

REVIEW ARTICLES

1569-1586	Emerging Therapeutic Strategies for Leprosy: Trends, Challenges, and Innovations Abida Khan, Yahia Hassan Ali, Intisar Kamil Saeed, Howayada Mahany Mostafa, Ruqiah Mohammed Ahmed Alshahrani, Mohammed Saad Abdullah Alhunaydi, Neelam Singla and Muhammad Irfan Siddique
1587-1598	Antimicrobial Potency of Some Traditional Medicinal Plants of North-Eastern India: An In-Depth Review Prabhjot Singh Jassal, Pathikrit Banerjee, Sudhakar Kancharla, Prachetha Kolli, Gowtham Mandadapu and Manoj Kumar Jena
1599-1613	Seed Microbiomes: Guardians of Plant Growth and Development Tavisha Singh, Diksha Garg, Kulveer Kaur, Ranjan Singh, Sangram Singh, Nivedita Prasad and Manikant Tripathi
1614-1626	Biomedical Applications of Bee Venom: A Natural Approach to Cancer, Infections, and Inflammatory Diseases Yatakona Supriya, Pranuthi Roy Jamparapu, Surya Komera, Shanmugam Saravanan, Pachamuthu Balakrishnan and Sathasivam Sivamalar
1627-1647	Biocatalysts for Change: Microbial Enzymes as a Sustainable Solution to Industrial Pollution Smriti Yadav, Nikita Kundu, Ananya Bhattacharya, G.K. Aseri and Neelam Jain
1648-1661	A Machine and Deep Learning-Based Approach for the Detection of <i>Plasmodium vivax</i> : Towards Improved Malaria Diagnosis Vivek Morris Prathap, Tabish Qidwai and Sonam Yadav
1662-1677	Pioneering Biofertilization: Advanced Zinc Solubilizing Bacteria Use as a Biostimulants for Transforming Mustard Yields: A Review Ujwal Virkhare, Govind Gupta, Sakshi Tewari, Prajwal Nimbulkar, Ashish Dutta and Deepak Kher
1678-1685	Comprehensive Evaluation of Mycoremediation using Aspergillus sp. Exopolysaccharide as A Sustainable Strategy Pooja Singh and Tabish Qidwai
1686-1704	From Pathogen to Protection: Integrated Disease Management Strategies for Tomato Late Blight M.D. Jehani, Jabril Mukhtar Mohamed, Saikumar Cheemala, Bharat Chandra Nath, Ella Khawlfelkim Chonzik and Seweta Srivastava
1705-1719	Transforming Medical Microbiology: The Role of Artificial Intelligence Suvarna Sande and Manisha Rajguru
1720-1732	Advanced Techniques to Control Mosquitoes and their Disease Transmission: A Review S. Renuka
1733-1743	Omics in Plant Science for Improved Stress Tolerance S. Garcha and S. Tohani
1744-1754	Antibacterials Derived From the Plants of Lamiaceae: Phytochemical Framework and Mechanistic Insights Gagandeep Singh, Saurabh Gupta and Puja Gupta
1755-1770	Molecular Mechanisms of <i>Helicobacter pylori</i> Infection: A Review Rakesh, Sachin Dev Munjal, R.S. Sengar, Narotam Sharma, Shubhangi Rautela and Monika Singh



SHORT COMMUNICATION

1771-1781 Isolation and Characterization of a Phage Xoo-Tp1, Infecting Xanthomonas oryzae pv. oryzae
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1782-1795	The Dual Effect of Coffea arabica Extract on Allium cepa and Bacteria: Chromosomal Abnormalities and Antimicrobial Activity Abeer Muhammad Almutrafy and Duaa A. Bukhari
1796-1804	Exploring Star Fruit Extract as an Alternative Substrate for Polyhydroxyalkanoates Production by <i>Bacillus licheniformis</i> NJ04 Gowthami Rajanna and Mridul Umesh
1805-1811	Evaluating The Role of Fosfomycin in Treating MDR Urinary Pathogens: A Tertiary Care Hospital Perspective Susmitha Simgamsetty, Sai Vineela Pilli, Muthusamy Raman and Padmaja Yarlagadda
1812-1823	Effect of Preservatives on Microorganisms Isolated from Contaminated Cosmetics Collected from Mecca Region, Saudi Arabia Fatimah M. Alshehrei
1824-1833	Unveiling the Microbial Landscape and Antimicrobial Drug Susceptibility in Intensive Care Unit Blood Cultures Susmitha Simgamsetty, Sai Vineela Pilli, Muthusamy Raman and Padmaja Yarlagadda
1834-1853	Hydrocarbon Degradation Potential Revealed by Metagenomic Analysis of Contaminated Soil Samples Across Silvassa, India: A Potential Bioremediation Solution Nipun Bariya, Mayuri Dholaria and Aparna J. Tailor
1854-1867	Antifungal Potential of <i>Sophora flavescens</i> Root Extract: HR-LCMS Analysis and Molecular Docking of Bioactive Compounds Against Nosocomial Fungal Pathogens Mostafa Mohammed Atiyah, Teena Merlin and Smitha Vijayan
1868-1888	Decoding Immune and Metabolic Dysregulation in COPD and Tuberculosis: Insights from Systems Biology and Transcriptomics Abida Khan, Hayat Ali Alzahrani, Ranya Mohammed Elmagzoub, Khadiga G. Abd Elaleem, Ahlam S. Mohamed, Aida A. Elsharief, Hayaa M Alhuthali and Zia Ur Rehman
1889-1902	Synergistic Application of <i>Trichoderma asperellum</i> and Biochar in Enhancing Cellulase Activity and Biocontrol Efficacy against <i>Pythium aphanidermatum</i> R. Vechithran, Mayukh Sarkar, Ranjna Kumari, Paveen Prashant and Vipul Kumar
1903-1907	Isolation and Identification of <i>E. coli</i> from Street Foods, Coimbatore A. Jenifer and J. Franglin Christopher Raja
1908-1918	Isolation, Identification and Characterization of an Indigenous Pigmented Yeast Isolated from Assam, North East, India Jubanlak Mary Pohsnem, Bhaskar Jyoti Nath, Smita Sarma and Deep Prakash Parasar
1919-1927	Bioremediation of Sewage Water by Three Extracellular Polymeric Substances (EPS) Producing Bacterial Strains using Molasses as A Carbon Source Manu Solanki, Madhulika Chauhan and Vandana Nandal
1928-1937	Evaluating the Potential of Leeds <i>Acinetobacter</i> Medium Versus Multiplex PCR for <i>Acinetobacter baumannii</i> Detection and Prevalence in Clinical and Water Samples Radhika K. Madalgi, Sughosh Kulkarni, Rohit Amuje, Raghavendra D. Kulkarni and Suresh B. Arakera



Development and Evaluation of Biogenic Nano-Hydrogel Incorporating Silver Nanoparticles for Wound Healing and Antibiofilm Activity S. Anju and J. Sarada
Bacteriological Profile and Antimicrobial Susceptibility Patterns in Patients with Diabetic Foot Infections in a Tertiary Care Hospital in South India Swathy Govindaswamy, Elankumar Subbarayan, V.M. Jaishwanth, Sri Sharika Anantha Kumar, Swathi Santhosh and Swetha Anna Renji
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Assessment of Antagonistic Potential of <i>Bacillus</i> spp. Isolated from Hot Springs of North East India against Some Phytopathogenic Fungi Amrit Kumar, Jintu Rabha and Kumananda Tayung
Evaluation of Serum SARS-CoV-2 Nucleocapsid Antigen as a Diagnostic Tool in COVID-19 Patients Alaa K. Mahmoud, Mona H. Hashish, Amr A. Elsherif and Marwa M. Fekry
Prevalence and Antimicrobial Resistance of Hypervirulent <i>Klebsiella pneumoniae</i> in Puducherry, India: A Cross-Sectional Analysis Swetapadma Mishra, K. Kavitha, R. Latha, Aravind C. Sasi, B. Indrajith Devandra, R. Gayathri and K. Hema Shree
Genome Mining of <i>Chryseobacterium proteolyticum</i> for Keratinolytic Properties and Prospective Applications Lindelwa Mpaka, Nonso E. Nnolim and Uchechukwu U. Nwodo
Synergistic Effect of <i>Artemisia vulgaris</i> L. with Antibiotics against Clinical Isolates of Multidrug-resistant <i>Staphylococcus aureus</i> Kundhey Hang Limboo and Bimala Singh
Role of <i>Pseudomonas putida</i> CKVF1 in Alleviating Arsenic-Induced Stress in <i>Vicia faba</i> L. Charanjeet Kaur, Prerna Chauhan, Akansha Garg, Aarti Kumari, Susheel Kumar, V.P. Singh and Alok Srivastava
Binding Dynamics of <i>Helicobacter pylori</i> CagF-CagV: Biochemical, Computational, and Structural Insights into the Inner Membrane Core Complex of Cag-Type 4 Secretion System Swagata Sain, Sukriti Sacher, Bhawna Solanki and Navin Kumar
Molecular Detection of <i>Mycobacterium avium</i> subsp. <i>paratuberculosis</i> by Targeting IS900 Insertion Sequence in the Samples of Dairy Cattle of Assam, India Nur Abdul Kader, Acheenta G. Barua, Razibuddin Ahmed Hazarika, Premanshu Dandapat, Durlav Prasad Bora, Srinivas Kandhan, Mosuri Chendu Bharat Prasad, Archana Talukdar, Sayed Nabil Abedin, A. Arun Prince Milton, Sandeep Ghatak and Samir Das
Taxonomic Studies on <i>Cladochytrium</i> (Cladochytriaceae) Species from North India Manish Kumar Dubey and Ram Sanmukh Upadhyay
Comparative Hydrocarbon Biodegradation by <i>Bacillus haikouensis</i> and <i>Cytobacillus kochii</i> : Pure Culture versus Consortium Performance Muhammad B. Alim, Mohamad Oves, Mamdoh T. Jamal and Kunarso Kunarso
Antagonistic Evaluation of Lactic Acid Bacteria Isolated from Commercial Cheese Against Foodborne Pathogens in Saudi Arabia Rawan Hassan Alshahrani, Mona Othman I. Albureikan and Nidal Mohammed Zabermawi



2099-2110	Potential Anticancer Activity and Molecular Docking Studies of Plant-derived Molecules from Fernandoa adenophylla against Glioblastoma (U87) Cell Line Abdur Rauf, Saima Naz, Zuneera Akram, Majid Khan, Umer Rashid, Awais Ahmed, Ho Soonmin, Abdulrahman Alshammari and Norah Abdullah Albekairi
2111-2119	CtxB7 Genotypes of Vibrio cholerae O1 Causing the 2022 Cholera Epidemic in Tribal Areas of Odisha, India Smruti Ranjan Nayak, Bibhuti Bhusan Pal, Swatishree Pany, Debasish Samal, Suryakanta Samal, Rojalini Tarai, Bhagyalaxmi Biswal, Arttatrana Pal, G. Nageswar Rao and Sanghamitra Pati
2120-2140	Streptomyces rochei SZ33, a Novel Antibacterial Reservoir against Nosocomial Lower Respiratory Tract Infections: A Comprehensive <i>In Vitro</i> and <i>In Silico</i> Study Sahar Zarrien, Archana S. Rao, M.P. Prasad, Bibi Ayesha, Ajay Nair, Aneesa Fasim, M.A. Surabhi, M. Gnanika and Sunil S. More
2141-2153	Characterization of Virulence Genetic Profile and Potential Effect of Nanoparticles against Multidrug-Resistant Uropathogenic <i>E. coli</i> at Menuofia University Hospitals Rasha G. Mostafa, Sahar A.M. Ali, Kamel Shoueir, Athar F. Lasheen, Aya E. Tayel and Mona S. Sabal
2154-2171	Morphological and Molecular Characterization of Fungal Isolates in VNMKV Produced 'Biomix': A Biocontrol Consortium R.A. Neware, Y.S. Bhagat, C.V. Ambadkar, V.N. Salunkhe, K.P. Nirwal, R.L. Chavhan and M.S. Dudhare
2172-2183	Profiling Pesticide Biodegradation by Phyllosphere Microbes for Putative Role in Effectuating Remediation of Common Pesticides Shifa Chaudhary, Binu Bhat and Shivani Sharda
2184-2199	Organophosphate Degradation and Plant Growth-Promoting Activity of Soil Bacteria Isolated from Vegetable Farms in Benguet, Philippines Jayson D. Komicho and Sherlyn C. Tipayno
2200-2210	Scrub Typhus Diagnosis by Enzyme Linked Immunosorbent Assay (ELISA), Indirect Immunofluorescence Assay (IFA) and Molecular Tests: Recommendations for Modification of Scrub Typhus Inclusion Criteria (STIC) in Indian Context V. Anitharaj, J. Pradeep and Selvaraj Stephen
2211-2226	Antibacterial Potential of Plant Extracts against Foodborne Pathogenic Bacteria: A Phytochemical and Bioactive Analysis Hazem Diab Sawalha, Ghayda Qalalweh, Hanaa Nazzal, Aya Kmail and Iman Qoraan
2227-2236	Enhanced Efficacy of Antibiotics Supplemented with Polyamines against Gram-positive and Gram-negative Bacteria Resma Rajan, Md. Haroon Rashid, Brinda Goda Lakshmi Didugu, Anugata Lima, Vidyullatha Peddireddy and Anitha Mamillapalli
2237-2246	Prevalence of Extended Spectrum β -lactamase and AmpC β -lactamase among Escherichia coli and Klebsiella pneumoniae in Urinary Tract Infections Kumuda Arumugam, Geeta S. Karande and S.R. Patil
2247-2259	Characterization of Multi-Antibiotic Resistant Histamine Producing Escherichia Species Isolated from Palm Wine Tapped from Elaeis guineensis in Enugu Ezike, Nigeria Cyril Adonu, Patrick Onyi, Hannah Okorie, Sunday Urama, Felix Abugu, Victor Eze, Treasure Ujam, Restus Onwusoba, Ibeabuchi Ali and James Ezema
2260-2270	Comparative Evaluation of Culture Media and pH Conditions for Xylanase Production in Aspergillus niger Pattarabhorn Pakaweerachat and Teerin Chysirichote



2271-2291	Cocktail Antigen Presenting Peptide Vaccine Development for Nipah Virus: An Immunoinformatic Approach to Indian and Malaysian Strain Naseera Kannanthodi Pariyapurath, Sarika Baburajan Pillai, Kavitha Dhandapani, Rahulgandhi Pachamuthu, Shivanandhappa Kukkaler Channappa, Ananda Arona Premkumar, Maghimaa Mathanmohun, Pachamuthu Balakrishnan, Sathish Sankar and Selvaraj Jagannathan
2292-2304	Antiplasmodial Potential of Quercetin and Its Derivatives: Molecular Docking, Synthesis and <i>In Vivo</i> Studies Paschal C. Anthony, Emmanuel Attih, Aniekan Ebong, Ekarika C. Jonhson, Victor Anah, Charles Goodnews, Festus Esenam, Abayomi Omotoso, Edet Asanga, Sheryar Afzal and Olorunfemi Eseyin
2305-2321	Targeting Mycobacterium tuberculosis InhA with Phytochemicals: Insights from Molecular Docking and Dynamics Simulations Jagriti Singh, Vinny Virdi, Kratika Singh, Rolee Sharma and Dipesh Kumar Verma
2322-2332	Studies on Production of Proteins from <i>Delftia</i> MW172212 Bacteria and their Antibacterial and Anticancer Applications P. Kavitha, R. Ganesamoorthy, K. Kasthuri, Aswathi Panneri Kalikkot, K. Thirugnanasambandham, Yazeedah, R. Gomathi and T. Maruthavanan
2333-2342	Beyond Green: Solvent-Dependent Antimicrobial Effects of Textile-Relevant Ionic Liquids on Key Bacterial Pathogens Tista Lata and Ashish Sachan
2343-2355	In vitro Anti-Microbial Potential, Cadmium Nanoparticles Biosynthesis and Characterisation Profiling of Marine Aspergillus terreus JMDL-20 Lilly Pushpam Dara, Mallika Dondapati and Madhavi Jattavathu
2356-2369	Rapid and Sensitive Detection of <i>Tobacco Streak Virus</i> in Cotton Using RT-LAMP and Molecular Profiling S. Siva Ramakrishnan, R. Kannan, C. Gopalakrishnan, G. Preetha, N. Swarnakumari, M. Jayakanthan and A. Arulsia
2370-2381	Antimicrobial Resistance Profiling of Non-pathogenic Microbial Flora in <i>Curcuma longa</i> Shayan Mohd, Jayhind Maury, Imran Ahmad, Vijay Laxmi, Sheetal Verma, Manoj Kumar, Alvina Farooqui and Mohammed Haris Siddiqui
2382-2394	Early Detection of Pyogenic Infections using Chromogenic Agar: Diagnostic Utility and Antibiotic Susceptibility M. Mohamadiya Rizwana, Geerthana Muthukaruppan, Lavanya Sriramajayam and S. Shanmugapriya
2395-2409	Influence of Prebiotic Fructooligosaccharides on the Growth of Probiotic <i>Lactobacillus</i> spp. to Produce Postbiotic Short Chain Fatty Acids Evaluated using Gas Chromatography S. Vanitha, Bhima Bhukya and K. Anuradha