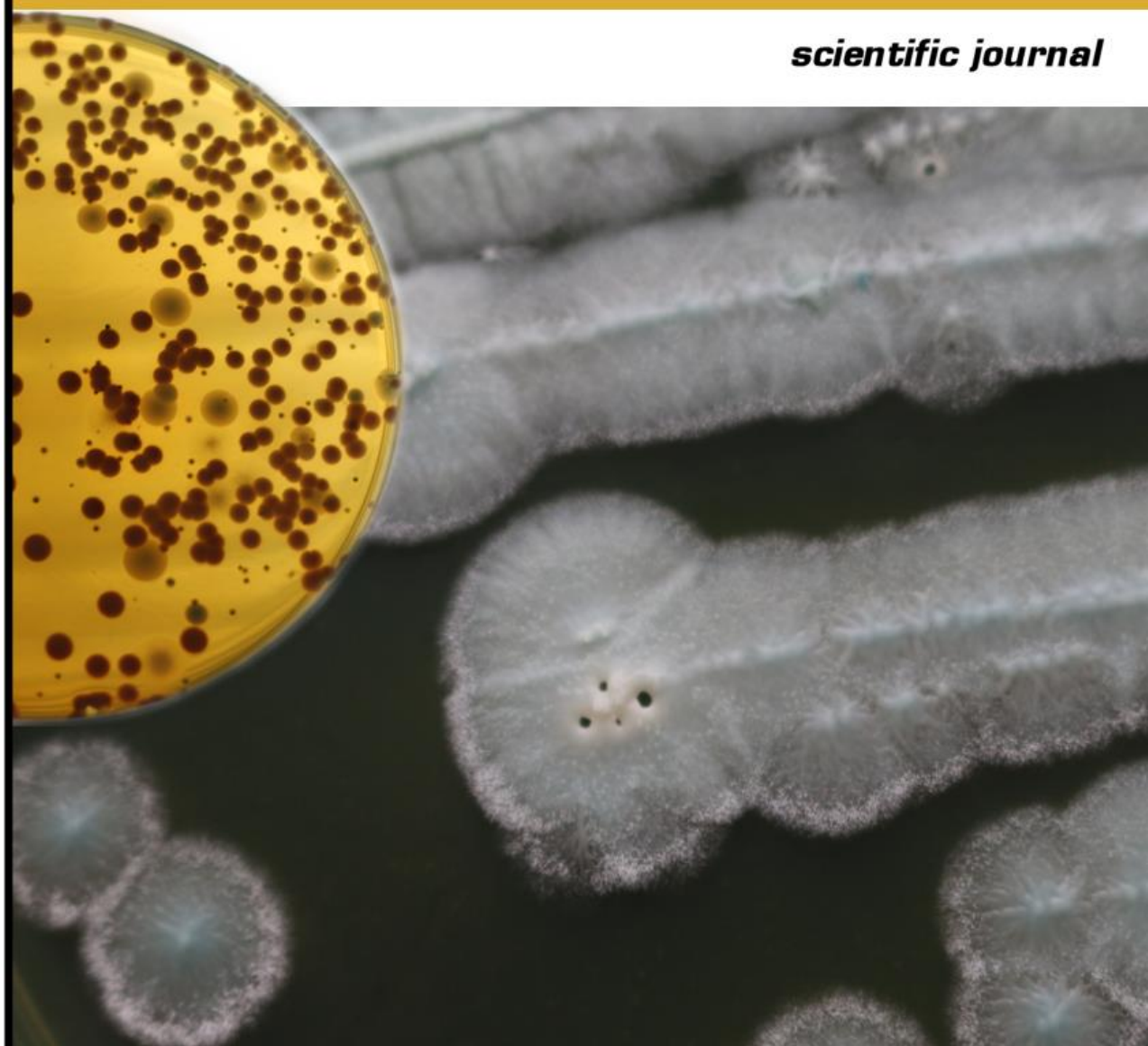


Journal of Microbiology, Biotechnology and Food Sciences

scientific journal



December - January 2015/16, vol. 5, no. 3

Published by: Faculty of Biotechnology and Food Sciences
Nitra, Slovakia





**Journal of Microbiology,
Biotechnology and
Food Sciences (JMBFS)**

Peer-reviewed scientific journal

ISSN 1338-5178

The Journal of Microbiology, Biotechnology and Food Sciences is a scientific journal for publishing of scientific articles from microbiology including bacteria, fungi, yeasts, algae, protozoa and viruses. Microbial, animal and plants biotechnology physiology, modern biotechnologies, genetics, molecular biology, agriculture and food chemistry, food control, evaluation and processing of food, food biochemistry and environmental science of agriculture.

The Journal of Microbiology, Biotechnology and Food Sciences is published 6 times per year in electronic version.

EDITOR-IN-CHIEF: Lukáš Hleba

CO-EDITORS: Miroslava Kačániová, Peter Haščík

EDITORIAL BOARD MEMBERS

Ján Tomáš, Juraj Čuboň, Peter Massányi, Zdenka Gálová, Dana Urmínská, Marcela Capcarová, Adriana Kolesárová, Norbert Lukáč, Anton Kováčik, Štefan Dráb, Dana Tančinová, Zuzana Mašková, Soňa Felšöciová, Adriana Pavelková, Eva Szabová, Elimam Ibrahim Omer Elamin, Peter Chrenek, Alexander Sirotkin, Vladimír Foltys, Mária Bauerová, Miroslav Bauer, Miroslav Ondrejovič, Vladimír Kmeť, Andrea Lauková, Dietmar Haltrich, Klaus Dürrschmid, Roman Labuda, Silvia Labudová, Vojtech Rada, Stanislav Kráčmar, František Buňka, Leona Buňková, Robert Gál, Ivan Holko, Ladislava Mišurcová, Ladislav Zeman, Tomáš Vyhnánek, Małgorzata Dżugan, Joanna Barłowska, Romas Gružasuskas, Agila Dauksiene, Nenad Vuković, Ivan B. Stančić, Sasa Dragin, Păcală Nicolae, Bencsik Ioan, Ștef Lavinia, Monica Dragomirescu, Giuseppe Maiorano, Angel Antonio Carbonell Barrachina, Ángel Calín Sánchez, Khudaverdi G. Ganbarov, Mohammad Ali Shariati, Alaa Kareem Niamah, Shubhadeep Roychoudhury, Manabendra Dutta Choudhury, Javed Ahamad Khan, Shailesh R. Dave, Baher Effat, Abd El-Latif Hesham, Khaled Nabih Zaki Rashed, Siree Chaiseri, Sirichai Kanlayanarat, Gadalla Abdalla El-Hassan, Mahdi Abbas Saad Shakak, Mohamed Hassan Musa Tabidi, Hisanori Tamaki, Liu Chang Hong, Chuan Tang Wang, Xiaoxu Jiang, Ramalingam Sivaprakash, Jia Wen, Bharath Prithiviraj, Purva Vats, Zhao Chen, Zhizeng Sun, Guojie Cao, Xinping Xu, Salam A. Ibrahim, Rachana Bhat, Vishal Singh Negi, Mingfeng Cao, Keelara Shiva, Aseer Manilal, Sita R. Ghimire, Lin Bi.

PUBLISHER Faculty of Biotechnology and Food Sciences
PUBLISHER CONTACT Slovak University of Agriculture,
Faculty of Biotechnology and Food Sciences,
Tr. Andreja Hlinku 2,
949 76 Nitra, Slovak Republic

MAIN WEB SITE www.fbp.uniag.sk

E-MAIL dekfbp@uniag.sk

ISSUE December - January 2015/16, vol. 5, no. 3
PUBLISHING DATE December 1, 2015
PERSONAL CONTACT **Ing. Lukáš Hleba, PhD.**

Department of microbiology
+ publisher contact

E-MAIL lukas.hleba@gmail.com

PHONE NUMBER + 421 37 641 5811

JMBFS CONTACT www.jmbfs.org

jmbfs@jmbfs.org

info@jmbfs.org

COVER PHOTO RNDr. Attila Kántor

GRAPHIC Ing. Lukáš Hleba, PhD.