

e-ISSN : 2550-6986

p-ISSN : 2550-6994

VOLUME 6 / NUMBER 1 / APRIL 2022

International Journal of Life Sciences



Ecuador, South America

International Journal of Life Sciences

EDITOR-IN-CHIEF

Vladimir Besada

Center for Genetic Engineering and
Biotechnology Havana, Havana,
Cuba

CHIEF EXECUTIVE EDITOR

María Rodríguez Gámez

Universidad Técnica de
Manabí, Portoviejo, Ecuador

EDITORS

Irmgard Blindow

University Greifswald
Hiddensee Biology Research
Station, Kloster, Germany

Martyn Kelly

Bowburn Consultancy, Durham,
United Kingdom

Wolf M. Mooij

Netherlands Institute of Ecology,
Wageningen, Netherlands

Ryszard Amarowicz

Institute of Animal
Reproduction and Food
Research PAS, Olsztyn,
Poland

Vijay Juneja

USDA-ARS Eastern Regional
Research Center, Wyndmoor,
Pennsylvania, United States

Catherine M.G.C. Renard

National Research Institute for
Agriculture Food and
Environment Pays de la Loire
Center, Nantes, France

G. Chen

Kansas State University,
Department of Grain Science
& Industry, Manhattan,
Kansas, United States

H. Corke

Shanghai Jiao Tong University,
Shanghai, China

ASSOCIATE EDITORS

A. Gharsallaoui

Laboratory of Bioengineering
and Microbial Dynamics at the
Food Interfaces, Bourg en
Bresse, France

X. Liu

University of Hong Kong,
Pokfulam, Hong Kong

T. Popova

Institute of Animal Science,
Bulgarian Agricultural Academy,
Kostinbrod, Bulgaria

M. Schreiner

University of Natural
Resources and Life Sciences
Vienna, Wien, Austria

Z. Chen

University of Maryland at
College Park, College Park,
Maryland, United States

Lizardo M.R. Bowen

Agricultural engineering,
Universidad Técnica de Manabí,
Portoviejo, Ecuador

Augustina Sackle

Food Technology, Cape Coast
Technical University, Ghana,
Havana

E D I T O R I A L B O A R D

S. Holden
*Norwegian University of Life
Sciences Department of
Economics and Resource
Management, Aas, Norway*

P. Huhtanen
*Sveriges Lantbruks Universitet
(SLU), Uppsala, Sweden*

D.M. Weary
*University of British Columbia,
Vancouver, BC, Canada*

H. Bao
*University of Cambridge,
Cambridge, United Kingdom*

S. Vidyarthi
*The Morning Star Company,
Woodland, California, United
States*

Carlos A.L. Velásquez
*Teaching and Educational
Research, Technical University
of Manabí, South America*

Williams J.M. Mata
*Environment Sciences,
Universidad Técnica de
Manabí, Portoviejo, Ecuador*

Tamar Nadiradze
*Natural Science & Biology-
Ecology Department, Iakob
Gogebashvili Telavi State
University, Georgia*

Aysar Yasin
*Energy Engineering &
Environment, An-Najah National
University, Palestinian Territory*

Mubeen Javed
*Health & Life Sciences,
Coventry University, United
Kingdom*

Santanu Panda
*Animal Biotechnology, Institute
of Animal Health and Veterinary
Biologicals, Kolkata*

Dharmendra Singh
*Cancer Biology, & Molecular
Biology, Houston Methodist
Research Institute, USA*

I N T E R N A T I O N A L A D V I S O R Y B O A R D

C. Shackleton
*Rhodes University, Department
of Environmental Science,
Grahamstown, South Africa*

D. Ramsey
*Brandon University, Brandon,
Manitoba, Canada*

J.C.P. Ferreira
*University of Sao Paulo State
(UNESP), Botucatu/SP, Brazil*

N.P.P. Macciotta
*University of Sassari, Sassari,
Italy*

X. Zhang
*City University of Hong Kong
Department of Public Policy,
Hong Kong, Hong Kong*

Grether L.R. Perez
*Universidad Técnica de
Manabí, Portoviejo, Ecuador*

C. Raymond
*Swedish University of
Agricultural Sciences Alnarp
Campus, Alnarp, Sweden*

A. Barnes
*Scotland's Rural College -
Aberdeen Campus, Aberdeen,
Scotland, United Kingdom*

V. M. Gómez-López
*San Antonio Catholic University
of Murcia, Murcia, Spain*

P R O D U C T I O N E D I T O R

D. Pannell
*The University of Western
Australia School of Agricultural
and Environment, Perth,
Australia*

T. Rudel
*Rutgers The State University of
New Jersey, New Brunswick,
New Jersey, United States*

W E B M A S T E R

Vedran Vucic
PKP Developer,
Belgrade

C O P Y R I G H T A N D C O P Y I N G (I N A N Y F O R M A T)

Articles published in the International Journal of Life Sciences (**IJLS**) are available under *Creative Commons Attribution Non-Commercial No Derivatives License (CC BY-NC-ND 4.0)*. Authors retain copyright in their work and grant **IJLS** right of first publication under CC BY-NC-ND 4.0. Users have the right to read, download, copy, distribute, print, search, or link to the full texts of articles in this journal, and to use them for any other lawful purpose. Articles published in **IJLS** can be copied, communicated and shared in their published form for non-commercial purposes provided full attribution is given to the author and the journal. Authors are able to enter into separate, additional contractual arrangements for the non-exclusive distribution of the journal's published version of the work (*e.g., post it to an institutional repository or publish it in a book*), with an acknowledgment of its initial publication in this journal.

D I S C L A I M E R

The Publisher and Editors cannot be held responsible for errors or any consequences arising from the use of information contained in this journal; the views and opinions expressed do not necessarily reflect those of the Publisher and Editors, neither does the publication of advertisements constitute any endorsement by the Publisher and Editors of the products advertised.

For submission instructions, subscription and all other information visit: <https://sciencescholar.us/journal/index.php/ijls/>

International
Journal of
Life
Sciences

Research Articles

Pages

The circular economy and environmental training as care of the common house

1

Gabriela Andreina Rebanales García, Yeneri Carolina Rivas

Manufacture of humus from plant residues

10

*Naina Lissette Ramon Amaya, Lourdes Sthefania Aguirre Cobeña,
Titania Luviqenia Alava Gualpa, Anggie Daysi Flores Ochoa,
Cindy Brithany Freire Suarez*



Universidad Técnica de Manabí

Av. Urbina y Che Guevara, APARTADO: 82 (Ecuador/South America)

email : ijls@utm.edu.ec

Phone : (05) 2635-611

Fax : (05) 2651-569