Annual Index 2012

Annual Contents

January 2012 (No. 1)

Papers

Manipulating thyroid status alters endoplasmic reticulum calcium homeostasis in rat cerebellum

Sodium butyrate modulates pRb phosphorylation and induces cell death in human vestibular schwannomas in vitro
Rohan Mitra, B Indira Devi, Mohan L Gope, D K Subbakkrisna & Rajalakshmi Gope

Ameliorative effect of daidzein: A caveolin-1 inhibitor in vascular endothelium dysfunction induced by ovariectomy
Saurabh Sharma, Manjeet Singh & Pyare Lal Sharma

Crosstalk between RXR, LXR and VDR within blood mononuclear cellular model
Vivek P Dave, Deepak Kaul & Monika Sharma

Intranasal administration of insulin lowers amyloid-β levels in rat model of diabetes
Sarada Subramanian & Mathew John

Modulation of intestinal brush border membrane chemical composition during postnatal development in rats: Effect of gestational diabetes
Ruchi Sharma, Shailender Singh Chauhan & Akhtar Mahmood

Interaction of hydroalcoholic extract of Acorus calamus Linn. with sodium valproate and carbamazepine
Jatinder Katyal, Vikas Sarangal & Yogendra Kumar Gupta

Effect of Alternanthera brasiliana (L) Kuntze on healing of dermal burn wound
Chandana C Barua, Archana Talukdar, Shameem A Begum, Bhaben Buragohain, Jayanti Datta Roy, Debesh C Pathak, Dilip K Sarma, Asheesh K Gupta & Rumi S Bora

Antinociceptive activity of Sesbania sesban (Linn) wood extracts, a preliminary study
S A Nirmal, J H Bairagi, A N Patil, S C Pal, C D Upasani & S C Mandal

Optimization of medium composition for the production of mosquitocidal toxins from Bacillus thuringiensis subsp. israelensis
Subbiah Poopathi & B Archana
Secretion of cyclodextrin glucanotransferase in *E. coli* using *Bacillus subtilis* lipase signal peptide and optimization of culture medium
Dorra Ayadi-Zouari, Radhouane Kammoun, Sonia Jemli, Hichem Chouayekh & Samir Bejar

Staurosporine induced poly (ADP-ribose) polymerase independent cell death in *Dictyostelium discoideum*
Hina Mir, Jyotika Rajawat & Rasheedunnisa Begum

**Information for Authors**

**February 2012 (No. 2)**

**Papers**

*In silico* analysis of peptide binding features of HLA-B*4006*
Nikhil S Gadewal & Narendra N Joshi

Effect of L-deprenyl treatment on electrical activity, Na⁺, K⁺ ATPase, and protein kinase C activities in hippocampal subfields (CA1 and CA3) of aged rat brain
Rameshwar Singh, Monika Mishra, Sangeeta Singh & Deepak Sharma

Cold stress interaction on organophosphate insecticide poisoning: Age-related assessment in rat cerebral cortex
Annapa Poojary & P Mahaboob Basha

Anti-apoptotic potential of gymnemic acid phospholipid complex pretreatment in Wistar rats with experimental cardiomyopathy
Rahila Ahmad Pathan, Uma Bhandari, Saleem Javed & Tapas C Nag

Curcumin increases vasodilatory effect of cilostazol in diabetic rat aorta
K E Nurullahaoğlu-Atalik, N Okudan, M Belviranli, H Gökbel & L Şimşek

Progression of early phase diabetic nephropathy in streptozotocin-induced diabetic rats: Evaluation of various kidney-related parameters
G Kiran, C D Nandini, H P Ramesh & P V Salimath

Protective effect of *Tribulus terrestris* linn on liver and kidney in cadmium intoxicated rats
G Dhana Lakshmi, P Ravi Kumar, K Bharavi, P Annapurna, B Rajendar, Pankaj T Patel, C S V Satish Kumar & G S Rao

Development and neurobehavioural toxicity study of arsenic on rats following gestational exposure
D N Gandhi, G M Panchal & K G Patel
Influence of mating histories and age on female remating behaviour in a few closely related species of *Drosophila nasuta* subgroup

B Shruthi, Chayakumari, K Ravi Ram & S R Ramesh

Regeneration of plantlets from mature embryo calli of Western Ghats land race cultivar of rice, *Oryza sativa* L.

A U Gnanesh, V Krishna, R Shashi Kumar, Venkatesh, S R Santosh Kumar & H E Shashidhar

March 2012 (No. 3)

Papers

Antiviral activity of crude extracts of *Eugenia jambolana* Lam. against highly pathogenic avian influenza (H5N1) virus

Richa Sood, D Swarup, S Bhatia, D D Kulkarni, S Dey, M Saini & S C Dubey

Anti-tumor activity of rosmarinic acid in 7,12-dimethylbenz(a)anthracene (DMBA) induced skin carcinogenesis in Swiss albino mice

R Sharmila & S Manoharan

Protective effect of triphala on radiation induced acute intestinal mucosal damage in Sprague Dawley rats

Won Sup Yoon, Chul Yong Kim, Dae Sik Yang, Young Je Park, Won Park, Yong Chan Ahn, Seok-Hyung Kim & Ghee Young Kwon

Preventive and curative effects of *Achyranthes aspera* Linn. extract in experimentally induced nephrolithiasis

Anshu Aggarwal, Surinder K Singla, Manish Gandhi & Chanderdeep Tandon

Amelioration of ionizing radiation induced lipid peroxidation in mouse liver by *Moringa oleifera* Lam. leaf extract

Mahuya Sinha, Dipesh Kr Das, Sanjukta Datta, Santinath Ghosh & Sanjit Dey

Effect of rosuvastatin on obesity-induced cardiac oxidative stress in Wistar rats—A preliminary study

Javed A Ansari, Uma Bhandari, K K Pillai & S E Haque

Effect of consumption of fatty acids, calcium, Vitamin D and boron with regular physical activity on bone mechanical properties and corresponding metabolic hormones in rats

MR Naghii, Y Ebrahimpour, P Darvishi, G Ghanizadeh, M Mofid, G Torkaman, A R Asgari & M Hedayati
ANNUAL CONTENTS

Mortality and testicular derangements in red flour beetles, Tribolium castaneum (Herbst) exposed to hen’s egg white proteins
Ranjit K Parshad & Megha Kansal

Note
Safety and immunogenicity of Brucella abortus RB51 vaccine in cross bred cattle calves in India
Rashmi Singh, Sanjay Singh Basera, Kamal Tewari, Shweta Yadav, Sumit Joshi, Brajesh Singh & Falguni Mukherjee

Announcement
3rd National Conference on Innovation in Indian Science, Engineering & Technology (NCISET)

April 2012 (No. 4)

Papers

Quinazolinone exposure induces apoptosis and changes expressions of Fas/FasL and C-Flip in embryonic mice testicles
Maryam Shams Lahijani, Shirin Farivar, Mojgan Sarhady & Mitra Amiri

Purification of recombinant antigen BmSXP used in panLF Rapid kit for lymphatic filariasis
Teng Kew Khoo, Rahmah Noordin & Amutha Santhanam

Mosquito cell line C6/36 shows resistance to Cyt1Aa6
Lingling Zhang, Enjiong Huang, Baozhen Tang, Xiong Guan & Ivan Gelbič

Immunomodulatory effects of alcoholic and hydroalcoholic extracts of Moringa olfera Lam leaves
Otilia J F Banji, David Banji & Kavitha R

Wound healing activity of ethanolic extract of Shorea robusta Gaertn. f. resin
T A Wani, H H Chandrashekar, D Kumar, R Prasad, A Gopal, K K Sardar, S K Tandan & D Kumar

Rapid screening and cultivation of oleaginous microorganisms
Xinlei Gao, Ye Liu Zhongju Chen & Li Wu

Decolourization and degradation of C.I.Reactive Red 195 by Georgenia sp. CC-NMPT-T3
Madhuri Sahasrabudhe & Girish Pathade

Cadmium tolerance and antibiotic resistance in Escherichia coli isolated from waste stabilization ponds
Sova Patra, T K Das, C Avila, V Cabello, F Castillo, D Sarkar (Paria), Susmita Lahiri (Ganguly) & B B Jana
May 2012 (No. 5)

Papers

Anti-HCMV and KSHV effect of a trapping ligand antagonist for Herpesvirus-encoded GPCR
Hong-Ai Liu, Han-Xiao Sun*, Xue-Mei Mo, Shi-Yu Li, Xiu-Ying Li, Guang Zhang & Lu Li

Nimodipine down-regulates CGRP expression in the rat trigeminal nucleus caudalis
Lakshmy Vijayan, Devanshu Bansal & Subrata Basu Ray

Prokaryotic expression of chicken infectious anemia apoptin protein and characterization of its polyclonal antibodies
Shikha Saxena, Gandham Ravi Kumar, Prafull Singh, Uttara Chaturvedi, Lovleen Saxena, Rajiv Kumar, Aditya Prasad Sahoo, Juwar Doley, Rajmani, Amit Kumar, Sudesh Kumar & Ashok K Tiwari

Effect of supplementation of dermal fibroblasts conditioned medium on expansion of keratinocytes through enhancing attachment
S R Chowdhury, B S Aminuddin & B H I Ruszymah

Phenotypic and molecular characterization of indigenous rhizobia nodulating chickpea in India
Rhitu Rai, Prasanta K Dash, Trilochan Mohapatra & Aqbal Singh

Antihyperglycemic activity of *Woodfordia fruticosa* (Kurz) flowers extracts in glucose metabolism and lipid peroxidation in streptozotocin-induced diabetic rats
Neeraj Verma, G Amresh1, P K Sahu, Ch V Rao & Anil Pratap Singh

Antitumor potential of Castanopsis indica (Roxb. ex Lindl.) A. DC. leaf extract against Ehrlich's ascites carcinoma cell
Narayan Dolai, Indrajit Karmakar, R B Suresh Kumar, Asis Bala, U K Mazumder & Pallab Kanti Haldar

Effect of temperature on behavioural isolation: A study with *Drosophila ananassae* populations
Sujata Yadav & Anand Kumar Yadav

Nitric oxide alleviates oxidative damage induced by high temperature stress in wheat
A Bavita, B Shashi & S B Navtej
Papers

Hyaluronic acid with or without bone marrow derived-mesenchymal stem cells improves osteoarthritic knee changes in rat model: A preliminary report  
Abdul Razzaq Suhaeb, Sangeetha Naveen, Azura Mansor & Tunku Kamarul  

Elucidation of neuroprotective role of endogenous GABA and energy metabolites in middle cerebral artery occluded model in rats  
M Ramanathan, C Saravana Babu, A Justin & S Shanthakumari  

Effects of glucocorticoids on plasma levels of thyroid hormones (T\textsubscript{4} and T\textsubscript{3}) and testicular activity in catfish, *Clarias gariepinus* during different phases of annual breeding cycle  
P Suchiang, S Varkey & B B P Gupta  

*Moringa oleifera* Lam. leaf extract prevents early liver injury and restores antioxidant status in mice fed with high-fat diet  
Nilanjan Das, Kunal Sikder, Santinath Ghosh, Bernard Fromenty & Sanjit Dey  

Effect of *Nigella sativa* seeds extracts on iNOS through antioxidant potential only: Crude/total extract as molecular therapy drug  
Yamini B Tripathi, AP Chaturvedi & Nidhi Pandey  

Antistress activity of ethanolic extract of *Asparagus racemosus* Willd roots in mice  
Tanuj Joshi, Sangeeta P Sah & Anita Singh  

Acute toxicity of Bisphenol A in rats  
Jayanti Pant & Shripad B Deshpande  

Microbial fuel cells demonstrate high coulombic efficiency applicable for water remediation  
Mercy Devasahayam & Sam A Masih  

Evaluation of certain insecticides on nettings for their efficacy and wash resistance against mosquito species  
T Jeyalakshmi & R Shanmugasundaram  

Announcements

Call for BRSI Annual Awards Nominations for 2011 and Fellows for 2012; National Workshop on Marine Fish and shellfish Immunology and Immunotechnology
July 2012 (No. 7)

Papers

Stress-responsive hypothalamic-nucleus accumbens regulation may vary depending on stressors
Seung June Noh, Dong-Won Kang, Sang Bae Yoo, Joo Young Lee, Jin Young Kim, Bom-Taeck Kim, Jong-Ho Lee & Jeong Won Jahng

Effect of ANXA2 gene single nucleotide polymorphism (SNP) on the development of osteonecrosis in Indian sickle cell patient: A PCR-RFLP approach
Sanjay Pandey, Ravi Ranjan, Sweta Pandey, Rahasya Mani Mishra, Tulika Seth & Renu Saxena

Production and characterization of monoclonal antibodies against a local isolate of classical swine fever virus
Dilip K Sarma, Namrata Kashyap, Pankaj Deka, Prabhat Medhi & Parimal Roychoudhury

Anticancer activity of sclerotiorin, isolated from an endophytic fungus Cephalotheca faveolata
Yaguchi, Nishim. & Udagawa

Periyasamy Giridharan, Shilpa Amit Verekar, Amit Khanna, P D Mishra & Sunil Kumar Deshmukh

Asparagus racemosus Willd (Liliaceae) ameliorates early diabetic nephropathy in STZ induced diabetic rats
Rahul Somani, Abhay Kumar Singhai, Prashant Shivgunde & Dilpesh Jain

Anti-obese activity of Butea monosperma (Lam) bark extract in experimentally induced obese rats
Dixit P, T Prakash, Roopa Karki & D Kotresha

Carbohydrate and elicitor enhanced withanolide (withaferin A and withanolide A) accumulation in hairy root cultures of Withania somnifera (L.)
Madhavi Doma, Gauri Abhayankar, V D Reddy & P B Kavi Kishor

Degradation of bacterial DNA by a natural antimicrobial agent with the help of biomimetic membrane system
Suman Bhandary, Shaswati Chaki, Sayanti Mukherjee, Sukhen Das, Sanjit Mukherjee, Keya Chaudhuri & Sujata G Dastidar

Synergistic effect of calcium stearate and photo treatment on the rate of biodegradation of low density polyethylene spent saline vials
D Carol, S Karpagam, S J Kingsley & S Vincent

Biodiesel production from seed oil of Cleome viscosa L.
Rashmi Kumari, Vinod Kumar Jain & Sushil Kumar

Announcement

International Conference on Industrial Biotechnology (ICIB-2012), IX Convention of the Biotech Research Society, India, Indo-Italian Workshop on Food Biotechnology: Industrial Processing, Safety & Health

Information for Authors
August 2012 (No. 8)

Papers

Radiomodulation by Hoechst 33258 against radiation-induced damage in murine splenocytes
Zubaida Khatoon & R K Kale

Alterations in ambient salinity and pH lead to modulation of developmental gene expression in *Microhyla ornata* (Duméril and Bibron) and *Xenopus laevis* (Daudin)
Bhagyashri Chougule, Makoto Asashima, Vidya Patwardhan & Surendra Ghaskadbi

Role of complement activation and antibody in the interaction between *Mycobacterium tuberculosis* and human macrophages
S Manivannan, V Narayan Rao & V D Ramanathan

Wound healing activity of methanolic and aqueous extracts of *Plagiochila beddomei* Steph. thallus in rat model
G S Manoj & K Murugan

A promising strain of *Streptomyces* sp. with agricultural traits for growth promotion and disease management
Mansoor Alam, Seema Dharni, Abdul-Khaliq, Santosh Kumar Srivastava, Abdul Samad & Mahesh Kumar Gupta

Alkaline protease production, extraction and characterization from alkaliphilic *Bacillus licheniformis* KBDL4: A Lonar soda lake isolate
Anupama P Pathak & Kshipra B Deshmukh

Response of antioxidative and ethanolic fermentation enzymes in maize seedlings of tolerant and sensitive genotypes under short term waterlogging
Vishal Chugh, Anil K Gupta, Maninder S Grewal & Narinder Kaur

Influence of genetic relatedness and shoal size on shoaling preferences in juvenile *Puntius sarana subnasutus* (Hamilton Valenciennes)
N Jilna Alex & K John Thomas

Increase in voltage gated potassium currents of human lymphocytes on culture
Snekalatha S & Praghalathan Kanthakumar

Announcement

Retraction
September 2012 (No. 9)

**Review Article**

Regulation of telomerase activity in ovarian granulosa cells
Ewa Chronowska

595

**Papers**

Effect of methanolic and water extract of *Leucobryum bowringii* Mitt. on growth, migration and invasion of MCF 7 human breast cancer cells *in vitro*
G S Manoj, T R Santhosh Kumar, Saneesh Varghese & K Murugan

602

Polysaccharide enriched immunomodulatory fractions from *Tinospora cordifolia* (Willd) miers ax hook. F. & Thoms
Upendra Sharma, Manju Bala, Rikki Saini, Praveen Kumar Verma, Neeraj Kumar, Bikram Singh, Renuka Kulkarni Munshi & Supriya Bhalerao

612

*In vitro* expression studies of non structural 1 protein of Canine Parvo virus 2 by polyclonal antiserum raised against CPV-NS1 protein expressed in *Escherichia coli* as an antigen
G Ravi Kumar, Shikha Saxena, Lovleen Saxena, Uttara Chaturvedi, Lakshman Santra, Rajiv Kumar, Aditya Prasad Sahoo, Rajmani, Aswani Kumar, G S Desai, Sudesh Kumar & Ashok K Tiwari

618

Antidepressant and anxiolytic-like effects of 4n, a novel 5-HT3 receptor antagonist using behaviour based rodent models
Baldev Kumar, Ankur Jindal, Dilip Kumar Pandey, Shvetank Bhatt, Thangaraj Devadoss & Radhakrishnan Mahesh

625

Role of C-fibers during acute and chronic stress on formalin-induced paw edema in rats
Zahra Sepehri, Masoud Fereidoni & Saeed Niazmand

633

Protective effects of subchronic caffeine administration on cisplatin induced urogenital toxicity in male mice
M Khazaei, P D Bayat, A Ghanbari, S Khazaei, M Feizian, A Khodaei, H A S Alian

638

Thirteen-week oral toxicity study of carotenoid pigment from *Rhodotorula glutinis* DFR-PDY in rats
B V Latha & K Jeevaratanm

645

Functional ureogenesis and changes of amino acid metabolism in amphihaline shad hilsa (*Tenualosa ilisha*, Hamilton-Buchanan) while inhabiting in estuary and freshwater habitats
Umesh C Goswami, Makibur Rahman & Nirmalendu Saha

652

Eclosion behaviour of three species of *Drosophila* under different light regimes
Shereen Kouser & V. Shakunthala

660
Papers

Generation of HIV-1 based bi-cistronic lentiviral vectors for stable gene expression and live cell imaging
Lalit Sehgal, Srikanth B, Khyati Bhatt, Sneha Sansare, Amitabha Mukhopadhyay, Rajiv D Kalraiya & Sorab N Dalal

Ampicillin alone and in combination with riboflavin modulates *Staphylococcus aureus* infection induced septic arthritis in mice
Pinky Mal, Deboshree Ghosh, Debasish Bandyopadhyay, Kallol Dutta & Biswadev Bishayi

Effect of seabuckthorn extract on scopolamine induced cognitive impairment
Dharam Paul Attrey, Amrit Kumar Singh, Tanveer Naved & Balgangadhar Roy

Effects of perinatal exposure of lithium on neuro-behaviour of developing mice offspring
Gasem M Abu-Taweel

Abortifacient activity of *Plumeria rubra* (Linn) pod extract in female albino rats
Dinesh Dabhadkar & Varsha Zade

Effect of *Pinus massoniana* Lamb. bark extract on lytic cycle of Epstein-Barr virus
Shuxia Xu, Shimin Zhang, Xuedong Wang, Yuqian Gao, Xing Qin & Kun Wu

Antimicrobial activity of some promising plant oils, molecules and formulations
Dwijendra Singh, T R S Kumar, Vivek K Gupta & Pushplata Chaturvedi

Screening, isolation, taxonomy and fermentation of an antibiotic producer
*Streptomyces xinghaiensis* from soil capable of acting against linezolid resistant strains
Konda Shravan Kumar, Sriramouju Anuradha, Gadeppalli Rama Sarma, Yenamandra Venkateshwarlu & Veerabrahma Kishan

Protocol for augmented shoot organogenesis in selected variety of soybean [*Glycine max* L. (Merr.)]
M K Akitha Devi, G Sakthivelu, P Giridhar & G A Ravishankar

High acid invertase activity for a prolonged period in developing seeds/podwall of wild chickpea is detrimental to seed filling
Harinderjeet Kaur, Anil Kumar Gupta, Narinder Kaur & Jeet Singh Sandhu

Individual variation in response to simulated hypoxic stress of rats
Dishari Ghosh, Rajesh Kumar & Karan Pal

Announcements

Second National Symposium on Innovative Approaches and Modern Technologies for Crop Productivity, Food Safety and Environmental Sustainability, International Conference on Recent Trends in Climate Change Researches vis-à-vis Biodiversity
November 2012 (No. 11)

Papers

Olfactory tract transection in neonatal rats: Evidence for Mitral cell regeneration and restoration of functional connectivity with its targets
S P Anil, T R Laxmi, Bindu M Kutty & T R Raju

Olfactory tract transection reveals robust tissue-level plasticity by cellular numbers and neurotrophic factor expression in olfactory bulb
Mansoor Ali Khan BM, Sunil Thomas, Jitendra Kumar Sinha, Phalguni Anand Alladi, Ravi V & T R Raju

Chronic fluoxetine treatment affects gene expression of catecholamine enzymes in the heart of depression model rats
Natasa Spasojevic, Predrag Jovanovic & Sladjana Dronjak

Antiobesity effect of Safoof Mohazzil, a polyherbal formulation, in cafeteria diet induced obesity in rats
Pooja Gupta, Jogender Mehla & Yogendra Kumar Gupta

Nanoemulsified ethanolic extract of Phyllanthus amarus Schum & Thonn ameliorates CCl4 induced hepatotoxicity in Wistar rats
V Deepa, R Sridhar, A Goparaju, P Neelakanta Reddy & P Balakrishna Murthy

Antioxidant and hepatoprotective action of Asparagus racemosus Willd. root extracts
S R Acharya, N S Acharya, J O Bhangale, S K Shah & S S Pandya

Virgin coconut oil improves hepatic lipid metabolism in rats—compared with copra oil, olive oil and sunflower oil
S Arunima & T Rajamohan

An efficient in vitro regeneration protocol for a natural dye yielding plant, Strobilanthes flaccidifolius Nees., from nodal explants
Chitta Ranjan Deb & T Arenmongla

Enhanced rosmarinic acid production in cultured plants of two species of Mentha
Debleena Roy & Sandip Mukhopadhyay

Cloning and expression of a small heat and salt tolerant protein (Hsp22) from Chaetomium globosum
Rashmi Aggarwal, Sangeeta Gupta, Sapna Sharma, Sagar Banerjee & Priyanka Singh
December 2012 (No. 12)

Papers

Optimal concentration of hyaluronan and plant protein in different culture systems for \textit{in vitro} maturation of bovine oocytes
Jolanta Opiela, Ewa Latasiewicz & Zdzisław Smorąg

Effects of sodium dodecyl sulphate on enhancement of lipoxygenase activity of hemoglobin
F C Ezebuo, S O O Eze & F C Chilaka

Curcumin sensitizes lung adenocarcinoma cells to apoptosis via intracellular redox status mediated pathway
Gaurav Kaushik, Toshi Kaushik, Subodh Kumar Yadav, Sanjeev Kumar Sharma, Pavitra Ranawat, Krishan Lal Khanduja & Chander Mohan Pathak

Neuropharmacological potential of methanolic extract and a triterpene isolated from \textit{Madhuca longifolia} L leaves in mice
Triveni S Inganakal, Md. Liyakhat Ahmed & Paramjyothi Swamy

Effect of long acting insulin supplementation on diabetic nephropathy in Wistar rats
Shiju Thomas Michael, Rajesh Nachiappa Ganesh & Pragasam Viswanathan

Protective effects of different extracts of \textit{Eucommia ulmoides} Oliv. against thioacetamide-induced hepatotoxicity in mice
Jie Zheng, Qiuping Yan, Kun Zhang, Yang Zheng & Suqing Zhao

Endothelium-dependent and independent vasorelaxant effects of aqueous extract of \textit{Tridax procumbens} Lin leaf in rat aortic rings
Hussein M Salahdeen, Gbolahan O Idowu, & Babatunde A Murtala

Microwave radiation induced oxidative Stress, cognitive impairment and inflammation in brain of Fischer rats
Kanu Megha, Pravin Suryakantrao Deshmukha, Basu Dev Banerjeea, Ashok Kumar Tripathi & Mahesh Pandurang Abegaonkar

Protective effect of \textit{Spirulina} and tamarind fruit pulp diet supplement in fish (\textit{Gambusia affinis} Baird & Girard) exposed to sublethal concentration of fluoride, aluminum and aluminum fluoride
K P Sharma, N Upreti, Shweta Sharma & S Sharma
Induction of somatic embryogenesis in endangered butterfly ginger *Hedychium coronarium* J. Koenig  
Manju Verma & Y K Bansal  

Direct and indirect method of plant regeneration from root explants of *Caesalpinia bonduc* (L.) Roxb.—A threatened medicinal plant of Western Ghats  
S R Santosh Kumar, V Krishna, Venkatesh, K Pradeepa, K Girish Kumar & A U Gnanesh

**Annual Index**  
Contents  
Keyword Index  
Author Index

**List of Experts**