University, Türkiye*

Table of Contents

Research Articles

[Phytochemical constituents from corn silk and antimicrobial activity of the isolates](#)

Page: 604-622 PDF

Nestor Tordzagla, Isaac Ayensu, James Oppong-kyekyeku

[A comparative study of the antioxidant, antibacterial, and cytotoxic activities of different varieties of imported ripe Cavendish banana](#)

Page: 623-632 PDF

Faisal Said Hamed Al-abri, Salem Said Jarooof Al Touby, Mohammad Amzad Hossain

[Deciphering the therapeutic actions of *Brenania brieyi* \(Rubiaceae\) fractions on oxidoinflammatory anomalies](#)

Page: 633-645 PDF

Ifeoma Felicia Chukwuma, Victor Onukwube Apeh, Florence Nkechi Nworah, Lawrence U.S. Ezeanyika, Victor Nwadiogo Ogugua, Abayomi Emmanuel Adegboyega, Martins Obinna Ogugofor

[Evaluation of potential anti-aging effects of *Achillea phrygia* Boiss. & Balansa \(Asteraceae\)](#)

Page: 646-657 PDF

Rukiye Boran Gülen, Nurdan Saraç, Aysel Uğur

[Unlocking traditional remedy: Gulkand-enhanced mucoadhesive gel for canker sore relief](#)

Page: 658-674 PDF

Manoj Madanahalli Ramesh, Annegowda Hardur Venkatappa

[Wound healing and coagulant activity of crude extract metabolites from fungal endophytes](#)

Page: 675-686 PDF

Fulgence Ntangere Mpenda, George Madaha, Fortunatus Jacob

[Chemical profiling and bioactivity studies on aerial parts *Ammoides atlantica* \(Coss. et Durieu\) H. Wolff](#)

Page: 687-699 PDF

Salah Bendjabeur, Mohamed Hazzit

[Cytotoxic effect of *Trigonella coerulescens* subsp. *ayvalikensis* Erdoğan, Selvi & Tümen in prostate and colon cancer cell lines](#)

Page: 700-709 PDF

Sümeyye Aydoğan Türkoğlu, Selin Koç, Fatma Poyrazlı, Selami Selvi

[The isolation of bioactive compounds from *Warburgia ugandensis* bark: A report of albicanyl acetate, caseamemin and \$\beta\$ -sitosterol from *Warburgia* species](#)

Page: 710-721 PDF

Zelalem Gizachew, Christopher Suh

Comparative assessment of antioxidant activity in red apricot (*Prunus armeniaca* L.) and Fig fruits (*Ficus carica* L.) cultivated in Nakhchivan AR, Azerbaijan

Page: 722-728 PDF

Sura Rahimova, Elsevar Asadov, Azize Huseynova

Comparison of matrix metalloproteinase levels in periodontal pockets treated with chlorhexidine and propolis

Page: 729-739 PDF

Ali Batuhan Bayırlı, İbrahim Kıvrak, Ercan Saruhan, Fulden Cantas Türkiş

Taxonomic characterization and secondary metabolite production of newly isolated *Streptomyces* sp. MC12

Page: 740-750 PDF

Mustafa Oskay

Preparation and characterization of chitosan nanoparticles with extracts of *Rheum ribes*, evaluation of biological activities of extracts and extract loaded nanoparticles

Page: 751-764 PDF

Murat Doğan, Ümit Muhammet Koçyiğit, Duygu Taşkın, Beyza Nur Yılmaz, Turgut Taşkın

Protective and therapeutic effects of hesperidin in an experimental colitis model

Page: 795-801 PDF

Esra Güzel, Serdal Öğüt, Serdar Aktaş

Dyeing of banana-silk union fabrics with cochineal using different concentrations of bio-mordant

Page: 802-811 PDF

Abdulkadir Pars

Comparison of high antioxidant ZnONPs produced from different fungi as alternative biomaterials

Page: 812-832 PDF

Olçay Gençyılmaz, Mohanad Fawzi Mutar Mutar

Chemical profile by GC-MS and protective effect of Algerian cloves (*Syzygium aromaticum*) against *Lactobacillus* spp. and *Streptococcus* spp. isolated from dental caries

Page: 833-852 PDF

Ouahiba Benhamada, Nabila Benhamada, Lilia Boussouf, Essaid Leghouchi

Review Articles

Review on the toxic effect of fluorine and lead on lichen metabolism

Page: 765-794 PDF

Ouahiba Benhamada, Nabila Benhamada, Essaid Leghouchi
