

e-ISSN: 2148-6905

a peer-reviewed
online journal

hosted by **DergiPark**

International Journal of Secondary Metabolite

Volume: 12

Issue: 2

June 2025

Editor	Prof. Dr. Selami SELVİ
Address	Balikesir University, Altinoluk Vocational School, Edremit/Balikesir, Türkiye
Phone	+90 266 396 1552
E-mail	sselvi@balikesir.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 SEMIZ
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 (IJS) purposed the publication of articles related to secondary metabolites of plant and allied organisms (algae, fungi, and lichens). IJS 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.

IJS 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-spasmolytic activity, anticancer activity). IJS 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 IJS 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)
- ERIH PLUS
- CAB Abstracts
- DOAJ
- idealonline

Editor

Dr. Selami Selvi, *Balikesir University, Türkiye*

Editorial Board

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

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

Dr. Eyüp Bağcı, *Firat University, Türkiye*

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

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

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

Dr. Oktay Erdoğan, *Pamukkale University, Türkiye*

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

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

Dr. Yeşim Kara, *Pamukkale University, Türkiye*

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

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

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

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

Dr. İlkay Erdogan Orhan, *Lokman Hekim University, Türkiye*

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

Dr. Jelena Popovic-djordjevic, *University of Belgrade, Serbia*

Dr. Cengiz Sarıkürkçü, *Afyonkarahisar Health Sciences University, Türkiye*

Dr. Gürkan Semiz, *Pamukkale University, Türkiye*

Dr. Sibel Silici, *Erciyes University, Turkey*

Dr. Huseyin Servi, *Altinbas University, Türkiye*

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

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

Dr. Bùi Thanh Tùng, *Vietnam National University, Vietnam*

Dr. Sharad Vats, *Banasthali University, India*

Dr. Gökhan Zengin, *Selcuk Üniversitesi, Türkiye*

Foreign Language Editor

Dr. Hatice Altun, *Pamukkale University, Türkiye*

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

Latin Language Editor

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

Table of Contents

Research Articles

Effects of preharvest salicylic acid and oxalic acid treatments on blackberry (cv. Bursa 1) fruit quality

Page: 235-247 PDF

Kerem Mertoğlu, İlknur Eskimez, Derya Erbaş, Mehmet Polat, İbrahim Bulduk

Analysis of accessible and total phosphate contents in different foods, to assess their suitability for use by dialysis patients

Page: 248-260 PDF

Muhammad Wahab, Hiwa M. Ahmed

A comparative analysis of the effects of different drying and storage techniques on the phenolic content of *Pistacia atlantica* leaves

Page: 261-270 PDF

Fethi Toul, Marwa Ballou, Marwa Kessou

Investigation of biological interactions in *Euphorbia rigida* extract using molecular docking

Page: 271-288 PDF

Emine İncilay Torunoğlu, Turan Akdağ

Biological activities of silver nanoparticles synthesized using *Olea europaea* L. leaves

Page: 289-296 PDF

Özge Ceylan, Nurcihan Hacıoğlu Doğru

Application of HPLC for detection of sildenafil/tadalafil in marketed honey in Oman

Page: 297-305 PDF

Hameda Hamood Al Dhakhri, Fatema Alqassabi, Israa Alrasbi, Dhuha Alhinai, Salha Al Salty, Sumit Pannu, Shaima Al Balushi, Shah Alam Khan, Mohammad Jawaid Akhtar

In-silico analysis of stress tolerance and secondary metabolite production in wild *Sesamum mulayanum* compared to cultivated *Sesamum indicum*

Page: 306-320 PDF

Selvi Subramanian, Dharanidharan Manivannan

Cytotoxic and apoptotic effect of *Lemna minor* L. extract on human osteosarcoma (Saos-2)

Page: 321-330 PDF

Sema Yiyit Doğan

Antifungal activity of extracts from *Ulva*, *Sargassum*, and *Gracilaria* against three fungal pathogens and GC-MS analysis of the most effective extracts

Page: 331-342 PDF

B.k. Dilmi M. Rodrigo, A. Harshani D. Alahakoon, B.m. Chathuranga M. Balasooriya, P. Edirisinghe, Harshini M. Herath, Rasika P. Wanigatunge

Investigation of the antimicrobial and antibiofilm effect of plant *Consolida orientalis* on methicillin resistant *Staphylococcus aureus* (MRSA) and vancomycin resistant *Enterococcus* sp. (VRE)

Page: 343-354 PDF

Gonca Şimşek, Ömer Poyraz

Profiles of volatile metabolite compounds of lotus tempeh: In-RSM-Boxbehken approach

Page: 355-367 PDF

Sherly Ridhowati, Herpandi Herpandi, İndah Widiastuti

The effect of inundation levels on secondary metabolites accumulation in *Avicennia marina* (Forsk.) roots under different salinity regimes

Page: 368-380 PDF

Endah Dwi Hastuti, Erma Prihastanti

Exploring *Phlomis crinita* extracts: HPLC analysis, phenolic content, antioxidant and antimicrobial potentials

Page: 381-396 PDF

Abdelhakim Chelgham, Abdelkader Saadi , Abdelaziz Merouane, Chawki Bensouici, Yavuz Selim Cakmak, Tânia Cristina De São Pedro Pires

Phytochemical composition and antioxidant activity: Comparison of *Pentaclethra eetveldeana* (De Wild & T. Durand) leaf ethanolic extracts (Congo-Brazzaville)

Page: 397-406 PDF

Victor N'goka

The effect of Crocetin on cholesterol depletion-mediated lipid raft disruption-induced apoptosis in breast cancer cells

Page: 407-419 PDF

Serife Buket Bozkurt Polat, Esma Özmen

Essential oil profile and biological activity of the paleoendemic species *Salvia dorystaechas* B.T. Drew

Page: 420-428 PDF

Yavuz Bülent Köse, Zeynep Gülcen, Gökalp İşcan, Mine Kürkçüoğlu

Chemical composition and antibacterial activity of *Azadirachta indica* seed oil from Chad

Page: 429-447 PDF

Brahim Mahamat Ousman, Omar Belmehdi, Ibtissam Boussaoudi, Boy Brahim Otchom, Saoud Younes

Physiologically active compounds in the fruits of *Smilax excelsa* L.

Page: 448-460 PDF

Farhad Azizov, Vafa Atayeva, Zarbali Khalilov, Nurmammad Mustafayev, Hilal İmanlı

Chemical composition, antioxidant properties, and enzyme inhibitory activities of methanol extract from *Sideritis montana* subsp. *montana* using ultrasound-assisted extraction

Page: 461-471 PDF

Fatma Özlem Kargin Solmaz, Cengiz Sarıkürkcü

Antimicrobial activity, phytochemical characterization and molecular docking studies of *Nyctanthes arbor-tristis* L. extracts

Page: 472-485 PDF

Prerna Sharma, Abhilasha Shourie
