

# Dr. Agr. Faujiah Nurhasanah Ritonga, S.Hut., M.Si

## Dosen Fakultas Kehutanan

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*Dr. Agr. Faujiah Nurhasanah Ritonga, S.Hut., M.Si. lahir pada 19 Januari 1990 dan merupakan salah satu dosen PNS di Program Studi Kehutanan, Fakultas Kehutanan USU sejak 2024. Beliau merupakan alumni Kehutanan USU, di mana ia tercatat sebagai salah satu mahasiswa yang lulus sebagai sarjana Kehutanan pada tahun 2012 dan sekarang menggeluti bidang Rekayasa Genetika Tanaman Hutan. Dengan minat belajar yang tinggi, beliau kemudian melanjutkan studi magister di Program Studi Silvikultur Tropika, Fakultas Kehutanan, IPB dengan minat Genetika Pohon dan lulus tahun 2016 sebagai seorang Master of Science (M.Si.). Pada tahun 2017-2018, beliau mendapatkan beasiswa China Scholarship Council (CSC) untuk belajar bahasa China (Mandarin) di Northeast Forestry University, Harbin, China. Kemudian pada tahun 2018, beliau mendapatkan beasiswa CSC kembali untuk studi doktor di Jurusan Genetika dan Pemuliaan Pohon, Fakultas Kehutanan, Northeast Forestry University, Harbin, China dan lulus tahun 2022. Wanita berdarah Batak ini kemudian melanjutkan program Postdoctoral Fellowship di Institute of Vegetables, Shandong Academy of Agricultural Science, Jinan, China sejak 2022-2024. Hingga saat ini, beliau aktif menjadi penulis dan reviewer jurnal nasional dan internasional bereputasi.*

## Publications

2024

Jurnal internasional bereputasi

### **Exploiting Brassica rapa L. subsp. pekinensis Genome Research**

FAUJIAH NURHASANAH RITONGA

2025

Buku referensi

### **Ilmu Tanah Hutan**

FAUJIAH NURHASANAH RITONGA, AQSHAN SHADIKIN NURDIN, JACOB KAILOLA, TRI MULYA HARTATI, DINA OKTAVIA, SABARIA NIAPELE, FADILA TAMNGE, PEBRIANDI, LASWI IRMAYANTI

2026

Buku lainnya

### **Reviewer Jurnal "Comprehensive Evaluation of Maize Germplasm for Alkali Tolerance during Germination"**

FAUJIAH NURHASANAH RITONGA

2026

Buku lainnya

### **Reviewer Jurnal "Genome-wide analysis of DC1 domain proteins in Ipomoea species reveals IbCHR10 as a positive regulator of salt tolerance in sweetpotato"**

FAUJIAH NURHASANAH RITONGA

2026

Buku lainnya

### **Reviewer Jurnal "Uncertainties of Forest Resources as Enhanced by Uncontrolled Anthropogenic Activities in Rural Tanzania: A case of Kigosi Forest in Bukombe District"**

FAUJIAH NURHASANAH RITONGA

2025

Prosiding seminar internasional

### **The Influence of nectar sources, stup types of stingless bee (Heterotrigona**

## itama) to produce honey bee in Langkat Mangrove area, Northern Sumatra

MOHAMMAD BASYUNI , AMELIA ZULIYANTI SIREGAR , ETTI SARTINA SIREGAR , ARIF NURYAWAN , ERNI JUMILAWATY , IWAN RISNASARI , FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

### **Reviewer Jurnal "Metatranscriptomics for Mycobiome: Advances and Challenges 2 in Bioinformatic Analysis"**

FAUJIAH NURHASANAH RITONGA

2026

Buku lainnya

### **Reviewer Jurnal "Transcriptomic Profiling Across Developmental Stages of 2 *Camellia petelotii* (Merr.) Sealy Flower"**

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

### **Reviewer Jurnal " Elucidation of drought tolerance mechanisms of different mungbean genotypes based upon physiological, biochemical and genetic mechanisms"**

FAUJIAH NURHASANAH RITONGA

2025

Jurnal internasional

### **Transcriptome-based discovery of EST-SSR markers in *Cephalostachyum pingbianense* rhizome buds**

DEANOVA FRESTIANA BR PELAWI , Runxian Song , Xin Fu , RHOMI ARDIANSYAH , FAUJIAH NURHASANAH RITONGA

2026

Book chapter internasional

### **Biodiversity, Global Patterns, Conservation Strategies, and Ecosystem Resilience**

FAUJIAH NURHASANAH RITONGA , MOHAMMAD BASYUNI , Su Chen , Runxian Song

2025

Buku lainnya

### **Reviewer Jurnal "Genome-wide identification and expression profiling of MYC 2 family genes response to various stresses in *Toona sinensis*"**

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

### **Reviewer Jurnal "Transcriptomic data assessment of wild and an improved vari-2 ety of *Trifolium repens* L. in relation to altitude and external factors"**

FAUJIAH NURHASANAH RITONGA

2025

Prosiding seminar internasional

### **Functional EST-SSR marker development from tip shoot transcriptome of *Bambusa oldhamii* for genetic studies and breeding**

DEANOVA FRESTIANA BR PELAWI , Runxian Song , FAUJIAH NURHASANAH RITONGA , TRIATY HANDAYANI , ARIDA SUSILOWATI

2025

Buku lainnya

### **Reviewer Jurnal "Identification, characterization, and expression analysis of WRKY transcription factors in *Gynostemma pentaphyllum* during tissue growth and cadmium stress"**

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

### **Reviewer Jurnal "Genotype-Specific Modulation of Drought Tolerance by Arbuscular Mycorrhizal Symbiosis in Foxtail Millet"**

FAUJIAH NURHASANAH RITONGA

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2025

Buku lainnya

**Reviewer Jurnal "Diversity of Phenological Characteristics and Fruit Quality of 2 the Chinese Honeyberry (*Lonicera caerulea*) Collection"**

FAUJIAH NURHASANAH RITONGA

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2026

Jurnal nasional terakreditasi

**SOIL PROPERTIES AND RAINFALL REGIMES IN CINNAMON (*Cinnamomum burmannii*) PLANTATIONS IN MANDAILING NATAL, NORTH SUMATRA**

NELLY ANNA , FAUJIAH NURHASANAH RITONGA , ARIDA SUSILOWATI , DEANOVA FRESTIANA BR PELAWI , KANSIH SRI HARTINI , DENI ELFIATI , ANDI TRI LESTARI

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2025

Buku lainnya

**Reviewer Jurnal "Heat stress resistance in *Camelina sativa*: morphological, physiological, yield and seed quality responses"**

FAUJIAH NURHASANAH RITONGA

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2025

Buku lainnya

**Reviewer Jurnal "Comparison of physiological responses of two apricot-plum hybrid cultivars under low temperature stress"**

FAUJIAH NURHASANAH RITONGA

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2025

Buku lainnya

**Reviewer Jurnal "Artificial Intelligence in Forest Pathology: Opportunities and 2 Challenges"**

FAUJIAH NURHASANAH RITONGA

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2025

Buku lainnya

**Reviewer Manuscript ICONART dan ICBAFORA**

FAUJIAH NURHASANAH RITONGA , NELLY ANNA , DEANOVA FRESTIANA BR PELAWI , AHMAD BAIQUNI RANGKUTI , NOVITA ANGGRAINI

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2025

Buku lainnya

**Reviewer Jurnal Transcriptome and metabolome analysis demonstrate critical contribution of flavonoid biosynthesis and galactose metabolism to salt resistance of rice roots""**

FAUJIAH NURHASANAH RITONGA

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2025

Buku lainnya

**Reviewer Jurnal "Regulation of Heat Tolerance by Iron Chlorine E6 in '84K' Poplar Tissue Culture Seedlings: A Study Coupled with Metabolomic and Transcriptomic Analysis"**

FAUJIAH NURHASANAH RITONGA

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2025

Buku lainnya

**Reviewer Jurnal "Optimizing eDNA Metabarcoding in Indonesia Freshwaters: A Scoping Review of Best Practise"**

FAUJIAH NURHASANAH RITONGA

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2025

Jurnal internasional bereputasi

**Unraveling the multifaceted roles of SPL transcription factors in leaf development**

FAUJIAH NURHASANAH RITONGA

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2026

Buku lainnya

**Reviewer Jurnal "The Heat-Stability of PSII Depends on PSII Repair, While the**

## 2 Chilling Stability of PSII Depends on the Damage of PSII In 3 Triticum aestivum and Oryza sativa"

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

## Reviewer Jurnal "DNA barcoding and relation with nutritional traits of glasswort ecotypes from Apulia region (southern Italy)"

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

## Reviewer Jurnal "Genome-wide analysis of the FAD gene family in Solanum tuberosum L. reveals its involvement in cold stress tolerance"

FAUJIAH NURHASANAH RITONGA

2026

Buku lainnya

## Cold Stress, Endothelial Cell Dysfunction and Related Diseases: Mechanistic Links and Research Progress

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

## Reviewer Jurnal "Antioxidative enzyme mechanisms of sweet potato [Ipomoea batatas (L.) Lam] advanced breeding lines under polyethylene glycol-mediated osmotic stress conditions"

FAUJIAH NURHASANAH RITONGA

2025

Buku referensi

## Pemuliaan Pohon

FAUJIAH NURHASANAH RITONGA , LASWI IRMAYANTI , AISJAH RACHMAWATY RYADIN , ANA TAMPANG , RIMA HERLINA SETIAWATI SIBURIAN , NAPSIAH HELUT , INDRIYANTO

2025

Prosiding seminar internasional

## Expressed sequence tag simple sequence repeats (EST-SSRs) mining and marker development from Shorea curtisii leaf transcriptome over a flowering season

FAUJIAH NURHASANAH RITONGA , DEANOVA FRESTIANA BR PELAWI , NOVITA ANGGRAINI , RAJJITHA HANDAYANI , Arina Nur Faidah , Fitri Indriani

2025

Jurnal internasional bereputasi

## The integrated function of roots in plant salt tolerance

FAUJIAH NURHASANAH RITONGA , Bing Cui , Yiran Xu , Yancan Li , Jie Song , Jianwei Gao , Jingjuan Li

2025

Buku lainnya

## Reviewer Jurnal "Regulation of Heat Tolerance by Iron Chlorine E6 in "84K"Poplar Tissue Culture Seedlings: A Study Coupled with Metabolomic and Transcriptomic Analysis" Revision

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

## Reviewer Jurnal "Integrated Transcriptomic and Proteomic Profiling Reveals the Molecular Mechanisms underlying Heat Tolerance in Pakchoi (Brassica rapa subsp. chinensis)"

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

## Reviewer Jurnal "Spraying exogenous brassinosteroids at the silking stage alleviated the effects of post-silking heat stress on photosynthetic per-3

## formance of waxy maize"

FAUJIAH NURHASANAH RITONGA

2026

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### **Reviewer Jurnal "Reference based Transcriptome Assembly of Piper Nigrum Reveals Novel Genes and Transcripts in Drought Tolerance"**

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

### **Reviewer Jurnal "Genome-wide identification and functional characterization of the CP12 gene family in Cotton reveals its critical role in heat stress response"**

FAUJIAH NURHASANAH RITONGA

2025

Jurnal internasional bereputasi

### **Integrated Analysis of Phenotypic, Physiological, and Biochemical Traits in *Betula platyphylla* Sukaczew Under Cold Stress Conditions**

NELLY ANNA , LASWI IRMAYANTI , FAUJIAH NURHASANAH RITONGA , PEBRIANDI

2025

Buku lainnya

### **Reviewer Jurnal "Post-transcriptional regulation dominates protein biosynthesis in *Landoltia punctata* under biogas surry stress"**

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### **Reviewer Jurnal "Melatonin improves the tolerance of Tartary buckwheat to 2 drought stress by coordinating carbon and nitrogen metabolism 3 and endogenous hormone levels"**

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2026

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### **Reviewer Jurnal "Phased Antioxidant and Osmotic Regulation Coordinate the Overwintering Adaptation of *Arundo donax* Rhizomes under Field Freezing Conditions"**

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

### **Reviewer jURNAL "Gene Expression Changes in Grapevine (*Vitis vinifera*) Under 2 Severe Cold Stress: Impact of a Preventive Natural Polysaccha- 3 ride-based Biogel"**

FAUJIAH NURHASANAH RITONGA

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Jurnal internasional bereputasi

### **Deciphering Defense Mechanisms and Genetic Determinants of Insect Resistance in Brassica Species**

FAUJIAH NURHASANAH RITONGA

2025

Prosiding seminar internasional

### **The Influence of nectar sources, stup types of stingless bee (*Heterotrigona itama*) to produce honey bee in Langkat Mangrove area, Northern Sumatra**

MOHAMMAD BASYUNI , AMELIA ZULIYANTI SIREGAR , ETTI SARTINA SIREGAR , ARIF NURYAWAN , ERNI JUMILAWATY , IWAN RISNASARI , FAUJIAH NURHASANAH RITONGA

2026

Buku lainnya

### **Reviewer Jurnal "Genome-wide analysis of Alfalfa AP2/ERF gene family and**

## abiotic stress response"

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

### **Reviewer Jurnal "Analysis of Salt Resistance Conferred by Salt Overly Sensitive 3 from Mulberry (*Morus notabilis*)"**

FAUJIAH NURHASANAH RITONGA

2025

Jurnal internasional bereputasi

### **Evaluation of sea turtle handling methods in a captive facility in Nipah, Indonesia**

BUDHY SETIAWAN , MAISER SYAPUTRA , ENDAH WAHYUNINGSIH , PANDE KOMANG SUPARYANA , ANDI TRI LESTARI , FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

### **Reviewer Jurnal "Salt Stress Responses and Tolerance Mechanisms in Native Desert Plants of the UAE: Growth, Biochemical, and Antioxidant Perspectives"**

FAUJIAH NURHASANAH RITONGA

2026

Buku lainnya

### **Reviewer Jurnal "Time-course transcriptomic information unravels the adaptation strategies of *Nicotiana tabacum* to drought stress through altered root system architecture"**

FAUJIAH NURHASANAH RITONGA

2025

Buku lainnya

### **Reviewer Jurnal "Mitigation of soil water stress by moderately deep sowing and exogenous application of glucosinolate during the early seedling stage in rapeseed"**

FAUJIAH NURHASANAH RITONGA

2026

Buku lainnya

### **Reviewer Jurnal "Soil environment, physiological metabolism and ornamental traits of zinnia response to water and nitrogen coupling in a cold and arid environment"**

FAUJIAH NURHASANAH RITONGA

## Researches

2025

### **Investigasi Biomassa, Karbon Stok dan Jasa Ekosistem Lainnya di Hutan Mangrove dan Konversinya**

MOHAMMAD BASYUNI , BEJO SLAMET , IDA LIANA TANJUNG , FAUJIAH NURHASANAH RITONGA , Severino Salmo III

2025

### **EKSPLORASI POHON PLUS KEMIRI (*Aleurites moluccanus*) SEBAGAI STRATEGI AWAL PROGRAM PEMULIAAN POHON**

FAUJIAH NURHASANAH RITONGA , DEANOVA FRESTIANA BR PELAWI

2026

### **Sustainable Silvofishery and Blue Carbon (SBC): Case study**

MOHAMMAD BASYUNI , BEJO SLAMET , ARIDA SUSILOWATI , FAUJIAH NURHASANAH RITONGA , ETTI SARTINA SIREGAR , Severino Salmo III

2025

### **KARAKTERISTIK MORFOLOGI DAN RESPON PERTUMBUHAN POPULASI BIJI**

# DAN ANAKAN KAYU MANIS (*Cinnamomum burmanni* (Nees & T. Nees) Blume) DI SUMATERA UTARA

ARIDA SUSILOWATI , FAUJIAH NURHASANAH RITONGA , DEANOVA FRESTIANA BR PELAWI

## Community Services

2026  
Ipteks

### Penanaman Bibit MPTS Sebagai Upaya Pemulihan Lingkungan Pasca Banjir Di Langkat, Sumatera Utara

MARIAH ULFA , RIDAHATI RAMBEY , PINDI PATANA , MA RIFATIN ZAHRAH , NURDIN SULISTİYONO , MOEHAR MARAGHIY HARAHAP , ACHMAD SIDDIK THOHA , DWI ENDAH WIDYASTUTI , FAUJIAH NURHASANAH RITONGA , YUNUS AFIFUDDIN , AGUS PURWOKO , SURI FADHILLA , ALFAN GUNAWAN AHMAD , NELLY ANNA , M AGUSTIAN SYAPUTRA , NAYLA FATHANAH , MHD FAJRI AFISYAH , NABILA NASYWA SIREGAR

2025

### Training on the Use of Dual-Function Bamboo Saws and the Implementation of Occupational Health and Safety (K3) for Efficient Fruit Basket Craft Production in Sirpang Sigodang Village, Raya District, Simalungun Regency

MARIAH ULFA , SAMSURI , APRI HERI ISWANTO , RIDAHATI RAMBEY , PINDI PATANA , DENI ELFIATI , KANSIH SRI HARTINI , MA RIFATIN ZAHRAH , NURDIN SULISTİYONO , MOEHAR MARAGHIY HARAHAP , TITO SUCIPTO , FAUJIAH NURHASANAH RITONGA , DEANOVA FRESTIANA BR PELAWI , EVALINA HERAWATI , YUNUS AFIFUDDIN , ANITA ZAITUNAH , AGUS PURWOKO , SURI FADHILLA , SITI LATIFAH , AFIFUDDIN DALIMUNTHER , LUTHFI HAKIM , YUNASFI , HARISYAH MANURUNG , RUDI HARTONO , ALFAN GUNAWAN AHMAD , NELLY ANNA

2026  
Ipteks Bagi Masyarakat

### Pemberdayaan Siswa SMK Teuku Amir Hamzah Indrapura Melalui Pelatihan Eco Print Berbasis Sumber Daya Hutan

DENI ELFIATI , KANSIH SRI HARTINI , MA RIFATIN ZAHRAH , IWAN RISNASARI , FAUJIAH NURHASANAH RITONGA , DEANOVA FRESTIANA BR PELAWI , EVALINA HERAWATI , AGUS PURWOKO , NOVITA ANGGRAINI , HARISYAH MANURUNG , NELLY ANNA

2025

### Penghijauan di Sepanjang Jalan Dusun Pamah Simelir Dalam Rangka HUT RI ke 80

MA RIFATIN ZAHRAH , FAUJIAH NURHASANAH RITONGA , EVALINA HERAWATI , AGUS PURWOKO , NOVITA ANGGRAINI , HARISYAH MANURUNG

2025

### PEMBUATAN PERSEMAIAN SEBAGAI UPAYA AKLIMATISASI BIBIT POHON LANGKA

AHMAD BAIQUNI RANGKUTI , SAMSURI , MOHAMMAD BASYUNI , RAHMAWATY , BEJO SLAMET , MUHDI , DENI ELFIATI , KANSIH SRI HARTINI , ARIDA SUSILOWATI , ORANG KAYA HASNANDA SYAHPUTRA , BUDI UTOMO , FAUJIAH NURHASANAH RITONGA , DEANOVA FRESTIANA BR PELAWI , ANITA ZAITUNAH , ONRIZAL , AGUS PURWOKO , SITI LATIFAH , DELVIAN , AFIFUDDIN DALIMUNTHER , NOVITA ANGGRAINI , YUNASFI , ODING AFFANDI , NELLY ANNA , HAFIZAH ARINAH

2026  
Ipteks Bagi Masyarakat

### Edukasi dan Pelatihan Mounting Platycerium Sebagai Alternatif Usaha Produktif Ibu Rumah Tangga

DENI ELFIATI , KANSIH SRI HARTINI , MA RIFATIN ZAHRAH , IWAN RISNASARI , FAUJIAH NURHASANAH RITONGA , DEANOVA FRESTIANA BR PELAWI , EVALINA HERAWATI , NOVITA ANGGRAINI , HARISYAH MANURUNG , NELLY ANNA

2025

### International Community Service by Mangrove Plantation for the Conservation of Biodiversity and Environmental Sustainability

AHMAD BAIQUNI RANGKUTI , APRI HERI ISWANTO , ERNI JUMILAWATY , MOHAMMAD BASYUNI , PINDI PATANA , BEJO SLAMET , DENI ELFIATI , IWAN RISNASARI , ARIDA SUSILOWATI , NURDIN SULISTİYONO , TITO SUCIPTO , FAUJIAH NURHASANAH RITONGA , DEANOVA FRESTIANA BR PELAWI , EVALINA HERAWATI , AGUS PURWOKO , ARIF NURYAWAN , DELVIAN , RIDWANTI BATUBARA , NOVITA ANGGRAINI , YUNASFI , RUDI HARTONO , ALFAN GUNAWAN AHMAD , ODING AFFANDI , NELLY ANNA , MASITTA TANJUNG , ETTI SARTINA SIREGAR

2025

### Penanaman Pohon Multiguna Sebagai Salah Satu Alternatif Sumber Pangan Dalam Rangka Mendukung Ketahanan Pangan

AHMAD BAIQUNI RANGKUTI , SAMSURI , MOHAMMAD BASYUNI , RAHMAWATY , BEJO SLAMET , MUHDI , DENI ELFIATI , KANSIH SRI HARTINI , ARIDA SUSILOWATI , BUDI UTOMO , FAUJIAH NURHASANAH RITONGA , DEANOVA FRESTIANA BR PELAWI , ANITA ZAITUNAH , ONRIZAL , AGUS PURWOKO , SITI LATIFAH , DELVIAN , AFIFUDDIN DALIMUNTHE , NOVITA ANGGRAINI , YUNASFI , ODING AFFANDI , NELLY ANNA , HAFIZAH ARINAH

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2026

Ipteks

## **Pendampingan Masyarakat Dalam Pemulihan Pendidikan Pasca Banjir Di Langkat Sumatera Utara**

SAMSURI , MOHAMMAD BASYUNI , RAHMAWATY , BEJO SLAMET , MUHDI , DENI ELFIATI , KANSIH SRI HARTINI , ARIDA SUSILOWATI , BUDI UTOMO , FAUJIAH NURHASANAH RITONGA , DEANOVA FRESTIANA BR PELAWI , ANITA ZAITUNAH , ONRIZAL , AGUS PURWOKO , SITI LATIFAH , DELVIAN , AFIFUDDIN DALIMUNTHE , YUNASFI , ODING AFFANDI , NELLY ANNA , HAFIZAH ARINAH , WINDY ANGELIKA BR GURUSINGA , ADILVI OKA ARISENA SINABUTAR , STEVAN PEDRO SINAGA , DALILAH SALSABILA ZIAWA

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## **Intellectual Property Rights**

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### **Buku Pemuliaan Pohon**

FAUJIAH NURHASANAH RITONGA , LASWI IRMAYANTI , AISJAH RACHMAWATY RYADIN , RIMA HERLINA SETIAWATI SIBURIAN

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