

INDIAN JOURNAL OF NATURAL SCIENCES (IJONS)
BIMONTHLY INTERNATIONAL JOURNAL

Editor-in-Chief
Dr.S.Vijikumar

Published by
TAMILNADU SCIENTIFIC RESEARCH ORGANISATION
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)".

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	Prof. Dr. V. Ramaiyan Marine Biologist Research Advisor Sri Venkateswara College of Arts & Science. Peravoorani, Thanjavur. Tamil Nadu. India.
Honorable Chief Advisor	Prof.Dr.A.Ganapathi UGC BSR Emeritus Professor Department of Biotechnology School of Life Sciences, Bharathidasan University, Tiruchirappalli. Tamil Nadu. India.
Honorable Chief Advisor	Prof.Mahdi Vatan Parast Chancellor & Professor, Islamic Azad University, Quchan Branch,Quchan-Khorasan Razavi- Iran.
Honorable Chief Advisor	Prof.Dr.Hamid Saremi Vice- Chancellor, Islamic Azad University, Quchan branch, Quchan-Iran.
Honorable Chief Advisor	Dr. Sr.D.Victoriya Amalorpava Mary , FBS Principal, Bon Secours College for Women, Vilar bypass road, Thanjavur - 613 006. Tamilnadu, South India.
Honorable Member	Dr. N. Jayabalan Professor & Head, Dept. of plant Science, School of life Sciences Bharathidasan University, Tiruchirappalli. Tamil Nadu. India.
Honorable Member	Dr. T.S. Saravanan Professor of Biotechnology cum Research Co-ordinator Dr.M.G.R Educational and Research Institute University Periyar E.V.R High Road, Maduravoyal, Chennai-600095.
Honorable Member	Dr.S.P.Subramaniyan Asst.Controller of Patents and Designs (Govt.of India) Patent Office, IPR Building, GST Road, Guindy, Chennai 600032
Honorable Member	Er. Abdul Samad. M. Kamdod Assistant Professor, Department of Civil Engineering Bharat Institute of Science & Technology for Women Mangalpally, Renga Reddy Dist. Andhra Pradesh, India
Honorable Member	Dr. Hina kousar Assistant Professor, Department of Environmental Sciences, Kuvempu University, Shankaraghatta, Shivamogga – 577 451, Karnataka ,India

Honorable Member	Mr.B.Rajesh Manager (Tech. Services Env.) Grass Roots Research & Creation India (P) Ltd Noida – 201301,Uttar Pradesh,India
Honorable Member	Mr. K.Ramanathan Head, Department of Bioinformatics, Thanthai Hans Roever College Perambalur, TamilNadu, India.
Honorable Member	Dr. K.Gurunathan Prof & Head, Department of Nano science & Technology, Alagappa University, Karaikudi, TamilNadu, 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	Dr.M.Ravichandran Prof.& Head Department of Environmental Management Bharathidasan University, Tiruchirappalli. Tamil Nadu. India.
Honorable Member	Dr.M.Krishnan Prof.& Head,Department of Environmental Biotechnology Bharathidasan University, Tiruchirappalli. Tamil Nadu. India
Honorable Member	Dr.K.Kumarasamy Prof.& Head,Department of Geography Bharathidasan University, Tiruchirappalli. Tamil Nadu. India
Honorable Member	Dr.A.Sathya, Assistant professor – III, School of Civil Engineering, SASTRA University, Thanjavur – 613401, TamilNadu, India.
Honorable Member	Dr.G.G.Hammad Ahmad Shadab Senior Assistant Professor, Department of Zoology Aligarh Muslim University,Aligarh-202002,Uttar Pradesh
Honorable Member	Dr.H.Syed Jahangir Assistant Professor, P.G. and Research Department of Botany Jamal Mohamed College(Autonomous) Trichirappalli-620020,TamilNadu,India.
Honorable Member	Mrs.A.Indumathi Asst.Professor,Department of Biotechnology, Bon Secours College for Women,Vilar bypass road, Thanjavur Tamilnadu, South India
Honorable Member	Dr. P. Santhanam Assistant Professor, Department of Marine Science, School of Marine Sciences,Bharathidasan University, Tiruchirappalli. Tamil Nadu. India
Honorable Member	Dr.B.Parimala Devi Additional Director, Veeramani Mohana Centre for Quality Life Engineering Research, Periyar Maniyammai University, Vallam,Thanjavur ,Tamil Nadu. India.

Honorable Member	Dr. M. Lekeshmanaswamy Associate professor PG and Research Department of Zoology Kongunadu Arts and Science College G.N. mills (PO), Coimbatore-641 029, TamilNadu, India.
Honorable Member	Dr.P.Udayakumar Principal, Jayanthi College of Education,Jayanthi Gardens Arulpurm,Tirupur(Dist.)-641605, TamilNadu, India
Honorable Member	Dr.Syed Mohamed Asst. Prof. Dept. of Zoology,Jamal Mohamed College Tiruchirappalli, TamilNadu, India
Honorable Member	Dr. Komalavalli Narayanaswamy Associate Professor, PG and Research Department of Botany H.H. The Rajah's College (Autonomous) Pudukkottai – 622 001, Tamil Nadu, India.
Honorable Member	Mis.S.Muthu Bharathi Asst.Professor,Department of Chemistry, Bon Secours College for Women,Vilar bypass road, Thanjavur Tamilnadu, South India
Honorable Member	Mrs.Sujatha Ilangovan Assistant Professor, Department of Biochemistry Holy Cross College, Tiruchirapalli-620002. TamilNadu, India.
Honorable Member	Dr.C.Kathirvelan Assistant Professor, Department of Animal Nutrition Veterinary College and Research Institute (TANUVAS) Namakkal -637002. TamilNadu, India.
Honorable Member	Professor.G.Ganesan Professor, Department of Mathematics Adikavi Nannaya University,Rajahmundry-533105 Andhra Pradesh, India.
Honorable Member	Mis D.Kalpana Asst.Professor,Department of Chemistry, Bon Secours College for Women,Vilar bypass road, Thanjavur TamilNadu, South India
Honorable Member	Dr.C.Balusami Assistant Professor, Department of Livestock Production and Management College of Veterinary and Animal Sciences Pookode-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.Vasudevan Ayyappan Department of Biology, Delaware State University, Dover, Delaware - 19901
Honorable Member	Mrs.A.Amargeetha Asst.Professor,Department of Chemistry, Bon Secours College for Women,Vilar bypass road, Thanjavur TamilNadu, South India
Honorable Member	Mrs.N.Rajarajeswari Asst.Professor,Department of Physics, Bon Secours College for Women,Vilar bypass road, Thanjavur TamilNadu, South India
Honorable Member	Dr.V. Rajendran Dean i/c Vanavarayar Institute of Agriculture Manakkadavu – 642 103. Pollachi Taluk, TamilNadu,India.
Honorable Member	Dr.C.Thamaraiselvi Assistant Professor, Dept. of Biotechnology Mother Teresa Women's University Kodaikanal-624101,TamilNadu,India.
Honorable Member	Dr. K.Madhava Chetty Plant Taxonomist, Assistant Professor,Department of Botany, SVUCS,S.V. University,Tirupati-517 502,Andhra Pradesh, India.
Honorable Member	Dr.S.Ramesh Kumar Assistant Professor, Department of Horticulture, Vanavarayar Institute of Agriculture, Manakkadavu-642103,Pollachi,TamilNadu,India.
Honorable Member	Dr. S. Balasubramanian Assistant Professor Department of Mathematics,Government Arts College (A), Karur – 639 005,Tamilnadu,India.
Honorable Member	Dr.G. Rubalakshmi D/o V.P. Govindaraj, #3/41, Nanbargal Nagar,Muthukalipatty, Rasipuram TK, Namakkal DT-637401.Tamilnadu,India.
Honorable Member	Mr.Sridhar Ramachandran Assistant Professor, Department of Biological Science, Gojan College of Teacher Education , Chennai-600 052, TamilNadu, India
Honorable Member	Dr. H. Krishna Ram #11, 1st Main, Opp. to SBM, Gnanaganaganagar,Bangalore- 560 056, Karnataka, 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	R.Muthukrishnan Assistant Professor Department of Soil Science and Agricultural Chemistry Vanavarayar Institute of Agricultural Manakkadavu, Pollachi-642- 103, TamilNadu, India
Honorable Member	K.Ashokkumar Senior Research Fellow Dept of Agricultural Microbiology, Tamil Nadu Agricultural University, Coimbutore-3, TamilNadu, India
Honorable Member	Dr.Subbiah poopathi Scientist-F/Deputy-Director Vector control Research Centre, Medical complex, Indira Nagar,Pondicherry-605006,India
Honorable Member	Dr. Sivalingam Elayabalan Assistant professor 3/33,Eachampatti village Attur(Tk),Salem(Dt)-636107, TamilNadu, India
Honorable Member	Dr. Horne Iona Averal Associate professor of Head Holy cross college (Autonomous), Trichy. TamilNadu, India
Honorable Member	Dr.G.Singaravelu Professor &Head Department of Education Bharathiar University Coimbatore-46 TamilNadu, India
Honorable Member	Dr.Ga.Bakavathiappan Associate Professor in Zoology SBK College, Aruppukottai - 626 101, TamilNadu, India.
Honorable Member	Dr.P.Govindaraj Head & Associate Professor in Chemistry Department of Chemistry SBK College, Aruppukottai - 626 101, TamilNadu, India
Honorable Member	Dr.M.Gopikannan Senior Research Fellow, 15-B3 Paramathi Main Road, S.P.Pudhur, Namakkal(Dt)-637 001, TamilNadu, India
Honorable Member	Dr.K.Samiyyan Dean Agricultural College and Research Institute, TNAU, Eachangkottai, Thanjavur-614902, T.N,India.
Honorable Member	Dr.M.Vasanthi Assistant professor Periyar Illam,(upstairs), No,4,Vayalur Road, Kumaran Nagar, Ramalinga nagar south Extension, Trichy-620017, Tamil Nadu, India
Honorable Member	Dr.N.Vijayakumar Assistant Professor Dept.of Biochemistry & Biotechnology Annamalai University, Annamalainagar-608 002, Tamilnadu, 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	Dr. Jai Shanker Pillai H.P. H.D. Ponna swamy Pillai # 644, Ganesh Temple Street Hunsur taluk, Mysore district – 571105, Karnataka, India
Honorable Member	Mr. Nesarajan. J Assitant Professor, Department of Zoology, Bishop Heber College, Trichy-17, Tamil Nadu. India

Indian Journal of Natural Sciences (IJONS)

Volume V(6) CODEN: IJONS (35) (2016)		Issue 35	April 2016 ISSN: 0976 - 0997
S. No.	CONTENTS	Page No.	
	Editorial		
1	Comparative Analysis of Laccase Immobilization on Magnetic Iron Nanoparticles using Two Activating Agents: EDAC and Cyanuric Chloride Anamika Das, Jatinder Singh and Yogalakshmi K N	10702-10709	
2	Effective Removal of Nitrate from Potable Water using Plant Coagulant B.Sowmiya Rajalakshmi, K.G.Ahila, A.Ancy Jenifer and C.Thamaraiselvi	10710-10719	
3	Passive Smoking, DMFT Index and Antioxidant Capacity of Saliva in Children 4-6 Years Maryam Ghasempour, Fahimeh Adeli, Mehdi Pouramir and Hossein Fatollahzadeh	10720-10725	
4	Influence of Zinc Deficiency on Yield and Yield Attributing Traits in F ₂ Population of Rice under Water Logged Conditions Salini.A.P, J.R.Kannan Babu and M.Dhandapani	10726-10732	
5	Character Association for Fruit Yield and Yield Traits in <i>Decalepis hamiltonii</i> Wight.&Arn. Pranay Kumar, Tarique Aslam and Anusree Anand	10733-10735	
6	Antimicrobial Activity of <i>Actinomycetes</i> from Soil Samples of Some Micro-Ecosystems of Satara District, Maharashtra, India against Selected Human Pathogens Sachin Ghadge and Ravindragouda Patil	10736-10746	
7	Effect of Salinity on Hatching Succession of Brine Shrimp (<i>Artemia franciscana</i> Kellong, 1906): a Laboratory Experiment Thangasamy Veeramani and Perumal Santhanam	10747-10753	
8	An Alternative Therapy of an Insulin Sensitizer Drug to the PCOS Induced Rats with a Common Perennial Vine R.Poornima, S. Bhuvaneshwari and Horne Iona Averal	10754-10759	
9	Soil Fertility Status of Sugarcane (<i>Saccharum officinarum</i> L.) Growing Soils of Theni District, Tamil Nadu K.Jeevika and B.BakiyathuSaliha	10760-10765	
10	Effect of Culture Filtrate of <i>Sclerotinia sclerotiorum</i> on Seed Germination and Seedling Vigour of Indian Mustard Jitendra Sharma, Shailesh Godika, Shashikant Goyal, Ratan Lal Sharma and Suresh Kumar Verma	10766-10768	
11	The Scientific Documentation of Diversity of Butterflies in Bishop Heber College Campus, Trichy District, Tamil Nadu. Nesarajan. J and Horne Iona Averal	10769-10779	
12	Influence of Resistance Training on Health and Some Selected Physical Variables among College Males Kaukab Azeem	10780-10784	

13	Biochemical Composition and Characterization of Edible Tissues of Penaeidean Shrimps, Nagapattinam Coast, Tamil Nadu, India R.Sri Sakthi Priyadarshini, P.K. Karuppasamy, N. Ramamoorthy, S.Ganga, V. Anjalidevi, Catherine Banu, Nancy Lydia and E. Nevika	10785-10796
14	A Comparative Study of some Selected Fitness Variables between Between Male Bodybuilders and Power Lifters of Telangana Kaukab Azeem	10797-10801
15	Anticariogenic Effect of Silver Nanoparticles synthesized using <i>Premna latifolia</i> Leaves Monicka seles.J, Jahira Banu,Anandan R, LogeshwariMN and Rajathi D Modilal	10802-10807
16	Zinnia Flower (Asteraceae) as a Key Nectar Source for Butterflies in the Bishop Heber College Campus, Trichy, TamilNadu Nesarajan. J and Horne Iona Avera	10808-10815
17	Synthesis and Characterization of Carotenoids from <i>Micrococcus luteus</i> and its Impacts in Human Health Concern A. Avila Jerley, M. Dhivya Bharathi and S. Rini Khanna	10816-10827
18	Efficacy of Organic Amendments aganist <i>Sclerotinia sclerotiorum</i> (Lib.) De Bary A.L. Yadav, R.P. Ghasolia, Suresh Kumar Verma, Sajjan Choudahry and Jitendra Sharma	10828-10830
19	Association Analysis among Oleic Acid Content and Oil Yield Component Traits in Sunflower (<i>Helianthus annus</i> L.) S. Abirami, R. Chandirakala, M. Muthu priya, N. Manivannan and PL.Viswanathan	10831-10833
20	Management of <i>Sclerotinia</i> Rot of Indian mustard through Plant Extracts A.L. Yadav, R. P. Ghasolia, Suresh Kumar Verma and Ratan Lal Sharma	10834-10836
21	Hydrocarbon Exposure and the Effect on Body Thermoregulation during Aircraft Fuel Tank Inspections Noorzaid Muhamad, Resni Mona @ SitiNurRasinah Abdullah, Jannathul Firdous, Ahmad <i>Zahir</i> Mokhtar and Abd Hafiz Qayyum Abd Talib	10837-10840
22	Effect of Dietary Incorporation of Nutraceutical Residue (Alfalfa Pellet) on Growth Performance and Haematological Parameters in Cross Bred Calves K.Jasmine Rani, C.R.Chithrима Seethal, Surej Joseph Bunglavan, K.Ailly and K.Shyama	10841-10846
23	A Descriptive Study on Lifestyle Factors Influencing Gastritis among University Students of UniKL RCMP in Malaysia Jannathul Firdous, Noorzaid Muhamad, Norain Ab. Latif, Dini Syazwani, Nurul Hidayah, Nurulnasuha and Nurhidayah	10847-10850
24	Prevalence of <i>Salmonella</i> , <i>Shigella</i> and <i>E.coli</i> in Vegetables of Various Markets in Kalaburagi (India) Mallikarjuna Gundappa and Subhaschandra M. Gaddad	10851-10858
25	Antimicrobial Activity of <i>Bignonia magnifica</i> and its Silver Nanoparticles against Urinary Tract Infection Pathogens Jahira Banu S, Monicka seles J, Anandan R and Rajathi D Modilal M	10859-10865
26	Genetics of Yield Traits, Seed Cotton Yield and Fibre Quality Traits in Upland Cotton (<i>Gossypium hirsutum</i> L.) K.Senthil Kumar, K.Ashokkumar and R.Ravikesavan	10866-10877
27	Effect of Fungicide Cumine Phenol on Three Isolated Fungal Species in Leather Manufacturing Ravindran Jaganathan, Rajeswari Ravindran and Vignesh Ramachandran	10878-10892

28	Phytochemical Screening of Bark Extracts of <i>Gmelina arborea</i> Sakthivel .S and Sheik Abdulla .S	10893-10901
29	The Effect of Nano Silver in D.C Conductivity of Biodegradable Polylactic Acid Nadia Abbas Ali	10902-10910
30	Glandular Hairs and Essential Oils of Stem and Leave from thePromosing Medicinal Legume <i>Cytisus triflorus</i> L' Hérít. Using Ultrasounds: Comparison with Conventional Hydrodistillation K. Ait-kaciAourahoun, F. Fazouane, S. Benayache and F. Souici	10911-10922

Editorial

Science for Nation Building....

National Science Day is celebrated all over India with great enthusiasm on 28th of February every year in order to commemorate the invention of the Raman Effect in India by the Indian physicist, Sir Chandrasekhara Venkata Raman on the same day in the year 1928. For his great success in the field of science in India, Chandrasekhara Venkata Raman was awarded and honored with the Nobel Prize in the Physics in the year 1930.



National Science Day 2015 in India was celebrated on 28th of February, at Saturday. The national science day has been started getting celebrated as the Science Carnival to recognize scientific activities and programs by the participation of students from school and college, scientists from the state and national faculties. This event celebration has provided a real platform for various new comer scientists to fix their feet and bright their career in the science profession. National science day is celebrated as one of the main science festivals in India every year during which students of the schools and colleges demonstrates various science projects as well as national and state science institutions demonstrates their latest researches. The celebration also includes public speech, radio-TV talk shows, exhibitions of science movie, science exhibition based on themes and concepts, watching night sky, live projects and researches demonstration, debates, quiz competitions, lectures, science models exhibitions and many more activities.

*The theme of the year 2015 was "**Science for Nation Building**" Based on the theme, the activities radio/television programmes, slideshows, debates/quiz/essay writing competitions, and other appropriate activities involving participation of large number of people, aimed at nurturing scientific temper in them, could be organized. Since Independence, India has travelled a long distance in research and development activities. Two scientists of Indian origin, Hargobind Khorana and S. Chandrasekhar, have won Nobel Prizes in Medicine and Physics. For all their eminent personalities' contribution let's pay our homage to them on this celebration day.*

Vijikumar.S

Editor in Chief

Indian Journal of Natural Sciences

Pudukkottai-TamilNadu,India.