

CURRENT SCIENCE

1402 In this issue

EDITORIAL

- 1403 **Diabetes and evolution**
Kirtana Vasu and Sandeep M. Eswarappa

CORRESPONDENCE

- 1405 **Microbes and agriculture: potentials and gaps**, Rana Pratap Singh ■ 1406 **Legislation limbo on e-pharmacies in India**, V. S. Ligade, N. Udapa and D. Sreedhar ■ 1407 **Genetic modification technology**, P. C. Kesavan; *Response by G. Padmanaban*

NEWS

- 1410 **Science Last Fortnight** ■ 1414 **Evolution of the universe and Earth's place in cosmos – The 2019 Nobel Prize for Physics**, Jayant Murthy ■ 1416 **Development of lithium-ion batteries – 2019 Nobel Prize for Chemistry**, A. Ramanan ■ 1418 **Out of breath: molecular description of cellular responses to hypoxia – 2019 Nobel Prize for Physiology or Medicine**, Padinjat Raghu ■ 1420 **Endophytes in agriculture**, T. S. Suryanarayanan and Karaba N. Nataraja

COMMENTARY

- 1422 **When biotechnologists lack objectivity**
Andrew Paul Gutierrez, Peter E. Kenmore and Aruna Rodrigues
- 1430 **National-level coordination strategies needed to mitigate the outburst of diabetes**
Govindasamy Agoramoorthy and Judu Havarasa
- 1433 ***Fistulina hepatica* (Schaeff.) With. belonging to the family *Fistulinaceae* in Nagaland, India**
Gloria Nyenthang, Asangla Kichu, Lydia Yephtho and T. Ajungla

GENERAL ARTICLES

- 1435 **Open access levels and patterns in scholarly articles from India**
Rajesh Priyani, Jyoti Dua and Vivek Kumar Singh
- 1441 **Energy credit cards and incentives for energy growth in India**
Lakshmi Pathak and Kavita Shah
- 1449 **Visualization analysis of research on rice with fertilizer from the 'agronomy' category based on CiteSpace**
Jie Sun and Bao-Zhong Yuan

REVIEW ARTICLE

- 1459 **Non-antibiotic potential of medicinal plants to combat urinary tract infections**
Poonam G. Daswani

RESEARCH ACCOUNT

- 1469 **Repository of fungal endophytes at VINSTROM, Chennai: waiting to be harnessed**
T. S. Suryanarayanan



RESEARCH ARTICLES

- 1475 **A hybrid-wavelet artificial neural network model for monthly water table depth prediction**
Anandakumar, A. R. Senthil Kumar, Ravindra Kale, B. Maheshwara Babu, U. Sathishkumar, G. V. Srinivasa Reddy and Prasad S. Kulkarni
- 1482 **Establishing empirical correlation between sediment thickness and resonant frequency using HVSR for the Indo-Gangetic Plain**
P. Anbazhagan, A. Janarthana Boobalan and H. S. Sbaivan
- 1492 **Physico-chemical, photocatalytic and cytotoxicity evaluation of *Annona muricata* L. fruit extract derived zinc oxide nanoparticles in comparison to the commercial chemical version**
Ahlam Abdul Aziz, V. S. Shaniba, P. R. Jayasree and P. R. Manish Kumar
- 1505 **Proton gradient regulator 5 of *Gossypium arboreum* enhances salt-stress tolerance in *Gossypium hirsutum***
Muhammad Naveed Shahid, Adil Jamal, Sarfraz Kiani, Javed Iqbal Wattoo, Bushra Rashid and Tayyab Husnain

RESEARCH COMMUNICATIONS

- 1512 **Sink removal from digital elevation model – a necessary evil for hydrological analysis**
Arabinda Sharma and K. N. Triwari
- 1516 **Assessment of level of service for urban signalized intersections in India**
Arpita Saha, Satish Chandra and Indrajit Ghosh
- 1521 **Xylooligosaccharides production from tobacco stalk xylan using edible acid**
A. K. Samanta, J. Chikkerur, Sohini Roy, A. P. Koltje, Manpal Sridhar, A. Dhali, K. Giridhar and S. Senanti
- 1526 **Influence of nutrient availability on the reproduction and offspring growth in *Vicia grandiflora***
Jeromi Kolodziejek
- 1531 **Variation studies in surface micromorphology on seed coat and endosperm of *Ensete superbum* (Roxb.) Cheesman: a conservation concern species of India**
V. Saroj Kumar, R. Jaishanker and A. Annamalai

BOOK REVIEWS

- 1537 **Annual Review of Microbiology, 2018**. Susan Gottesman, Carlome S. Harwood and Olaf Schneewind (eds); reviewed by Umesh Varshney
- 1538 **Annual Review of Astronomy and Astrophysics, 2018**. S. M. Faber and Ewine van Dishoeck (eds); reviewed by Biman Nath

COVER. Beef steak fungus, *Fistulina hepatica* (Schaeff.) With. See page 1433.

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