

## DAFTAR PUSTAKA

- Affinnih, K. 2023. Assessment of extractants for soil available potassium determination in the selected soils of Kwara State, Nigeria. *Agricultural Sciences/Agrarni Nauki*, 15(36).
- Afzal, S., Sirohi, P., Sharma, D., & Singh, N. K. 2020. Micronutrient movement and signalling in plants from a biofortification perspective. In *Plant micronutrients: deficiency and toxicity management* (pp. 129-171). Cham: Springer International Publishing.
- Al-Snafi, A. E. 2017. The pharmacological and therapeutic importance of *Eucalyptus* species grown in Iraq. *IOSR Journal of Pharmacy*, 7(3), 72-91.
- Alemayehu, A., & Melka, Y. 2022. Small scale eucalyptus cultivation and its socioeconomic impacts in Ethiopia: A review of practices and conditions. *Trees, Forests and People*, 8, 100269.
- Anggraini, N., Faridah, E., & Indrioko, S. 2015. Pengaruh cekaman kekeringan terhadap perilaku fisiologis dan pertumbuhan bibit black locust (*Robinia pseudoacacia*). *Jurnal Ilmu Kehutanan*, 9(1), 40-56.
- Armanto, A., Pata'dungan, Y. S., & Khaliq, M. A. 2025. DISTRIBUSI VERTIKAL UNSUR HARA FOSFOR (P) PADA LAHAN KELAPA SAWIT DI KECAMATAN BUDONG-BUDONG. *AGROTEKBIS: JURNAL ILMU PERTANIAN (e-journal)*, 13(2), 356-365.
- Asti, A. D. P. 2022. *Isolasi dan identifikasi kapang endofit tanaman eukaliptus (Eucalyptus sp.) Berdasarkan analisis filogenetik its rdna* (Bachelor's Thesis. Tidak Dipublikasikan. Fakultas Sains dan Teknologi UIN Syarif Hidayatullah Jakarta).
- ASTUTI, A. W. 2013. PENGARUH SIFAT KIMIA TANAH TERHADAP PERTUMBUHAN TANAMAN JATI UMUR 3 TAHUN DI PETAK 14 WANAGAMA I GUNUNG KIDUL. Skripsi. Tidak Dipublikasikan. Universitas Gadjah Mada.
- Azhari, M. F. 2024. *Kajian Sifat Kimia Spodosol pada Areal Pertanaman Eucalyptus di PT. Wirakarya Sakti*. Doctoral Dissertation. Tidak Dipublikasikan. Universitas Jambi.
- Aziza, I., Rahayu, Y. S., & Dewi, S. K. 2022. Pengaruh pupuk organik cair dengan penambahan silika dan cekaman air terhadap pertumbuhan tanaman kedelai. *LenteraBio: Berkala Ilmiah Biologi*, 11(1), 183-191.
- Bhat, S. A., Qadri, S. A. A., Dubbey, V., Sofi, I. B., & Huang, N. F. 2024. Impact of crop management practices on maize yield: Insights from farming in tropical regions and predictive modeling using machine learning. *Journal of Agriculture and Food Research*, 18, 101392.

- Bi, B., Li, G., Goll, D. S., Lin, L., Chen, H., Xu, T., ... & Lambers, H. 2024. "Enhanced rock weathering increased soil phosphorus availability and altered root phosphorus-acquisition strategies." *Global Change Biology* 30. 5: e17310.
- Bouray, M., Moir, J. L., Condrón, L. M., & Lehto, N. J. 2021. Lime-induced pH elevation influences phosphorus biochemical processes and dynamics in the rhizosphere of *Lupinus polyphyllus* and *Lupinus angustifolius*. *Journal of Soil Science and Plant Nutrition*, 21(3), 1978-1992.
- Brune, A. 2021. Eucalypts for Tropical Rainforest (Af) climate. *SILVAE GENETICA*, 70(1), 170-183.
- Bulgarelli, R. G., de Oliveira Silva, F. M., Bichara, S., Andrade, S. A. L., & Mazzafera, P. 2019. Eucalypts and low phosphorus availability: between responsiveness and efficiency. *Plant and Soil*, 445(1), 349-368.
- Chaturvedi, S., Kumar, A., Min, L., Mohan, K., Singh, N., & Kumar, R. 2025. Insights into earthworms and fungi: pioneering roles in mitigating global food scarcity and combatting land degradation. *Land Degradation & Development*, 36(5), 1405-1429.
- Chi, G., Zeng, F., Wang, Y., & Chen, X. 2022. Phosphorus dynamics in litter-soil systems during litter decomposition in larch plantations across the chronosequence. *Frontiers in Plant Science*, 13, 1010458.
- Dharmawan, I. W. S., & Rekan. 2023. Implementation of soil and water conservation in Indonesia: lessons for biodiversity, hydrology, soil erosion and microclimate. *Applied Sciences*, 13(13), 7648.
- David, E. 2024. Phosphorus Adsorption as Affected by Concretionary Nodules of Oxidic Rhodustalf in Southern Guinea Savannah Agroecological Zone of Nigeria. *Adv Earth & Env Sci*, 5(3), 1-15.
- De Lima Neto, Antonio João, Júlio César Lima Neves, Herminia Emilia Prieto Martinez, Jailson Silva Sousa, and Loane Vaz Fernandes. 2021. "Nutrient accumulation and nutritional efficiency in eucalyptus." *Journal of Plant Nutrition* 44, no. 16 : 2421-2434.
- Dorau, K., Hoppe, M., Rückamp, D., Köser, J., Scheeder, G., Scholz, K., & Fries, E. 2023. Status quo of operation procedures for soil sampling to analyze microplastics. *Microplastics and Nanoplastics*, 3(1), 15.
- Du Toit, B., Smith, C. W., Little, K. M., Boreham, G., & Pallett, R. N. 2010. Intensive, site-specific silviculture: manipulating resource availability at establishment for improved stand productivity. *Southern Forests: a Journal of Forest Science*, 72(2), 63-74.
- Eger, A., Koele, N., Caspari, T., Poggio, M., Kumar, K., & Burge, O. R. 2021. Quantifying the importance of soil-forming factors using multivariate soil data at landscape scale. *Journal of Geophysical Research: Earth Surface*, 126(8), e2021JF006198.

- Fahrizal, I., Rahayu, A., & Rochman, N. 2017. Response of Soybean Plant to Inoculation of Arbuscular Mycorrhizae and Application of Phosphorus Fertilizer on Acidic Soil. *Jurnal Agronida*, 3(2).
- Ferdianti, W., Wasis, B., & Lisnawati, Y. 2022. Dampak Revegetasi Hutan dengan Tegakan Meranti di Hutan Penelitian Gunung Dahu Bogor Jawa Barat terhadap Karakteristik dan Kesuburan Tanah. *Jurnal Penelitian Hutan dan Konservasi Alam*, 19(1), 49-67.
- Fitriani, B. A. F., Putri, K. A., & Persada, A. Y. 2019. Analisis karakter morfologi tanaman padi yang diaplikasikan dengan silika dan kalium organik. *Jurnal Jeumpa*. 6(2).
- Ghosh, D., Barman, M., Datta, S. P., Das, D., Sharma, V. K., & Das, T. K. 2024. Boosting the soil phosphorus availability to plants by using silicon-rich crop residues and reducing fertilizer requirements. *Silicon*, 16(7), 2801-2813.
- González, A., Hernández, J., Pino, A. D., Hirigoyen, A., & Ualde, J. 2023. Harvest Residue Decomposition from *Eucalyptus* sp. Plantations in Temperate Climate: Indicators and Contribution to Nutrient Cycling. *Forests*, 14(6), 1119.
- Guntoro, D., Andriyani, Y., & Audina, M. 2024. Identifikasi Zat Alelopati pada Daun *Eucalyptus pellita* F. Muell dan Pengaruhnya terhadap Perkecambahan Gulma. *Buletin Agrohorti*. 12(3), 375-382.
- Galla, E. A. 2024. ANALISIS KETERKAITAN SIFAT TANAH DENGAN KANDUNGAN KARBON TANAH PADA HUTAN SEKUNDER, KELAPA SAWIT, AGROFORESTRI DAN SAWAH DI KABUPATEN LUWU TIMUR. *Jurnal Eboni*, 6(1), 12-22.
- Guo, X., Yang, G., Wu, J., Qiao, S., & Tao, L. 2024. Impacts of forest age on soil characteristics and fertility quality of *Populus simonii* shelter forest at the southern edge of the Horqin Sandy Land, China. *PeerJ*, 12, e17512.
- Hadiatna, E. 2017. *Modul Diklat Keahlian Ganda Guru Agribisnis Tanaman Perkebunan: Mengelola Penanaman Tanaman Perkebunan dan Tanaman Penutup Tanah*. Kementerian Pendidikan dan Kebudayaan, Jakarta.
- Hakamada, R. E. Da Silva, R. M. L., Bazani, J. H., Otto, M. S. G., & Stape, J. L. 2016. Fertilization Response, Light Use, and Growth Efficiency in *Eucalyptus* Plantations across Soil and Climate Gradients in Brazil. *Forests*, 7(6), 117.
- Hardiyanti, R. A., Hamzah, H., & Andriani, A. 2022. Pengaruh Pemberian Pupuk NPK terhadap Pertambahan Bibit Merbau Darat (*Intsia palembanica*) di Pembibitan: The effect of NPK fertilizer on the growth of merbau Land (*Intsia palembanica*) seedlings in nursery. *Jurnal Silva Tropika*, 6(1), 15-22.
- Hardiyanto, E. B., Inail, M. A., & Nambiar, E. K. S. 2021. Productivity of *Eucalyptus pellita* in Sumatra: Acacia mangium Legacy, Response to

- Phosphorus, and Site Variables for Guiding Management. *Forests*, 12(9), 1186.
- Hardjowigeno, S. 2012. *Ilmu Tanah*. Jakarta: Akademika Pressindo.
- Hutapea, F. J., Volkova, L., Mendham, D. S., & Weston, C. J. 2024. *Eucalyptus pellita* substantially outperforms *Acacia mangium* in tropical savannah ecosystem of Australia, but strategies are needed to maintain soil nutrients. *Forest Ecology and Management*, 562, 121930.
- Inayah, A., & Kaswanto, K. 2023. Nilai biodiversitas lanskap mangrove DKI Jakarta, Kelurahan Penjaringan, Kecamatan Muara Kamal, Jakarta Utara. *Jurnal Pengelolaan Lingkungan Berkelanjutan (Journal of Environmental Sustainability Management)*, 118-134.
- Janes, J. K., & Hamilton, J. A. 2017. Mixing it up: The role of hybridization in forest management and conservation under climate change. *Forests*, 8(7), 237.
- Jayadi, M., Juita, N., & Wulansari, H. 2023. Analisis fosfor tanah pada lahan sawah irigasi dan sawah tadah hujan di Kecamatan Duampanua Kabupaten Pinrang. *Jurnal Ecosolum*, 11(2), 191–207.
- Fahri, R., & Khairani, S. 2023. Pengaruh Pemberian Kalium Terhadap Fisiologis Dan Morfologis Kedelai Pada Cekaman Kekeringan. *AGRORADIX: Jurnal Ilmu Pertanian*, 6(2), 45-49.
- Kunarso, A., & Azwar, F. 2013. Keragaman jenis tumbuhan bawah pada berbagai tegakan hutan tanaman di Benakat, Sumatera Selatan. *Jurnal Penelitian Hutan Tanaman*, 10(2), 85-98.
- Kusuma, Z., & Wicaksono, K. S. 2024. Impact of Land Use on Soil Water Retention in Inceptisols of the Upper Konto Watershed. *Journal of Tropical Soils*, 29(3), 167-177.
- Kusumandari, A., Marhaento, H., & Suryatmojo, H. 2024. Vegetation Analysis of the Spring Water Surroundings at the Wanagama Rehabilitated Forest. *In BIO Web of Conferences (Vol. 94, p. 04012)*. EDP Sciences.
- Lisaholit, S., & Maruapey, A. Riskawati 2025. Peran pupuk organik super bokashi MA-11 terhadap pertumbuhan dan hasil panen ubi jalar (*Ipomea batatas* L.). *AGRILAND Jurnal Ilmu Pertanian*, 13(1), 1-11.
- Long, Y., & Peng, J. 2023. Interaction between boron and other elements in plants. *Genes*, 14(1), 130.
- Lynch, J. P. 2022. Harnessing root architecture to address global challenges. *The Plant Journal*, 109(2), 415-431.
- Ma, Y., Suo, Y., Qi, H., Tang, F., & Wang, M. 2024. Effects of Rhizobium Inoculation on Rhizosphere Soil Microbial Communities, Physicochemical Properties, and Enzyme Activities in Caucasian Clover Under Field Conditions. *Agronomy*, 14(12), 2880.

- Madalcho, A. B., Lemma, B., Mena, M. M., & Badesso, B. B. 2019. Is the expansion of *Eucalyptus* tree a curse or an opportunity? Implications from a dispute on the tree's ecological and economic impact in Ethiopia: A review. *Journal of Ecology and the Natural Environment*, 11(6), 75-83.
- Madjid, M. N. M., Dwiko, D. B. P., & Wahyu, W. W. 2022. Locals' Claims of Rights and Access to Forest Resources in Three Forest Management Regimes in Gunungkidul Regency, Yogyakarta. Wasian: *Jurnal Kehutanan*, 3(2), 45–56.
- Manurung, R., Gunawan, J., & Hazriani, R. 2017. Pemetaan status unsur hara N, P, dan K tanah pada perkebunan kelapa sawit di lahan gambut. *Jurnal Ilmu Tanah*.
- Mazzafera, P., Bulgarelli, R. G., de Oliveira Silva, F. M., & de Andrade, S. A. L. 2025. Nutrient Ratios in the Leaves and Stems of *Eucalyptus* and *Corymbia* Species Under High Soil Phosphate. *Forests*, 16(6), 869.
- Melsasail, L., Warouw, V. R. C., & Kamag, Y. E. 2018. Analisis kandungan unsur hara pada kotoran sapi di daerah dataran tinggi dan dataran rendah. *In Cocos* (Vol. 10, No. 8).
- Molina, A., Vanacker, V., Chadwick, O., Zhiminaicela, S., Corre, M., & Veldkamp, E. 2024. Vegetation patterns associated with nutrient availability and supply in high-elevation tropical Andean ecosystems. *Biogeosciences*, 21(12), 3075-3091.
- Moon, H. K., & Aggangan, N. S. 2019. Seedling growth and mineral uptake of *Eucalyptus pellita* with different mycorrhizal inoculants in Central Kalimantan, Indonesia. CABI Digital Library.
- Mousavi, S. R., Jahandideh Mahjenabadi, V. A., Khoshru, B., & Rezaei, M. 2024. Spatial prediction of winter wheat yield gap: agro-climatic model and machine learning approaches. *Frontiers in Plant Science*, 14, 1309171.
- Mustika, A., Rahmatiyah, V., Mukti, M. L., Khofifah, I. M., Alhi, F. Z., & Purnomo, N. H. 2024, December. *Potential Vulnerability to Hydrological Disasters in the Gunungsewu Gunungkidul Karst Area*. In 4th International Conference on Social Sciences and Law (ICSSL 2024) (pp. 348-365). Atlantis Press.
- Mustofa, A., Utami, S. N. H., & Purwanto, B. H. 2024. Soil quality index in some cropping systems in plot 17 of Wanagama forest, Gunungkidul, Yogyakarta, Indonesia. *Jurnal Tanah*, 11(1), 25–34.
- Muzaqi, F., & Wijayanti, P. ANALYSIS OF KARST ROCK DESERTIFICATION IN THE TROPICAL KARST REGION OF GUNUNG SEWU, TEPUS, GUNUNGKIDUL. *GeoEco*, 11(2), 413-429.
- Nadalia, D., Sutandi, A., & Nugroho, B. 2021. *Suitability criteria of land characteristics related to *Eucalyptus pellita* production*. IOP Conference Series: Earth and Environmental Science.

- Nursyamsi, D. 2025. Kebutuhan hara kalium tanaman kedelai di tanah Ultisol. *Jurnal Ilmu Tanah dan Lingkungan*, 6(2), 71-81.
- Oluwajuwon, T. V., Ogbuka, C. E., Ogana, F. N., Hossain, M. S., Israel, R., & Lee, D. J. 2024. Describing and Modelling Stem Form of Tropical Tree Species with Form Factor: A Comprehensive Review. *Forests*, 16(1), 29.
- Pavinato, P. S., Gotz, L. F., Teles, A. P. B., Arruda, B., Herrera, W. B., Chadwick, D. R., & Withers, P. J. 2024. Legacy soil phosphorus bioavailability in tropical and temperate soils: Implications for sustainable crop production. *Soil and Tillage Research*, 244, 106228.
- Pradana, S., Bayu, G., Islami, T., & Suminarti, N. E. 2015. *Kajian kombinasi pupuk fosfor dan kalium pada pertumbuhan dan hasil dua varietas tanaman sorgum (Sorghum bicolor (L.) Moench)* (Doctoral Dissertation. Tidak Dipublikasikan. Brawijaya University).
- Prasetyo, A., Aiso-Sanada, H., & Ishiguri, F. 2018. Growth characteristics and wood properties of two interspecific Eucalyptus hybrids developed in Indonesia. *Forest Products Journal*, 68(4), 436-445.
- Rahayu, Y. S., & Dewi, S. K. 2023. *Penyakit Tanaman Akibat Defisiensi Unsur Hara*. Unesa University Press.
- Rahmawati, A. D. 2025. Studi Literatur Metode Rehabilitasi Lahan Hutan di Indonesia. *Jurnal ForestrIndo*, 2(1), 174-191.
- Reddy, G. V., Karanth, K. U., Kumar, N. S., Krishnaswamy, J., & Karanth, K. K. 2016. *Survey Design, Field and Analytical Methods*. In *Recovering Biodiversity in Indian Forests* (pp. 23-41). Singapore: Springer Singapore.
- Riyanto, H. N. 2024. *KORELASI KADAR Ca DAN Mg DALAM TANAH DENGAN PERFORMA TEGAKAN EUCALYPTUS HIBRIDA DI PETAK 18 KHDTK WANAGAMA*. Skripsi. Tidak Dipublikasikan. Universitas Gadjah Mada.
- Rodionov, A., Bauke, S. L., von Sperber, C., Hoeschen, C., Kandeler, E., Kruse, J., & Amelung, W. 2020. Biogeochemical cycling of phosphorus in subsoils of temperate forest ecosystems. *Biogeochemistry*, 150(3), 313-328.
- Sabrina, L. 2018. *Status Kesuburan Tanah pada Berbagai Tutupan Lahan di Kebun Percobaan Karangploso, Mala*. Universitas Brawijaya.
- Sancayaningsih, R. P. 1991. *Studies of vesicular-arbuscular mycorrhiza in Wanagama I Forest Research Center, Yogyakarta, Indonesia*. University of British Columbia Library.
- Saputra, R. D. 2022. *Potensi Carrier Kompos dan NaCl sebagai Media Mikroba untuk Remediasi Lahan Bekas Tambang Emas di Kabupaten Kulon Progo*. Universitas Islam Indonesia.
- Seran, R. 2017. Pengaruh mangan sebagai unsur hara mikro esensial terhadap kesuburan tanah dan tanaman. *Bio-edu*, 2(1), 13-14.
- Silalahi, M. 2017. *Diktat Sistematika Tumbuhan Tinggi*. Universitas Kristen Indonesia, Jakarta Timur.

- Silva, P. H. M., Junqueira, L. R., de Araujo, M. J., Wilcken, C. F., Moraes, M. L. T., & de Paula, R. C. 2020. Susceptibility of eucalypt taxa to a natural infestation by *Leptocybe invasa*. *New Forests*, 51, 753-763.
- Snieszko, R. A., Koch, J., Liu, J. J., & Romero-Severson, J. 2023. Will Genomic Information Facilitate Forest Tree Breeding for Disease and Pest Resistance?. *Forests*, 14(12), 2382.
- Sugiyono, P. 2016. *Metode Penelitian Manajemen (Pendekatan Kuantitatif, Kualitatif, Kombinasi (Mixed Methods). Penelitian Tindakan (Action Research, dan Penelitian*. Cv. Alfabeta: Bandung.
- Susanti, Y. 2022. Uji Kompatibilitas Bakteri Endofit Asal Tanaman *Eucalyptus pellita* dan Fungi Mikoriza Arbuskular (FMA) Compatibility Test Endophytic Bacteria Of Plant Origin *Eucalyptus pellita* and Arbuscular Mycorrhiza Fungi (AMF). *Faculty Of Agriculture, Study Program Of Agrotechnology, Universitas Pasir Pengaraian, Riau, Indonesia Email*, 3(2), 111-120.
- Titisari, P. W. 2024. *Dasar-Dasar Ekologi Pertanian*. UIR Press.
- Trisnawati, A. 2022. Analisis Status Kesuburan Tanah Pada Kebun Petani Desa Ladogahar Kecamatan Nita Kabupaten Sikka. *Jurnal Locus Penelitian dan Pengabdian*, 1(5), 68-80.
- Urbaningrum, S. 2023. *Karakteristik Kimia Tanah pada Beberapa Penggunaan Lahan di Kecamatan Batang Kuis Kabupaten Deli Serdang Provinsi Sumatera Utara*. Skripsi. Tidak Dipublikasikan. Universitas Medan Area.
- Vengavasi, K., Pandey, R., Soumya, P. R., Hawkesford, M. J., & Siddique, K. H. 2021. Below-ground physiological processes enhancing phosphorus acquisition in plants. *Plant Physiology Reports*, 26(4), 600-613.
- Vietorisz, C. R., Nash, J. A., Siggers, J. A., Leander, E. J., Bock, B. M., Camuy-Vélez, L. A., ... & Hoeksema, J. D. 2025. Pine-fungal co-invasion alters whole-ecosystem properties of a native eucalypt forest. *New Phytologist*, 247(5), 2342-2356.
- Wang, Y., Wu, Z., Li, X., & Shang, X. 2024. Regeneration and genetic transformation in *Eucalyptus* Species, current research and future perspectives. *Plants*, 13(20), 2843.
- Wang, Z., Zhu, L., Gielen, G., Wu, Q., Huang, K., Wen, J., ... & Wu, L. 2023. Potential effects of soil chemical and biological properties on wood volume in *Eucalyptus urophylla* × *Eucalyptus grandis* hybrid plantations and their responses to different intensity applications of inorganic fertilizer. *Environmental Science and Pollution Research*, 30(1), 773-787.
- West, P. W. 2015. *Stand measurement*. In *Tree and Forest Measurement* (pp. 71-95). Cham: Springer International Publishing.
- Wild, B., Gerrits, R., & Bonneville, S. 2022. The contribution of living organisms to rock weathering in the critical zone. *npj Materials degradation*, 6(1), 98.

- Zahrah, S., & Sulhaswardi, S. 2013. *Perbandingan campuran media tumbuh dan berbagai konsentrasi atonik untuk pertanaman bibit Eucalyptus pellita*. Dinamika Pertanian.
- Zalfa, A. P. 2023. *Analisis implementasi kebijakan restorasi gambut di Taman Hutan Raya Orang Kayo Hitam Provinsi Jambi*. Skripsi. Tidak Dipublikasikan. Universitas Lampung.
- Zhang, M. E., Dai, S., Gul, S., He, L., Chen, H., & Liu, D. 2024. Effect of Plow Pan on the Redistribution Dynamics of Water and Nutrient Transport in Soils. *Sustainability*, 16(20), 8859.
- Zörb, C., Senbayram, M., & Peiter, E. 2014. Potassium in agriculture—status and perspectives. *Journal of plant physiology*, 171(9), 656-669.