

Contents

REVIEW ARTICLES

641-649	The Most Common Side Effects of AstraZeneca COVID-19 Vaccine among Saudi Arabian Population: A Systematic Review Jehad A. Aldali, Abdullah Abutheeb, Abdullah Al-Fahd, Meshal Alzakari, Omar Almukhalafi,
	Nasser Al-Tayar, Abdullah Almeziny and Razique Anwer
650-659	A Systematic Review on Human Monkeypox Virus Disease and Infection in Pregnancy Srishti Morris, Poonam Joshi, Priyanka Soni, Vikas Jakhmola, Sahiba, Karabi Kalita, Nidhi Nainwal and Nitin Sharma
660-681	Pink Pigmented Facultative Methylotrophs (PPFMs): Potential Bioinoculants for Sustainable Crop Production N.S. Nysanth, S. Anu Rajan, S.L. Sivapriya and K.N. Anith
682-692	Challenges in Characterization of Coagulase Negative Staphylococcus by Conventional Methods and Comparison with Molecular Diagnostic Modalities Achal J. Chaudhari and Shital Mahajan
693-704	Recent Advances in using Lipomyces starkeyi for the Production of Single-Cell Oil Anu Jacob and Jissin Mathew
705-721	Lignocellulolytic Microbial Systems and its Importance in Dye Decolourization: A Review Somnath Das, Ankita Gole, Annesha Chakraborty, Supriyo Mal, Shilpa Rudra and Dipankar Ghosh
722-731	Studies on Diversity of Bacterial Diseases and Occupational Risks through Mudcrab Aquaculture in West Bengal Sanjib Saha, Debajyoti Pradhan and Gadadhar Dash
732-748	Current Progress and Biotechnological Applications of Microbial Keratinases Indira Gahatraj, Anupom Borah, Piyush Pandey, Arindam Bhattacharya, Suman Mazumdar, Bijender Singh and Sanjeev Kumar
749-760	Mushrooms: A Potential Option in the Management of Deficiency and Diseases in Humans Kanna Sai Teja, Suruchi, Utkarsh Rai, Mukesh Kumar, Omkar Mohanty, Jyolsna Roy and Shweta Meshram
761-767	<i>Enterococcus</i> Species: A Systemic Review Vaishnavi Kalode and Praful Patil
RESEARCH A	ARTICLES
768-779	Bacterization with Endospore-forming <i>Bacillus</i> spp. Promotes Plant Growth and Suppresses Foot Rot Disease in Black Pepper (<i>Piper nigrum</i> L.) in the Nursery A.B. Anju, Chitra Natarajan, R. Preetha, S. Anu Rajan, V.I. Soumya and K.N. Anith
780-787	Pretreatments for Microbial Analysis and Evaluation of Hygiene of Wet Towels and Wet Wipes Joohyun Kang, Miseon Sung, Jung Hoan Kim and Yohan Yoon

788-798 Identification and Characterisation of Potential Probiotic Lactic Acid Bacteria Extracted from Pig Faeces Shaomin Qin, Hongming Du, Wenting Zeng, Anbin Bai, Jinfeng Liu, Fenglian Chen, Ling Ma, Shuying Qin, Peng Zhu and Jianmin Wu



Contents

799-810	Detection of Toxoplasmosis in Association with Autoimmune Thyroid Disease During Pregnancy in Duhok, Iraq Manal Adil Murad and Souzan Hussain Eassa
811-818	Predicting Single Cell Lag Time and Maximum Specific Growth Rate of Proteus mirabilis using Curve Fitting Machine Learning Algorithm (MLA) Yan Ramona and Komang Dharmawan
819-825	Gene Sequencing of Hepatitis C Virus Isolated from Patients with Liver Diseases Abdulrazzaq N. Zghair, Nazar Sh. Mohammed and Sumayah Faruq Kasim
826-837	Antimicrobial Activity and Multi-therapeutic Potential of <i>Salvia officinalis</i> and <i>Mentha longifolia</i> Essential Oils in Leaves Duaa Abdulrashid A. Bukhari
838-848	Molecular Characterization of Microbial Quality of Ready-to-eat Salads using Multi-locus Sequence Typing Jihad Alrehaili, Firas K. Almarri, Sunil Kumar, Shoeb Mustafa, Hassan Alshehri, Shafiul Haque, Arezki Azzi and Razique Anwer
849-860	Plant Growth-promoting Ability and Pathogen Inhibitory Effect of Actinomycetes Isolated from Fecal Pellets of the Giant Millipede <i>Thyropygus resimus</i> (Diplopoda) Waraporn Sutthisa, Warisara Paraphong and Piyatida Pimvichai
861-869	Association Between Gonococcal Infection and a Common Genetic Deletion in Sperm Mitochondrial Mohanad Jawad Kadhim, Shaimaa Obaid Hasson and Hayder Shkhair Al-Janabi
870-881	Isolation of Fungi from Mangrove Ecosystem of Mumbai and Evaluation of their Antibacterial Potential Rutuja Sunil Patankar and Nissar Ahmad Reshi
882-890	Evaluation of Antimicrobial-producing Actinomycetes Isolated from Regions in Baghdad City Balqees Yahya Najm, Sarab Hussein Khallel and Hala Mahmmed Majeed
891-899	Microbiological Profile of Infectious Keratitis at a Tertiary Care Hospital Jyoti Chauhan, Narinder Kaur, Harit Kumar, Rosy Bala and Richa Dhiman
900-910	The Emerging Paradigm of Antimicrobial Resistance in Surgical Site Infections of the Nilgiris Region P. Rihana Begum, R. Rajeshkumar, V. Manigandan, V. Balasubramaniam, Sivasankaran Ponnusankar, Kuldeep Dhama and Talha Bin Emran
911-918	Central Line Associated Blood Stream Infection: Microbiological Profile and its Antimicrobial Susceptibility Pattern at Tertiary Care Centre Sachin M. Darji and Neha Patel
919-930	COVID-19 Prognosis from Chest X-ray Images by using Deep Learning Approaches: A Next Generation Diagnostic Tool Madhumita Pal, Smita Parija, Ganapati Panda, Snehasish Mishra, Ranjan K. Mohapatra and Kuldeep Dhama
931-941	Phenotypic Detection of Virulence Factors of Uropathogenic Enterobacteriaceae Betu Rama Soujanya and G.S. Banashankari
942-950	A Correlation between the Number of Airborne Bacteria and Fungi using the Settle Plate Method with Temperature and Relative Humidity at the Clinical Microbiology Laboratory of Dr. Soetomo Regional General Hospital Surabaya, Indonesia Yenni Andriana, Agung Dwi Wahyu Widodo and Pepy Dwi Endraswari



Contents

951-965	Antimicrobial Resistance and Major Virulence Gene Detection in Methicillin Resistant Staphylococcus aureus in Humans and Livestock Animals of Assam: A North Eastern State of India
	Naba Kumar Deka, Pratap Jyoti Handique, Probodh Borah, Pranita Konwar, Geetanjali Deka, Rijumani Das and Mridusmita Choudhury
966-981	Exoenzyme Profiling of Soil Bacteria from Thattekad Bird Sanctuary for Bioprospection Achamma Thomas, Ramakrishnan Sugathan, M. Somasekharan Pillai and Mohan Sankarshanan
982-992	Mycological Profile of <i>Candida tropicalis</i> and its Virulence Factors from Candidemia Patients at A Tertiary Care Facility Hemamalini Mohanraj, V.M. Vinodhini and Leela Kakithakara Vajravelu
993-999	Isolation of Bacterial Pathogens Associated with Commercially Available Spices
	in Mangaluru City, India Chaithra S. Hebbar, Apoorva R. Kenjar, Juliet Roshini Mohan Raj, Iddya Karunasagar and Rajeshwari Vittal
1000-1008	In vitro Evaluation of the Antimicrobial Activity of Aqueous and Ethanolic Extracts of Four Medicinal Plants from Saudi Arabia Muneefah Abdullah Alenezi
1009-1016	The Immunohistochemical Staining of Vimentin and E-Cadherin in Bladder Cancer
	Patients Infected with Hepatitis C Virus May K. Ismael, Yasir B. Qaddoori, Mustafa N. Shaban and Bahaa Abdullah Laftaah AL-Rubaii
1017-1028	Determination of Ochratoxin-A Detoxification and Antibiotic Resistance Potential
	of Acinetobacter calcoaceticus Mohammed Al-Nussairawi, Nooralden Abdulkarem Jasim Al-Tulaibawi and Munaf Aal-Aaboda
1029-1037	Anaerobic Profile of Intra-abdominal Infections – A 23-Year Retrospective Study Meghna Chetty, Biswas Rakhi, Sistla Sujatha and Sistla Sarath Chandra
1038-1046	Correlation of Interleukin-17 and 23 Inflammatory Markers with Genetically Transmitted Spondyloarthritis Patients at a Tertiary Care Facility, South India T. Jayaprakash, K.V. Leela, Balamurali Venkatesan, Sujith Ravi and Om Lokesh Muthamilan
1047-1055	Aqueous Extract of <i>Clitoria ternatea</i> Attenuates the Growth of <i>Streptococcus mutans</i> Liana Mohd Zulkamal, Muhammad Aliff Hazim Al Zelan, Farizan Aris, Nurul Aili Zakaria, Farida Zuraina Mohd Yusof, Darah Ibrahim and Mohd Taufiq Mat Jalil
1056-1064	Green Synthesis and Bioactivity of Copper Nanoparticles from Asparagus aethiopicus and Asparagus densiflorus A. Stephen, S.R. Mohith Sai, Neha Pal and S. Arjun
1065-1075	Prevalence, Risk Factors and Antibiotic Susceptibility of Urinary Tract Infections among Pregnant Women: A Study in Damt District Yemen Fawaz Al-Badaii, Mohammed Al-Tairi, Amina Rashid, Sumaya Al-Morisi and Najla Al-Hamari
1076-1085	Characteristics of Antibiotic-resistant <i>E. coli</i> Isolated from Perfume River in Hue City, Vietnam Ngo Viet Quynh Tram, Phung Thi Thu Thuy, Nguyen Thi Dang Khoa, Nguyen Thi Tuyen, Pham Thi Hong Cam, Ngo Thi Dieu Huong, Ton That Canh Tri, Nguyen Hoang Bach and Bianca Paglietti



Contents

1086-1096	Factors Influencing Knowledge Level of COVID-19 among Healthcare Workers: A Cross-sectional Survey in Four Regions of Tanzania Edward Augustine Magwe, Modest Diamond Varisanga and Secilia Kapalata Ng'weshemi
1097-1102	Virulence Factors of Clinical and Fecal Isolates of <i>Enterococci</i> Species Sudhamani Kumar, U. Purna Chandra Rao, Arvind Natarajan, Sagar Mali and P.M. Beena
1103-1108	Seroprevalence of Hepatitis E Antibodies in Asymptomatic Antenatal Women from Tertiary Care Centre, Puducherry Mohammed Riyaz, S. Umadevi, S. Pramodhini and Joshy M. Easow
1109-1117	Molecular Detection of Carbapenem Resistance in Clinical Isolates of <i>Klebsiella pneumoniae</i> in Tertiary Care Hospital Praful S. Patil, Harshada Shah, Brij Nandan Singh, Dhruba Hari Chandi, Mrinangka Deb and Roshan Jha
1118-1127	Antimicrobial Property of Silver Nanoparticles: Effects of Concentration and Temperature on Bacterial Isolates Thripthi Ananda, Ankita Modi, Vishwanath Managuli and Chiranjay Mukhopadhyay
1128-1140	Comparison of 16S rRNA Gene Quantification with Selected Inflammatory Markers and Culture Method in Septic Arthritis Rana Abdulrahman Hamood Al-Masoodi, Uday Younis Hussein Abdullah, Tengku Muzaffar Bin Tengku Mohd Shihabudin, Ahmad Fadzli Bin Solong, Salwani Binti Ismail and Azian Harun
1141-1153	Dengue Virus Serotypes Circulating among Aedes Mosquitoes in the Lucknow District of North India: Molecular Identification and Characterization Nikky Nyari Srivastava, Harjeet Singh Maan, T.N. Dhole, Jasmeet Singh, Swati Sharma, Shyam Narain Pandey and Ankita Agarwal
1154-1162	Deciphering Azadirachta indica (Neem) Gum Microbiome using Metagenomic Approaches Pragya Saxena, Arjun Singh, Hillol Chakdar, Sheetal Shirodkar and Alok K. Srivastava
1163-1178	Demonstration of the Antioxidant Potential of Three Newly Isolated Carotenoid-Producing Microscopic Algae from KwaZulu-Natal (South Africa) Ayodeji E. Adedoyin and Stefan Schmidt
1179-1192	Isolation, Identification, and Characterization of Tetrodotoxin Producing Bacillus myloliquefaciens B1 Originated from Carcinoscorpius rotundicauda Canh Le, Tra Doan, Phong Le, Bao Phan, Tu Ho, Phuc Hua, Yen Tran and Tu Nguyen
1193-1204	Energy from Waste: <i>Poterioochromonas malhamensis</i> Used for Managing Dairy Effluent and Producing Valuable Microalgal Lipid Nisha Dhillon, Sanjay Gupta, Vivek Kumar, Geeta Bhandari and Sonam Arya
1205-1213	Antibacterial Activity of Oregano Essential Oil and its Effect on Biofilm Formation Alma Tahric, Haris Kolic, Aida Lavic, Dado Latinovic and Emina Pramenkovic
1214-1220	Fecal Coliform Bacteria in Vegetable Salads Prepared in Baghdad Restaurants Adil Turki Al-Musawi, Raafat Ahmed Abu-Almaaly and Haider Shannon Kareem
1221-1230	Antibacterial and Cytotoxic Activity of <i>Mentha arvensis</i> L. Leaves Methanolic Extract <i>In vitro</i> Bushra Hindi Saleh, Dhafar N. Al-ugaili, Asma G. Oraibi and Rasha Abdalelah Ibrahim
1231-1237	<i>In vitro</i> Antimicrobial Properties of Pluronic F-127 Injectable Thermoresponsive Hydrogel Khan Sharun, Sonu S. Nair, S. Amitha Banu, K.M. Manjusha, Varsha Jayakumar, Shubham Saini, Abhijit M. Pawde, Rohit Kumar, Kuldeep Dhama and Amar Pal



Contents

1238-1245	Comparison of Bacterial Pathogens Causing Urinary Tract Infection among Catheterized and Non-catheterized Patients at a Tertiary Care Hospital, Jamnagar Disha Rameshbhai Fefar, Hitesh Kantilal Shingala, Krunal Dineshbhai Mehta and Ruchi Virendrakumar Shah
1246-1254	Molecular Detection of Virulence Genes, Biofilm Formation, and Antibiotic Resistance in Pathogenic Staphylococcus aureus from Taif Hospitals Jamal A. Alorabi

- 1255-1265 Evaluation of Wound Healing Parameters and Antibacterial Effect of Jojoba and *Citrullus colocynthis* Oils in *Staphylococcus* Wound Infection Induced in Mice Gihan A. Elbatouti, Sherien A. Abdelhady, Dalia M. Yacout, Ebtehal Farrage and Ibrahim A. Abdelwahab
- 1266-1279 Impact of Training about Knowledge, Attitude and Practice of Hepatitis B infection and its Vaccination among Healthcare Professionals in a Tertiary Care Hospital of Northern Gujarat Roli Solanki, Bhumika Gaur and Parul D. Shah