

DAFTAR PUSTAKA

- Abdullah FO, Hamahameen B, Dastan D. 2021. Chemical constituents of the volatile and nonvolatile, cytotoxic and free radical scavenging activities of medicinal plant: *Ranunculus millefoliatus* and *Acanthus dioscoridis*. Polish Journal of Environmental Studies **30(3)**: 1981–1989.
- Abdurrohim S. 1991. Pengawetan kayu sungkai (*Peronema canescens* Jack) memakai dua jenis bahan pengawet. Jurnal Penelitian Hasil Hutan **9(7)**: 279-282.
- Adamopoulos S, Voulgaridis E, Passialis C. 2005. Variation of certain chemical properties within the stemwood of black locust (*Robinia pseudoacacia* L.). Holz als roh-und Werkstoff **63**: 327-333.
- Adzemmy MLDA. 2021. Analisis kualitatif flavonoid fraksi etil asetat dan *n*-Butanol daun sungkai (*Peronema canescens* Jack.) menggunakan kromatografi lapis tipis. Skripsi (Tidak dipublikasikan). Fakultas Farmasi, Universitas Lambung Mangkurat, Kalimantan Selatan.
- Agustina R. 2021. Kekayaan alam bumi borneo dan khasiatnya sebagai obat. Qiara media, Jawa Timur.
- Alen R. 2000. Structure and Chemical Composition of Wood. In: Stenius P. (Ed.) Papermaking Science and Technology. Halaman: 11–57. Forest Products Chemistry Department. Helsinki.
- Amusant N, Moretti C, Richard B, Prost E, Nuzillard JM, Thevenon MF. 2007. Chemical compounds from *Eperua falcata* and *Eperua grandiflora* heartwood and their biological activities against wood destroying fungus (*Coriolus versicolor*). Holz als Roh- und Werkstoff **65**:23-28.
- Anonim. 1992. Manual Kehutanan. Departemen Kehutanan Republik Indonesia. Jakarta.
- Ashwell G. 1957. Colorimetric analysis of sugars. Methods in Enzymology. **3**: 73-105.



- Azizi MH, Ramaniya DW, Pujiastuti C. 2020. Kajian perpindahan massa ekstraksi polisakarida pada biji asam jawa dengan pelarut NaOH. *ChemPro* **1(2)**: 8-13.
- Balasundram N, Sundram KK, Samman S. 2006. Phenolic compounds in plants and agriindustrial by-products: Antioxidant activity, occurrence, and potential uses. *Food Chemistry* **99**: 191-203.
- Barbaroux C, Bréda N, Dufrêne E. 2003. Distribution of above-ground and below-ground carbohydrate reserves in adult trees of two contrasting broad-leaved species (*Quercus petraea*) and (*Fagus sylvatica*). *New Phytologist* **157**: 605-615.
- BeMiller JN. 2001. Carbohydrates. In: Rowe J.W. (eds) *Natural products of woody plants*. Springer Series in Wood Science. Berlin.
- Blainski A, Lopes GC, Mello JCP. 2013. Application and analysis of the Folin-ciocalteu method for the determination of the total phenolic content from *Limonium brasiliense* L. *Molecules* **18**:6852-6865.
- Bowyer JL, Shmulsky R, Haygreen JG. 2007. *Forest product and wood science: An introduction* Fifth Edition. Blackwell, London.
- Browning BL. 1967. *Methods of Wood Chemistry* Vol. I. Interscience Publishers, A Division of John Wiley and Sons. Inc, New York.
- Budiaman A. 2000. Kuantifikasi kayu bulat kecil limbah pemanenan pada perusahaan hutan alam. *Jurnal Teknologi Hasil Hutan* **12(2)**: 34-43.
- Burtin P, Jay-Allemand C, Charpentier JP, Janin G. 2000. Modifications of hybrid walnut (*Juglans nigra* x *Juglans regia*) wood color and phenolic composition under various steaming conditions. *Holzforschung* **54**: 33-38.
- Burtin PJC, Charpentier JP, Janin G. 1998. Natural wood coloring process in *Juglans sp* depends on native phenolic compounds accumulated in the transition zone between sapwood and heartwood. *Trees* **12**: 258-264



- Bustan A, Avni A, Lavee, S, Zipori I, Yeselson Y, Schaffer AA, Riov Joseph, Dag A. 2011. Role of carbohydrate reserves in yield production of intensively cultivated oil olive (*Olea europaea* L.) trees. *Tree Physiology* **31**: 519-530.
- Chandrasekaran A. 2021. Solvent physical properties. Diambil dari <https://people.chem.umass.edu/xray/solvent.html>
- Chow P, Nakayama FS, Blahnik B, Youngquist JA, Coffelt TA. 2008. Chemical constituents and physical properties of guayule wood and bark. *Industrial Crops and Products* **28**: 303-308.
- Chow PS dan Landhausser SM. 2004. A method for routine measurements of total sugar and starch content in woody plant tissues. *Tree Physiology* **24**: 1129-1136.
- Connor AM, Chad EF, Peter AA. 2005. Genotypic and enviromental variation in antioxidant activity and total phenolic content among blackberry and hybridberry cultivars. *American Society of Horticultural Science* **130**: 527-533.
- Dellus V, Scalbert A, Janin G. 1997. Polyphenols and color of Douglas-fir heartwood. *Holzforschung* **51(4)**: 291-295.
- Departemen Kehutanan RI, 1989. Atlas Kayu Indonesia. Jilid I dan II. Badan Litbang Dephut, Bogor.
- Desywijaya S. 2020. Analisis komponen zat ekstraktif polar dan non-polar pada kayu simpur (*Dillenia sp.*) Disertasi (Tidak dipublikasikan). Fakultas Kehutanan, Universitas Hasanuddin. Makassar.
- Domingos I, Ayata U, Ferreira J, Cruz-Lopes L, Sen A, Sahin S, Esteves B. 2020. Calorific power improvement of wood by heat treatment and its relation to chemical composition. *Energies* **13(20)**.



- Drózdź P dan Pырzynska K. 2018. Assessment of polyphenol content and antioxidant activity of oak bark extracts. *European Journal of Wood and Wood Products* **76**: 793-795.
- Dubois M, Gilles KA, Hamilton JK, Rebers PA, Smith F. 1956. Colorimetric method for determination of sugars and related substances. *Anal Chem* **28**: 350-356.
- Dumanauw JF. 1990. *Mengenal Kayu*. Penerbit Kanisius, Yogyakarta.
- Efendi N, Lahjie AM, Kristiningrum R. 2016. Analisis pertumbuhan hutan tanaman industri jenis sungkai (*Peronema canescens* Jack) dan nilai harapan lahan oleh PT. Kutai Timber Kabupaten Kutai Kartanegara. Seminar nasional silvikultur ke-IV. Fakultas Kehutanan, Universitas Mulawarman, Samarinda.
- Fatmasari K. 2015. Isolasi polisakarida dari umbi uwi (*Dioscorea alata* L.) sebagai pengganti gelatin dan karakterisasi sifat fisika kimianya.
- Fendi F dan Kurniaty D. 2016. Identifikasi kandungan ekstrak kayu jati menggunakan Py-GCMS. *Jurnal Ilmu Pertanian Indonesia*. **21(3)**: 167-171.
- Fengel D dan Wegener G. 1995. *Kayu; Kimia, Ultrastruktur, reaksi-reaksi*. Sastroamijoyo H, penerjemah; Prawirohatmojo S, editor. Yogyakarta: Gadjah Mada University Press. Terjemahan dari: *Wood Chemistry, Ultrastructure, Reactions*.
- Ferreira JPA, Miranda I, Gominho J, Pereira H. 2015. Selective fractioning of *Pseudotsuga menziesii* bark and chemical characterization in view of an integrated valorization. *Industrial Crops and Products* **74**: 998–1007
- Fitri ACK dan Proborini WD. 2018. Analisa komposisi minyak atsiri kulit jeruk manis hasil ekstraksi metode microwave hydrodiffusion and gravity dengan GC-MS. *Reka Buana: Jurnal Ilmiah Teknik Sipil dan Teknik Kimia* **3(1)**: 53-58.



- Fitria A. 2021. Karakterisasi dan uji aktivitas antioksidan terhadap ekstrak non-polar, semi polar, dan polar dari daun sungkai. Skripsi (Tidak dipublikasikan). Fakultas Farmasi, Universitas Perintis Indonesia, Padang.
- Gan RY, Chan CL, Yang QQ, Li HB, Zhang D, Ge YY, Corke H. 2019. Bioactive compounds and beneficial functions of sprouted grains. *Sprouted Grains*. **1**:191-246
- Gao H, Shupe TF, Eberhardt TL, Hse CY. 2007. Antioxidant activity of extracts from the wood and bark of Port Orford cedar. *Wood Science* **53**(2): 147-152.
- Gao H., Shupe TF, Hse CY, Eberhardt TL. 2006. Antioxidant activity of extracts from the bark of *Chamaecyparis lawsoniana* (A. Murray) Parl. *Holzforchung* **60**(4): 459-462.
- Hadiyane A. 2011. Perubahan sifat-sifat komponen penyusun kayu, struktur sel kayu dan sifat-sifat dasar kayu terdensifikasi secara parsial. (Tidak dipublikasikan). Fakultas Kehutanan, Institut Pertanian Bogor. Bogor.
- Harborne JB. 1980. Secondary plant products: encyclopedia of plant physiology. *Phytochemistry* **19**:2803-2804.
- Harborne JB. 1984. *Phytochemical methods: a guide to modern techniques of plant analysis*. Second edition: Chapman and Hall, New York, USA.
- Hardian D. 2021. Analisis komponen zat ekstraktif pelarut polar dan nonpolar terhadap kayu arang (*Diospyros sp.*). Skripsi (Tidak Dipublikasikan). Fakultas Kehutanan, Universitas Hasanuddin, Makassar.
- Hernandez RE. 2007. Influence of Accessory Substances, Wood Density and Interlocked Grain on the Compressive Properties of Hardwoods. *Wood Science and Technology* **41**:249-265



- Hillis WE dan Sumimoto M. 1989. Effect of extractives on pulping. In Natural Products of Woody Plants. Halaman: 880-920. Springer. Heidelberg, Berlin.
- Hutagalung H. 2009. Karbohidrat bagian ilmu gizi. Fakultas kedokteran, Universitas Sumatera Utara. Medan.
- Ihsan M. 2021. Uji aktivitas antioksidan dan penghambatan tirosinase fraksi etil asetat dari ekstrak etanol daun sungkai (*Peronema canescens* Jack.) asal Kalimantan Selatan secara kromatografi lapis tipis. Skripsi (Tidak dipublikasikan. Fakultas Farmasi, Universitas Lambung Mangkurat, Kalimantan Selatan.
- Irwanto. 2007. Budidaya Tanaman Kehutanan. Yogyakarta: PDF Processed with Cute PDF Evaluation.
- Kabtni S, Sdouga D, Bettaib R I. 2020. Influence of climate variation on phenolic composition and antioxidant capacity of *Medicago minima* populations. Scientific Report **10**: 82-93.
- Kampe A dan Magel E. 2013. New insights into heartwood and heartwood formation: Cellular aspects of wood formation. Springer. Berlin
- Kaskoniene V, Maruska A, Kornysova O, Charczun N, Ligor M, Buszewski B. 2009. Quantitative and qualitative determination of phenolic compound in honey. Chemine Technologija **3**: 74-80.
- Krilov A dan Gref R. 1986. Mechanism of sawblade corrosion by polyphenolic compounds. Wood Science and Technology **20**:369-375.
- Kumar R, Chandrashekar N, Prasad NRR, Tailor R. 2020. Effect of extractive content on fuelwood characteristics of certain woody and non-woody biomass. Current Science. **118(6)**: 966-969.
- Lamounier KC, Cunha LCS, de Moraes SAL, de Aquino FJT, Chang RE, do Nascimento RT, de Souza MGM, Martins CHG, Cunha WR. 2012.



Chemical analysis and study of phenolics, antioxidant activity, and antibacterial effect of the wood and bark of *Maclura tinctoria* (L.) D. Don ex Steud. Evidence-based Complementary and Alternative Medicine. 2012: 1-8.

Lattanzio V, Kroon PA, Quidheau S, Treutter D. 2008. Recent advances in polyphenol research plant phenolics secondary metabolites with diverse functions. Blackwell Publishing, Foggia.

Lempang M. 2014. Sifat dasar dan potensi kegunaan kayu jabon merah. Jurnal Penelitian Kehutanan. Wallacea **3**:163-175.

Louis AR dan Grace M. 2019. Perancangan fasilitas duduk sebagai sarana penggunaan smart phone dan game mobile. Jurnal Intra **7(2)**: 545-550.

Lukmandaru G dan Gazidy AA. 2016. Bioaktivitas dan aktivitas antioksidan ekstrak batang mahkota dewa. Jurnal Ilmu dan Teknologi Kayu Tropis **14(2)**: 114-126.

Lukmandaru G dan Takahashi K. 2008. Variation in the natural termite resistance of teak (*Tectona grandis* L.f.) wood as a function of tree age. Annals of Forest Science **65**: 1-8.

Lukmandaru G dan Takahashi K. 2009. Radial distribution of quinone in plantation teak (*Tectona grandis* L.f.). Annals of Forest Science **66**: 1-9

Lukmandaru G, Falaah AN, Listyanto T, Rodiana D. 2021. Extractive content and colour properties of 11-year-old superior teak wood. Wood Research Journal **12(1)**: 10-17.

Lukmandaru G, Sayudha IGND, Gustomo LS, Prasetyo VE. 2011. Pengukuran kadar ekstraktif dan sifat warna kayu *Acacia mangium* dari lima provenans. Seminar Nasional MAPEKI XIII.



- Lukmandaru G. 2010. Sifat kimia kayu jati (*Tectona grandis*) pada laju pertumbuhan berbeda. *Jurnal Ilmu dan Teknologi Kayu Tropis* **8(2)**: 188-196.
- Lukmandaru G. 2011. Variability in the natural termite resistance of plantation teak wood and its relations with wood extractive content and color properties. *Indonesian Journal of Forestry Research* **8**:17-31
- Lukmandaru G. 2013. The natural resistance of teak wood grown in community forest. *Ilmu dan Teknologi Kayu Tropis* **11**: 131-139.
- Lukmandaru G. 2021. Kayu sebagai penyedia bahan kimia alami ramah lingkungan: Dulu, sekarang dan masa mendatang di Indonesia. Fakultas Kehutanan, Universitas Gadjah Mada. Yogyakarta.
- Luo ZB, Calfapietra C, Liberloo M, Scarascia-mugnozza G, Polle A. 2006. Carbon partitioning to mobile and structural fractions in poplar wood under elevated CO₂ (Euroface) and N fertilization. *Global Change Biology* **12**: 272-283.
- Luth F. 2020. Pengaruh zat ekstraktif beberapa tumbuhan terhadap mortalitas rayap tanah (*Coptotermes curvignathus* Holmgren). *Jurnal Ilmiah Pertanian* **8**: 8-16.
- Magel E, Einig W, Hampp R. 2000. Carbohydrates in trees in carbohydrate reserves in Plants-Synthesis and regulation. Elsevier Science. Ludhiana
- Martawijaya A, Kartasujana I, Kadir K, Prawira AS. 2005. Atlas kayu indonesia jilid I. Bogor: Departemen Kehutanan Badan Penelitian dan Pengembangan Kehutanan Bogor.
- Maryani H. 2020. Dimensi serat dan komponen kimia kayu reaksi pada kayu sungkai (*Peronema canescens* Jack). (Tidak dipublikasikan). Fakultas Kehutanan, Institut Pertanian Bogor. Bogor.



- Mauladdini R, Syafii W, Nawawi DS. 2022. Pengaruh zat ekstraktif kayu gamal (*Gliricidia sepium* Jacq) terhadap nilai kalor. Jurnal Penelitian Hasil Hutan **40(2)**: 125-134.
- Maulida F, Meiganati KB, Maslahat. 2020. Komponen kimia kayu trubusan jati unggul nusantara (*Tectona grandis* L.f.) pada bagian pangkal, tengah, ujung. Jurnal Sains Natural Universitas Nusa Bangsa **10(2)**.
- Metsamuuronen S dan Siren H. 2019. Bioactive phenolic compounds, metabolism and properties: a review on valuable chemical compounds in Scots pine and Norway spruce. Phytochem Review **18**: 623-664.
- Miranda I, Sousa V, Pereira, H. 2011. Wood properties of teak (*Tectona grandis*) from a mature unmanaged stand in East Timor. Journal of Wood Science **57(3)**: 171-178.
- Muhamad ZK. 2014. Uji aktivitas antibakteri ekstrak dan fraksi daun sintok (*Cinnamomum sintoc.* Blume) terhadap *Staphylococcus aureus* dan *Pseudomonas aeruginosa* serta analisa komponen senyawa fraksi aktif dengan kromatografi gas-spektrometri massa. Skripsi (Tidak dipublikasikan). Fakultas Kedokteran dan Ilmu Kesehatan, UIN Syarif Hidayatullah Jakarta, Jakarta.
- Muladi E. 2017. Kajian Alternatif Detail Sambungan Untuk Mainan Kayu. Vitruvian: Jurnal Arsitektur, Bangunan dan Lingkungan **6(3)**: 109-124.
- Mulyani LN, Asmadi A, Setiawan A. 2021. Potensi mikroalga simbiosis di perairan teluk Lampung sebagai sumber senyawa eksopolisakarida. Jurnal Farmasi Galenika **8(2)**: 76-90.
- Neiva DM, Araujo S, Gominho J, Carneiro ADC, Pereira H. 2018. Potential of *Eucalyptus globulus* industrial bark as a biorefinery feedstock: Chemical and fuel characterization. Industrial Crops and Products **123**: 262-270.



- Niamke BF, Adima AA, Seraphin K, Amusant N, Jay-Allemand C. 2018. Heartwood formation process in teak (*Tectona grandis* L): fate of non-structural carbohydrates and characterization of forsythoside B. *International Journal of Biological and Chemical Sciences* **12**: 1102-1112.
- Niamke BF, Amusant N, Kokutse A D, Chaix G, Charpentier JP, Adima A A, Kati Coulibaly S, Jay-Allemand C. 2010. Radial distribution of non-structural carbohydrates in Malaysian teak. *Biological and Chemical Science* **4**: 710-720.
- Nisula L. 2018. Wood extractives in conifer : A study of stemwood and knots of industrially important species. Abo Academy University Press, Tavastgatan.
- Nobuchi T, Okada N, Nishida M, Siripatanadilok S, Veenin T, Tobing TL, Sahri MH. 2005. Some characteristics of wood formation in Teak (*Tectona grandis*) with special reference to water conditions. Hlm: 495-499. Quality timber products of teak from sustainable forest management. India.
- Noreen H, Semmar N, Farman M, McCullagh JSO. 2017. Measurement of total phenolic content and antioxidant activity of aerial parts of medicinal plant *Coronopus didymus*. *Asian Pacific Journal of Tropical Medicine* **10**: 792-801.
- Oberhuber W, Swidrak I, Pirkebner D, Gruber A. 2011. Temporal dynamics of nonstructural carbohydrates and xylem growth in (*Pinus sylvestris*) exposed to drought. *Canadian Journal of Forest Research* **41**: 1590-1597.
- Panjaitan S dan Nuraeni Y. 2014. Prospek dan teknik budidaya sungkai (*Peronema canescens* Jack.) di Kalimantan Selatan. *Gelam* **7(1)**: 25–29.
- Panshin AJ dan JE de Zeeuw. 1980. Textbook of wood technology. **1**: Structure, Identification, Properties, and Use of the Commercial Wood of the United States and Canada. McGraw-Hill Book. Company. New York



- Plantamor. 2022. *Peronema canescens* Jack. <http://plantamor.com/species/search> (di akses September 2022).
- Praptoyo H dan Cahyono E. 2005. Dimensi serat dan proporsi sel per lingkaran tumbuh kayu sungkai (*Peronema canescens* Jack) dari Kulon Progo. Laporan Seminar Nasional. Fakultas Kehutanan, Universitas Gadjah Mada, Yogyakarta.
- Prawirohatmodjo S. 1999. Struktur dan sifat-sifat kayu, Jilid 1, Sifat-Sifat Makroskopis dan Identifikasi Kayu. Fakultas Kehutanan, Universitas Gadjah Mada, Yogyakarta.
- Prawirohatmodjo S. 2004. Kimia kayu. Universitas Gadjah Mada. Yogyakarta. (Tidak diterbitkan).
- Qiu H, Liu R, Long L. 2019. Analysis of chemical composition of extractives by acetone and the chromatic aberration of teak (*Tectona grandis* LF) from China. *Molecules* **24(10)**: 1989.
- Rahman F. 2021. Kadar Ekstraktif Kulit dan Kayu Jati Unggul Nusantara (JUN) Umur 6 dan 8 Tahun dari BKPH Yogyakarta. Skripsi (Tidak dipublikasikan). Fakultas Kehutanan, Universitas Gadjah Mada, Yogyakarta.
- Ramadhani N, Samudra AG, Pertiwi R, Utami CD, Muslimah A, Syahidah W, Khodijah PS. 2022. Analisis total fenol dan flavonoid ekstrak etanol kulit batang sungkai (*Peronema canescens* Jack). *Pharmacy: Jurnal Farmasi Indonesia* **19(1)**: 66-79.
- Rizanti DE, Wayan D, Beatrice G, Andre M, Stephane D, Hubert C, Christiane G, Eric Gelhaye, Phila R, Rita KS, Syafii W, Rozi M, Philippe G. 2018. Comparison of teak wood properties according to forest management: Short versus long rotation. *Annals of Forest Science* **75**: 39.



- Roffael E. 2016. Significance of wood extractives for wood bonding. *Applied Microbiology Biotechnology* **100**: 1589-1596.
- Rosales-Castro M, Honorato-Salazar JA, Reyes-Navarrete MG, González-Laredo RF. 2015. Antioxidant phenolic compounds of ethanolic and aqueous extracts from pink cedar (*Acrocarpus fraxinifolius*) bark at two tree ages. *Wood Chemistry and Technology* **35**: 270-279.
- Rosdian NA. 2014. Fraksi aktif antioksidan dari ekstrak kulit kayu sungkai (*Peronema canescens* Jack.). Skripsi (Tidak dipublikasikan). Fakultas kehutanan, Institut Pertanian Bogor, Bogor.
- Rosdiana NA. 2014. Fraksi Aktif Antioksidan dari Ekstrak Kulit Kayu Sungkai (*Peronema canescens* Jack.). Skripsi (Tidak dipublikasikan). Fakultas Kehutanan, Institut Pertanian Bogor, Bogor.
- Rosell JA, Piper FI, Jiménez-Vera C, Vergílio PCB, Marcati CR, Castorena M, Olson ME. 2020. Inner bark as a crucial tissue for non-structural carbohydrate storage across three tropical woody plant communities. *Plant, Cell and Environment* **44**: 156-170.
- Rosell JA. 2019. Bark in woody plants: understanding the diversity of a multifunctional structure. National Laboratory of Sustainability Sciences, Institute of Ecology University Nacional Autónoma de México. Mexico
- Routa J, Perttu A, Antti A. 2017. Wood extractives of finnish pine, spruce and birch-availability and optimal sources of ompounds: A Literature Review. Juvenes. Helshinki.
- Rowe JW. 1989. Natural products of woody plants. I and II. Springer-Verlag. New York.
- Rowell RM, Pettersen R, Han JS, Rowell JS, Tshabalala MA. 2005. Cell wall chemistry. *Handbook of wood chemistry and wood composites* **2**: 33-72.



- Rowell RM, Roger P, Mandla AT. 2012. Wood chemistry and Wood Composites. CRC Press, London.
- Sakai K. 2001. Chemistry of bark in wood and cellulosic chemistry: Second edition, revised and expanded. Marcel Decker Inc. New York
- Salim SA, Saputri FA, Saptarini NM, Levita J. 2020. Kelebihan dan keterbatasan pereaksi Folin-ciocalteu dalam penentuan kadar fenol total pada tanaman. Farmaka **18(1)**: 46-57.
- Sanusi D. 2010. Kimia kayu. Laboratorium pemanfaatan dan pengelolaan hasil hutan. Fakultas Kehutanan, Universitas Hasanuddin, Makassar.
- Sari N, Erniwati, Hapid A. 2015. Sifat mekanika kayu kemiri (*Aleurites mollucana* Willd) asal Sulawesi Tengah berdasarkan arah aksial. Warta Rimba **3(2)**: 73–79.
- Sarker SD. 2007. Chemistry for pharmacy students general. Organic and natural product chemistry. Willey and Sons. London.
- Sastrohamidjojo dan Pranowo. 1985. Spektroskopi. Liberty, Yogyakarta
- Savage JA, Clearwater MJ, Haines DF, Klein T, Mencuccini M, Sevanto S, Turgeon R, Zhang C. 2016. Allocation, stress tolerance and carbon transport in plants: how does phloem physiology affect plant ecology? Plant. Cell and Environment **39**: 709-725.
- Seftianingsih DK. 2018. Pengenalan berbagai jenis kayu solid dan konstruksinya untuk furniture kayu. Jurnal Kemadha **7 (1)**: 5-14.
- Setyowati H, Angela IF, Aliyah N. 2013. Isolasi dan standarisasi bahan alam GC-MS. Yayasan Farmasi, Semarang.
- Sholehah NA. 2021. Uji aktivitas antioksidan pada fraksi *n*-heksana dan fraksi etil asetat daun sungkai (*Peronema canescens* Jack) asal Kalimantan Selatan. Skripsi (Tidak dipublikasikan). Fakultas Farmasi, Universitas Lambung Mangkurat, Kalimantan Selatan.



- Simard S, Giovannelli A, Treydte K, Traversi ML, King GM, Frank D, Fonti P. 2013. Intra-annual dynamics of non-structural carbohydrates in the cambium of mature conifer trees reflects radial growth demands. *Tree Physiology* **33**: 913-923.
- Sinaga MPB, Mambang DEP, Lubis MS, Yuniarti R. 2022. Uji aktivitas analgesik ekstrak daun sungkai (*Peronema canescens* Jack.) terhadap mencit jantan (*Mus musculus*). *Jurnal Farmasi, Sains dan Kesehatan* **2(1)**: 100-110.
- Singleton VL, Orthofer R, Lamuela-Raventós RM. 1999. Analysis of total phenols and other oxidation substrates and antioxidants by means of folin-ciocalteu reagent. *Methods in Enzymology*. **299**: 152-178.
- Sjostrom E. 1995. Kimia kayu, dasar-dasar dan penggunaan edisi kedua. (Diterjemahkan oleh Sastrohamidjojo H). Terjemahan dari: Wood chemistry, fundamentals and application second edition. Gadjah Mada University Pres, Yogyakarta.
- Sjostrom E. 1998. Kimia Kayu Edisi 2. Terjemahan Hardjono Sastrohamidjojo. Gadjah Mada University Press. Yogyakarta. Hal: 68-80.
- Soebagio SB, Soares JS, Indraswati N, Kurniawan Y. 2018. Ekstraksi polisakarida pada biji tamarind (*Tamarindus Indica* L). *Widya Teknik*. **13(2)**: 23-32.
- Soetisna U. 2005. Study on seed anatomy of sungkai (*Peronema canescens* Jack); a viability perspective. *Biodiversitas Journal of Biological Diversity*. **6(4)**: 288-291.
- Soto-Vaca A, Gutierrez JN, Losso ZXU, Finley JW. 2012. Evolution of phenolic compounds from color and flavor problems to health benefits. *Journal of Agricultural and Food Chemistry*. **60(27)**: 6658-6677. doi: 10.1021/jf300861c



- Stackpole DJ, Vaillancourt RE, Alves A, Rodrigues J, Potts BM. 2011. Genetic variation in the chemical components of *Eucalyptus globulus* wood. *G3: Genes, Genomes, Genetics* **1(2)**: 151-159.
- Stamm AJ. 1964. Wood and Cellulose Science. The Ronald Press Co. New York.
- Sumiasri N dan Pribadi D. 2003. Pertumbuhan stek cabang sungkai (*Peronema canescens* Jack) pada berbagai konsentrasi zat pengatur tumbuh (GA3) dalam media cair. *Jurnal Natur Indonesia. Majalah Ilmiah Lembaga Penelitian Universitas Riau* **6(1)**: 1-2.
- Supartini S. 2009. Komponen kimia kayu meranti kuning (*Shorea macrobalanos*). *Jurnal Penelitian Ekosistem Dipterokarpa*. **3(1)**: 43-50.
- Surani. 2020. Keanekaragaman serangga ordo hymenoptera dibawah tegakan sungkai (*Peronema canescens* Jack) di KHDTK Kemampo Kabupaten Banyuasin. Skripsi (Tidak dipublikasikan). Fakultas Sains dan Teknologi, Universitas Raden Fatah, Palembang.
- Surya MI dan Astuti IP. 2017. Keanekaragaman dan potensi tumbuhan di kawasan hutan lindung gunung Pesagi, Lampung Barat. *Pros Sem Nas Masy Biodiv Indon* **3(2)**: 211-215.
- Syahidah. 2008. Bioaktivitas zat ekstraktif kayu manggis (*Garcinia mangostana* L.) terhadap rayap tanah *Coptotermes curvignathus* Holmgren. Fakultas Kehutanan, Institut Pertanian Bogor, Bogor.
- Torelli N, Trajkovi J, Serti V. 2006. Influence of phenolic compounds in heartwood of silver fir (*Abies alba* Mill.) on the equilibrium moisture content. *Holz als Roh- und Werkstoff* **64**: 341-342.
- Triharyani A, Meinisasti R, Khasanah HR, Susilo AI. 2021. Formulasi sediaan sabun mandi padat ekstrak etanol daun bidara (*Ziziphus Mauritiana Lam*) dengan variasi konsentrasi minyak sawit. Disertasi (Tidak dipublikasikan). Politeknik Kesehatan, Kementerian Kesehatan, Bengkulu.



- Tsoumis G. 1991. Science and technology of wood: structure, properties, utilization. New York: Van Nostrand Reinhold.
- Umezawa T. 2001. Chemistry of extractives in wood and cellulosic chemistry, 2nd edition. Marcel Decker Inc, New York.
- Van-Sumere CF. 1989. Phenols and phenolic acids. In: Methods in Plant Biochemistry, Vol. 1. Plant Phenolics. Academic Press, London.
- Wahyudi I, T Priadi, Rahayu IS. 2014. Karakteristik dan sifat-sifat dasar kayu jati unggul umur 4 dan 5 tahun asal Jawa Barat. Jurnal Ilmu Pertanian Indonesia **19(1)**: 5056.
- Wangaard FF. 1966. Resistance of wood to chemical degradation. Forest Product Journal **16(2)**: 53-64.
- Widyorini R, Khotimah K, Prayitno TA. 2014. Pengaruh suhu dan metode perlakuan panas terhadap sifat fisika dan kualitas finishing kayu mahoni. Jurnal Ilmu Kehutanan **8(2)**: 65-74.
- Withouck H, Boeykens A, Luyten W, Lavigne R, Wagemans J, Broucke MV. 2019. Phenolic composition, antimicrobial and antioxidant properties of Belgian apple wood extracts. Journal of Biologically Active Products from Nature **9**: 24-38.
- Yulistati FR. 2021. Uji farmakognostik dan aktivitas antioksidan ekstrak metanol daun sungkai (*Peronema canescens* Jack.) asal Kalimantan Selatan. Skripsi (Tidak dipublikasikan). Fakultas Farmasi, Universitas Lambung Mangkurat, Kalimantan Selatan.
- Yunanta RRR, Lukmandaru G, Fernandes A. 2014. Sifat Kimia dari Kayu *Shorea Retusa*, *Shorea Macroptera* dan *Shorea Macrophylla*. Jurnal Penelitian Dipterokarpa **8(1)**: 15-24.
- Zhang H, Wang C, Wang X. 2014. Spatial variations in non-structural carbohydrates in stems of twelve temperate tree species. Trees **28**: 77-89.



- Zhang Q, Jia X, Shao M, Ma C. 2018. Unfolding non-structural carbohydrates from Sapling to dying black locust on China's Loess Plateau. *Journal of Plant Growth Regulation* **37**: 794-802.
- Zule J, Cufar CA, Tisler V. 2015. Lipophilic extractives in heartwood of european larch (*Larix decidua* Mill). *Drvna Industrija* **66**: 305-313.