

# Research Journal of Biotechnology

**VOL. 21(2), FEBRUARY 2026**



**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 21(2), Pages 1-350, February 2026, SCI Impact Factor 0.233

Editor-in-Chief (Hon.)  
**Dr. Wan Keung Wong**  
 Kowloon, HONG KONG

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>Application of ISSR markers to analyze the genetic diversity of the May nuoc mo species (<i>Calamus</i> sp.) in Quang Nam province, Central Vietnam</b> - Hieu Huynh Kim, Loi Nguyen Van, Long Dang Thanh and Minh Nguyen Van	1-9
2.	<b>Phytomediated biofabrication of silver nanoparticles derived from <i>Athyrium filix-femina</i> and their antibacterial potential against bacterial pathogens</b> - Neha Neha, Chauhan Sanya and Devi Sushila	10-19
3.	<b>Evaluating the efficacy of myricetin from the stem bark of <i>Syzygium cumini</i> as a regulator in signal transduction mechanism in breast cancer by <i>in silico</i> approach</b> - Murugesan Viji, Periyasamy Vijayalakshmi and Manikkam Rajalakshmi	20-27
4.	<b>Bacterial showdown: Chronic Osteomyelitis Types vs their Microbial Foes</b> - Jagan V., V. Vijaya Swetha and N. Padma Priya	28-32
5.	<b>Depicting Molecular Interactions of Luteolin with Human Cytomegalovirus Envelope Glycoprotein N and Glycoprotein H: An <i>In Silico</i> Approach</b> - Nayak Subham Ravi, Tripathy Chandra Sekhar, Parida Sagarika, Pattnaik Dipti and Patro A. Raj Kumar	33-40
6.	<b>Isolation and characterization of anti-cancer compounds from ethanol extract of <i>Vetiveria zizanioides</i> (Nash) roots and their cytotoxic effects</b> - Chitra T., Jayashree S., Rathinamala J., Rajagopal B. and Thangavelu A.U.	41-53
7.	<b>Detection of blast resistance gene(s) in some rice genotypes using molecular markers and pathogenicity assessment</b> - Rownok Zubair-Al-Mahmud, Haque Mohammad Mahbubul, Bir Md. Shahidul Haque, Hossain Muhammed Ali and Ali Md. Arshad	54-61
8.	<b>Improvement of ethanol stress tolerance in <i>Saccharomyces cerevisiae</i> through modulation of Ehrlich pathway via overexpression of <i>BAT2</i> gene</b> - Vimanth S., Ningaraju T.M., Poornima R., Lakshminarayana Reddy C.N. and Chandrashekhara K.N.	62-70
9.	<b>Soybean Seed Extract induced Inhibition of Jab1 in Breast Cancer Cell Line</b> - Nandakumar Vidya, Gunasankaran Gayathiri, Muthukrishnan Saradhadevi, Arumugam Vijaya Anand and Muthukrishnan Arun	71-80
10.	<b>Expression Dynamics of Metastasis-Associated Markers in Oral Squamous Cell Carcinoma Cell Lines CAL27 and HSC-3</b> - Vardhan Nalla Reddy Harsha, Preetha K., Bonney L. James and Ranganadha Reddy A.	81-86
11.	<b>Anticancer activity of <i>Illicium verum</i>, <i>Amomum subulatum</i> and <i>Parmotrema perlatum</i> extracts against MCF-7 human breast cancer cell line</b> - Pradeepa Muthurajan, Mahesha Vasanthakumar and Keerthana Manoharan	87-94

12.	<b>Gut bacterial community structure and functional analysis in the silkworm <i>Samia ricini</i> reared on the secondary food plant Tapioca (<i>Manihot esculenta</i> Crantz)</b> - Hatarkhi Mwchahary, Dulur Brahma and Swmdwn Brahma	95-104
13.	<b>Investigation of the neuroprotective effects of squid ink extract to mitigate the reactive oxidative species in stress-induced neuroblastoma cell line</b> - Elangovan Sujatha and Arumugam Sivakumar	105-116
14.	<b>Comprehensive Genomic and Immunological Characterization of Hepatitis B Virus: Insights from Molecular and Bioinformatics Analyses</b> - Govardhan T., Vijay Kumar P., Adiga Usha, Vasishta Sampara and Amulya T.	117-125
15.	<b>KL rs9536314 variant influencing mineral homeostasis and oxidative stress in diabetic CKD</b> - Alfayadh Karrar, Dehghan Gholamreza, Khosroshahi Hamid Tayebi and Haghi Mehdi	126-136
16.	<b>Simple and easy method to isolate nucleic acids and protein from leaf sample</b> - Hazarika Pranita, Singh H. Ranjit, Das Dhiraj Kumar, Ali Cintom and Das Sudripta	137-152
17.	<b>Exploring the Functional Impact of KRAS Gene Mutations in Lung Cancer through Computational Analysis</b> - Kizhakedathil Moni Philip Jacob, Chowdary Chandu, Koyye Rahul and Vijaykumar Sudarshana Deepa	153-159
18.	<b>Green Synthesis, Characterization, Antimicrobial Potential and Cytotoxic Evaluation of Silver Nanoparticles derived from Marine Seaweed <i>Valonia Utricularis</i></b> - Singh Gurinder, Sharma Asha, Chaudhary Narendra and Sharma Gaurav	160-168
19.	<b>A case-control study and meta-analysis on the association of <i>NME1</i> rs34214448 polymorphism with breast cancer risk</b> - Ngiam Adlar Ryan, Chong Eric Tzyy Jiann, Chuah Jitt Aun and Lee Ping-Chin	169-177
20.	<b>Isolation and Characterization of Phosphate Solubilizing Microorganisms from <i>Saccharum officinarum</i> Rhizosphere</b> - Tomer Supriya, Parveen Shaiba and Khati Priyanka	178-184
21.	<b>GC-MS Analysis and Bioactivity Assessment of Protonated <i>Alstonia macrophylla</i> Methanolic Extract against Oxidative Stress, Inflammation and Cervical Cancer Cells</b> - Vijayan Sobana, Olaganathan Sivapriya and Muruganantham Sankareswaran	185-199
22.	<b>Qualitative and Quantitative Analysis of Phytoconstituents and their Therapeutic Potential in <i>Tribulus terrestris</i></b> - Bijarnia Ekta, Sharma Bindu, Songer Vijaylaxmi and Meena Vinay Kumar	200-208
23.	<b><i>In vitro</i> anti-Chikungunya efficacy, antioxidant and anti-inflammatory potential of <i>Murraya koenigii</i> ethanolic extract</b> - Soniya Kumari, Boora Sanjit, Bharti Abhishekh Kumar, Parashar Deepti and Kaushik Samander	209-218
24.	<b>Antifertility effects of aqueous flower extract of <i>Hibiscus rosa-sinensis</i> (Linn.) on seminal parameters in male Swiss albino mice.</b> - Anand Nidhi, Sardar Raj Kumar, Anand Jany, Reja SK Jasim and Kumar Rajesh	219-223
25.	<b>Comparative study of rosmarinic acid content and antioxidant activity of four Lamiaceae species extracts in Vietnam</b> - Pham Thi My Tram and Pham Giang Que Anh	224-229
26.	<b>Silent Nasal Carriers: Nasal Colonization and Genetic Profiling of Methicillin-Resistant Coagulase Negative Staphylococci among College Students</b> - Ramachandiran Ramamoorthi, Kesavaram Padmavathy, Venkatachalam Pradeepa and Jebadass Jasmine Vinshia	230-234

27.	<b>Protein docking and molecular dynamics simulation of predicted IcaA and IcaD protein structure from <i>Staphylococcus epidermidis</i> involved in PNAG biosynthesis and trafficking</b> - Ramachandira Prabu, Mohanty Amaresh Kumar, Balaji Gupta V.L.N.T., Yadav Rajesh Mudi and Veeramani T.	235-245
28.	<b>Antiapoptotic effects of resveratrol ameliorate perfluorooctanoic acid-induced inhibition of testosterone biosynthesis in TM3 Leydig cells</b> - Pavani R., Sukeerthi S. and Sainath S.B.	246-255
29.	<b>Development of simple and rapid identification system for <i>Candida</i> species isolated from clinical samples</b> - Nagaraja B.K., Dayananda G.Y. and Sundararaman M.	256-263
30.	<b>Identification and validation of molecular markers for rust resistance in wheat genotypes for marker assisted breeding in India</b> - Singh Prashant, Mishra Vinod Kumar, Atri Neelam, Ashutosh, Kumar Monu and Yadav Manoj Kumar	264-270
31.	<b>Decoupling Genotype–Phenotype Resistance type in MDR <i>Klebsiella pneumoniae</i>: Integrative Genomic and Structural prudence into SULII, SULL and QnrB Determinants</b> - Inas Sattar Abd	271-285
32.	<b><i>In silico</i> meta-analyses for putative biomarkers associated with Renal Cancer</b> - Bhardwaj Anuradha and Ashra Himani	286-292
33.	<b>Effect of Salinity Stress on expression of aquaporin (PIP 1) gene in Pokkali Vytilla V-8 (<i>Oryza sativa L.</i>): A comparative study</b> - M. Harish, V. Salna Fathima, Raveendran Roshni, D.C. Deepthi and Nair Sethulekshmy	293-297
<b>Review Papers:</b>		
34.	<b>Decoding Scopoletin: A Comprehensive Review</b> - Agrawal Krishn Kumar, Deshwal Rahul, Murti Yogesh and Singh Sunil Pratap	298-309
35.	<b>Current and Future Perspectives on the Development and Design of Aptamers</b> - Tandasi Vandana and Srivastava Sudha	310-327
36.	<b>Embracing Nature: Anti-Biofilm Herbal Compounds against <i>Mycobacterium tuberculosis</i> (Mtb) used in Tuberculosis Treatment</b> - Virdi Vinny, Singh Jagriti, Sharma Rolee and Verma Dipesh Kumar	328-334
37.	<b>The Contribution of DNA Replication and Cell Cycle Genes in promoting Metastasis</b> - Vardhan Nalla Reddy Harsha, Preetha K., Radhu L. and Reddy Aluru Ranganadha	335-345
38.	<b>Revolutionizing oral Cancer diagnosis: The impact of emerging medical technologies</b> - Vino Udappusamy, Nithya Thangam S., Nirmal Kumar R., Rajan Thinakaran and Shalini Ganeshan	346-350

❖ EDITORIAL BOARD: P V ❖