

# Prof. Dr. Apri Heri Iswanto, S.Hut., M.Si.

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*Prof. Dr. Apri Heri Iswanto, S.Hut., M.Si. is a professor in the field of Particleboard and Fiberboard Technology at the USU Faculty of Forestry. During his career, he has been trusted as Vice Dean III for Research, Community Service, and Cooperation in the period 2016-2021. In addition to teaching, he is also active in various scientific research activities related to wood and non-wood materials as raw materials for composite boards. He is also active as a reviewer for several reputable international journals, including the Journal of Building Engineering, the Journal of Cleaner Production, Industrial Crops & Product, the International Journal of Mechanics and Materials in Design, Construction and Building Materials, Environment Technology Innovative, Journal of the Korean Wood Science and Technology, Case Study in Construction Materials, Biomass Conversion and Biorefinery, BioResources, Polymers, Forests, and Frontier in Materials. Currently, he is active as a reviewer for internal research at USU, research from the Directorate of Research and Technology Development (DRTPM) of the Ministry of Research, Technology and Higher Education (Kemendikbudristek), and reviewer for the Higher Education Council (Dikti) of Kemendikbudristek for the matching fund grant program. From 2018-2021, he was the editor-in-chief of the Journal of Sylva Indonesiana (Sinta-3), and then from 2023 until now, he was the editor-in-chief of Global Forest Journal. Not only that, as of 2024, he also contributes as an editorial board member of Jurnal Sylva Lestari (indexed by Scopus).*

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## Publications

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2025

Jurnal internasional bereputasi

### **Modified acacia lignin-reinforced epoxy nanocomposites with PVA assistance for sustainable food packaging**

APRI HERI ISWANTO

2019

Jurnal internasional bereputasi

### **Antioxidant and antifungal activity of endophytic fungi associated with Agarwood trees**

APRI HERI ISWANTO

2021

Jurnal internasional bereputasi

### **A comprehensive review on natural fibers: Technological and socio-economical aspects**

APRI HERI ISWANTO

2017

Jurnal internasional bereputasi

### **Physical and mechanical properties of three-layer particleboards bonded with UF and UMF adhesives**

APRI HERI ISWANTO

2025

Jurnal internasional bereputasi

### **Characteristics of formacell OPEFB lignin by potassium hydroxide precipitation**

APRI HERI ISWANTO

2024

Jurnal internasional bereputasi

## **Isocyanate-free tannin-based polyurethane resins for enhancing thermo-mechanical properties of ramie (*Boehmeria nivea* L.) fibers**

APRI HERI ISWANTO

2025

Jurnal internasional bereputasi

## **Greener Polyurethane Adhesive Derived from Polyvinyl Alcohol/Tannin-Based Polyol for Plywood**

APRI HERI ISWANTO

2024

Prosiding seminar internasional

## **The effect of chemically modified wood particles on the termite durability of sandwich particleboard from *Cotylelobium melanoxydon* and *Gigantochloa pruriens***

NIKEN SUBEKTI , D Tarmadi , TEKAT DWI CAHYONO , ATMAWI DARWIS , SYAHIDAH , HIKMA YANTI , APRI HERI ISWANTO

2023

Jurnal internasional bereputasi

## **Biological Rotation Age of Community Teak (*Tectona grandis*) Plantation Based on the Volume, Biomass, and Price Growth Curve Determined through the Analysis of Its Tree Ring Digitization**

APRI HERI ISWANTO , EFFENDI TRI BAHTIAR , Nam-Hun Kim

2025

Jurnal internasional bereputasi

## **Enhancing the Performance of Cold-Setting Phenol-Resorcinol-Formaldehyde Resin Adhesives through Condensation Extension**

APRI HERI ISWANTO

2023

Jurnal internasional bereputasi

## **Durability of heat-treated *Paulownia tomentosa* and *Pinus koraiensis* woods in palm oil and air against brown- and white-rot fungi**

APRI HERI ISWANTO , WAHYU HIDAYAT , INTAN FAJAR SURI , Won Joung Hwang , Byantara Darsan Purusatama , Jong Ho Kim , Se Yeong Park , Seung Hwan Lee , Nam Hun Kim

2023

Jurnal internasional bereputasi

## **Artificial Weathering Effects on the Physical and Chemical Properties of *Paulownia tomentosa* and *Pinus koraiensis* Woods Heat-Treated in Oil and Air**

WAHYU HIDAYAT , INTAN FAJAR SURI , APRI HERI ISWANTO , Jong Ho Kim , Se Yeong Park , Nam Hun Kim , Seung Hwan Lee , Byantara Darsan Purusatama

2024

Jurnal internasional bereputasi

## **Isocyanate-free tannin-based polyurethane resins for enhancing thermo-mechanical properties of ramie (*Boehmeria nivea* L.) fibers**

APRI HERI ISWANTO

2025

Jurnal internasional bereputasi

## **Synthesis and Application of Activated Charcoal from Indonesian Sugar Palm Bunches (*Arenga longipes*) as a Potential Absorbent for Heavy Metals**

APRI HERI ISWANTO

2025

Jurnal internasional bereputasi

## **Performance of Exterior-Grade Plywood Composites Bonded With Formaldehyde-Free Bio-Adhesives Derived From Polyvinyl Alcohol, Citric Acid, and Microwave-Assisted Carboxymethylation of Lignocellulose**

APRI HERI ISWANTO

2021

## **Enhancing thermal and mechanical properties of ramie fiber via impregnation by lignin-based polyurethane resin**

APRI HERI ISWANTO

2024

## **Performance of Oriented Strand Board Made of Heat-Treated Bamboo (*Dendrocalamus asper* (Schult.) Backer) Strands**

APRI HERI ISWANTO

2023

## **Durability of heat-treated *Paulownia tomentosa* and *Pinus koraiensis* woods in palm oil and air against brown- and white-rot fungi**

APRI HERI ISWANTO

2025

## **Comparative Analysis of Fiber Characteristics and Chemical, Physical, and Mechanical Properties of Six Indigenous Bamboo Species from Indonesia**

RIANA ANGGRAINI , APRI HERI ISWANTO , IKA YULIANDARI , Antalina Florida Br. Marpaung , Feby Savva Kharisma , Sarah Augustina , Widya Patriasari , MUHAMMAD RASYIDUR RIDHO

2018

## **Morphological characteristics of *bambusa vulgaris* and the distribution and shape of vascular bundles therein<sup>1</sup>**

APRI HERI ISWANTO

2022

## **Latest advancements in high-performance bio-based wood adhesives: A critical review**

APRI HERI ISWANTO

2023

## **Annual Tree-Ring Curve-Fitting for Graphing the Growth Curve and Determining the Increment and Cutting Cycle Period of Sungkai (*Peronema canescens*)**

APRI HERI ISWANTO , EFFENDI TRI BAHTIAR

2022

## **Post-modification of ultra-low molar ratio urea-formaldehyde adhesive with different types and levels of organic acid hardener**

APRI HERI ISWANTO

2021

## **Recent developments in lignin- and tannin-based non-isocyanate polyurethane resins for wood adhesives: A review**

APRI HERI ISWANTO

2018

## **Morphological characteristics of *Bambusa vulgaris* and the distribution and shape of vascular bundles therein**

APRI HERI ISWANTO , ATMAWI DARWIS

2025

## **Chemical constituents, physical, and mechanical properties of Indonesian sugar palm (*Arenga longipes* Mogege) trunk**

APRI HERI ISWANTO

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2023

Jurnal internasional bereputasi

## **Macroscopic and Microscopic Anatomical Characteristics of Six Korean Oak Species**

APRI HERI ISWANTO

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2023

Jurnal internasional bereputasi

## **Adhesion and Cohesion Strength of Phenol-Formaldehyde Resin Mixed with Different Types and Levels of Catalyst for Wood Composites**

APRI HERI ISWANTO

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2022

Jurnal internasional bereputasi

## **Recent progress in ultra-low formaldehyde emitting adhesive systems and formaldehyde scavengers in wood-based panels: a review**

APRI HERI ISWANTO

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2024

Jurnal internasional bereputasi

## **Production and Properties Chip Block Pallets from Teak Wood (*Tectona grandis* sp.) Biomass**

APRI HERI ISWANTO

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2021

Jurnal internasional bereputasi

## **Design and Performance of Amphiphilic Lignin Derivatives in Enzymatic Hydrolysis of Sweet Sorghum Bagasse for Bioethanol Production**

APRI HERI ISWANTO

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2020

Jurnal internasional bereputasi

## **Linear expansion and durability of a composite boards (Mdf laminated using three selected wood veneers) against drywood termites**

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2024

Jurnal internasional bereputasi

## **Ramie Fibers from Agroforestry System as Sustainable Materials for Functional Textiles: A Review**

APRI HERI ISWANTO

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2016

Jurnal internasional bereputasi

## **Morphological and anatomical evaluation of grafted Pinus Merkusii**

APRI HERI ISWANTO

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2016

Jurnal internasional bereputasi

## **Physical and mechanical properties of local styrax woods from north tapanuli in Indonesia**

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2025

Jurnal internasional bereputasi

## **Characteristics of Bioplastics Based on Chitosan and Kraft Lignin Derived from Acacia mangium**

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2023

Jurnal internasional bereputasi

## **Eco-friendly tanin based non isocyanate polyurethane Resins for the modification of ramie (*boehmeria nivea* L) fibers**

APRI HERI ISWANTO

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2025  
Prosiding seminar internasional

## **The effect of adhesive content and layer ratio on the quality of sandwich particleboard**

MANGGAR ARUM ARISTRI , APRI HERI ISWANTO , DWIKA PUTRA , IRENE ISSABELLA MAHARANI PANJAITAN , NABILA

2017  
Jurnal internasional bereputasi

## **The physical, mechanical and durability properties of sorghum bagasse particleboard by layering surface treatment**

APRI HERI ISWANTO

2023  
Prosiding seminar internasional

## **The effect of chemically modified wood particles on the termite durability of sandwich particleboard from *Cotylelobium melanoxyton* and *Gigantochloa pruriens***

HIKMA YANTI , TEKAT DWI CAHYONO , APRI HERI ISWANTO , SYAHIDAH , NIKEN SUBEKTI , ATMAWI DARWIS

2021  
Jurnal internasional bereputasi

## **Maintaining tree biodiversity in urban communities on the university campus**

APRI HERI ISWANTO

2024  
Jurnal internasional bereputasi

## **Adhesion and Cohesion Performance of Polyurethane Made of Bio-Polyol Derived from Modified Waste Cooking Oil for Exterior Grade Plywood**

APRI HERI ISWANTO

2023  
Jurnal internasional bereputasi

## **Latest Advancements in the Development of High-Performance Lignin- and Tannin-Based Non-Isocyanate Polyurethane Adhesive for Wood Composites**

APRI HERI ISWANTO

2024  
Jurnal internasional bereputasi

## **The Application of Entomopathogenic Fungi *Metarhizium anisopliae*, *Beauveria bassiana*, and *Trichoderma harzianum* for *Coptotermes curvignathus* and *Cryptotermes cynocephalus* Termite Control in Indonesia**

APRI HERI ISWANTO

2023  
Jurnal internasional bereputasi

## **Influence of Isocyanate Content and Hot-Pressing Temperatures on the Physical&#8211;Mechanical Properties of Particleboard Bonded with a Hybrid Urea&#8211;Formaldehyde/Isocyanate Adhesive**

JAJANG SUTIAWAN , ATMAWI DARWIS , APRI HERI ISWANTO

2016  
Jurnal internasional bereputasi

## **Physical and mechanical properties of local styrax woods from north tapanuli in Indonesia**

APRI HERI ISWANTO , ARIDA SUSILOWATI

2019  
Jurnal internasional bereputasi

## **Effect of several exterior adhesive types on dimensional stability of bamboo oriented particleboard**

APRI HERI ISWANTO

2024  
Jurnal internasional bereputasi

## **Thermo-Mechanical, Physico-Chemical, Morphological, and Fire Characteristics of Eco-Friendly Particleboard Manufactured with**

## Phosphorylated Lignin Addition

HARISYAH MANURUNG , APRI HERI ISWANTO

2019

Jurnal internasional bereputasi

### **Fundamental properties of composite board made with oriented strand board and three different species of veneer**

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2018

Jurnal internasional bereputasi

### **Radical scavenging activity of kemenyan resin produced by an indonesian native plant, styrax sumatrana<sup>1</sup>**

APRI HERI ISWANTO

2023

Jurnal internasional bereputasi

### **Effect of Lignin or Lignosulfonate Addition on the Fire Resistance of Areca (Areca catechu) Particleboards Bonded with Ultra-Low-Emitting Urea-Formaldehyde Resin**

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2019

Jurnal internasional bereputasi

### **Variation in chemical constituent of Styrax sumatrana wood growing at different cultivation site in North Sumatra, Indonesia**

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2022

Jurnal internasional bereputasi

### **Lignin as green filler in polymer composites: development methods, characteristics, and potential applications**

APRI HERI ISWANTO

2024

Jurnal internasional bereputasi

### **Characteristics of Biopellets Manufactured from Various Lignocellulosic Feedstocks as Alternative Renewable Energy Sources**

HARISYAH MANURUNG , APRI HERI ISWANTO

2022

Jurnal internasional bereputasi

### **Modification of Ramie Fiber via Impregnation with Low Viscosity Bio-Polyurethane Resins Derived from Lignin**

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2022

Jurnal internasional bereputasi

### **Improvement of Thermal Behavior of Rattan by Lignosulphonate Impregnation Treatment**

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2023

Jurnal internasional bereputasi

### **Influence of Isocyanate Content and Hot-Pressing Temperatures on the Physical-Mechanical Properties of Particleboard Bonded with a Hybrid Urea-Formaldehyde/Isocyanate Adhesive**

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2025

Prosiding seminar internasional

### **The Effect of Particle Soaking Treatment on The Quality of Hybrid Organic Solid Waste Particleboard (HOSWPb)**

APRI HERI ISWANTO , MANGGAR ARUM ARISTRI , IRENE ISSABELLA MAHARANI PANJAITAN , NABILA

2025  
Jurnal nasional

## **Nanofluid thermosetting adhesives for bonding forest-based lignocellulosic materials: A Brief Review of Synthesis, characterization, and applications**

APRI HERI ISWANTO

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2023  
Jurnal internasional bereputasi

## **Characterization of lignin isolated from oil palm empty fruit bunch using phosphoric acid**

APRI HERI ISWANTO

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2022  
Jurnal internasional bereputasi

## **A recent advancement on preparation, characterization and application of nanolignin**

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2025  
Jurnal internasional bereputasi

## **Effect of Air Heat Treatment on the Shrinkage and Surface Roughness of Six Korean Oak Woods**

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2025  
Jurnal internasional bereputasi

## **Improving mechanical and physical properties of citric acid-bonded kenaf particleboard with gelatinized starch**

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2022  
Jurnal internasional bereputasi

## **Latest advancements in high-performance bio-based wood adhesives: A critical review**

APRI HERI ISWANTO

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2021  
Jurnal internasional bereputasi

## **Optimization of maleic acid pretreatment of oil palm empty fruit bunches (OPEFB) using response surface methodology to produce reducing sugars**

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2015  
Jurnal internasional bereputasi

## **The kraft pulp and paper properties of sweet sorghum bagasse (Sorghum bicolor L Moench)**

APRI HERI ISWANTO

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2025  
Jurnal internasional bereputasi

## **Comparative Analysis of Fiber Characteristics and Chemical, Physical, and Mechanical Properties of Six Indigenous Bamboo Species from Indonesia**

APRI HERI ISWANTO

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2019  
Prosiding seminar internasional

## **The flexural properties of medium density fibreboard overlaid with veneer from three species of wood**

APRI HERI ISWANTO , HIKMA YANTI , TEKAT DWI CAHYONO

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2020  
Jurnal internasional bereputasi

## **Enzymatic hydrolysis performance of biomass by the addition of a lignin based biosurfactant**

APRI HERI ISWANTO

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2020  
Jurnal internasional bereputasi

## **The physical, mechanical, and sound absorption properties of sandwich particleboard (SPb)**

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2022  
Jurnal internasional bereputasi

## **Characterization of Indonesian banana species as an alternative cellulose fibers**

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2024  
Jurnal internasional bereputasi

## **Effects of boiling water treatment on the physical properties of *Quercus variabilis* virgin cork grown in Korea**

APRI HERI ISWANTO

2020  
Jurnal internasional bereputasi

## **Dimensional stability, color change, and durability of boron-mma treated red jabol (*Antocephalus macrophyllus*) wood<sup>1</sup>**

APRI HERI ISWANTO

2024  
Jurnal internasional bereputasi

## **The influence of washing of rice straw lignin isolation on polyurethane synthesis for coating in biomedical application**

APRI HERI ISWANTO

2023  
Jurnal internasional bereputasi

## **Artificial Weathering Effects on the Physical and Chemical Properties of *Paulownia tomentosa* and *Pinus koraiensis* Woods Heat-Treated in Oil and Air**

APRI HERI ISWANTO

2023  
Prosiding seminar internasional

## **Hot-pressing effect on the termite durability of sandwich particleboards from *Styrax sumatrana* and *Gigantochloa pruriens***

APRI HERI ISWANTO , ATMAWI DARWIS , TEKAT DWI CAHYONO , SYAHIDAH , NIKEN SUBEKTI , HIKMA YANTI

2022  
Jurnal internasional bereputasi

## **A review on *Lantana camara* lignocellulose fiber-reinforced polymer composites**

APRI HERI ISWANTO

2025  
Jurnal internasional bereputasi

## **Characteristics of Three Bamboo Species and Their Potential as Raw Materials for Oriented Strand Board Production**

APRI HERI ISWANTO

2025  
Prosiding seminar internasional

## **The economic value and marketing chain of gambir (*Uncaria gambir* Roxb) in Pakpak Bharat Regency, North Sumatra**

TITO SUCIPTO , APRI HERI ISWANTO

2023  
Jurnal internasional bereputasi

## **The Effect of Active Alkali and Sulfidity Loading on the Kraft Pulp Properties of Sweet Sorghum Bagasse**

APRI HERI ISWANTO

2021  
Jurnal internasional bereputasi

## **The resistance of styrax sumatrana wood of varying growth sites and stem axial positions to subterranean termite (*Coptotermes curvignathus*) attack**

APRI HERI ISWANTO

2020  
Jurnal internasional bereputasi

## **Quality comparison of activated carbon produced from oil palm fronds by chemical activation using sodium carbonate versus sodium chloride**

APRI HERI ISWANTO

2024  
Prosiding seminar internasional

## **Hot-pressing effect on the termite durability of sandwich particleboards from *Styrax sumatrana* and *Gigantochloa pruriens***

HIKMA YANTI , TEKAT DWI CAHYONO , ATMAWI DARWIS , NIKEN SUBEKTI , SYAHIDAH , APRI HERI ISWANTO , D Tarmadi

2025  
Jurnal internasional bereputasi

## **Exploring Bonding and Interfacial Adhesion Properties of Normal and Reaction Wood in Wood-Based Composites-A Review**

APRI HERI ISWANTO

2024  
Jurnal internasional bereputasi

## **Effect of Air Heat Treatment on the Color Change and Weight and Density Loss of Six Korean Oak Woods**

APRI HERI ISWANTO

2022  
Jurnal internasional bereputasi

## **Environmentally Friendly Starch-Based Adhesives for Bonding High-Performance Wood Composites: A Review**

APRI HERI ISWANTO

2022  
Jurnal internasional bereputasi

## **Effect of reaction time on the molecular weight distribution of polyurethane modified epoxy and its properties**

APRI HERI ISWANTO

2022  
Prosiding seminar internasional

## **Technological Properties of Formaldehyde Free Adhesives Based on Oxidized Starch Mixed with Different Crosslinkers for Plywood**

APRI HERI ISWANTO

2023  
Jurnal internasional bereputasi

## **Characteristics of Simalambuo (*Lophopetalum* sp.) wood from Nias Island, North Sumatra Province, Indonesia**

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2024  
Jurnal internasional bereputasi

## **Ramie Fibers from Agroforestry System as Sustainable Materials for Functional Textiles: A Review**

MANGGAR ARUM ARISTRIS , WAHYU HIDAYAT , Muhammad Adly Rahandi Lubis , APRI HERI ISWANTO

2020  
Jurnal internasional bereputasi

## **Variation of quantitative anatomical characteristics in the culm of Belangke Bamboo (*Gigantochloa pruriens*)**

APRI HERI ISWANTO

2022  
Jurnal internasional bereputasi

## **Recent developments in lignin modification and its application in lignin-based green composites: A review**

APRI HERI ISWANTO

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2023  
Jurnal internasional bereputasi

## **Cohesion and Adhesion Performance of Tannin-Glyoxal Adhesives at Different Formulations and Hardener Types for Bonding Particleboard Made of Areca (Areca catechu) Leaf Sheath**

APRI HERI ISWANTO

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2023  
Jurnal internasional bereputasi

## **Properties of Plywood Bonded with Formaldehyde-Free Adhesive Based on Poly (vinyl alcohol)â€“Tanninâ€“Hexamine at Different Formulations and Cold-Pressing Times**

APRI HERI ISWANTO

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2024  
Jurnal internasional bereputasi

## **Preparation of superhydrophobic biomedical pulp from rice straw coated with a stearic acid-cellulose composite**

APRI HERI ISWANTO

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2020  
Jurnal internasional bereputasi

## **Short communication: The higher laccase enzyme producer, *cerrena sp. bmd.ta.1*, isolated from gunung rinjani national park, West Nusa Tenggara, Indonesia**

APRI HERI ISWANTO

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2023  
Jurnal internasional bereputasi

## **Preparation and characterization of non-isocyanate polyurethane resins derived from tannin of *Acacia mangium* bark for the modification of ramie fibers**

APRI HERI ISWANTO

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2024  
Jurnal internasional bereputasi

## **Overview of the Synthesis, Characterization, and Application of Tannin-Glyoxal Adhesive for Wood-Based Composites**

APRI HERI ISWANTO

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2020  
Jurnal internasional bereputasi

## **Dimensional stability, color change, and durability of boron-MMA treated red jabon (*Antocephalus macrophyllus*) wood**

TEKAT DWI CAHYONO , TRISNA PRIADI , APRI HERI ISWANTO

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2024  
Prosiding seminar internasional

## **Properties of bio-based non-isocyanate polyurethane resins derived from viscous tannin of *Acacia mangium* bark, dimethyl carbonate, and hexamethylenediamine**

APRI HERI ISWANTO

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2023  
Jurnal internasional bereputasi

## **Annual Tree-Ring Curve-Fitting for Graphing the Growth Curve and Determining the Increment and Cutting Cycle Period of Sungkai (*Peronema canescens*)**

APRI HERI ISWANTO

2022

Jurnal internasional bereputasi

## **Thermal and mechanical performance of ramie fibers modified with polyurethane resins derived from acacia mangium bark tannin**

APRI HERI ISWANTO

2023

Jurnal internasional bereputasi

## **Development and Characterization of Eco-Friendly Non-Isocyanate Urethane Monomer from Jatropha curcas Oil for Wood Composite Applications**

APRI HERI ISWANTO

2023

Jurnal internasional bereputasi

## **Artificial Weathering Effects on the Physical and Chemical Properties of Paulownia tomentosa and Pinus koraiensis Woods Heat-Treated in Oil and Air**

Nam Hun Kim , WAHYU HIDAYAT , Intan Fajar Suri , Byantara Darsan Purusatama , Jong Ho Kim , Se Yeong Park , Seung Hwan Lee , APRI HERI ISWANTO

2020

Jurnal internasional bereputasi

## **Flexural properties of heat-treatment samama (Anthocephalus macrophyllus) wood impregnated by boron and methyl metacrylate**

APRI HERI ISWANTO

2022

Jurnal internasional bereputasi

## **Recent Advances in the Development of Fire-Resistant Biocomposites – A Review**

APRI HERI ISWANTO

2018

Jurnal internasional bereputasi

## **Effect of particle pre-treatment on properties of jatropha fruit hulls particleboard**

APRI HERI ISWANTO

2022

Prosiding seminar internasional

## **Exploration of high-quality wood-producing trees on the Universitas Sumatera Utara (USU) Medan campus's green space**

APRI HERI ISWANTO

2022

Jurnal internasional bereputasi

## **Chemical, Physical, and Mechanical Properties of Belangke Bamboo (Gigantochloa pruriens) and Its Application as a Reinforcing Material in Particleboard Manufacturing**

APRI HERI ISWANTO

2024

Jurnal internasional bereputasi

## **Eco-Friendly and High-Performance Bio-Polyurethane Adhesives from Vegetable Oils: A Review**

APRI HERI ISWANTO , SENA MAULANA , EFRI MARDAWATI

2024

Jurnal internasional bereputasi

## **Hydrolytic Stability of Sengon-Oriented Strand Board Bonded with Hybrid Phenol-Formaldehyde/Polymeric Methylene Diphenyl Diisocyanate Adhesives**

APRI HERI ISWANTO

2025

Prosiding seminar internasional

## **Enhanced Adhesion and Reduced Formaldehyde Emission of Urea-Formaldehyde Resin Bonded Plywood Panel Using Intercalated**

# Montmorillonite and Laponite Nanoclay

APRI HERI ISWANTO

2025

Jurnal internasional bereputasi

## **Synthesis, characterization, applications, and environmental impacts of nanofluid thermosetting adhesives for sustainable bio-composites: A review**

DEWI KURNIANINGSIH ARUM KUSUMAHASTUTI , APRI HERI ISWANTO , Ina Winarni , Muhammad Adly Rahandi Lubis , EFRI MARDAWATI

2021

Jurnal internasional bereputasi

## **Enhancing the performance of natural rubber latex with polymeric isocyanate as cold-pressing and formaldehyde free adhesive for plywood**

APRI HERI ISWANTO

2024

Jurnal internasional bereputasi

## **Chemical properties, crystallinity, and fiber biometry of Jabon (*Anthocephalus cadamba*) wood for pulp raw material: the effect of age and position**

ALFI RUMIDATUL , ATMAWI DARWIS , TATI KARLIATI , EKA MULYA ALAMSYAH , LILI MELANI , APRI HERI ISWANTO

2023

Jurnal internasional bereputasi

## **Eco-Friendly Tannin-Based Non-Isocyanate Polyurethane Resins for the Modification of Ramie (*Boehmeria nivea* L.) Fibers**

APRI HERI ISWANTO

2019

Jurnal internasional bereputasi

## **Fundamental properties of composite board made with oriented strand board and three different species of veneer**

HIKMA YANTI , TEKAT DWI CAHYONO , APRI HERI ISWANTO

2026

Jurnal internasional bereputasi

## **Structural, Chemical, and Morphological Evaluation of Banana Pseudostem Fibers for Biobased Composite Development**

APRI HERI ISWANTO

2020

Jurnal internasional bereputasi

## **Optimizing the synthesis of lignin derivatives from acacia mangium to improve the enzymatic hydrolysis of kraft pulp sorghum bagasse**

APRI HERI ISWANTO

2021

Jurnal internasional bereputasi

## **Bio-based polyurethane resins derived from tannin: Source, synthesis, characterisation, and application**

APRI HERI ISWANTO

2021

Jurnal internasional bereputasi

## **Wood chemical compositions of raru species originating from central tapanuli, north sumatra, indonesia: Effect of differences in wood species and log positions<sup>1</sup>**

APRI HERI ISWANTO

2021

Prosiding seminar internasional

## **Particleboard from kemenyan wood and belangke bamboo: Effect of particle pre-treatment in acidic solution**

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2022

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