



NOTULAE SCIENTIA BIOLOGICAE

2013 Volume 5, Issue 4

*Published by AcademicPres on behalf of
Horticulture and Forestry Society from Transylvania*

Abstracted and/or indexed:

- Centre for Agriculture and Biosciences International (CABI), <http://www.cabi.org>
- ProQuest-CSA (Cambridge Scientific Abstracts, <http://www.proquest.co.uk>
- Chemical Abstracts Service (CAS), <http://www.cas.org>
- Directory of Open Access Journals (DOAJ), <http://www.doaj.org>
- Index Copernicus, <http://www.indexcopernicus.com>
- Russian Scientific and Technical Information Institute (VINITI), <http://www.viniti.ru>
- Scientific Commons, <http://en.scientificcommons.org>
- Bielefeld Academic Search Engine (BASE), <http://www.base-search.net>
- Google Scholar, <http://scholar.google.com>
- Open J-Gate, <http://www.openj-gate.com>
- Academic research, citation reports and discussion lists getCITED, <http://www.getcited.org>
- Open Archives Initiative Protocol for Metadata Harvesting (OAIster), <http://www.oaister.org>
- China Educational Publications Import and Export Corporation (SOCOLAR), <http://www.socolar.com>
- Genamics JournalSeek, <http://journalseek.net>
- WorldCat, <http://www.worldcat.org>
- Elton B Stephens Company (EBSCO), <http://www.ebscohost.com>
- The National Science Digital Library (NSDL), <http://nsdl.org>

Print ISSN 2067-3205, Electronic ISSN 2067-3264
www.notulaebiologicae.ro

Editorial office

AcademicPres, University of Agricultural Sciences and Veterinary Medicine

Phone: +40 264-596 384 ext. 176

Fax +40 364-819 343

E-mail: rsestras@notulac.ro**Editorial Committee**

Editor-in-Chief:	Radu E. SESTRĂȘ	rsestras@notulac.ro	
Advisory Editors:	Doru PAMFIL	rector@usamvcluj.ro	
	Liviu Al. MĂRGHITAȘ	lmarghitas@usamvcluj.ro	
	Viorel MITRE	mitre.viorel@usamvcluj.ro	
Assistant Editor:	Lucica MIHALTE	lmihalte@notulac.ro	
	Sorana D. BOLBOACĂ	sbolboaca@umfcluj.ro	
Associate Editors:	Monica BOSCAIU	mobosnea@eaf.upv.es	
	Cornel CĂTOI	cornel.catoi@usamv.ro	
	Vasile COZMA	vasile.cozma@usamvcluj.ro	
	Ioan Ștefan GROZA	isoangroza@yahoo.com	
	Lorentz JĂNTSCHI	lori@academicdirect.org	
	Vioara MIREȘAN	vioara.miresan@usamv.ro	
	Sevastița MUSTE	smuste@usamvcluj.ro	
	Ioana POP	popioana@usamvcluj.ro	
	Ioan ROTAR	irotar@usamvcluj.ro	
	Adriana F. SESTRĂȘ	adriana.sestras@usamvcluj.ro	
	Valentin SINGUREANU	singvalentin@yahoo.com	
	Carmen SOCACIU	carmen.socaciu@usamvcluj.ro	
	Augustin VLAIC	avlaic@usamvcluj.ro	
	Linguistic editors:	Mihaela MIHAI	miky1000ro@yahoo.com
		Rodica STAN	ro7si@yahoo.com
Technical support:	Adriana D. BACIU	ady.baciu@yahoo.com	
	Raluca CICEVAN	ralucacicevan@yahoo.com	
	Cătălina DAN	catalina_dan@yahoo.com	
	Mihail KANTOR	catrisu@yahoo.com	
	Melinda PUSKÁS	puskasmelinda@yahoo.com	
	Corina F. SERBAN	corina.serban@hotmail.com	
	Traian S. SCHIOP	sorinschiop@yahoo.com	
	Andreea F. TRIPON	tripon.andreea@gmail.com	
Alina M. VÎLCAN	alina_vilcan@yahoo.com		

Editorial Board

Ioan Vasile ABRUDAN	Transilvania University, 1 Sirul Beethoven St., 500123 Brasov, Romania; abrudan@unitbv.ro
Ezz Al-Dein Muhammed AL-RAMAMNEH	Sweileh, Amman, Jordan; ezznew@yahoo.com
Douglas D. ARCHBOLD	University of Kentucky, Lexington, KY 40546-0091, USA; darchbol@uky.edu
Omar BAGASRA	Clafin University, 400 Magnolia Street, Orangeburg, SC 29115, USA; obagasra@clafin.edu
Grigore BĂCIUȚ	University of Medicine and Pharmacy, Romania; gbaciut@umfcluj.ro
Umberto BERNABUCCI	University of Tuscia, Via S. Camillo de Lellis 1-01100 Viterbo, Italy; bernab@unitus.it
Marius BOJIȚĂ	University of Medicine and Pharmacy, 13 Emil Isac, 400023, Cluj-Napoca, Romania; mbojita@umfcluj.ro
Rebecca BULLARD- DILLARD	Clafin University, 400 Magnolia Street, Orangeburg, SC 29115, United States; rdillard@clafin.edu
John D. BUSSELL	University of Western Australia, 35 Stirling Highway, Crawley WA 6009, Perth, Australia
Gheorghe CIMPOIEȘ	The State Agrarian University of Moldova, 44 Mircesti St., Chisinau, Moldova; cimpoies@uasm.md
Kamal CHOWDHURY	Clafin University, 400 Magnolia Street, Orangeburg, SC 29115, USA; kchowdhury@clafin.edu
Ioan COMAN	University of Medicine and Pharmacy, 13 Emil Isac, 400023, Cluj-Napoca, Romania; jcoman@yahoo.com
Vasile CRISTEA	Babes-Bolyai University, 44 Gh Bilascu St., 400015 Cluj-Napoca, Romania; cristea@grbot.ubbcluj.ro
David HENSLEY	University of Arkansas, Fayetteville, AR 72701, United States; dhensley@uark.edu
Iker B. ETXABURU	Parque Tecnológico de Bizkaia, Ed. 502 Planta 1 48750 Derio Bizkaia, Spain; ibadiola@innoprot.com
Florent ENGELMANN	Centre IRD, Montpellier-BP 64501, 911 Av Agropolis, F-34394 Montpellier Cedex 5, France; engelma@mpl.ird.fr
Róbert FARKAS	Faculty of Veterinary Science, Szent István University, Budapest Pf. 2, Hungary; farkas.robert@aotk.szie.hu
László FODOR	Faculty of Veterinary Science, Szent István University, Budapest, Hungary; Fodor.Laszlo@aotk.szie.hu
Marek GAJEWSKI	Warsaw Agricultural University, 166 Nowoursynowska, 02-787 Warsaw, Poland; marek_gajewski@sggw.pl
Stefano GREGO	University of Tuscia, Via S. Camillo de Lellis 1-01100 Viterbo, Italy; grego@unitus.it
Cristian IBÁÑEZ GUTIÉRREZ	Faculty of Sciences at La Serena University, Chile; cibanez@usalca.cl
Serge HAMON	Centre IRD, Montpellier-BP 64501, 911 Av Agropolis, F-34394 Montpellier Cedex 5, France; serge.hamon@ird.fr
Roman HOLUBOWICZ	Agricultural University of Poznań, Department of Horticultural Seed Science and Technology, Poland; rholubowicz@au.poznan.pl
Florin IORAȘ	Buckinghamshire New University, United Kingdom; Florin.Ioras@bucks.ac.uk
Alexandru IRIMIE	'Ion Chiricuta' Cancer Institute, 34-36 Republicii St., 400015, Cluj-Napoca, Romania; office@iocn.ro
Stefania MASCI	University of Tuscia, Via S. Camillo de Lellis 1-01100 Viterbo, Italy; masci@unitus.it
Dan MIHU	University of Medicine and Pharmacy, 13 Emil Isac, 400023, Cluj-Napoca, Romania; dan.mihu@yahoo.com
Meena MISRA	Institute of Frontier Sciences and Biotechnology, Baramunda, Bhubaneswar-751004, India; meenamisra@yahoo.com
Réka NAGY	University of Zurich, Institute of Plant Biology, Zollikerstrasse 107, CH 8008 Zurich, Switzerland; rnagy@botinst.uzh.ch
Daniel Ioan PĂCURAR	Umea Plant Science Centre, Sweden; daniel.pacurar@genfys.slu.se
Neiva Izabel PIEROZZI	Instituto Agronômico de Campinas, CPDR Geneticos Vegetais, Brazil; pierozzi@iac.sp.gov.br
Jaime PROHENS	Instituto de Conservación y Mejora de la Agrodiversidad Valenciana Spain; jprohens@btc.upv.es
Chen QIN	School of Life Science, Shanghai Univ., 99 Shangda R., Baoshan District, Shanghai, 200436, China; chenqincc@yahoo.com.cn
Klaus SCHALLER	Research Center Geisenheim, P.O. Box 1158, D-65358 Geisenheim, Germany; k.schaller@fa-gm.de
Lei SHI	University Massachusetts, Sch Med, Department Neurobiol, Worcester, MA 01605 USA; shil@janelia.hhmi.org
Oscar VICENTE	IBMCP Universidad Politécnica de Valencia, Camino de Vera s/n. 46022 Valencia, Spain; ovicente@ibmcp.upv.es
Zhang WEIGUANG	College of Food Science, Southwest Agricultural University, China; zwguang@hotmail.com

Notice

To be cited **Not Sci Biol**

The Editorial Board of Not Sci Biol is not responsible for statements and opinions published; they represent the views of the authors or persons to whom they are credited. Publication of research information does not constitute a recommendation or endorsement of products involved.

Aims and scope

Notulae Scientia Biologicae is a quarterly peer-reviewed journal aimed at disseminating significant research and original papers, critical reviews and short reviews on life sciences and medicine, development of new methodologies that can be of interest to a wide audience of scientists in all areas of biology sciences. The journal encourages authors to frame their research questions and discuss their results in terms of the major questions of biology, agriculture, horticulture, forestry, biotechnology and medicine, thereby maximizing the impact, spreading and value of their research. The papers must be of potential interest to a significant number of scientists and, if specific to a local situation, must be relevant to a wide body of knowledge in life and medical sciences. Articles should make a significant contribution to the advancement of knowledge or toward a better understanding of existing biological, agricultural and medical concepts. An international Editorial Board advises the journal. The total content of the journal may be used for educational, non-profit purposes without regard to copyright. The distribution of the material is encouraged with the condition that the authors and the source (**Notulae Scientia Biologicae** or **Not Sci Biol**) are mentioned.

Submission

The journal offers to authors a fully web-enabled online manuscript submission, instructions for authors and review system available at <http://www.notulaebiologicae.ro>

Papers are published in English (British spelling) and the authors are fully responsible for the originality of their papers and for the correctness of their subject-matter, language and formal attributes. A language reviewer revises English, but authors are strongly urged to have the papers reviewed linguistically prior to submission.

Manuscripts submitted must be edited, for clarity and conformity purposes according to Authors guidelines, and must not have been previously published or simultaneously submitted elsewhere.

The papers can be submitted online by the “senior author” (the main author, or the person who takes responsibility for the integrity of the work as a whole, from submission to the published article). The submission process is described on the web site.

An Author Statement, available on the website, should be enclosed by “senior author” declaring that the paper has not been published anywhere else, permission to reproduce the material, authorship credit, contributors and creditors for the integrity of the work as a whole, to avoid the conflicts of interest and scientist fraud, and respecting the ethical principles of publishing, research and scientific rights.

Publication Ethics and Publication Malpractice Policy

The journal respects the publication ethics norms, based on internationally accepted best practice guidelines for journal editors, notably the Committee on Publication Ethics ([COPE](#)), the World Association of Medical Editors Ethics ([WAME](#)), the International Committee of Medical Journal Editors ([ICMJE](#)) and Consolidated Standards of Reporting Trials ([Consort](#)).

Prof. dr. Radu SESTRĂȘ
Editor-in-Chief

Contents

Efficiency of Oxygen Therapy by Simple Face Mask and Nasal Cannula for Acute Respiratory Failure in Infants and Young Children Ioana D. BADIU TIȘA, Sorana D. BOLBOACĂ, Nicolae MIU, Daniela IACOB.....	407
The Protective Effect of Vitamin E Against Genotoxicity of Lead Acetate Intraperitoneal Administration in Male Rat Nadia HAMADOUCHE, Nesrine SADI, Omar KHAROUBI, Miloud SLIMANI, Abderlkader AOUES.....	412
The Possible Improving Effects of γ-Irradiated and/or Extruded Soy Flour on Hypercholesterolemic Rats Refaat G. HAMZA, Safaa AFIFI, Abdel-Rahman B. ABDEL-GHAFFAR, Ibrahim H. BORAI.....	420
Record of Traditional Medicinal Practice of Herbalists of Muslim Community in Manipur Ahmed MOHD MUSTAQUE, S.K. BORTHAKUR.....	426
Anatomical Response of <i>Amaranthus hybridus</i> Linn. as Influenced by Pharmaceutical Effluents Clement Oluseye OGUNKUNLE, Abdullahi Alanamu ABDULRAHAMAN, Tinuola Abimbola ALUKO, Opeyemi Saheed KOLAWOLE, Paul Ojo FATOBA, Felix Ayotunde OLADELE.....	431
Identification and Quantification of Heavy Metals Concentrations in <i>Pistacia</i> Gholamhossein DAVARYNEJAD, Mehdi ZAREI, Peter Tamas NAGY.....	438
Cellulase Production Potentials of the Microbial Profile of Some Sugarcane Bagasse Dumping Sites in Ilorin, Nigeria Kamoldeen AJIJOLAKEWU, Alhasan SANI, Ganiyu P OYEYIOLA, Risikat AHMED, M. O. AREKEMASE, Mutiat ODEBISI-OMAKANYE, S.A. LABA.....	445
Genetic Analysis for Quantitative and Quality Characters in Three Single Crosses of Upland Cotton Srinivasan KANNAN, Rajashekar RAVIKESAVAN, Mahalingam GOVINDARAJ.....	450
Genetic Variation of Isozyme Polyphenol Oxidase (PPO) Profiles in Different Varieties of <i>Capsicum annuum</i> L. Owk ANIEL KUMAR, Tamminana RUPAVATHI, Sape SUBBA TATA.....	454
Analysis of Several Popular Cultivars of Madagascar Periwinkle (<i>Catharanthus roseus</i> L.) Using Biochemical Markers Owk A. KUMAR, Sape S. TATA, Kancharla P. KUMAR.....	458
Seed Germination and Early Growth Responses of Hyssop, Sweet Basil and Oregano to Temperature Levels Sajad MIJANI, Samieh ESKANDARI NASRABADI, Hadi ZARGHANI, Mohammad GHIAS ABADI.....	462
Effect of Light Stress on Germination and Growth Parameters of <i>Corchorus olitorius</i>, <i>Celosia argentea</i>, <i>Amaranthus cruentus</i>, <i>Abelmoschus esculentus</i> and <i>Delonix regia</i> Akinbode OLOGUNDUDU, Adekunle ADELUSI, Kehinde ADEKOYA.....	468
Effect of Seed Orientation and Medium Strength on <i>In vitro</i> Germination of <i>Pterocarpus marsupium</i> Roxb. Yogeshwar MISHRA, Rimi RAWAT, Brajesh NEMA, Fatima SHIRIN.....	476

Effects of Humic Acid on the Germination Traits of Pumpkin Seeds Under Cadmium Stress Maasoumeh ASADI, Mohammad SEDGHI, Raouf Seyed SHARIFI.....	480
The Influence of pH on Microspore Embryogenesis of White Cabbage (<i>Brassica oleracea</i> L.) Tina Oana CRISTEA.....	485
Improvement of Vase Life and Postharvest Factors of <i>Lilium orientalis</i> ‘Bouquet’ by Silver Nano Particles Seyed Hossein NEMATI, Ali TEHRANIFAR, Behnam ESFANDIARI, Azar REZAEI.....	490
Plant Spacing and Cultivar Affects Yield Components, Qualitative Traits and Early Ripening of Tomato (<i>Lycopersicon esculentum</i>) Ebrahim MAMNOIE, Ali DOLATKHAHI.....	494
Classification of the Leguminosae-Papilionoideae: A Numerical Re-assessment Adel EL-GAZZAR, Monier Abd EL-GHANI, Nahed EL-HUSSEINI, Adel KHATTAB.....	499
Effect of Prior Heat Stress on the Early Growth of <i>Carica papaya</i> Gideon Olarewaju OKUNLOLA, Adekunle Ajayi ADELUSI.....	508
Growth Parameters and Photosynthetic Pigments of Marigold under Stress Induced by Jasmonic Acid Nilofar ATAEL, Hossein MORADI, Vahid AKBARPOUR.....	513
Utilization of Aseptic Seedling Explants for <i>In vitro</i> Propagation of Indian Red Wood Kishore K CHIRUVELLA, Arifullah MOHAMMED, Rama Gopal GHANTA.....	518