

CURRENT SCIENCE

Volume 116 Number 5

10 March 2019

696 In this issue

EDITORIAL

697 Challenges in predicting floods
V. V. Srinivas

NEWS

699 Science Last Fortnight ■ 703 DiatomBase – Principal online catalogue of diatoms, Surajit Roy and Jai Prakash Keshri ■ 704 Understanding behaviour: from crickets to elephants, Pratik Pawar

COMMENTARY

706 Bao Dhan of Assam: organically grown indigenous rice slated to increase farmer's income, Megha Rohilla, Priyanka Roy, Dhiren Chowdhury, Kishore Kumar Sharma, Prabal Saikia, Priyabrata Sen, Nagendra Kumar Singh and Tapan Kumar Mondal

SCIENTIFIC CORRESPONDENCE

709 Microbial deterioration of heritage monuments in Santiniketan, West Bengal, India, Nitin Keshari, Sudipta Kumar Das and Siba Prasad Adhikary ■ 711 Evidence for underwater current activity on the upper slope of the carbonate platform off western India using multibeam bathymetry, B. Chakraborty, V. Purnachandra Rao, Tejas Salkar, Vasudev P. Mahale and John Kurien

GENERAL ARTICLES

714 Solar module installation in India: concerns, options and roadmap
Amlan J. Pal

723 Ecosystem services approach for revitalizing agriculture in India
M. Manjula, L. Venkatachalam, P. Mukhopadhyay and Lalit Kumar

728 Soilless farming – the next generation green revolution
Bikram Pradhan and Bandita Deo

REVIEW ARTICLE

733 Isolation of fungi from various habitats and their possible bioremediation
Farazimah Yakop, Hussein Taha and Pooja Shivanand

RESEARCH ARTICLES

741 Use of processed biomass ash as a sustainable pozzolana
Vasudha D. Katare and Mangesh V. Madurwar

751 Impact of ecosystem respiration on carbon balance in a semi-evergreen forest of Northeast India
Dipankar Sarma, Kushal Kumar Baruah, Supriyo Chakraborty, Anand Karipot and Rulee Baruah

758 Effects of nitrogen application and planting density on growth and yield of *Sesbania* pea grown in saline soil
Xiaoqian Guo, Guanglong Zhu, Xiurong Jiao and Guisheng Zhou

765 Effect of temperature on litter decomposition, soil microbial community structure and biomass in a mixed-wood forest in European Russia
Kravchenko Irina, K., Tikhonova Ekaterina, N., Ulanova Ruzalia, V., Menko Ekaterina, V. and Sukhacheva Marina, V.



- 773 **Landslide susceptibility mapping using the analytical hierarchy process and GIS**
I. Semlali, L. Oquadif and L. Bahi
- 780 **Role of dams on the floods of August 2018 in Periyar River Basin, Kerala**
K. P. Sudheer, S. Murty Bhallamudi, Balaji Narasimhan, Jobin Thomas, V. M. Bindhu,
Vamsikrishna Vema and Cicily Kurian
- 795 **Size–logging interactions and population dynamics in tropical understorey birds**
Umesh Srinivasan and Suhel Quader
- 802 **Tissue-specific sexual dimorphism in the expression of *kisspeptin* and its receptors in spotted snakehead *Channa punctatus***
Amrita Bakshi and Umesh Rai



RESEARCH COMMUNICATIONS

- 811 **Astronomical significance of sun-dials in Srirangapatna, Karnataka, India**
Aalok Pandya, Tej Bahadur and Sandip Bhattacharya
- 816 **Impact of Cartosat-1 orography in 330 m Unified Model forecast**
A. Jayakumar, Jisesh Sethunadh, Timmy Francis, Saji Mohandas and E. N. Rajagopal
- 822 **Hydrocarbon generation potential of source rocks in Jaisalmer Basin, Rajasthan, India**
Rajesh Pandey, Dinesh Kumar, A. S. Maurya and Pooja Pandey
- 828 **A new record of *Nerita nigrita* Röding, 1798 (Mollusca: Gastropoda: Neritidae) from India**
Vikas Pandey, Ganesh Thiruchitrabalam and Kunal Satyam
- 831 **Rice straw biomass to high energy yield biocoal by torrefaction: Indian perspective**
S. R. Dhakate, Abhishek K. Pathak, Prateek Jain, Mandeep Singh, B. P. Singh, K. M. Subhedar, S. S. Sharda and R. K. Seth
- 838 **Nutrient composition, glucosinolate and vinyl-oxazolidine-thione profiling of Indian rapeseed (*Brassica juncea* Coss.) meal**
M. S. Mahesh, S. P. Tripathi and Prashant M. Puri



BOOK REVIEWS

- 842 **The Growth Delusion**, David Pilling; reviewed by P. A. Azeez and P. P. Nikhil Raj
 ■ 843 **Management of Collegiate Education in the 21st Century: Some Insights**, Srinivas K. Saidapur (ed.); reviewed by S. C. Sharma

PERSONAL NEWS

- 845 **R. G. Rastogi (1929–2018)**, Harish Chandra ■ 847 **Sitaram Rao Valluri (1924–2019)**, R. Sunder, K. S. Yajnik and R. Narasimha ■ 850 **Remembering S. R. Valluri**, Srinivas Bhogle



- ◀ COVER. Rocky shore coastline of South Andaman Island. (Inset) *Nerita nigrita*. See page 828.

Indexed in CURRENT CONTENTS/GEODATABASE/CHEMICAL ABSTRACTS/IndMED/SCOPUS/
WEB OF SCIENCE