

# Jurnal Sylva Lestari

**Editor-in-Chief:** Wahyu Hidayat, Ph.D. (University of Lampung, Indonesia)

**Associate Editor:** Yulia Rahma Fitriana, Ph.D. (University of Lampung, Indonesia)

## Editorial Boards:

Prof. Dr. Nam Hun Kim (Kangwon National University, South Korea)

Prof. Dr. Fauzi Febrianto (IPB University, Indonesia)

Yue Qi, Ph.D. (Chinese Academy of Forestry, China)

Md Mafizur Rahman, Ph.D. (Islamic University Bangladesh, Bangladesh)

Khongor Tsogt, Ph.D. (Institute of General and Experimental Biology, Mongolia)

Dr. Budiadi (Indonesian Network for Agroforestry Education (INAFe) – SEANAFE)

Dr. Christine Wulandari (University of Lampung, Indonesia)

Dr. Melya Riniarti (University of Lampung, Indonesia)

Dr. Indra Gumay Febryano (University of Lampung, Indonesia)

## Managing Editors:

Surnayanti, S.Hut., M.Si. (University of Lampung, Indonesia)

Hendra Prasetya, Ph.D. (University of Lampung, Indonesia, Indonesia)

## Mailing Address:

Department of Forestry, Faculty of Agriculture, Universitas Lampung  
Jl. Soemantri Brojonegoro No.1, Bandar Lampung 35145, INDONESIA

E-mail: [sylva.lestari@fp.unila.ac.id](mailto:sylva.lestari@fp.unila.ac.id)

Jurnal Sylva Lestari is an open-access journal launched in 2013, published by Department of Forestry, Faculty of Agriculture, University of Lampung in collaboration with Indonesia Network for Agroforestry Education (INAFe) - SEANAFE. Jurnal Sylva Lestari publishes original research articles related to forest and natural resources management, biodiversity conservation and management, wood science and timber technology, agroforestry, social forestry, forest products and services, and socio-economics of natural resources. It is primarily a medium for disseminating original theoretical and experimental researches, as well as technical reviews. This journal issues one volume annually consisting of three issues delivered every January, May, and September. Jurnal Sylva Lestari is accredited PERINGKAT 2 (SINTA 2) by the Ministry of Research, Technology and Higher Education of the Republic of Indonesia since Volume 7 Number 3, September 2019.

# Jurnal Sylva Lestari

## Peer Review Process

All manuscripts submitted to Jurnal Sylva Lestari must follow focus and scope and author guidelines. All manuscripts must be free from plagiarism contents. Editors will use plagiarism detection software to do similarity checking. The research article submitted to this journal will be peer-reviewed by at least 2 (two) reviewers. Editors will make the final decision of article acceptance according to reviewers' comments.

### Reviewers:

Prof. Dr. San Afri Awang (Gadjah Mada University, Indonesia)

Prof. Dr. Wahyu Andayani (Gadjah Mada University, Indonesia)

Dr. Sumit Manohar Yadav (Forest College and Research Institute, India)

Dr. Sitti Latifah (University of Mataram, Indonesia)

Ji Ae Ryu, M.Sc. (Kyungpook National University, Republic of Korea)

Dr. Tuti Herawati (Research, Development, and Innovation Agency, Ministry of Environment and Forestry, Indonesia)

Dr. Arida Susilowati (University of Sumatera Utara, Indonesia)

Dr. Muhammad Alif K. Sahide (Hasanuddin University, Indonesia)

Prof. Dr. Irwan Sukri Banuwa (University of Lampung, Indonesia)

Dr. Apri Heri Iswanto (University of Sumatera Utara, Indonesia)

Atus Syahbudin, Ph.D. (Gadjah Mada University, Indonesia)

Dr. Didi Tarmadi (Indonesian Institute of Sciences, Indonesia)

Dr. Agus Setiawan (University of Lampung, Indonesia)

Dr. Emi Roslinda (Tanjungpura University, Indonesia)

Dr. Faisal Danu Tuheteru (Halu Oleo University, Indonesia)

Arief Darmawan, Ph.D. (University of Lampung, Indonesia, Indonesia)

Hari Kaskoyo, Ph.D. (University of Lampung, Indonesia)

Lukmanul Hakim Zaini, S.Hut., M.Sc. (IPB University, Indonesia)

Prof. Dr. Nurheni Wijayanto (IPB University, Indonesia)

Prof. Rahmawaty, Ph.D. (University of Sumatera Utara, Indonesia)

Dr. Muhammad Adly Rahandi Lubis (Indonesian Institute of Sciences, Indonesia)

Dr. Samsuri (University of Sumatera Utara, Indonesia)

Dr. Satyawan Pudyatmoko (Gadjah Mada University, Indonesia)

Dr. Sarno (Sriwijaya University, Indonesia)

Duryat, S.Hut., M.Si. (University of Lampung, Indonesia)

Dr. Rahmat Safei (University of Lampung, Indonesia)

Tomy Listyanto, Ph.D. (Gadjah Mada University, Indonesia)

# Jurnal Sylva Lestari

Vol. 9, No.1, January 2021

## **Review Article**

### **Lignin as an Active Biomaterial: A Review**

- Nissa Nurfajrin Solihat • Fahriya Puspita Sari • Faizatul Falah • Maya Ismayati •  
Muhammad Adly Rahandi Lubis • Widya Fatriasari • Eko Budi Santoso • Wasrin Syafii ..... 1

### **The Removal of Cured Urea-Formaldehyde Adhesive towards Sustainable Medium Density Fiberboard Production: A Review**

- Muhammad Adly Rahandi Lubis • Sumit Yadav Manohar • Raden Permana Budi Laksana •  
Widya Fatriasari • Maya Ismayati • Faizatul Falah • Nissa Nurfajrin Solihat • Fahriya Puspita Sari •  
Wahyu Hidayat ..... 23

## **Full Length Research Article**

### **Household Livelihood Strategy Based on Capital Assets in Fires Prone Areas, Ogan Komering Ilir Regency, South Sumatera**

- Ari Nurlia • Dadang Hikmah Purnama • Sabaruddin Kadir ..... 45

### **Characterization and Potential of *Coelogyne rochussenii* Orchids from Bukit Rimbang and Bukit Baling Wildlife Sanctuary as Explant Source**

- Pebra Heriansyah • Gusti Marlina ..... 64

### **Antimicrobial Activity of Ten Extractives from Toba, North Sumatra and Mt. Merapi National Park Regions, Indonesia**

- Maya Ismayati • Deni Zulfiana • Setiawan Khoirul Himmi • Didi Tarmadi • Dita Meisyara •  
Aprawi Zulfitri • Titik Kartika ..... 76

### **Tree Health Management Strategy in Cianjur Urban Forest**

- Religiana Salsabila • Hariyadi • Nyoto Santoso ..... 86

### **Ergonomics Risk Assessment in Pine Resin Harvesting: A Static Postural Analysis (Penilaian Risiko Ergonomi dalam Kegiatan Pemungutan Getah Pinus: Analisis Postur Kerja Statis)**

- Efi Yuliati Yovi • Ahmad Fauzi ..... 104

### **Relationship Between Axial Location and Board Thickness Variation on the Development of Drying Schedule of Cemara Gunung (*Casuarina Junghuhniana* Miq.) (Hubungan Letak Aksial dan Variasi Ketebalan Papan terhadap Penyusunan Skedul Pengeringan Kayu Cemara Gunung (*Casuarina Junghuhniana* Miq.))**

- Hanan Purana Putra • Tomy Listyanto ..... 121

# Jurnal Sylva Lestari

Vol. 9, No.1, January 2021

## Short-Term Impact of Thinning of Mixed Forest on the Diversity of Flying Insects in Forest Management Unit of Banten

### (Dampak Jangka Pendek Penjarangan Hutan Campuran terhadap Keanekaragaman Serangga Terbang di KPH Banten)

Ahmad Budiaman • Noor Farikhah Haneda • Sarah Nova Irene Lumbantobing ..... 138

## The Production and Decomposition Rate of *Ceriops tagal* Litter in Tanjung Panjang Nature Reserve

### (Produksi dan Laju Dekomposisi Serasah *Ceriops tagal* di Cagar Alam Tanjung Panjang)

Mirawati Thalib • Dewi Wahyuni Kyai Baderan • Abubakar Sidik Katili..... 151

## Effect of Chemical Characteristics on Mechanical and Natural Durability Properties of Three Lesser-Used Wood Species

### (Pengaruh Karakteristik Kimia terhadap Sifat Mekanis dan Keawetan Alami Tiga Jenis Kayu Kurang Digunakan)

Sarah Augustina • Imam Wahyudi • I Wayan Darmawan • Jamaludin Malik • Yoichi Kojima • Taiyo Okada • Naoki Okano ..... 161

## Spatial Modeling of Javan Hawk-Eagle (*Nisaetus bartelsi*) Habitat Suitability in Bromo Tengger Semeru National Park

### (Pemodelan Spasial Kesesuaian Habitat Elang Jawa (*Nisaetus bartelsi*) di Taman Nasional Bromo Tengger Semeru)

Nirmala Ayu Aryanti • Tander Scila Serata Dwi Susilo • Ari Nadya Ningtyas • Mahmuddin Rahmadana..... 179