

DAFTAR PUSTAKA

- Adam DJ. 2004. Fungal cell wall chitinases and glucanases [ulasan]. *Microbiol.* 150: 2029-2035.
- Afzal, I., Shinqari, Z.K., Sikandar, S., Shahzad, S. 2019. Plant Beneficial Endophytic Bacteria: Mechanism, Diversity, Host Range and Genetic Determinants. *Microbiol Res*, 221, 36-49.
- Ariffin, D., Idris, A.S. and Marzuki, A. 1995. Development of a Technique to Screen Oil Palm Seedlings for Resistance to *Ganoderma* . Proceedings of the 1995 *PORIM National Oil Palm Oil Conference :Technologies in Plantation- The Way Forward*”, 11-12 Juli 1995. Palm Oil Research Institute of Malaysia, Bangi, Selangor, Malaysia, pp. 132-141.
- Ariffin, D., Idris, A.S., G. Singh. 2000. Status of *Ganoderma* in Oil Palm. In CABI, Wallingford, pp 49-68.
- Asmara, R., Suharjo, R., Rini, M. v, Dirmawati, S. R., Agroteknologi, J., Pertanian, F., & Lampung, U. (2021). Kemelimpahan Dan Karakterisasi Bakteri Rizosfer Tanaman Kelapa Sawit Di Pt Bumitama Gunajaya Agro Kalimantan Tengah Abundance And Characterization Of Rhizospheric Bacteria Of Oil Palm Plant In Pt Bumitama Gunajaya Agro Central Kalimantan. *Journal Of Tropical Upland Resources Issn*, 03(02), 71–83.
- Asril, M. (n.d.). *Kemampuan Bakteri Tanah Dalam Menghambat Pertumbuhan Ganoderma boninense dan Fusarium oxysporum Secara In Vitro dan Uji Penghambatan Penyakit Layu Fusarium Pada Benih Cabai Merah Screening of Protease Bacteria From Tofu Waste Water and Application for Biogas Reactor View project Phosphate Solubilizing Bacteria from Acid Soil to Enhanced Soil Fertility View project.* <https://www.researchgate.net/publication/328281991>.
- Brader G, S Compant, B Mitter, F Trognitz, and A Sessitsch. 2014. Metabolic potential of endophytic bacteria. *Current Opinion in Biotechnology* 27, 30-7.
- Budiarti, W., Widyastuti, S. M., Pengkajian, B., Pertanian, T., Tengah Bukit, J., Ungaran, T., & Tengah, J. (n.d.). *Aktivitas Antifungal B-1,3-Glucanase Trichoderma Reesei Pada Fungi Akar Ganoderma Philippii The Effect Of Antifungal Activity Of B-1,3-Glucanase Trichoderma Reesei Against Root Fungi Of Ganoderma philippii.*
- Cakrawaba, D. N., dan Nurhayati, L. 2014. Outlook Komoditi Kelapa Sawit. Pusat Data dan Sistem Informasi Pertanian. Sekretariat Jenderal Pertanian-Kementerian Pertanian. Jakarta.
- Chin-A- TFC, GV Bloemberg, BJJ Lugtenberg, 2003. Phenazines and Their Role in Biocontrol by Pseudomonas Bacteria. *New Phytologist*. 157, 503-23

- D.Ariffin, A. I. (2001). Status of Ganoderma in Oil Palm. Dalam J.Flood, P. Bridge, & M. Holderness, *Ganoderma Diseases of Perennial Crops* (hal. 49). USA: CABI Publishing.
- Direktorat Jenderal Perkebunan. 2021. Statistik Perkebunan Unggulan Nasional 2019-2021. Jakarta : Sekretariat Direktorat Jenderal Perkebunan.
- Hajoeningtjas, O.D. 2012. *Mikrobiologi Pertanian*. Edisi Pertama Graha Ilmu. Yogyakarta. 198 hal.
- Hardiansyah, M. Y., Musa, Y., & Jaya, A. M. (2020). Identifikasi Plant Growth Promoting Rhizobacteria pada Rizosfer Bambu Duri dengan Gram KOH 3%. *Agrotechnology Research Journal*, 4(1), 41–46. <https://doi.org/10.20961/agrotechresj.v4i1.40875>
- Hasan, Y. and Turner, P.D. (1998) The comparative importance of different oil palm tissues as infection sources for basal stem rot in replantings. *The Planter* 74, 119–135
- Herliyana, E.N., Jamilah, R., Taniwiryono, D., Firmansyah, M.A. 2013. Uji *in-vitro* Pengendalian Hayati oleh *Tricoderma* spp. terhadap Ganoderma sp. Yang Menyerang Sengon. *Jurnal Silvikultur Tropika*, 4(3), 190-195.
- Heydari, S, Moghadam, P.R, Arab, S.M. 2008. Hydrogen cyanide production ability by Pseudomonas fluorescence bacteria and their inhibition potential on weed germination. Di dalam: Prosiding —Competition for Resources in Changing World: New Drive for Rural Development”. Hohenheim (DE). Tropentag University.
- Hilda Wandita, R., Pujiyanto, S., Suprihadi, A., Ratih Dewi Hastuti, dan, Soedharto, J., Penelitian Tanah, B., & Tentara Pelajar No, J. (2018). *Isolasi dan Karakterisasi Bakteri Endofit Pelarut Fosfat dan Penghasil Hidrogen Cyanide (HCN) dari Tanaman Bawang Merah (Allium cepa L)*. 20(1), 9–16.
- Hong,C.E., Park, J.M. 2016. Endophytic Bacteria as Biocontrol Agents Against Plant Pathogens: Current State of the art. *Plant Biotechnol Rep*, 10(6), 353-357.
- Hushiarian, R., Yusof, N. A., & Dutse, S. W. (2013). Detection and control of Ganoderma boninense: Strategies and perspectives. In *SpringerPlus* (Vol. 2, Issue 1, pp. 1–12). SpringerOpen. <https://doi.org/10.1186/2193-1801-2-555>.
- Jaya CT. & Subha MP. 2011. A Study of 2 Rapid Tests to Differentiate Gram Positive and Gram Negative Aerobic Bacteria. *J. Med Allied Sci*; 1(2): 84-85.
- Juliarta, I.K., Sudana, M., Adiartayasa. 2015. Pengendalian Jamur Akar Putih (*Rigidoporus* sp.) Penyebab Penyakit Layu pada Tanaman Cengkeh (*Syzigium aromaticum* L.) secara Hayati dan Nabati di Rumah Kaca. *Jurnal Agroekoteknologi Tropika*, 2(4), 94-100.
- Khare, A., Singh, B. K., & Upadhyay, R. S. (2010). Biological control of Pythium aphanidermatum causing damping-off of mustard by mutants of Trichoderma viride 1433. *J Agric Technol*, 6(2), 231-243.

- Kremer, R.J., and Souissi, T. 2001. Cyanide Production by Rhizobacteria and Potential for Suppression of Weed Seedling Growth. *Current Microbiology* 43:182-186.
- Manzila, I., Tri, P. P., Muhammad, F.F., Laksmi, M.A., Yadi, S., I Made S., dan Dwi N.S., 2015. Karakterisasi β -1,3-1,4-Glukanase bakteri endofitik Burkholderia cepacian Isolat76 Asal Tanaman Padi. <https://media.neliti.com/media/publications/68601-ID-none.pdf>
- Mardanov AM, Hadieva GF, Lutfullin MT, Khilyas IVE, Minnullina LF, Gilyazeva AG, Bogomolnaya LM, Sharipova MR. 2017. *Bacillus subtilis* strains with antifungal activity against the phytopathogenic fungi. *Agr Sci.* 8(1):1–20. DOI: <https://doi.org/10.4236/as.2017.81001>
- Muhammad Yusril Hardiansyah, Y. M. (2020). Identifikasi Plant Growth Promoting Rhizobacteria pada Rizosfer Bambu Duri dengan Gram KOH 3%. *Agrotechnology Research Journal*, 41-46.
- Mukhlis, M. A., Sitepu, F. S., dan Lisnawita. 2017. Potensi Trichoderma spp. Asal Rizosfer Tanaman Kelapa Sawit sebagai Agens Antagonis terhadap Ganoderma sp. secara in vitro. *Jurnal Agroteknologi FP USU*, 5(2), 469-473.
- Nasahi C, F Widiyanti, E Yulia, R Meliansyah, dan P Rasisetyo. 2016. Isolasi dan deteksi potensi actinobacteria endofit dalam mengendalikan penyakit busuk pangkal batang pada tanaman kelapa sawit (*Ganoderma boninense* Pat.). In: Joko T, *et al.*, eds. *Proceedings of the Seminar Nasional Pengendalian Penyakit pada Tanaman Ramah Lingkungan II* (hlm. 66-78). Yogyakarta: Perhimpunan Fitopatologi Indonesia. Otter, W., Bailey, D.J and Giligan, C.A. 2004. Empirical Evidence of Spatial Thresholds to Control Invasion of Fungal Parasite and Saprotrophs. *New Phytologist*. 163:125-132.
- Otter, W., Bailey, D.J and Giligan, C.A. 2004. Empirical Evidence of Spatial Thresholds to Control Invasion of Fungal Parasite and Saprotrophs. *New Phytologist*. 163:125-132.
- Pathma J, Rahul GR, Kennedy RK, Subashri R, Sakthivel N. 2011. Secondary metabolite production by bacterial antagonists. *J Biol Control*, 25(3), 165–181.
- Poinar, G.O. and Thomas, G.M. 1984. *Laboratory Guide to Insect Pathogen and Parasites*. Plenum Pres, New York.
- Purnamasari, M., Prihatna, C., Gunawan, A., & Suwanto, A. (2012). Isolasi dan Identifikasi Secara Molekuler *Ganoderma* spp. yang Berasosiasi dengan Penyakit Busuk Pangkal Batang di Kelapa Sawit. *Jurnal Fitopatologi Indonesia*, 8(1), 9–15. <https://doi.org/10.14692/jfi.8.1.9>.
- Rashid, M., Rakib, M., Bong, C.J., Khairulmazmi, A., & Idris, A.S. 2014. Genetic and Morphological Diversity of *Ganoderma* Species Isolated From Infected Oil Palms (*Elaeis guineensis*). *International Journal of Agriculture & Biology*, 16(4), 691-699.

- Rupaedah, B., Amanda, D. V., Indrayanti, R., Asiani, N., Sukmadi, B., Ali, A., Wahid, A., Firmansyah, T., Sugianto, M., Bioteknologi, B., Gedung, B., Puspipstek, K., & Selatan, T. (2018). *Bioteknologi & Biosains Indonesia Aktivitas Stenotrophomonas Rhizophila Dan Trichoderma Sp. Dalam Menghambat Pertumbuhan Ganoderma Boninense Activities Of Stenotrophomonas rhizophila and Trichoderma sp. in Inhibiting the Growth of Ganoderma boninense* (Vol. 5). <http://ejurnal.bppt.go.id/index.php/JBBI>.
- Sanda, M.P. 2022. Isolasi dan Penapisan Bakteri Endofit Dari Akar Kelapa Sawit (*Elaeis guineensis* Jacq) di Lahan Gambut yang Berpotensi sebagai *Plant Growth Promoting Rhizobacteria*. *Skripsi*. Pekanbaru : Universitas Islam Negeri Sultan Syarif Kasim Riau, Fakultas Pertanian dan Peternakan.
- Sembiring, AM. 2008. Isolasi dan Uji Antagonis Bakteri Endofit Kelapa Sawit (*Elaeis guineensis* Jacq.) terhadap *Ganoderma boninense* Pat. *Skripsi*: Universitas Sumatera Utara. Medan.
- Simbolon, DW. 2008. Kemampuan Antifungi Bakteri Endofit Kelapa Sawit (*Elaeis guineensis* Jacq.) terhadap *Ganoderma boninense* Pat. *Skripsi*: Sumatera Utara. Medan.
- Sitepu, R,A,P. 2021. Potensi Rhizobium Isolat *Mucuna bracteata* DC. Dalam Menghambat Pertumbuhan *Ganoderma boninense* Pat. Dan Menghasilkan IAA (Indole-3-Actid Acid). *Skripsi*. Medan : Universitas Sumatera Utara. Society, St Paul Minnesota. p.270.
- Surahmida., Sudarwati, T.P.L. 2018. Potensi dan Senyawa Aktif *Ganoderma lucidum* sebagai Biopestisida Nabati. Gresik. Graniti.
- Susanto, A., Sudharto Ps, dan D. Tambajong. 2002. Hiperparasitisme beberapa agens biokontrol terhadap *Ganoderma boninense* penyebab penyakit busuk pangkal batang kelapa sawit. *Jurnal Penelitian Kelapa Sawit*. 10 (2-3): 63-68.
- Syamsuddin dan M.A. Ulim. 2013. Daya Hambat Rizobakteri Kandidat Agens Biokontrol Terhadap Pertumbuhan Koloni Patogen *Phytophthora capsici* Secara In Vitro. *Jurnal Floratek*, 8(2):64-72.
- Trinayanti.T. 2012. Keanekaragaman dan Potensi Antimikroba Pada Bakteri Endofit Rizosfer *Ageratum Conyzoides* L. Universitas Pendidikan Indonesia
- Weller, David. M., Jos M. Raaijmakers., Brian B. McSpadden Gardener., Linda S. Thomashow. 2002. Microbial Populations Responsible for Specific Soil Suppressiveness to Plant Pathogens. *Annu. Rev. Phytophatol*. 40: 309 – 348.
- Wibowo, R. H., Mubarik, N. R., Rusmana, I., & Thenawidjaya, M. (2017). Penapisan dan Identifikasi bakteri kitinolitik penghambat pertumbuhan *Ganoderma boninense* in vitro. *Jurnal Fitopatologi Indonesia*, 13(3), 105– 111. <https://doi.org/10.14692/jfi.13.3.105>.
- Wood PJ and J Weisz. 1984. Use of calcuflour in analysis of oat beta-D-glucan. *Cereal Chemistry* 6,73-75.