

C O M M U N I C A T I O N S

FACULTY OF SCIENCES
UNIVERSITY OF ANKARA

DE LA FACULTE DES SCIENCES
DE L'UNIVERSITE D'ANKARA

Series C: Biology

VOLUME: 33

Number: 1

YEAR: 2024

Faculty of Sciences, Ankara University
06100 Beşevler, Ankara-Türkiye
ISSN 1303-5991 e-ISSN 2618-6470

C O M M U N I C A T I O N S

FACULTY OF SCIENCES
UNIVERSITY OF ANKARA

DE LA FACULTE DES SCIENCES
DE L'UNIVERSITE D'ANKARA

Series C: Biology

Volume: 33

Number: 1

Year: 2024

Owner

Sait HALICIOĞLU, Dean of Faculty of Sciences

Editor in Chief

Fatma KARAKOÇ

Managing Editor

Sevgi ERTUĞRUL KARATAY

Production Editor

Hatice MUTLU EYİSON

Technical Editor

Hakan ESKİZENGİN

Area Editors

Ahmet Emre YAPRAK (Botany)	Alexey YANCHUKOV (Populations Genetics, Molecular Ecology and Evolution)	Aydan ACAR ŞAHİN (Palynology)	Esra KOÇ (Plant Physiology)
Gül Nilhan TUĞ (Ecology)	İlker BÜYÜK (Biotechnology)	İlknur DAĞ (Microbiology, Histology)	Mehmet Kürşat ŞAHİN (Zoology)
Nursel AŞAN BAYDEMİR (Zoology)	Sevgi ERTUĞRUL KARATAY (Biotechnology)	Şeyda FİKİRDEŞİCİ ERGEN (Hydrobiology)	Talip ÇETER (Plant Anatomy and Embryology)
Türker DUMAN (Molecular Biology)			

Editors

A. K. ÇETİN Fırat University, TÜRKİYE	A. GRINN - GOFRON Szczecin University, POLAND	A. ALTINDAĞ Ankara University, TÜRKİYE	A. YILDIZ Ankara University, TÜRKİYE
A. GÜVENSEN Ege University, TÜRKİYE	A. KÖROĞLU Ankara University, TÜRKİYE	B. ASLIM Gazi University, TÜRKİYE	C.G. SOLDEVILLA Cordoba University, SPAIN
D. AYAZ Ege University, TÜRKİYE	D. C. ALBACH Carl Von Ossietzky University, GERMANY	E. SARIKAYA DEMİRKAN Bursa Uludağ University, TÜRKİYE	E. OYBAK DÖNMEZ Hacettepe University, TÜRKİYE
E. MARTIN Necmettin Erbakan University, TÜRKİYE	F. VARDAR Marmara University, TÜRKİYE	H. ÖZBAY Neveşir Hacı Bektaş Veli University, TÜRKİYE	H. AKGÜL Akdeniz University, TÜRKİYE
H. WIECLAW Szczecin University, POLAND	İ. POTOĞLU ERKARA Osmangazi University, TÜRKİYE	J. BREINE Research Institute for Nature and Forest, BELGIUM	K. BÜYÜKGÜZEL Bülent Ecevit University, TÜRKİYE
M. MURTSKHVALADZE Iliia State University, GEORGIA	M. H. ABU DIEYEH Qatar University, QATAR	M. EKİCİ Gazi University, TÜRKİYE	N. M. PINAR Ankara University, TÜRKİYE
N. ÇİÇEK Hacettepe University, TÜRKİYE	N. AKBULUT Hacettepe University, TÜRKİYE	O. EROL Istanbul University, TÜRKİYE	R. ARAFEH Palestine Polytechnic University, PALESTINE
S. MAKBUL Recep Tayyip Erdoğan University, TÜRKİYE	S. CEBESOY Ankara University, TÜRKİYE	Ş. ALAN Bülent Ecevit University, TÜRKİYE	T. ATICI Gazi University, TÜRKİYE
Z. AYTAC Gazi University, TÜRKİYE	Z. SULUDERE Gazi University, TÜRKİYE		

This Journal is published two issues in a year by the Faculty of Sciences, University of Ankara. Articles and any other material published in this journal represent the opinions of the author(s) and should not be construed to reflect the opinions of the Editor(s) and the Publisher(s).

Correspondence Address:
COMMUNICATIONS EDITORIAL OFFICE
Ankara University, Faculty of Sciences,
06100 Tandoğan, ANKARA – TÜRKİYE
Tel: (90) 312-2126720 Fax: (90) 312-2235000
e-mail: commun@science.ankara.edu.tr
<http://communications.science.ankara.edu.tr/index.php?series=A1>

Print:
Ankara University Press
İncitaş Sokak No:10 06510 Beşevler
ANKARA – TÜRKİYE
Tel: (90) 312-2136655

C O M M U N I C A T I O N S

FACULTY OF SCIENCES
UNIVERSITY OF ANKARA

DE LA FACULTE DES SCIENCES DE
L'UNIVERSITE D'ANKARA

Series C: Biology

Volume: 33

Number: 1

Year: 2024

Research Articles

Yusuf HÜSAMOĞLU, Cahit DOĞAN, The application and benefits of forensic palynology in robbery events in Turkey	1
Gizem SAYGIN, İnci Bahar ÇINAR, Gül Nilhan TUĞ, <i>Draba verna</i> L. (Brassicaceae/Cruciferae): A salt averse taxon	13
Yavuz BAĞCI, İsa BAŞKÖSE, Ahmet SAVRAN, Anatomical and morphological characteristics of endemic <i>Barbarea auriculata</i> taxa (var. <i>Auriculata</i> and var. <i>Paludosa</i>)	27
İhsan EKİN, Ayhan YILDIRIM, A comprehensive study on the infectivity of <i>Galba truncatula</i> (O. F. Müller, 1774), an intermediate host of <i>Fasciola</i> sp. reported in Diyarbakir hospitals	44
Nuri YİĞİT, Ömer Faruk AYDINCILAR, Ercüment ÇOLAK, The variations of carbonic anhydrase in species of the genera of <i>Mus</i> Linnaeus, 1758 and <i>Rattus</i> Fischer, 1803 (mammalia: rodentia) in the line of Ankara - Zonguldak provinces	55

INSTRUCTIONS TO CONTRIBUTORS

Communications Faculty of Sciences University of Ankara Series C Biology (Commun. Fac. Sci. Univ. Ank. Ser. C-Biology.) is a single-blind peer reviewed open access journal which has been published biannually since 1948 by Ankara University, accepts original research articles written in English in the field of Biology. Review articles written by eminent scientists can also be invited by the Editor.

The publication costs for Communications Faculty of Sciences University of Ankara Series C-Biology are covered by the journal, so authors do not need to pay an article-processing and submission charges. The PDF copies of accepted papers are free of charges and can be downloaded from the website. Hard copies of the paper, if required, are due to be charged for the amount of which is determined by the administration each year.

All manuscripts should be submitted via our online submission system <https://dergipark.org.tr/en/journal/2987/submission/step/manuscript/new>. Manuscripts should be submitted in the PDF form used in the peer-review process together with THE COVER LETTER and the TEX file (Source File). In the cover letter the authors should suggest the most appropriate Field Editor for the manuscript and potential four reviewers with full names, universities and institutional email addresses. Proposed reviewers must be experienced researchers in your area of research and at least two of them should be from different countries. In addition, proposed reviewers must not be co-authors, advisors, students, etc. of the authors. In the cover letter, the author may enter the name of anyone who he/she would prefer not to review the manuscript, with detailed explanation of the reason. Note that the editorial office may not use these nominations, but this may help to speed up the selection of appropriate reviewers.

Manuscripts should be typeset using a word processor editor. Authors should prepare the article using the COMMUNICATIONS style before submission to the editor via our submission system. A template of manuscript can be downloaded in doc form from the link <http://dergipark.org.tr/download/journal-file/13889> (or can be reviewed in pdf form). The title page should contain the title of the paper, full names of the authors, affiliations addresses and e-mail addresses of all authors. Authors are also required to submit their Open Researcher and Contributor ID (ORCID)'s which can be obtained from <http://orcid.org> as their URL address in the format <http://orcid.org/xxxx-xxxx-xxxx-xxxx>. Please indicate the corresponding author. The abstract should state briefly the purpose of the research. The length of the Abstract should be between 50 to 5000 characters. At least 3 keywords are required. Formulas should be numbered consecutively in the parentheses (). All tables must have numbers (TABLE 1) consecutively in accordance with their appearance in the text and a legend above the table. Please submit tables as editable text not as images. All figures must have numbers (FIGURE 1) consecutively in accordance with their appearance in the text and a caption (not on the figure itself) below the figure. Required final resolution is 300 dpi for coloured images (RGB), 300–600 dpi for black and white images and 600–1200 dpi for line art. Pictures and line drawings should be saved as TIFF files. Authors Contribution Statement, Declaration of Competing Interests and Acknowledgements should be given at the end of the article before the references. The following format for the references should be used. Authors are urged to use the Communication.csl style (<https://dergipark.org.tr/en/download/journal-file/18514>) in Mendeley Desktop or Zotero automated bibliography. If manual entry is preferred for bibliography, then all citations must be listed in the references part and vice versa. The Editor may seek the advice of two, or three referees, depending on the response of the referees, chosen in consultation with appropriate members of the Editorial Board, from among experts in the field of specialization of the paper. The reviewing process is conducted in strict confidence and the identity of a referee is not disclosed to the authors at any point since we use a single-blind peer review process.

Copyright on any open access article in Communications Faculty of Sciences University of Ankara Series C-Biology is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/) (CC BY). Authors grant Faculty of Sciences of Ankara University a license to publish the article and identify itself as the original publisher. Authors also grant any third party the right to use the article freely as long as its integrity is maintained and its original authors, citation details and publisher are identified. It is a fundamental condition that articles submitted to COMMUNICATIONS have not been previously published and will not be simultaneously submitted or published elsewhere. After the manuscript has been accepted for publication, the author will not be permitted to make any new additions to the manuscript. Before publication the galley proof is always sent to the author for correction. Thus it is solely the author's responsibility for any typographical mistakes which occur in their article as it appears in the Journal. The contents of the manuscript published in the COMMUNICATIONS are the sole responsibility of the authors.

Declarations/Ethics:

With the submission of the manuscript authors declare that:

- All authors of the submitted research paper have directly participated in the planning, execution, or analysis of study;
- All authors of the paper have read and approved the final version submitted;
- The contents of the manuscript have not been submitted, copyrighted or published elsewhere and the visual-graphical materials such as photograph, drawing, picture, and document within the article do not have any copyright issue;
- The contents of the manuscript will not be copyrighted, submitted, or published elsewhere, while acceptance by the Journal is under consideration.
- The article is clean in terms of plagiarism, and the legal and ethical responsibility of the article belongs to the author(s). Author(s) also accept that the manuscript may go through plagiarism check using IThenticate software;
- The objectivity and transparency in research, and the principles of ethical and professional conduct have been followed. Authors have also declared that they have no potential conflict of interest (financial or non-financial), and their research does not involve any human participants and/or animals.

Research papers published in **Communications Faculty of Sciences University of Ankara** are archived in the [Library of Ankara University](https://ankara.library.edu.tr/) (Volume 1-67) and in [Dergipark](https://dergipark.org.tr/) immediately following publication with no embargo.

Editor in Chief

<http://communications.science.ankara.edu.tr>

Ankara University, Faculty of Sciences
06100, Besevler - ANKARA TÜRKİYE