

**Editor in Chief:**

Prof. H.S. Amarasekera  
University of Sri Jayewardenepura, Sri Lanka

**Managing Editor:**

Dr. S.M.C.U.P. Subasinghe  
University of Sri Jayewardenepura, Sri Lanka

**Editorial Board:**

Prof. T. Owari  
University of Tokyo Hokkaido Forest, Japan

Prof. B.M.P. Singhakumara  
University of Sri Jayewardenepura, Sri Lanka

Prof. D.M.H.S.K. Ranasinghe,  
University of Sri Jayewardenepura, Sri Lanka

Prof. S.K. Ghosh  
Jadavpur University, Kolkata, India

Prof. N.J.G.J. Bandara  
University of Sri Jayewardenepura, Sri Lanka

Dr. R. Bonsi  
Scientific Certification Systems Global Services,  
Ghana

Dr. U.A.D.P. Gunawardena  
University of Sri Jayewardenepura, Sri Lanka

Dr. P. Perera  
University of Sri Jayewardenepura, Sri Lanka

Dr. T.D. Jayewardene  
University of Sri Jayewardenepura, Sri Lanka

Prof. M.M. Pathmalal  
University of Sri Jayewardenepura, Sri Lanka

**Editorial Advisory Board:**

Prof. R.P. Vlosky  
Louisiana State University, USA

Prof. C. Bossard  
St. Mary's College of California, USA

Prof. M. Ashton  
Yale School of Forestry and Environmental  
Studies, Yale University, USA

Prof. C. Visvanathan,  
Asian Institute of Technology, Bangkok, Thailand

Prof. A. K Mani,  
FC & RI, Mettupalayam, India

# JOURNAL OF TROPICAL FORESTRY AND ENVIRONMENT

December 2015

Volume 09, Number 02

**In this issue...****Feature Article:**

Potential of Biomass Based Electricity Generation in Sri Lanka

**Reviewed Articles:**

Optimisation of Environmental Factors on Oil Degrading Bacteria Isolated from Coastal Water and Sediments in Sri Lanka

Construction of Allometric Relationships to Predict Growth Parameters, Stem Biomass and Carbon of *Eucalyptus grandis* Growing in Sri Lanka

Identification and Quantification of Tree Species in Open Mixed Forests using High Resolution QuickBird Satellite Imagery

Greenhouse Gas Emissions from Plantation to the Proceeded Wood Products via State Timber Corporation Depots for Selected Tree Species using Life Cycle Assessment

Determination of the Effectiveness of Hal Bark (*Vateria copallifera*) as a Natural Preservative for Food Security of Confectionery Industry

Morpho-Physiological Dynamics of Weedy Rice Seeds Collected from Two Contrasting Agro-Ecological Zones in Sri Lanka

Leaf Extracts of *Lobelia nicotianaefolia* as a Potential Biopesticide Against Defoliator Pests

**Expert Review Panel:**

Prof. M.M. Pathmalal, University of Sri Jayewardenepura  
Dr. P.N. Dassanayake, University of Sri Jayewardenepura  
Dr. N.D. Ruwanpathirana, State Timber Corporation  
Dr. W.A.D. Mahaulpotha, University of Sri Jayewardenepura  
Mr. K.P. Ariyadasa, Sri Lanka Forest Department

## **Journal of Tropical Forestry and Environment**

Journal of Tropical Forestry and Environment (JTFE) is a peer reviewed international journal that publishes high quality original research articles in forestry, environmental sciences and natural resource management relevant to tropical regions. This is a semiannual journal published by the Department of Forestry and Environmental Science, University of Sri Jayewardenepura, Nugegoda, Sri Lanka. JTFE provides a multidisciplinary forum for discussion of issues and communication of research findings of wider interest to the community of forestry and environmental professionals, especially in the tropical regions. Although the journal has a specific geographical focus, it also welcomes high quality, original submissions of research and review manuscripts on issues of global importance. Acceptance for publication is subject to a double-blind peer-reviewing process.

The Publisher reserves the right to determine the format and the style of the journal and will commit to publish only the original contributions to the field of Forestry, Environment and Natural Resources by respective authors.

**Manuscript Submission:** Manuscript guidelines and submission instructions can be found at <http://journals.sjp.ac.lk/index.php/JTFE/about/submissions#onlineSubmissions>

### **Subscriptions:**

**Print:** Price for a single copy is LKR 500; International Price: US\$ 15 (including shipping & handling). Subscribers will receive two copies of each issue. Please make checks payable to Forestry and Environment Society, University of Sri Jayewardenepura.

**Online:** Online version is open access.

**Copyrights:** The publisher retains the copyrights of articles published in the journal. All open access articles are distributed under the terms of the Creative Commons Attribution license, which permits unrestricted use, distribution and reproduction in any medium, provided that the original work is properly cited.

**Disclaimer:** While the advice and information in this journal are believed to be true and accurate on the date of its going to press, neither the editors nor the publisher can accept any legal responsibility for any errors or omissions that may be made. The publisher makes no warranty, express or implied, with respect to the material contained herein. The use of general descriptive names, trade names, trademarks, and so forth in this publication, even if not specifically identified, does not imply that these names are not protected by the relevant laws and regulations.

### **Editorial Office:**

Ms. H.I.D. Hitihamu

Ms. L.L.U. Mandakini

**Cover Design by:** Charith Saranga

### **Publisher Information:**

Journal of Tropical Forestry and Environment

ISSN 2235-9370 Print    ISSN 2235-9362 Online

Department of Forestry and Environmental Science,

University of Sri Jayewardenepura,

Nugegoda,

Sri Lanka.

Telephone: +94 112804685

Fax: +94 112802914

Email: [jtfe@sjp.ac.lk](mailto:jtfe@sjp.ac.lk)

Web: <http://journals.sjp.ac.lk/jtfe>

©2015 University of Sri Jayewardenepura

Printed in Sri Lanka