

## DAFTAR PUSTAKA

- Abdel-Hamid, A.M., J.O. Solbiati., I.K.O. Cann. 2013. Insights into Lignin Degradation and Its Potential Industrial Applications. *Advance in Applied Microbiology*. Vol 82 (1): 1–28.
- Agrios, G.N. 2005. *Plant Pathology*. Fifth Edition. Elsevier Academic Press. USA.
- Aravindaram, K., R. Bhaskaran., & R. Samiyappan. 2010. Ganoderma–A Basal Stem Rot Disease of Coconut Palm in South Asia and Asia Pacific Regions. *Archives of Phytopathology and Plant Protection*. Vol 43 (15): 1.445–1.449.
- Armiadi. 2009. Penambatan Nitrogen Secara Biologis pada Tanaman Leguminosa. *Wartazoa*. Vol 19 (1): 23–30.
- Bagchee, K.D. 1945. Pathological Notes No. 2: Wilt and Dieback of Shisham, Babul, and Khair in the Artificial Regeneration under Agriculture-Cum-Forestry Management. *Indian Forester*. Vol 71 (1): 20–24.
- Balasundram, N., K. Sundram., S. Samman. 2006. Phenolic Compounds in Plants and Agri-Industrial By-Products: Antioxidant Activity, Occurrence, and Potential Uses. *Food Chemistry*. Vol 99 (1): 191–203.
- Basset, K. & Peters, R.N. 2003. *Ganoderma: A Significant Root Patogen*. Arborilological Service Inc. Publisher. Texas.
- Bhadra, M. 2014. *Ganoderma* Associaton with the Mortality of *Acacia auriculiformis*, Susceptibility to Different Hosts and Its Controls. *Journal of Plant Pathology and Microbiology*. Vol 5 (4): 1–6.
- Bharudin, I., A.F.F.A. Wahab., M.A.A. Samad., N.X. Yie., M.A. Zairun., F.D.A. Bakar., & A.M.A. Murad. 2022. Review Update on the Life Cycle, Plant–Microbe Interaction, Genomics, Detection and control Strategies of the Oil Palm Pathogen *Ganoderma boninense*. *Biology*. Vol 11 (2): 251–269.
- Bhosle, S., K. Ranadive., G. Bapat., S. Garad., G. Deshpande., & J. Vaidya. 2010. Taxonomy and Diversity of *Ganoderma* from the Western Parts of Maharashtra (India). *Mycosphere*. Vol 1 (3): 249–262.
- Bintarto, R. & Surastopo, H. 1978. *Metode Analisa Geografi*. LP3ES. Jakarta.
- Blanchette, R.A. 1984. Screening Wood Decayed by White Rot Fungi for Preferential Lignin Degradation. *Applied and Environmental Microbiology*. Vol 48 (3): 647–653.
- Campbell, C.L. & Madden, L.V. 1990. *Introduction to Plant Disease Epidemiology*. John wiley & Sons. New York.
- Cao, Y. & Yuan, H.S. 2013. *Ganoderma mutabile* sp. nov. from Southwestern China Based on Morphological and Molecular Data. *Mycological Progress*. Vol 12 (1): 121–126.
- Chang, S.T. 1999. Global Impact of Edible and Medicinal Mushrooms on Human Welfare in the 21<sup>st</sup> Century: Nongreen Revolution. *International Journal of Medicinal Mushrooms*. Vol 1 (1): 1–7.

- Coetzee, M.P.A., S. Marincowitz., V.G. Muthelo., & M.J. Wingfield. 2015. *Ganoderma* Species, Including New Taxa Associated with Root Rot of the Iconic *Jacaranda mimosifolia* in Pretoria, South Africa. *IMA Fungus*. Vol 6 (1): 249–256.
- Dai, Y.C., B.K. Cui., H.S. Yuan., & B.D. Li. 2007. Pathogenic Wood-Decaying Fungi in China. *Forest Pathology*. Vol 37 (2): 105–120.
- Daza, A., J.L. Manjon., M. Camacho., L.R. De La Osa., A. Aguilar., & C. Santamaria. 2006. Effect of Carbon and Nitrogen Sources, pH, and Temperature on In Vitro Culture of Several Isolates of *Amanita caesarea* (Scop.:Fr.) Pers. *Mycorrhiza*. Vol 16 (1): 133–136.
- Din, F. & Mukhtar, T. 2019. Morphological Characterization of *Ganoderma* Species from Murre Hills of Pakistan. *Plant Protection*. Vol 3 (2): 73–84.
- Dreistadt, S.H., J.K. Clark., & M.L. Flint. 2004. *Pests of Landscape and Shrubs*. Second Edition. University of California Agriculture and Natural Research Publication. Oakland.
- Dube, H.C. 2013. *An Introduction to Fungi*. Scientific Publisher. India.
- Edy, N., A. Anshary., & I. Bogor. 2020. Incidence and Severity of *Ganoderma* Rot Disease in Tropical Land-use Systems and Their Virulence to Palm Oil. *Plant Pathology Journal*. Vol 19 (2): 98–105.
- Eiland, F., M. Klammer., A.M. Lind., M. Leth., & E. Bååth. 2001. Influence of Initial C/N Ration on Chemical and Microbial Composition During Long Term Composting of Straw. *Mycrobial Ecology*. Vol 41 (1): 272–280.
- Ennos, R.A. 2015. Resilience of Forests to Pathogens: an Evolutionary Ecology Perspective. *International Journal of Forest Research*. Vol 88 (1): 41–52.
- Eris, D.D., H. Widiastuti., Suharyanto., K. Panjaitan., & D. Taniwiryono. 2022. *Ganoderma* Stem Rot Disease Mapping and the Chemical and Biological Characters of Epidemic Lands. *IOP Conference Series: Earth and Enviromental Science*. Vol 974 (1): p. 012049.
- Fernando, K.M.E.P. 2008. The Host Prefernce of a *Ganoderma lucidum* Strain for Three Tree Species of Fabaceae Family: *Cassia nodosa*, *Cassia fistula*, and *Delonix regia*. *Journal of the National Science Foundation of Sri Lanka*. Vol 36 (4): 323–326.
- Fletcher, I. 2019. Effect of Temperature and Growth Media on Mycelium Growth of *Pleurotus ostreatus* and *Ganoderma lucidum*. *Cohesive Journal of Microbiology and Infectious Disease*. Vol 2 (5): 1–5.
- Gardner, F.P., R.B. Pearce., & R.L. Mitchel. 1991. *Fisiologi Tanaman Budidaya*. Universitas Indonesia Press. Jakarta.
- Grinn-Gofron, A. & Strzelczak, A. 2011. The Effects of Meteorological Factors on the Occurrence of *Ganoderma* spp. Spores in the Air. *International Journal of Biometeorology*. Vol 55 (2): 235–241.
- Hasanuddin. 2014. Jenis Jamur Kayu Makroskopis sebagai Media Pembelajaran Biologi (Studi di TNGL Blangjerango Kabupaten Gayo Lues). *Jurnal Biotik*. Vol 2 (1): 1–76.
- Hasnain, S.M., A. Al-Frayh, F. Khatija., & S. Al-Sedairy. 2004. Airborne *Ganoderma* Basidiospores in a Country with Desert Environment. *Grana*. Vol 43 (2): 111–115.

- Henessy, C. & Daly, A. 2007. *Ganoderma Diseases*. Department of Primary Industry, Fisheries, and Mines. Northern Territory Government.
- Herliyana, E.N., D. Taniwiryono., & H. Minarsih. 2012. Penyakit Akar *Ganoderma* sp. Pada Sengon di Jawa Barat dan Jawa Timur. *Jurnal Manajemen Hutan Tropika*. Vol 18 (2): 100–109.
- Hushiarian, R., N.A. Yusof., & S.W. Dutse, 2013. Detection and Control of *Ganoderma boninense*: Strategies and Perspective. *Springer Plus*. Vol 2 (1): 1–12.
- Isrun. 2010. Perubahan Serapan Nitrogen Tanaman Jagung dan Kadar Al-dd Akibat Pemberian Kompos Tanaman Legum dan Nonlegum pada Inseptisols Napu. *Jurnal Agroland*. Vol 17 (1): 23–29.
- Jager, K.J., C. Zoccali., R. Kramar., & F.W. Dekker. 2007. Measuring Distance Occurrence. *Kidney International*. Vol 72 (4): 412–415.
- Jo, W.S., Y.J. Cho., D.H. Cho., S.D. Park., Y.B. Yoo., & S.J. Seok. 2009. Culture Conditions for Mycelial Growth of *Ganoderma aplanatum*. *Mycobiology*. Vol 37 (2): 94–102.
- Kamu, A., C.K. Phin., I.A. Seman., & H.C. Mun. 2015. Distribution of Infected Oil Palms with *Ganoderma* Basal Stems Root Disease. *Journal of Scientific Research and Development*. Vol 2 (10): 49–55.
- Karlinasari, L., U. Adzkia., T. Puspitsari., D. Nandika., N. Nugroho., U.D. Syafitri., & I.Z. Siregar. 2021. Tree Morphometric Relationships and Dynamic Elasticity Properties in Tropical Rain Tree. (*Samanea saman* Jacq. Merr). *Forest*. Vol 12 (12): p. 1711.
- Koebanu, W., A.C. Hendrik., & Refli. 2022. Identifikasi Jamur Makroskopis di Hutan Lindung Haunobenak Kecamatan Kolbano Kabupaten Timor Tengah Selatan. *Journal Science of Biodiversity*. Vol 3 (1): 39–52.
- Lattanzio, V., V.M.T. Lattanzio., & A. Cardinali. 2006. Role of Phenolics in the Resistance Mechanism of Plants Against Fungal Pathogens and Insects. *Phytochemistry : Advances in Research*. Vol 661 (2): 23–67.
- Lian, D., L. Li., X. Liu., X. Zhong., H. Wang., S. Zhou., & L. Gu. 2021. Time-Scale Dynamics of Pretome Predicts the Central Carbon Metabolism Involved in Triterpenoid Accumulation Responsive to Nitrogen Limitation in *Ganoderma lucidum*. *Fungal Biology*. Vol 125 (4): 294–304.
- Lilleskov, E.A., E.A. Hobbie., & T.J. Fahey. 2002. Ectomycorrhizal Fungal Taxa Differing in Response to Nitrogen Deposition Also Differ in Pure Culture Organic Nitrogen Use and Natural Abundance of Nitrogen Isotopes. *New Phytologist*. Vol 154 (1): 219–231.
- Lloyd, A.L., J.A. Smith., B.S. Richter., R.A. Blanchette., & M.E. Smith. 2017. The Laccate *Ganoderma* of the Southeastern United States: A cosmopolitan and Important Genus of Wood Decay Fungi. *EDIS*. Vol 1 (1): 6–6.
- Madden, L.V. & Hughes, G. 1995. Plant Disease Incidence: Distributions, Heterogeneity, and Temporal Analysis. *Annual Review of Phytopathology*. Vol 33 (1): 529–564.
- Matern, U. & Kneusal, R.E. 1988. Phenolic Compounds in Plant Disease Resistance. *Phytopathology*. Vol 16 (1): 153–170.

- Mercière, M., R. Boulord., C. Carasco-Lacombe., C. Klopp., Y.P. Lee., J.S. Tan., S.H. Rabiah., A. Zaremski., H. De Franqueville., F. Breton., & L. Camus-Kulandaivelu. 2017. About *Ganoderma boninense* in Oil Palm Plantations of Sumatra and Peninsular Malaysia: Ancient Population Expansion, Extensive Gene Flow and Large Scale Dispersion Ability. *Fungal Biology*. Vol 121 (6–7):529–540.
- Moncalvo, J.M. 2000. *Ganoderma Diseases of Perennial Crops: Systematics of Ganoderma*. CABI Bioscience. United Kingdom.
- Na'iem, M., D.T. Adriyanti., & Musyafa. 2014. *Pedoman Pengelolaan Vegetasi di Lingkungan Universitas Gadjah Mada*. Direktorat Pengelolaan dan Pemeliharaan Aset Universitas Gadjah Mada. Yogyakarta.
- Naher, L., U.K. Yusuf., S.K. Tan., & A. Ismail. 2013. Ecological Status of *Ganoderma* and Basal Stem Rot Disease of Oil Palms (*Elaeis guineensis* Jacq.). *Australian Journal of Crop Science*. Vol 7 (11): 1.723–1.727.
- Paterson, R.R.M. 2007. *Ganoderma* Disease of Oil Palm—A White Rot Perspective Necessary for Integrated Control. *Crop Protection*. Vol 26 (9): 1.369–1.376.
- Peix, A., M.H. Ramírez-Bahena., E. Velázquez., & E.J. Bedmar. 2015. Bacterial Associations with Legumes. *Critical Reviews in Plant Sciences*. Vol 34 (1–3): 17–42.
- Pinaria, A.G. & Assa, B.H. 2017. *Jamur Patogen Tanaman Terbawa Tanah*. Media Nusa Creative. Malang.
- Peng, S.H.T., C.K. Yap., P.F.Ren., & E.W. Chai. 2019. Effect of Environment and Nutritional Conditions on Mycelial Growth of *Ganoderma boninense*. *International Journal of Oil Palm*. Vol 2 (3): 95–107.
- Rakib, M.R.M., C.F.J. Bong., A. Khairulmazmi., & I.A. Seman. 2014. Occurrence and Spatial Distribution of *Ganoderma* Species Causing Upper and Basal Stem Rot in Oil Palm. *Journal of Food, Agriculture, and Environment*. Vol 12 (2): 360–364.
- Rahayu, S., D.S. Utomo., V.E. Cahyanto., G. Anggara., D.T. Adriyanti., H.H. Nurjanto., & A.A. Kristian. 2021. Monitoring of *Ganoderma* spp. on the Trees at Arboretum of Universitas Gadjah Mada, Yogyakarta, Indonesia: Implications for Health Care Recommendation of Old Trees. *IOP Conference Series: Earth and Environmental Science*. Vol 918 (1): p. 012044.
- Ratnaningtyas, N.I. & Samiyarsih, S. 2012. Karakterisasi *Ganoderma* spp. di Kabupaten Banyumas dan Uji Peran Basidiospora dalam Siklus Penyakit Busuk Batang. *Majalah Ilmiah Biologi BIOSFERA: A Scientific Journal*. Vol 29 (1): 36–41.
- Rees, R.W., J. Flood., Y. Hasan., U. Potter., & R.M. Copper. 2009. Basal Stem Rot of Oil Palm (*Elaeis guineensis*): Mode of Root Infection and Lower Stem Invasion by *Ganoderma boninense*. *Plant Pathology*. Vol 58 (5): 982–989.
- Rojas, A.C.B., L.Q.O. Silva., A.D.M. gugliotta., & V.L.R. Boloni. 2018. Diversity of *Ganoderma* spp. and Falls of Urban Trees in Brazil and Colombia. *Biodiversity International Journal*. Vol 2 (2): 178–179.
- Sanderson, F.R. 2005. An Insight into Spore Dispersal of *Ganoderma boninense* on Oil Palm. *Mycopathologia*. Vol 159 (1): 139–141.

- Santos, E.M., N.D. Piovesan., E.G. de Baros., & M.A. Moreira. 2013. Low Linolenic Soybeans for Biodiesel: Characteristic, Performance, and Advantages. *Fuel*. Vol 104 (1): 861–864.
- Schwarze, F.W. & Ferner, D. 2003. *Ganoderma* on Trees–Differentiation of Species and Studies of Invasiveness. *Arboricultural Journal*. Vol 27 (1): 59–77.
- Schwarze, F.W., J. Engels., & C. Mattheck. 2000. *Fungal Strategies of Wood Decay in Trees*. Springer-Verlag. Berlin.
- Seman, I.A., M.H.A.Z. Mior., W. Omar., A. Kushairi., T.M. Azahar., & M.N. Nisfariza. 2010. *Spatial Patterns of Ganoderma Basal Stem Rot Disease in Oil Palm Plantations in Sarawak, Malaysia*. The International Oil Palm Conference. Jogja Expo Center, Yogyakarta.
- Semangun. 2001. *Pengantar Ilmu Penyakit Tumbuhan*. Gadjah Mada University Press. Yogyakarta.
- Sharma, J.K. & Florence, E.J.M. 1996. *Fungal Pathogens as Potential Threat to Tropical Acacias: A Case Study of India*. KFRI Research Report No. 113, Kerala Forest Research Institute. India.
- Shukri, I.M., M.A. Izzuddin., R.M. Hefni., & A.S. Idris. 2020. Geostatics of Oil Palm Trees Affected by *Ganoderma* Diseases in Low and High Planting Density. *IOP Conference Series: Earth and Environmental Science*. Vol 540 (1): p. 012065.
- Sinclair, W.A. & Lyon, H.H. 2005. *Diseases of Trees and Shrubs*. Comstock Publishing Associates. New York.
- Sinulingga, W. 1989. *Pengendalian Biologi Penyakit Cendawan Akar Putih pada Tanaman Karet*. Pusat Penelitian Perkebunan Sei. Deli Serdang.
- Supriyanto., Purwanto., S.H. Poromarto., & Supyani. 2020. The Relationship of Some Characteristics of Peat with Oil Palm Basal Stem Rot (BSR) Caused by *Ganoderma* in Peatland. *IOP Conference Series: Earth and Environmental Science*. Vol 423 (1): p. 012064.
- Syahbudin, A., R.I. Syaufina., R. Yudhistira., R. Sadono., Suginingsih., & Mukhlison. 2018. Tree Architecture Models, Canopy Maintenance, and Associated Root Problems of Angsana (*Pterocarpus indicus*) in the Urban Trees of Yogyakarta. *IOP Conference Series: Earth and Environmental Science*. Vol 203 (1): p. 012010.
- Tewari, D.N. 1992. *Monograph on Neem (Azadirachta indica A. Juss.)*. International Book Publisher. Dehra Dun.
- Utami, K., Supriadi., & K.S. Lubis. 2016. Evaluasi Sifat Fisik Tanah terhadap Laju Infeksi *Ganoderma* di Perkebunan Kelapa Sawit (Studi Kasus PT. PD Pati). *Jurnal Agroekoteknologi*. Vol 4 (3): 2146–2157.
- Utomo, D.S. 2021. Sebaran Jamur *Ganoderma* spp. dan Kerusakan yang Ditimbulkannya pada Pohon di Kawasan Kampus Universitas Gadjah Mada. *Skripsi*. Fakultas Kehutanan, Universitas Gadjah Mada.
- Widyastuti, S.M., A. Sulthoni., & Harjono. 1998. Pengendalian Hayati Penyakit Akar Merah pada Akasia dengan *Trichoderma*. *Jurnal Perlindungan Tanaman Indonesia*. Vol 4 (2): 65–72.



- Widyastuti, S.M., Harjono., & I. Riastiwi. 2013. Toleransi Tanaman Peneduh *Polyalthia longifolia* dan *Pterocarpus indicus* terhadap *Ganoderma* sp. *Jurnal Hama dan Penyakit Tumbuhan Tropika*. Vol 13 (1): 19–23.
- Widyastuti, S.M., Sumardi., & Harjono. 1999. Potensi Antagonistik Tiga *Trichoderma* spp. terhadap Delapan Penyakit Akar Tanaman Kehutanan. *Buletin Kehutanan*. Vol 41: 2–10.
- Wirianata, H., F. Wilisani., S. Gunawan., & Y. Mahardika. 2022. Development of Basal Stem Rot (*Ganoderma boninense*) of Oil Palm in Peatland and Minerals. *Asian Journal of Applied Research for Community Development and Empowerment*. Vol 6 (1): 30–33.
- Wolf, A.A., J.L. Funk., & D.N.L. Menge. 2016. The Symbionts Made Me Do It: Legumes are not Hardwired for High Nitrogen Concentrations but Incorporate More Nitrogen When Inoculated. *New Phytologist*. Vol 213 (2): 690–699.
- Yaseen, M., T. Ahmad., G. Sablok., A. Standardi., I.A. Hafiz. 2013. Role of Carbon Sources for In Vitro Plant Growth and Development. *Molecular Biology Reports*. Vol 40 (4): 2.837–2.849.