### INDIAN JOURNAL OF NATURAL SCIENCES (IJONS)

BIMONTHLY INTERNATIONAL JOURNAL (PRINT)

Editor-in-Chief Dr.S.Vijikumar

#### Published by

#### TAMILNADU SCIENTIFIC RESEARCH ORGANISATION

Regd.Off.: NO 46-141, MEENAKSHIPURAM RD, NEAR POST OFFICE, ARIMALAM 622 201, PUDUKKOTTAI, TAMIL NADU, INDIA

Admin. Off.: PLOT NO 39, MURA BHAVAN, KOODAL NAGAR, RAJAGOPALAPURAM POST, PUDUKKOTTAI, TAMIL NADU, INDIA.

ijonstnsro@gmail.com, editorijons@gmail.com-www.tnsroindia.org.in

Editor-in-Chief, Editorial Board and Publisher take no responsibility for inaccurate, misleading data, opinion and statements appeared in the articles and advertisements published in this journal. It is the sole responsibility of the contributors and advertisers. No part of this journal can be reproduced without the written permission of the Editor-in-Chief who also holds the copyright © of the "Indian Journal of Natural Sciences (IJONS)".

# JOURNAL PARTICULARS

Journal Name	INDIAN JOURNAL OF NATURAL SCIENCES (IJONS)
Frequency	Bi-monthly (Feb, Apr, Jun, Aug, Oct, Dec)
ISSN	0976 – 0997 ( Print)
Publisher	TamilNadu Scientific Research Organisation,
	Pudukkottai, Tamil Nadu, India
Chief Editor	Dr.S.Vijikumar
Copy right	TamilNadu Scientific Research Organisation (TNSRO)
	Pudukkottai, Tamil Nadu, India.
Starting Year	2010
Subject	Multi Disciplinary Science Subjects
Review Process	Double Blind Review Process
Language	English
Publication Format	Print
Access	OPENICCESS
License	Creative Commons Attribution License 4.0
Phone Nos:	04322- 458193, 04322 –261088 (10.00 A.M to 05.00 P.M)
Email	ijons@tnsroindia.org.in & ijonstnsro@gmail.com
Website	https://www.tnsroindia.org.in/
Registered office	No 46-141, Meenakshipuram Rd, Near Post Office,
Address	Arimalam 622 201, Pudukkottai, Tamil Nadu, India.
Admin. Office Address	Plot No 39, Mura Bhavan, Koodal Nagar,
	Rajagopalapuram Post, Pudukkottai, Tamil Nadu, India.

# **Indian Journal of Natural Sciences (IJONS)**

# **Editorial Committee Members (ECM)**

Editor–in–Chief	Dr.S.Vijikumar Director TamilNadu Scientific Research Organisation Pudukkottai-622003, Tamil Nadu. India.
	Editorial Committee
Honorable Chief Advisor	Dr.Neelesh Sharma Professor & Head, Visiting Professor (South Korea and Brazil), Veterinary Sciences & Animal Husbandry, SKUAST-J, R.S. Pura, Jammu, UT of Jammu & Kashmir-181 102, India.
Honorable Chief Advisor	Dr.C.Anandharamakrishnan  Director,  CSIR – National Institute for Interdisciplinary Science and Technology (NIIST) Council of Scientific and Industrial Research (CSIR), Ministry of Science and Technology, Government of India, Industrial Estate PO, Thiruvananthapuram, India
Honorable Chief Advisor	Dr.G.G.Hammad Ahmad Shadab Associate Professor, Department of Zoology, Aligarh Muslim University, Aligarh-202002,Uttar Pradesh, India
Honorable Chief Advisor	Dr. B. Vaseeharan Professor and Head, Department of Animal Health and Management, Alagappa University, Karaikudi – 630003 Tamil Nadu, India
Honorable Member	Dr. T.S. Saravanan Sr.Professor of Biotechnology, Dr.M.G.R Educational and Research Institute University, Periyar E.V.R High Road, Maduravoyal, Chennai-600095.
Honorable Member	Dr. K.Gurunathan Prof & Head, Department of Nano science & Technology, Alagappa University, Karaikudi, TamilNadu, India.
Honorable Member	<b>Dr.C.Balusami</b> Assistant Professor, Department of Livestock Production and Management, College of Veterinary and Animal Sciences Pookode-673576.Kerala, India.
Honorable Member	Dr. Rajashekhar O, Patil Assistant Professor, Department of Environmental Management, Sant Gadge Maharaj College of Commerce & Economics, Mumbai 400004, India
Honorable Member	Professor. G.Ganesan Professor, Department of Mathematics, Adikavi Nannaya University,Rajahmundry-533105, Andhra Pradesh, India
Honorable Member	<b>Dr.M.Krishnan</b> Vice Chancellor, Central University of Tamil Nadu, Thiruvarur, Tamil Nadu. India.

Honorable Member	Mis D.Kalpana Asst. Professor, Department of Chemistry, Bon Secours College for Women, Vilar bypass road, Thanjavur TamilNadu, India.
Honorable Member	Dr.H.Syed Jahangir Associate Professor, P.G. and Research Department of Botany, Jamal Mohamed College (Autonomous) Trichirappalli-620020, TamilNadu, India.
Honorable Member	<b>Dr.Sujatha Ilangovan</b> Assistant Professor, PG & Research Department of Zoology, Holy Cross College, Tiruchirapalli-620002. TamilNadu, India.
Honorable Member	<b>Dr.Vasudevan Ayyappan,</b> Post Doctoral Research Associate, Department of Biotechnology, Delaware State University, Dover, Delaware – 19901
Honorable Member	Prof.K.Kumarasamy Emeritus Professor, ICSSR-Senior Fellow Department of Geography, School of Earth Sciences Bharathidasan University Tiruchirappalli - 620 024, TN, INDIA
Honorable Member	<b>Dr. S. Balasubramanian</b> Assistant Professor, Department of Mathematics, Government Arts College (A), Karur – 639 005, Tamilnadu, India.
Honorable Member	Dr.R.Muthukrishnan Associate Professor (SS&AC) & HOD (Crop Management) Department of Soil Science and Agricultural Chemistry, Vanavarayar Institute of Agricultural Manakkadavu, Pollachi-642- 103, TamilNadu, India
Honorable Member	Dr.Subbiah poopathi Scientist-G/ Director Grade ICMR-Vector control Research Centre, Medical complex, Indira Nagar,Pondicherry-605006,India
Honorable Member	Dr.P.Govindaraj Head & Associate Professor in Chemistry Department of Chemistry, SBK College, Aruppukottai - 626 101, TamilNadu, India
Honorable Member	Dr.Sindhu. K Assistant Professor, Department of Veterinary Pharmacology and Toxicology Veterinary College, Gadag – 582101, Karnataka, India.
Honorable Member	Dr. S. Umamaheswari Assistant Professor, Department of Environmental Biotechnology School of Environmental Sciences Bharathidasan University, Tiruchirappalli – 620 024, Tamil Nadu
Honorable Member	<b>Dr. P. Santhanam</b> Associate Professor, Department of Marine Science, School of Marine Sciences, Bharathidasan University, Tiruchirappalli. Tamil Nadu. India

Honorable Member	Dr. S. Jayachandran Professor &Head,Dept. of Oral Medicine and Radiology, Tamil Nadu Govt. Dental College and Hospital,Chennai -600003, Tamil Nadu,India.
Honorable Member	<b>Dr. Komalavalli Narayanaswamy</b> Associate Professor and Head , PG and Research Department of Botany, Alagappa College of Arts & Science, Karaikudi, Tamil Nadu, India
Honorable Member	Dr.V.M. Srinivasan Assistant Professor (Plant Pathology) Department of Crop Protection Thanthai Roever Institute of Agriculture and Rural Development, Valikandapuram Post, Perambalur - 621115., Tamil Nadu.
Honorable Member	<b>Dr.Rina Poonia</b> Associate Professor, Department of Arts, Faculty of Arts & Law, Manipal University, Jaipur,India.
Honorable Member	Dr.M.Shanthasheela Professor Department of Agricultural Extension and Rural Sociology Tamil Nadu Agricultural University, Lawley Road Coimbatore, Tamil Nadu, India - 641003
Honorable Member	Dr. M. Lekeshmanaswamy Principal, PG and Research Department of Zoology, Kongunadu Arts and Science College G.N. mills (PO), Coimbatore-641 029, TamilNadu, India.
Honorable Member	<b>Dr. N. Balakrishnan</b> Professor, Directorate of Research Tamil Nadu Agricultural University, Lawley Road, Coimbatore, Tamil Nadu, India - 641003.
Honorable Member	<b>Dr.Syed Mohamed</b> Asst. Prof. Dept. of Zoology, Jamal Mohamed College Tiruchirappalli, TamilNadu, India
Honorable Member	<b>Dr.N.Raman</b> Associate Professor, Department of Chemistry, VHNSN College, Virudhunagar-626 001, TamilNadu, India.
Honorable Member	Dr.Komal Kumar Javarappa Institute of Molecular Medicine Finland, University of Helsinki, Finland, Biomedicum Helsinki 2U, G315b, Finland- 00014.
Honorable Member	Dr.A.Dinakara Rao Professor, Center for Bioinformatics, School of Life Sciences, Pondicherry University, Puducherry, India

Honorable Member	Dr.K.Sivakumar Professor, Department of Botany, Annamalai University, Annamalai Nagar, TamilNadu, India
Honorable Member	Dr.A.Kalyana Sundaram Associate Professor(Entomology), Tamil Nadu Agricultural University, Lawley Road Coimbatore, Tamil Nadu, - 641003.
Honorable Member	Dr.P.Ramachandran Director & Head, Trichy Institute of Regenerative Medicine, Thillai Nagar West,Trichy,TamilNadu, India.
Honorable Member	Dr.S.Senthil Murugan Assistant Professor, Department of Animal Nutrition, College of Veterinary and Animal Sciences, Pookode, Wayanad, Kerala, India
Honorable Member	Dr.V.Violet Dhayabaran Associate Professor, Department of Chemistry, Bishop Heber College (Autonomous), Puthur, Tiruchirappalli, Tamil Nadu, India.
Honorable Member	Dr.Ananthnag B Lecturer, Department of Environmental Science, Kuvempu University, Shivamogga, Karnataka, India.
Honorable Member	<b>Dr.G. Rubalakshmi</b> Scientist & Director, GRD Bio Research Centre #3/41, Nanbargal Nagar, Muthukalipatty, Rasipuram TK, Namakkal DT- 37401. T.N. ,India.
Honorable Member	Dr.M.Ramesh Professor, Department of Biotechnology, Alagappa University, Karaikudi-630003,Sivagangai Dt, TamilNadu,India.
Honorable Member	Dr.S.Ezhil Vendan, Scientist, Food Protect ants & Infestation Control Department, CSIR-Central Food Technological Research Institute, Mysore-570 020, Karnataka, India.
Honorable Member	Dr.S.Yamini Sudha Lakshmi Assistant Professor, Department of Medical Biochemistry, University of Madras, Taramani Campus, Chennai-600113, TamilNadu, India.

Honorable Member	Dr.V.L.Madhu Prasad Directorate of Extension, University of Agricultural Science, Hebbal,Bangaluru-560024. Karnataka,India.
Honorable Member	Dr.T.Shanmugasundaram Department of Vegetable Crops, Horticultural College and Research Institute, Tamil Nadu Agricultural University, Coimbatore-641 003, Tamil Nadu,India.
Honorable Member	Dr.C.Thamaraiselvi Assistant Professor, Dept. of Biotechnology Mother Teresa Women's University Kodaikanal-624101, TamilNadu, India.
Honorable Member	Dr.R.Selvaraj Department of Veterinary Physiology, Centre for Laboratory Animal Technology & Research (CPCSEA approved), Sathyabama University, Chennai – 600 119.
Honorable Member	Dr. Hasan S.A. Jawad Animal Production Department, Agricultural Faculty, University of Baghdad, Baghdad, Iraq.
Honorable Member	Dr.C.Kathirvelan Assistant Professor, Department of Animal Nutrition Veterinary College and Research Institute, Tamil Nadu Veterinary and Animal Sciences University, Namakkal -637002. TamilNadu, India.
Honorable Member	<b>Dr. John Abraham</b> Assistant Professor, Department of L.P.M.,College of Veterinary and Animal Sciences, Pookode, Wayanad. 673576, Kerala, India
Honorable Member	Dr.P.Kavitha Assistant Professor, Department of Zoology and Biotechnology AVVM Sri Pushpam College (Autonomous) Poondi, Thanjavur, TamilNadu, India.
Honorable Member	Dr. Gopal Muthu Scientist -'C', DHR-Model Rural Health Research Unit ICMR-National Institute of Epidemiology Government of India, Primary Health Centre Campus Kallur-627 010, Tirunelveli District, Tamil Nadu, India

Honorable Member	Dr.Ranjith.D Assistant Professor, Department of Veterinary Pharmacology and Toxicology, College of Veterinary and Animal Sciences, Pookode, Wayanad – 673576. Kerala, India
Honorable Member	Dr.Prantosh K. Paul Assistant Professor, Department of Computer & Information Science, Raiganj University, Raiganj, West Bengal-733 134, India.
Honorable Member	Dr. Ajay Anil Gurjar Professor & Dean Academics, Sipna College of Engineering & Technology, Amravati(M.S)- 444606,India.
Honorable Member	Dr.V.E.Nethaji Mariappan Scientist"F" Centre for Remote Sensing and Geoinformatics Sathyabama University,Rajiv Gandhi Road, Sholinganallur, Chennai – 600119,Tamil Nadu
Honorable Member	Dr.N.Mahesh Assistant Professor – III Department of Chemistry & Biosciences SASTRA University Srinivasa Ramanujan Centre, Kumbakonam, Thanjavur Dist, Tamilnadu, INDIA
Honorable Member	Dr.Sumit Kumar Gupta Dean of Science, Department of Physics, Parishkar College of Global Excellence, Jaipur, Rajasthan, India
Honorable Member	Mr.S.M.Prasad Assistant Professor, Department of Nutrition and Dietetics, Sadakathullah Appa College, Rahmath Nagar, Tirunelveli-627011. T.N.India
Honorable Member	Dr.Prakash.M Professor, Department of Genetics and Plant Breeding, Faculty of Agriculture, Annamalai University, Annamalai nagar- 608002.Cuddalore District
Honorable Member	Dr.M.N.Harisha Guest Lecturer, Department of Wildlife and Management, Kuvempu University, Jnanasahyadri, Shankaraghatta - 577451. Shimoga, Karnataka, India
Honorable Member	Mr.Sridhar Ramachandran Assistant Professor, Department of Biological Science, Gojan College of Teacher Education, Chennai-600 052, TamilNadu, India

Honorable Member	<b>Dr.P.Jeyaseelan</b> Department of Agricultural Extension, Faculty of Agriculture, Annamalai University, Annamalai Nagar – 608 002, Cuddalore
Honorable Member	Dr.Suja George Principal Scientist, Department of Biotechnology, M.S. Swaminathan Research Foundation, Taramani, Chennai 600113.
Honorable Member	<b>Dr.Muthuraman A.,</b> Senior Lecturerm , Pharmacological unit, AIMST University, 08100 Bedong, Kedah, Malaysia
Honorable Member	<b>Dr.G.Rama Rao</b> Principal Scientist &Head, Dept.of Crop Physiology, RARS Lam, Guntur-522034, ANGR Agricultural University, Andhra Pradesh, India
Honorable Member	Dr.Y.V. Krishna Reddy Department of Agricultural Engineering, Aditya Engineering College, Surampalem- 533437, East –Godavari, A.P., India
Honorable Member	<b>Dr.Pushpa S Murthy</b> Senior Scientist, Department of Spice and Flavor Science, AcSIR Associate Professor (Biological Sciences), CSIR - Central Food Technological Research Inst. MYSURU, Karnataka, INDIA
Honorable Member	Dr.Mathews Plamoottil Asst. Professor in Zoology, Govt. College Chavara, Kollam, Kerala, India
Honorable Member	Dr.N.Vijayakumar Assistant Professor Dept.of Biochemistry & Biotechnology Annamalai University, Annamalainagar-608 002, Tamilnadu, India.
Honorable Member	<b>Dr. E.Emimal Victoria</b> Assistant Professor, Department of Zoology Sri Meenakshi Govt. Arts College for Women, Madurai, TamilNadu, India
Honorable Member	Dr.C.Kandeepan Asst.Professor and Head, PG Department of Zoology, A.P.A College of Arts and Culture, Palani-624601, Dindigul Dt. Tamil Nadu,India.

Honorable Member	<b>Dr.A.Radha</b> Assistant Professor, Dept. of Zoology Kunthavai Naacchiyar Govt Arts College for Women, Thanjavur-7,TamilNadu, India.
Honorable Member	Dr.P.Ramachandran Director & Head, Trichy Institute of Regenerative Medicine, Thillai Nagar West,Trichy,Tamil Nadu,India.
Honorable Member	Dr.B.Kaleeswaran Assistant Professor, Dept. of Zoology & Biotechnology, A.V.V.M.Sri Pushpam College, Poondi, Thanjavur, TamilNadu, India.
Honorable Member	Dr.S.Yamini Sudha Lakshmi Assistant Professor, Department of Medical Biochemistry, University of Madras, Taramani Campus, Chennai-600113, TamilNadu, India.
Honorable Member	Dr.K.Nagarajan Associate Professor & Head Department of Zoology VHN Senthikumara Nadar College, Virudhunagar, TamilNadu, India.
Honorable Member	<b>Dr.S.Lingathurai</b> Assistant Professor, Department of Zoology and Research Centre, at Aditanar College of Arts & Science, Virapandianpattinam, Tiruchendur - 628 216 Thoothukudi District.
Honorable Member	Dr.D.Sivaraman Scientist-C Department of Pharmacology, Sathyabama University, Jeppiaar Nagar, Rajiv Gandhi road, Chennai- 600 119. TamilNadu, India.
Honorable Member	<b>Dr.Suja George</b> Principal Scientist, Department of Biotechnology, M.S. Swaminathan Research Foundation, Taramani, Chennai 600113.
Honorable Member	Dr.S.V.Sai Prasad Principal Scientist & Head ICAR-IARI, Regional Station, Near Agriculture College, Indore – 452 001, Madhya Pradesh, India

Honorable Member	Subburaj. M Authorised Officer, Kolkata Seaport, Kolkata International Airport and Haldia port Food Safety and Standards Authority of India Ministry of Health and Family welfare, Govt. of India Benfish Tower, 31 GN Block, Sector V, Salt lake city Kolkata -700091, India
Honorable Member	Dr.Ga.Bakavathiappan Associate Professor in Zoology SBK College, Aruppukottai - 626 101, TamilNadu, India E.Mail: ga.bakavathiappan@gmail.com
Honorable Member	Dr.Omkar Prasad Baidya Assistant Professor, ESI-PGIMSR and ESIC Medical College, Joka, Kolkata, West Bengal, India
Honorable Member	Dr. Preethi Balasundaram Post-Doctoral Fellow, Wieden Group Alberta RNA Research & Training Institute Department of Chemistry and Biochemistry University of Lethbridge, 4401 University Drive Lethbridge, Alberta, Canada T1K 3M4
Honorable Member	Dr. Horne Iona Averal IQAC Coordinator, Associate Professor PG Research Department of Zoology, Holy cross college (Autonomous), Trichy. TamilNadu, India.
Honorable Member	Dr. S. Thenmozhi Assistant Professor (SS & AC) Soil Fertility and Irrigation Water Management TNAU, Coimbatore, Tamil Nadu, India
Honorable Member	Dr. S. Suganya Kanna Associate Professor, (Agricultural Entomology), Agricultural College and Research Institute, Tamil Nadu Agricultural University. Coimbatore, Tamil Nadu, India
Honorable Member	Dr.K.Saravanan Assistant Professor ,PG & Research Dept. of Zoology, Nehru Memorial College (Autonomous), Puthanampatti, Tiruchirappalli, TamilNadu,India
Honorable Member	Dr.C.Ravinder Singh Chief Scientist - Tissue Culture & Hydroponics AAKASH GREEN RESEARCH PRIVATE LIMITED 14B/1, Bryant Nagar, 9th Street East Thoothukudi, Tamil Nadu - 628008, India.

Honorable Member	Dr.M.Biruntha Assistant Professor, Department of Animal Health and Management, Alagappa University, Karaikudi, TamilNadu, India
Honorable Member	Dr.S.Sasikala Head&Associate Professor, Department of Computer Applications, Hindusthan College of Arts and Science, Coimbatore - 641 028, Tamilnadu, India.
Honorable Member	Dr.Y.V. Krishna Reddy Department of Agricultural Engineering, Aditya Engineering College, Surampalem- 533437, East –Godavari, A.P., India
Honorable Member	Dr.Manigopa Chakraborty Chief Scientist cum University Professor Department of Genetics & Plant Breeding, Birsa Agricultural University, Kanke, Ranchi, Jharkhand – 834006., India.
Honorable Member	<b>Dr.Huda Falah Hasan Radi Alqaraghuli</b> Assistant Professor, College of Veterinary Medicine, University of Baghdad,Baghdad, Iraq.
Honorable Member	Dr.Arvind Prasad Dwivedi Lecturer, Department of Biochemistry, Govt. Sanjay Gandhi Smriti College, Sidhi, Madhya Pradesh, India.
Honorable Member	Dr.A.Suganya Associate Professor, Department of Agricultural Science, Tamil Nadu Agricultural University, Coimbatore, Tamil Nadu, India.
Honorable Member	Dr.M.Karthikeyan Assistant Professor (Plant Pathology) Department of Vegetable Crops ,HC&RI Tamil Nadu Agricultural University ,Coimbatore TamilNadu,India
Honorable Member	Vijaya Bhaskara Reddy.MUTHA Asst. Prof.Faculty of Public Health, St Theresa International College, 1 Moo 6 Rangsit-Nakhon Nayok Road (Klong 14), Bungsan,Ongkharak – 26120 Nakhon Nayok, Thailand

Honorable Member	Dr.Thirumal Kumar D Assistant Professor(Jr) Department of Integrative Biology, School of Bio Sciences and Technology Vellore Institute of Technology Vellore – 632014, Tamilnadu, India.
Honorable Member	Dr. Saikat Sen  Dean of Faculty,  Faculty of Pharmaceutical Sciences  Assam down town University,  Panikhaiti, Guwahati, Assam - 781026, India
Honorable Member	Dr. P. Chandramani Professor, (Agricultural Entomology), Agricultural College and Research Institute, Tamil Nadu Agricultural University Kudumiyanmalai – 622 104. Pudukkottai Dist., Tamil Nadu, India
Honorable Member	Dr.S.Prema Associate Professor of Computer Science, Arulmigu arthanareeswarar arts and science college, Tiruchengode, Tamilnadu

### **Indian Journal of Natural Sciences (IJONS)**

 Volume XV (15)
 August 2024

 CODEN: IJONS (85) (2024)
 ISSUE 85
 ISSN: 0976 - 0997

S. No.	CONTENTS	Page No.
110	Application of Analytical Hierarchy Process (AHP) in Landslide Susceptibility Assessment of Zunheboto Sadar Block of Zunheboto District, Nagaland Khekuto Kiho and Asha Manjari K.G	76973-76985
111	Using Hybrid Machine Learning Methods to Predict Plant Disease on Soil Conditions K.Jyothi and G.Shankar Lingam	76986-76991
112	Phtyochemical and Biological Investigation on Arial Part of <i>Heliopsis helianthoides</i> Methanolic Extract D.Aruna Kumari, Gana Manjusha.K and B.Vaishnavi	76992-76999
113	Exogenous Application of Brassinolide and Alpha-Tocopherol Improving Physiological, Biochemical, and Harvest Attributes in <i>Vigna radiate</i> L. (Co-6) variety Under Salinity Stress Aamir Abdullah, R. Somasundaram and Kathiravan Mani	77000-77008
114	Sustainable Agriculture Practices in Thanjavur: Addressing Challenges in Traditional Paddy Farming and Marketing S.Santhakumar, S. Ravichandran, R.Venkatraman and S. Manimaran	77009-77013
115	Kinematic and Geotechnical Assessment of Vulnerable Slopes and Geotechnical Properties of Soil in Zunheboto Sadar, Zunheboto District Nagaland Khekuto Kiho, Asha Manjari K.G, Wangshitula Ozukum Paolenmang Haokip	77014-77023
116	Evaluation Neuro-Protective Effects of <i>Erythrina variegata</i> towards Aluminium Chloride (AlCl <sub>3</sub> ) Induced Oxidative Stress of Alzheimer's Disease in Rat Model Saleem Ahmed, Seema Mehdi, K.L.Krishna, Prakruthi S M and Suman	77024-77034
117	Computational Evaluation on Molecular Structure, Vibrational Assignments, Electronic Properties, NBO Analysis, Topological Analysis and Molecular Docking Study of ( <i>E</i> )-3-(1, 3-Benzoxazol-2-ylsulfanyl)-1-Phenylprop-2-en-1-one K . Laavanya , S. Muthu , R . Yuvashri , A. Anish Fathima and G. Usha	77035-77051
118	IoT based Assistive Device for Monitoring quality of Post Harvested Fruits Mohana Priya.R, A.Reni and Shree Harasha Vardeni S N	77052-77056
119	Navigating Regulatory Norms for Fixed-Dose Combinations in India Gowthami K R, Deeksha K S, Keerthiraj K S and Balamuralidhara V	77057-77065
120	Ayurveda Management of <i>Ashmari</i> (Renal Stone): A Single Case Study Nidhi Parmar, Vaidehi Raole and Yesha Kacha	77066-77070
121	A Management of Vatarakta w.s.r. Gout through Ayurveda - A Single Case Study Mamta Rajpurohit, Gyan Prakash Sharma, Achala R. Kumawat and Neeraj Kumar Pathak	77071-77076

122	An Efficient Framework for a Multi-criteria Neutrosophic Decision Making Method based on Kharif Crop Selection S. Rubeela Mary and R. Sophia Porchelvi	77077-77083
123	A Review on Impurity Profiling Gowni Aswini, B.Deekshitha and S.Shakir	77084-77093
124	Silver Nanoparticles in Antidiabetics and Wound Healing Sharmila Naykar and Ramdas .T	77094-77103
125	Comparison of Promptly Effect of Mulligan Bent Leg Raise Technique and Suboccipital Muscle Inhibition Technique in Attendant with Hamstring Tightness: An Experimental Study Jaynesh Vandra, Bansari Patel and Arvind Kumar	77104-77110
126	Cascade Multilevel Inverter for Grid-Connected Hybrid Solar and Wind Energy Systems P. Marimuthu, P. Kamalakar, P. Sarala and N. Raju	77111-77118
127	Enhancing Transdermal Drug Delivery: the Pivotal Role of Ethosomal Nanoparticles in Overcoming Skin Barrier Challenges Mashaerabdelazim Ibrahim Bakhit, Shamoon Mahammed, Yassin Babkir Elshiekh Mohamed and Y. Sravani	77119-77134
128	Molecular Docking Study on Anti Diarrhoeal Activity of Notchi Karpam - A Siddha Formulation M.Akila ,A.Vasudevi, K.Thayalini, M.V.Mahadevan, V.Mahalakshmi and N.J.Muthukumar	77135-77140
129	Anticataract and Aldose Reductase Enzyme Inhibition Potential of the Siddha Formulation <i>Ilaneer Kuzhambu</i> on Glucose-Induced Cataract Model Srinivasan Moorthiyamma Rajaram, Kayalvizhi Panchamoorthy, Subathra Thangamani, Saravanasingh Karanchandmohan Singh, Rajakumar K, Anbarasan Balasubramanian, Shanmugapriya Ponnappan, Ramamurthy Murugan, Christian Gnanaraj Johnson, Meenakumari Ramasamy	77141-77148
130	Comprehensive Ayurvedic Management of Diabetic Foot Ulcer – A Case Report Gajiram D. Banothe, Chandrakant Pawar and Shalaka More	77149-77152
131	Nano <b>PRE JD</b> Continuous and Nano <b>PRE JD</b> Irresolute Functions in Nano Topological Spaces J. Anuf Sarumathi and V.L. Stella Arputha Mary	77153-77160
132	Potential Drug Target from Breast Milk <i>Lactobacillus</i> against Vaginal Pathogens Sandhiya .T and Jeyabharathi S	77161-77168
133	Thalassemias Clinical Description and Management Mohammed Basheir Ishag Mohammed, Sravani Jollireddy, Dipak Dnyandeo Bharambe and Veerendra Uppara	77169-77177
134	Assessment of Herbal Extract of Guava Leaves for Maintaining Good Oral Health Shweta Bakshi and Indrani Bhattacharya	77178-77183
135	Formulation and Organoleptic Evaluation of Mukhwaas As Functional Food Pranali Jaju and Yamee Shah	77184-77191
136	A Common Fixed -Point Theorems in Complex Valued Dislocated Metric Spaces Rinku Jain, Rekha Jain and Gopal Yadav	77192-77202

137	Future Prospects of Indian Traditional Medicine for Snake Bite Treatment: A Comprehensive Review Dhivya, Daniel Sundar Singh, Roshan Nawaz, Prakashraj, Solai Ganesh, Ram Sridhar, Sowmya	77203-77214
138	Fuel Characterization and Kinetic Study of Sugarcane Bagasse Briquette for Power Generation S.Esakkiammal, A.N.Seethalashmi and Ishwarya .P	77215-77226
139	Securing the Future: A Comprehensive Review of Block Chain Security Protocols and Challenges Priyankaben Vashi, Srikant Singh and Dharmesh Purani	77227-77235
140	Can Humanism Lead to Happiness?: Examining Mamet's Humanistic Outlook in 'Reunion' M. Renuga and B. Kanchanamala and M. Saraswathy	77236-77244
141	Identity and Alienation in Chitra Banerjee Divakaruni's Oleander Girl N.Vadivu	77245-77250
142	Prevalence of Optimism in Mother- Child Relationships in the Novel the Binding Vine by Shashi Deshpande M. Saraswathy	77251-77254
143	Exploring the Prominence of Soft skills B. Kanchana Mala	77255-77258
144	Tilling the Earth, Telling the Tale: Ecological Layers in John Steinbeck's, <i>The Grapes of Wrath</i> .  J. Beaulah Joseline	77259-77263
145	Coping Mechanism: A Psychological Approach to Rohinton Mistry's Works C.Shahin Banu	77264-77268
146	The Enduring Significance of Literature in the Digital Age: A Comprehensive Exploration R.Sathees Kumar	77269-77273
147	Investigation into Crop Yield Survival Rates using Various Casting Techniques with Agricultural Data C.Karkuzhali and R.Padmapriya	77274-77281
148	Efficient Bird Species Classification: A Deep Learning Approach Helen K Joy, Sridevi R, Electa Alice Jayarani A and Fabiola Hazel Pohrmen	77282-77290
149	Assessing Different Growing Media on Growth, Flowering and Yield of African Marigold ( <i>Tegetes erecta</i> L.) under Low Hills of Uttarakhand Anshul Nautiyal, Suneeta Singh and A. K. Saxena	77291-77303
150	Powder Face Scrub Formulation with Antioxidant Attributes Dilip B, Sushmit Bauldas, Sruthi Sadanandan, Madhu Kumar.K.V, Aniketh Pinnada, Giresha .A.S and Apurva Kumar R Joshi	77304-77309
151	Women Entrepreneurs and COVID-19: Challenges and Opportunities Keerthi Chandrika and P. Bhanumathi	77310-77325
152	Simplified Kundalini Yoga: A Study on Its Impact on Stress Reduction and Life Satisfaction in Men with Alcohol Addiction Ramanathan N, S.Murugesan and Pon.Anbarasu	77326-77329
153	Advances and Future Frontiers in Microbial Bioremediation of Oil Contaminated Environments Pooja Kasana and Pankaj Kumar Rai	77330-77338

154	Performance of Custom Power Devices for Improvement of Power Quality S. Lakshmi Devi, M. Jyothsnadevi, A. Venu Gopal Reddy and K Prathibha, Rajesh Reddy Duvvuru	77339-77349
155	A Case Study of <i>Vamana Karma</i> Followed by <i>Shaman Aushadhi</i> in The Management of <i>Ekakushtha</i> w.s.r. to Psoriasis Parag Devadiya and Achalaram Kumawat	77350-77360
156	Review Article on Future Prospects of Hydropower M.Malathi, K.Vinoth, G.Anbalagan and B.Rajeswari	77361-77365
157	The Concept of Psychomachy and Holy Grail in Brown's <i>The Da Vanci Code</i> Emagulate Rani J and Thenmozhi A	77366-77370
158	Prevalence of Incidental Cone Beam Computed Tomographic Findings Among Rural Population of Western Maharastra: A Retrospective Study Anjum Ara J Farooqui, Jamebaseer M Farooqui, Anwesha Samanta, Smita Lahane, Sudharani Biradar and Rahul G Pandhare	77371-77377
159	Exploring Knee Osteoarthritis Diagnosis through Efficient Mixture of Machine Learning and Deep Learning Models: A Comprehensive Review S. Ponmalar and Mary Magdalene Jane .F	77378-77388
160	Use of Artificial Intelligence (AI) for Pesticide Detection: A Case Study- based Approach Kriti Ahuja, Naina Jain and Madhuben Sharma	77389-77401
161	A Study of Psychological Issues and Gen Z's Education and Lifestyle Suffering V.B. Sowmiya and Suganthi V	77402-77405
162	A MCDM Method based on Aggregation Operators under Cubic Root Fuzzy Sets D.Sivakumar and S.Sangeetha	77406-77415
163	Application of Queuing Theory for the Normal Petrol Station and Automated Petrol Bulk K. L. Murugananatha Prasad, G. Sundarrajan, P.S. Stem Edilber	77416-77427
164	Formulation and Evaluation of Fast Dissolving Tablets Containing Methanolic Leaf Extract of <i>Psidium guajava</i> Linn. Evincing Anti Hyperglycemic Activity Sudheer Kumar Penumudi, Rama Rao Nadendla and Asiya Begum	77428-77446
165	How Much Carbon Footprint Does A Household Emit? A Comparative Research between Low and High-Income Households Bhagya Das and Olimpiya Borgohain	77447-77452
166	Analyzing Everyday Psychological Boredom in the Aspects of Existentialism Vijayalakshmi B and Devibala B	77453-77456
167	Advancements in Diagnosing and Monitoring Knee Osteoarthritis through Intelligent Sensor Technologies R.Ranjani and L. Thara	77457-77465
168	Management of Bronchial Asthma in Ayurveda through Vamana ( <i>Therapeutic emesis</i> ) along with Oral Ayurvedic Medication: A Case Study Nishant Patel, Nisha Munishwar and Kajal Senghani	77466-7774
169	A Scientometric Analysis of Phenacetin Retrieved from Web of Science Database S.Rajeswari and K.Kanimozhi	77475-77489

170	Psychological Impact of Financial Strain on Caregiving: Insights from Lorelei Parker's <i>Handle with Care</i> and Research on Families Raising Children with Disabilities Keerthana R, Prakash A, M.R. Bindu and Lamessa Oli	77490-77494
171	Doubly Fed Induction Generator based Wind Energy Conversion System of PI and Fuzzy Logic Controller Y.Sudha,K. Shyama Satya Naga Teja and T. Parameshwar	77495-77498
172	Identification of Potential Drugs for Epilepsy by Drug Repurposing using Strength Centrality Shanmugapriya.M, R.Sundareswaran, Induja.M.C, Ilakkia Bharathi.B, Karishmaa S and Krithiukha K B	77499-77509
173	Prediction and Segregation of Iris Dataset using K-Nearest Neighbors Mahalanobis Metric Abinaya Durai Singam and Selvi Devasahayam	77510-77518
174	LTE Power Budget Handover Algorithm Barkha Makwana and Sneha Saini	77519-77523
175	Wound Healing of Extraction Socket - Recent Advancement Priyanka Parida, Rojalin Parida, Ripan Seikh, Riddhiman Dutta and Md Jalaluddin	77524-77531
176	An Observational Prospective Study on Knowledge, Use and Attitude towards Multivitamins Supplements in Tertiary Healthcare Hospital A.M.Janani, Pavithra .V, Pavithra .D, Pavithra .T, Sarputheen .M and Sowmiya .S	77532-77537
177	Revolutionizing Education: The Transformative Synergy of AI, IoT and ML R. Sandrilla	77538-77552
178	Rapid Stability Indicating RP-HPLC Method for the Estimation of Organic Impurities for Linezolid in Linezolid Drug Substances U. Chandra Sekhar, T. Veera Reddy and P.Sanjeeva	77553-77569
179	The Diabetes Dilemma : Integrative Solutions Unveiled Hamsaveni L, Dharani R K, Gaganraj B, Syed Sagheer Ahmed, Bharathi D R and Chandan K	77570-77576
180	Comparison of Blood Flow Restriction Training and Resistance Training with Slow Movement Tempo on Muscle Strength and Throwing Capacity of Upper Limb in College Going Cricket Players Revati Sunil Pagare, Sandip Parekh and Bhavana Gadhavi	77577-77584
181	A Comparative Study of Fermented and Non-Fermented Bamboo Shoot and their Applications in Nutraceutical and Pharmaceuticals Izaz Hussain, Satyabrat Sarma, Hiyashree Sharmah, Lakhyajit Borah, Abdul Hadi Umam, Mostafa Khursid Alam, Sneha Prabin and Biplab Kr. Dey	77585-77601
182	Internet of Nanothings for Medical Applications - A Review J.Manga and V.J.K.Kishor Sonti	77602-77613
183	Coumarin Derivatives as Enoyl Acyl Carrier Reductase Inhibitors in Antitubercular Therapy Deepika .P, Sherin .A, M. K. Sirajudheen, and Shaniba Mariyam K U	77614-77619
184	Liquid Waste Treatment using Organic Coagulating Agents R.M.Muthuraman, Indhumathi.V, Abitha.A,Dinesh.B, Shoaibhussain.MD and Jayasri .K	77620-77626

185	Total Directed Graph S.Mahesh Priya and M.Kamaraj	77627-77634
186	Attachment Theory and Grief: Understanding the Relationship between Attachment Styles and Grief Responses Rupali Yadav and Kalpana Randhawa	77635-77646
187	Role of Media in Increasing Violence against Women and Girls in the Society Om Prakash Yadav and Lohans Kr. Kalyani	77647-77651
188	An Implementation of USB based Data Acquisition System for Temperature Measurement using LabVIEW Niyat V. Patel Kapilkumar C.Dave, Pradeep N.Patel and Aarti N.Bokade	77652-77657
189	Curcumin Encapsulated Nanoscale Chitosan– A Potent Outcome N. Annlin Bezy, K. Francy and A. Lesly Fathima	77658-77672
190	Hybrid Approach of Combined RNN and the SALP Optimization Technique to Detect the Intrusions using the LSSA Algorithm A. Vinitha and B. Rosiline Jeetha	77673-77680
191	Developed a Hybrid Fast Correlation-based Feature Selection with Improved Weighed Particle Swarm Optimization to Predict and Classify Heart Disease at An Early Stage L. Jaya Singh Dhas, T. Velumani, R.Murugan, A.R. Deepa and C. Jaspin Jeba Sheela	77681-77689
192	A Partial Backlog Inventory Model for Perishable Items with Linear Holding Cost, Time and Selling Price Dependent Split Demand and Time-Varying Deterioration T.Vanjikkodi and V. Pankajam	77690-77705
193	Low Level of Ambulatory Physical Activity is a Risk Factor for Persisting Pain in Acute / Subacute Low Back Pain – A Prospective Cohort Study Sweta Upadhyay and M. Balaganapathy	77706-77713
194	Screening of Phytochemicals and (H <sub>2</sub> O <sub>2</sub> -Free Radical Scavenging Activity in <i>Terminalia arjuna</i> (Roxb.) Wight & Ar. Leaf Extract Alagusundaram .P, Asharaja .A and M. Mayandi	77714-77722
195	Effect of Different Levels of Nitrogen in Combination with Nano Urea on Flowering, Yield and Quality of Crossandra ( <i>Crossandra infundibuliformis</i> L.) cv. Lakshmi S. Gowtham and P. Karuppaiah	77723-77728
196	Advancements in Protein-based Therapies for Cancer: A Comprehensive Analysis Mallikarjuna Gandla and Niranjan Babu Mudduluru	77729-77737
197	Applying the Double Formable Transform to Deal with a Various Boundary Value Problems: The Telegraph Equations and the Klein-Gordon Equations Sharad B. Ugale and Dinkar P. Patil	77738-77746
198	Some Distance - based Topological Indices of Star Starbell Graph and Wheel Starbell Graph Babysuganya K and Sivasankar S	77747-77754
199	Structure of a Graph Associated with Annihilator Ideals of $\mathbb{Z}_n$ Nepur Ranjan Hazarika and Bikash Barman	77755-77758

200	A Decision Making Problem based on Neutrosophic Soft Expert Set to Analyse the Components that Cause Cancer Jayasudha .J and Raghavi .S	77759-77765
201	A Mathematical Perspective behind Atmospheric Chemistry Hema Sukhija and Aarti Trehan	77766-77777
202	T2D Digital Twin: GV Analysis to Recommend Meds Vaishnavi Anand and S. Karthika	77778-77788
203	Pythagorean Intuitionistic and Pythagorean Interval-Valued Intuitionistic Fuzzy Graph S.Anitha and P.Jayalakshmi	77789-77794
204	Water Quality Assessment of Rural Area Lake of Village Segvi Ta.: Valsad-Gujarat, India Bhadreshkumar Rameshbhai Sudani	77795-77802
205	The Role of Neuromarketing in Persuasive Consumer Choices of Wearable Fitness Devices in Bengaluru Chaithra S R and S.Umamaheswari	77803-77809
206	A Novel Method for Solving Uncertain Differential Equations Gethsi Sharmila R and Suvitha S	77810-77822
207	In vitro and In-silico Study of the Plant Extract of Barleria lupulina with the Evaluation of it's Antibacterial and Antioxidant Properties Anindya Bagchi, Anusree Raha, Prosenjit Mukherjee, Monit Pal, Palash Chandra Biswas, Kunal Datta, Paramita Karmakar and Samiran Sadhukhan	77823-77832
208	Knowledge amongst Clinicians about the Current Trends in Immediate Loading of Implants: A Questionnaire-based Survey Athma Shetty, Omkar Shetty, Manoj Shetty and Nivya John	77833-77840
209	Ethnomedicinal Plants in India: A Comprehensive Review of their Therapeutic Potential and Phytochemical Constituents S. A Parmar, V. Mayasa and P. Gajula and K. Sweta	77841-77850
210	Pythagorean Fuzzy Assignment Problem by using Matrix One's Assignment Technique K.Senbagam, L.Saranya and A. Devika	77851-77856
211	A Comprehensive Analysis of Stock Price Prediction using Machine Learning Techniques P. Deepa and B.Murugesakumar	77857-77867
212	InceptionV3 in Healthcare: Automated Human Disease Classification Shweta Marulkar, BhavanaNarain and Rajivkumar Mente	77868-77874
213	A Review on Arsenic Contamination of Groundwater in Kolkata, West Bengal, India: Sources, Effects and Probable Methods of Mitigation Asik Hossian	77875-77883
214	Formulation and Evaluation of Chewable Tablets using <i>Hingwashtak churna</i> Gana Manjusha K, Aruna Kumari D and Radha Krishna Maddipati	77884-77888
215	Validation of Quality Parameters of Siddha Formulation "Vatharatchasan Mathirai" B.Prathisha, V. Manjari and B. Abarna	77889-77896
216	Identifying Prenatal, Perinatal and Neonatal Risk Factors Influencing on NICU (Neonatal Intensive Care Unit) Stay Duration Pranali Thakkar and Madhavan Iyengar	77897-77904

	An Examination of the Microplastic Concentration Present in Various Fish Organs of <i>Decapterus russelli</i> (Ruppell, 1830) Procured from the Kasimedu Fishing Harbour	
217	Situated along the South-Eastern Coast of India Yasmeen Ali Rafi and Kuppusamy Elumalai and Deepalakkshmi Balakrishnan	77905-77914
218	Mastering Mathematical Skills through Classic Game Pallanguzli R.Prabakaran, A. Nirmala, M. Vijaya Kumar and D. Santhosh Shanthakumar	77915-77920
219	Identification of Potential Phytocompounds from the Indian Medicinal Plants for Treating Pneumoconiosis– An <i>In silico</i> Approach M.Subasri, D. Pradeepa, A. Logeshwaran, V. Umabarathi and P. Ravikumar	77921-77936
220	Observation and Control of Spin Wave Mode Splitting and Mode Conversion in a Two-Dimensional Diamond Shaped Bicomponent Magnonic Crystal Kartik Adhikari	77937-77944
221	Some Continuous Maps in Soft Topological Spaces Jackson S and Carlin J	77945-77951
222	Antioxidant Potential of <i>Caesalpinia sappan</i> Linn. Protects Indomethacin Induced Enterocolitis in Rats A.M. Thimmaraju, K. Harshith, M.B. Lavanya, M.D. Hemanth and S Babitha	77952-77959
223	Academic Achievement of Higher Secondary Students in Relation to their Self-Efficacy Aadil Hussain Mir and R.Sivakumar	77960-77966
224	Effect of Positional Release Technique in Improving Range of Motion and Pain Pressure Threshold in Patients with Myofascial Trigger Points in Upper Trapezius Muscle: A Systematic Review Rubi Yadav, Sandeep Pattnaik and Sunita Sharma	77967-77980
225	Studies on the Impact of Heavy Metal Chromium on Biochemical Changes in the Adult Male Insect <i>Sphaerodema rusticum</i> Relation to Reproduction (Heteroptera: Belostomatidae)  V.Rajathi and B. Babitha	77981-77984
226	Nutritional and Health Benefits of Foxtail Millet: A Review Nitisha Nainwal Akanksha Yadav and Sumedha Chaudhary	77985-77991
227	Pandemic Accelerated Digitalization of Education: Perspective from Economical Terms  Deep Shikha and J.N. Baliya	77992-77997
228	Development and Evaluation of Gel Derived from Natural Sources for the Treatment of Inflammation Preeti Jadeja, R.C. Mashru, Apeksha Kadam and Parin Chokshi	77998-78010
229	Effect of Colloidal Nano Silica on the Properties of Natural and Recycled Aggregate Concrete Rizwan Khan, Arvind Kumar, Kuldeep Kumar Soni and Anuj Verma	78011-78018
230	A Novel Approach to Solving Transportation Problems using Congruence Modulo Fermatean Fuzzy Programming with Score Functions Sharmila Banu .S and Prasanna A	78019-78028
231	A Cloud Load Balancing Algorithm Considering Processor Capacity, Memory Capacity, Storage Capacity and Network Congestion Annwesha Banerjee Majumder, Sourav Majumder, Dipanjana Biswas and Pratiksha Nandi	78029-78034

232	Baryte Mineralization and its Characters from a Part of Hungund-Kushtagi Schist Belt, Bagalkote District, Eastern Dharwar Craton Ramaling D Natikar, Tejaswai Lakkundi, Krishnappa R Olekar and Murigeppa A. Malapur	78035-78041
233	Excision of Fibroma by Laser-A Case Report Aditi Chaturvedi, Vidushi Sheokand and Amit Bhardwaj	78042-78045
234	Preliminary Phytochemical Screening, FT-IR Spectral analysis, and Assessment of <i>in-vitro</i> Antibacterial Activity of Methanolic Crude Extract of <i>Alpinia galanga</i> (L.) Willd N. Rabita and K. Palanisamy	78046-78055
235	Crop Species for Heavy Metal Phytoremediation at the Yadavagiri Industrial Area, Mysuru, India Santhosh M Sosale and Raju N S	78056-78062
236	A Compressive Review: Mechanisms Underlying the use of Diuretics in the Treatment of Hypertension Rashmi Pathak, Himanshu Sharma, Phool Chandra, Prashant Halagali, Zeeshan Ali, and Amit Anand	78063-78075
237	Comparative Study on Types of MPPT Algorithms used in Photovoltaic Systems Akshitha .C.S, Balu Priyanka Angeline Swetha .K and N.B Muthuselvan	78076-78083
238	Anti-inflammatory and Comparative Antioxidant Activity of <i>Datura metel</i> L. Leaf Aqueous and Alcoholic Extract Sreeja Kaimal V, Rajeshwari V Kamat, Sunil S Jalalpure and Amal S Chandran	78084-78094
239	A Brief Insight into Viability and <i>In vitro</i> Pollen Germination Behavior of Ridged Gourd from Malda District of West Bengal Santanu Gupta, Sudipta Kumar Sil, Md. Masidur Alam and Sharli Sarkar	78095-78100
240	A Study on Sports Event Management in India Siddhant Mahambrey and C.Sathish Kumar	78101-78112
241	Phytoplankton Diversity in Relation to Physico-Chemical Parameters of PeriyaKulam Pond, Azhigiyapandipuram Ramisha .S, M. Mathevan Pillai, Juwairiya Nasreen .J Iren Amutha .A and Jacklin Jemi .R	78113-78120
242	The Effect of Sport on Life Skills in High School Students Mruigesh Singh Shekhawat and C.Sathish Kumar	78121-78130
243	A Cup of Green Tea Twice a Day is SARS-CoV-2 Preventive S Rana, J N Bhakta and M Ghorai	78131-78134
244	Analyzing the Traumatic Fidelity in Kindred by Octavia E. Butler: AnExploration on Trans-Feminine Experiences M. Vinoth, K.V.S. Nivetha Priya and V. Venkateshwaran	78135-78142
245	Navigating Green Choices: Understanding Affordability Among Low-Income Ethnic Groups in Bangalore's Suburban Areas Manjula.P and Syed Abid Hussain	78143-78151
246	Impact of Corporate Social Responsibility to Develop Marketing Strategy Ramesha V, Roopavathi V and Subramani S V	78152-78167
247	Trampled Psyche of Women: Embodying the Patriarchal Framework in Easterine Kire's A Terrible Matriarchy K. Priya Mol	78168-78172
248	An Empirical Study on Women Financial Self-Efficacy in Bengaluru Urban District S.Umamaheswari and Pramod A V	78173-78179

#### Editorial...

The state of Kerala is the largest tourist destination in India. Due to the rains that fall here during the seasons, the hilly places, rivers, and estuaries become places of natural beauty. India has two biodiversity hotspots in the world, namely the Western Ghats and the Eastern Ghats. The Western Ghats, which stretch across six states from Gujarat to Tamil Nadu, have many rare creatures and amazing birds. It is also the birthplace of many perennial rivers of life. The central government formed a committee in 2014 to protect this ecological zone with an area of about 56,825 square kilometers and issued a report. Most of the places in the Western Ghats region that add beauty to beauty are tourist destinations. The people of Kerala depend on the Western Ghats for their livelihood, and these hills have been identified as highly vulnerable areas prone to landslides. 13 villages in Wayanad district in these hilly areas were hit by massive landslides in the early hours of Tuesday, July 30, 2024, due to incessant rain. More than 350 (approx.) people were killed in three successive landslides within three hours. Thousands have been saved from injuries. Also, the main bridge connecting Suralmala, Attamala, Mundakkai, and Anartham villages collapsed. The central and state governments are taking various initiatives to provide comfort to the rural hill dwellers of Wayanad who are losing their livelihoods. A landslide is a mass movement of rock, soil, and silt. These mature for a long time and then suddenly move from top to bottom due to continuous rains. Landslides are caused by gravity when piles of rock and soil debris accumulate, and heavy rains that lead to soil saturation also cause erosion at the base of the slope, science says. It is the roots of the trees that make the mountains beautiful and hold the soil and rock together to prevent landslides. But in the villages that have become tourist destinations, the buildings have been cut down and the trees have been built for modern conveniences. Landslides are classified into four main types based on their movement: falls, overturns, slides, and flows. All these are dangerous. Considered one of the most populous Indian states, Kerala has 14.5% of its land area vulnerable to floods. And it fits in seismic zone 3. Also, the most severe lightning strikes occur in the months of April, May, October, and November in this state. The state of Kerala has been identified as a region prone to landslides. In the west, about 8% of the area is covered by the Western Ghats. Rainfall in Kerala is about 3000 mm per year. In some cases, it exceeds 5500 mm. It is worth noting that 2018 saw 24% more rainfall than normal. The first officially recorded flood in Kerala occurred in 1881. The oldest known landslide occurred on October 4, 1882. The current landslide damage value is higher than the 2018 landslide damage in Wayanad. Mainly, the economic sector and the agricultural sector have suffered irreparable losses. The state government and various organizations have appealed to the central government to declare this a national calamity. It is significant that the UN Climate Change Committee indicated in its report three years ago that such natural calamities are likely to occur in Kerala. Likewise, the Kerala government should set up a comprehensive committee to examine the important points of biodiversity scientist Madhav Gadgil's report. In any case, it is the innocent public who ultimately suffers. And there is an urgent need to lay down a comprehensive, workable plan to avoid economic loss due to such natural calamities. This incident shows that man is still lagging behind in predicting natural calamities like rain, flood, storm, earthquake, and landslide. Strict legal norms should be laid down for establishing tourist spots in high mountain areas, and these areas should be kept under full surveillance. It is also necessary to set up high-level teams of geological surveyors and set up research laboratories with advanced tools to detect the impacts in advance with community awareness. On behalf of IIONS, we offer our deepest condolences and tearful tributes to the people who lost their lives and belongings in this landslide. Many sincere thanks to all the soldiers, social workers, medical teams, environmentalists, government employees, youth organizations who are on the rescue mission in the field. Let's love nature! Let's protect nature! Let's live in harmony with nature!

Cover Image Credit: T.R.A.Arunthavaselvan, Wild life Photographer, Chief Editor IJONS