



**RESEARCH JOURNAL OF  
BIOTECHNOLOGY**

**VOL. 16 (8), AUGUST 2021**

**JOURNAL IS INDEXED IN SCOPUS,  
CHEMICAL ABSTRACTS, NAAS, UGC,  
WEB OF SCIENCE AND  
ESCI HAVING IMPACT FACTOR 0.233**

# RESEARCH JOURNAL OF BIOTECHNOLOGY

An International Peer Reviewed Research Journal of Biotechnology, Nanotechnology, Biological Sciences  
*Res. J. Biotech.*, Volume 16(8), Pages 1-164, August 2021, SCI Impact Factor 0.233

Editor- in- Chief (Hon.)  
**Dr. Shankar Lal Garg**  
 Indore, INDIA

Correspondence Address:  
**"Research Journal of Biotechnology"**  
 Sector AG/80, Scheme No. 54, Indore 452 010 (M.P.) INDIA  
 Mobile: +91-94250-56228

Web Site: <https://www.worldresearchersassociations.com>

E-mail: [info@worldresearchersassociations.com](mailto:info@worldresearchersassociations.com)

## CONTENTS

| <b>Research Papers:</b> |  |       |
|-------------------------|--|-------|
| 1.                      | <b>Antioxidant and Antibacterial Activities of Phytochemicals in Methanolic Extracts of Five Underutilized Leafy Vegetables</b><br>- Raj Adarsha, Sikdar Bratati, Roy Alokesh, Mukhopadhyay Asish Kumar and Roy Sudipta                        | 1-10  |
| 2.                      | <b>In-silico Analysis of Evolution of Plant Polyamine Oxidases</b><br>- Pratheek H.P., Manikanta N., Shashidhara K.S. and Kanavi M.S.P.  | 11-21 |
| 3.                      | <b>Cultivation and extraction of omega 3-6 fatty acids from the heterotrophic marine microalga <i>Schizochytrium mangrovei</i> TB17 to make a functional food</b><br>- Le Thi Thom and Dang Diem Hong  | 22-32 |
| 4.                      | <b>Extraction of inulin using super critical fluid extractor</b><br>- Renuka Raju, Subhapiya Pusparaju, Ramalakshmi Kulathooran and Siddhu Adhiaman  | 33-37 |
| 5.                      | <b>Functionalized silver nanoparticles synthesized from marine algae: In vitro Evaluation of Antibacterial Potential</b><br>- Kandula Siva Kumar, Cheekatla Satyanarayana Swamy, Metta Venkata Satya Mahesh Kumar and Saladi Venkata Rajagopal | 38-49 |
| 6.                      | <b>microRNA Identification on Head and Neck Squamous Cell Carcinoma Cancer Gene based on Male Gender</b><br>- Renadya Maulani Wijaya and Agustriawan David   | 50-54 |
| 7.                      | <b>Tailor-made LED Illumination inducing Metabolic Variations in <i>Centella asiatica</i>, an important medicinal herb</b><br>- Sowmya R., Ciji P.K. and Narasimhan S.   | 55-60 |
| 8.                      | <b>Prevalence of Multi-Drug-Resistant bacterial strains in agricultural soils of Haryana, India</b><br>- Mann Avantika, Rana J.S., Nehra Kiran, Sharma Gaurav and Twinkle  | 61-71 |
| 9.                      | <b>In silico molecular docking of marchantins and tumor necrosis factor receptor superfamily member 6 for apoptosis agonist activity</b><br>- Sari Yustika, Iqbal Roihan M., Permana Yafi S., Raihan Ananta W. and Hidayati Lisna              | 72-74 |
| 10.                     | <b>Isolation, identification and characterization of native plant growth promoting bacteria and their plant growth promotion in <i>Zea mays</i></b><br>- Pelapudi Pitchaiah, Ch Sasikala and Ganti Swarnabala                                  | 75-80 |
| 11.                     | <b>Extraction and characterization of essential oil from <i>Portieria hornemannii</i> with applications in antibacterial edible films</b><br>- Johni Rexliene and Jayavel Sridhar  | 81-89 |

|                             |  |         |
|-----------------------------|--|---------|
| 12.                         | <b>Optimization of Xylose Reductase production from <i>Citrobacter</i> sp.</b><br>- Niranjan Rashmi, Ahuja Vishal and Bhatt Arvind Kumar   | 90-97   |
| 13.                         | <b>Evaluation of the alterations in the serum blood sugar level, the activity of AST and ALT enzymes of diabetes mellitus type 2 in Iraqi women patients</b><br>- Iman Hashim Abdul Razzaq and Jinan Hussein Murtadha                          | 98-102  |
| 14.                         | <b>Antibacterial Activity of Extracts from Plants of the Family Cucurbitaceae against Common Bacterial Strains</b><br>- Reilly Eoghan and Menghani Ekta  | 103-109 |
| 15.                         | <b>Isolation and characterization of phosphate solubilizing bacteria from the rhizospheric soil of Ponthenpuzha forest, Pathanamthitta (District), Kerala</b><br>- Abhirami Kannan and Jayakumar K.  | 110-117 |
| 16.                         | <b>Control of browning during seed germination of <i>Meizotropis pellita</i>: a rare and an endangered plant</b><br>- Chandola Renu and Upadhyaya Anshulika  | 118-120 |
| <b>Short Communication:</b> |  |         |
| 17.                         | <b>Bioprospecting of insect nest associated actinobacteria with special reference to antimicrobial and anti HIV activity</b><br>- Rao Pooja, Winchester Yaraswini, Varatharajan Rameshkumar, Venugopal Gopikrishnan and Manikkam Radhakrishnan | 121-125 |
| <b>Review Papers:</b>       |  |         |
| 18.                         | <b>Impact of Urbanization and Dietary Patterns on Development of Colorectal Cancer in Indian Population – A Review</b><br>- Banerjee Antara, Sriramulu Sushmitha, Malayaperumal Sarubala, Kumar Babu and Pathak Surajit                        | 126-140 |
| 19.                         | <b>Immunopathogenesis and Immunotherapeutic Strategies in Rheumatoid Arthritis</b><br>- Qamar Tooba and Mukherjee Sayali   | 141-150 |
| 20.                         | <b><math>\beta</math>-Lactams and <math>\beta</math>-Lactamase Inhibitors: Unlocking their potential to address drug resistance</b><br>- Gangadharappa Bhavya, Dammalli Manjunath and Rajashekarappa Sharath                                   | 151-158 |
| 21.                         | <b>Review on Emerging from SARSCoV to SARSCoV-2: Important Approach in Prevention and Control</b><br>- Savaner Varsha and Billore Vandita  | 159-164 |

❖ EDITORIAL BOARD: P IV ❖