

DAFTAR PUSTAKA

- Abidin, Z., L. Q. Aini, dan A. L. Abadi. 2015. Pengaruh bakteri *Bacillus* sp. dan *Pseudomonas* sp. terhadap pertumbuhan jamur patogen *Sclerotium rolfsii* Sacc. penyebab penyakit rebah semai pada tanaman kedelai. *Jurnal HPT*, 3(1):1-10.
- Adelina, S.O., Enny, A., dan Hasriyanty. 2017. Identifikasi morfologi dan anatomi jeruk lokal (*Citrus* sp.) di Desa Doda dan Desa Lempe Kecamatan Lore Tengah Kabupaten Poso. *Jurnal Agrotekbis*, 5(1):58-65.
- Aji, O. R., dan I. D. Lestari. 2020. Bakteri endofit tanaman jeruk nipis (*Citrus aurantifolia*) penghasil asam indol asetat (AIA). *Jurnal Biologi*, 13(2):179-191.
- Alina, S. O., F. Constantinscu, dan C. C. Petruta. 2015. Biodiversity of *Bacillus subtilis* group and beneficial traits of *Bacillus* species useful in plant protection. *Romanian Biotechnological Letters*, 20(5):10737-10750.
- Anggrahini, D. S., A. Wibowo, dan S. Subandiyah. 2020. Morphological and molecular identification of *Colletotrichum* spp. associated with chili anthracnose disease in Yogyakarta. *Jurnal Perlindungan Tanaman Indonesia*, 24(2):161-174.
- Araujo, W.L., W. Maccheroni, C. J. Aguilar-Vildosa, P. A. V. Barrosa, H.O. Saridakis, H.O., and J.L. Azevedo. 2001. Variability and interactions between endophytic bacteria and fungi isolated from leaf tissues of citrus rootstocks. *Can. J. Microbiol.* 47:229– 236.
- Astuti, B. 2011. Pengendalian Penyakit Darah Pisang dengan Bakteri Endofit. Fakultas Pertanian, Universitas Gadjah Mada, Yogyakarta. Skripsi (tidak dipublikasikan).
- Athukorala, S. N. P., W. G. D. Fernando, and K. Y. R. Rashid. 2009. Identification of antifungal antibiotics of *Bacillus* species isolated from different microhabitats using polymerase chain reaction and MALDI-TOF mass spectrometry. *Canadian Journal Microbiology*, 55:1021-1032.
- Azevedo, J. L., W. L. Araújo, and P. T. Lacava. 2016. The diversity of citrus endophytic bacteria and their interactions with *Xylella fastidiosa* and host plants. *Genetics and Molecular Biology*, 39(4):476-491.
- Badan Pusat Statistik (BPS). 2023. Statistik Hortikultura Indonesia. BPS Indonesia, Jakarta.
- Chen, X. H., A. Koumoutsis, R. Scholz, K. Schneider, J. Vater, R. Süssmuth, J. Piel, and R. Borriss. 2009. Genome analysis of *Bacillus amyloliquefaciens* FZB42 reveals its potential for biocontrol of plant pathogens. *Journal of Biotechnology*. 140: 27-37.
- Dean R., J. A. L. V. Kan, Z. A. Pretorius, K. E. Hammond-Kosack, A. Di Pietro, P. D. Spanu, J. J. Rudd, M. Dickman, R. Kahmann, J. Ellis, and G. D. Foster. 2012. The Top 10 fungal pathogens in molecular plant pathology. *Molecular Plant Pathology*, 13: 414–430.
- Deleu, M., M. Paquot and T. Nylander. 2008. Effect of fengycin, a lipopeptide produced by *Bacillus subtilis*, on model biomembranes. *Biophysical Journal* 94: 2667-2679.
- Desriani., U. Safira, M. Bintang, A. Rivai, dan P. Lisdiyanti. 2014. Isolasi dan karakterisasi bakteri endofit dari tanaman binahong dan ketapeng china. *Jurnal Kesehatan Andalas*, (2):89-93.
- Dharmaputra, O. S., S. Listiyowati, dan I. Z. Nurwulansari. 2018. Keragaman cendawan pascapanen pada umbi bawang merah varietas Bima Brebes. *Jurnal Fitopatologi Indonesia*, 14(5), 175-175.

- Duan, J., W. Jiang, Z. Cheng, J. J. Heikkila, and B. R. Glick. 2013. The complete genome sequence of the plant growthpromoting bacterium *Pseudomonas* sp. UW4. PLOS ONE, 8(3):1-19.
- Endarto, O. dan E. Martini. 2016. Pedoman Budidaya Jeruk Sehat. Balai Penelitian Tanaman Jeruk dan Buah Subtropika (Balijestro), Sulawesi.
- Gao, F. K., C.C. Dai and X.Z. Liu. 2010. Mechanisms of fungal endophytes in plant protection againts pathogens. Afridan Journal of Microbiology Research 4(13): 1346-1351.
- Gu Q., Y. Yang, Q. Yuan, G. Shi, L. Wu, Z. Lou, R. Huo, H. Wu, R. Borriss, and X. Gao. 2017. Bacillomycin D produced by *Bacillus amyloliquefaciens* is involved in 2 the antagonistic interaction with the plant pathogenic fungus *Fusarium graminearum*. Applied and environmental microbiology, 83(19):1-31.
- Gu, Q., Y. Yang, Q. Yuan, G. Shi, L. Wu, Z. Loum R. Huo, H. Wu, R. Borris, and X. Gao. 2017. Bacillomycin D produced by *Bacillus amyloliquefaciens* is involved in the antagonistic interaction with the plant-pathogenic fungus *Fusarium graminearum*. Applied and Environmental Microbiology 83(19): 1-17.
- Hallman, J. and G. Berg. 2006. Spectrum and population dynamics of bacterial root endophytes. Microbial root endophytes, 15-31.
- Hanif, A., F. Zhan, P. Li, C. Li, C. Li, Y. Xu, M. Zubair, M. Zhang, D. Jia, X. Zhao, J. Liang, T. Majid, J. Yan, A. Farzand, H. Wu, Q. Gu. and X. Gao. 2019. Fengycin Produced by *Bacillus amyloliquefaciens* FZB42 Inhibits *Fusarium graminearum* Growth and Mycotoxins Biosynthesis. Toxins, 11(5), 295.
- Hsieh, F.C., T. C. Lin, M. Meng, and S.S. Kao. 2008. Comparing methods for identifying *Bacillus* strains capable of producing the antifungal lipopeptide iturin A. Curr Microbiol, 56:1–5.
- Huong, B. T. C., H. L. K. Linh, T. T. B. Van, D. T. K. Tien, N. T. T. Nga, P. T. T. Que, N. V. Ay, K. C. Tuyen, and D. T. Khang. 2022. Identification of pathogens causing anthracnose on king oranges (*Citrus nobilis* var *Typica* Hassk). Pakistan Journal Biological Sciences 25(2):137-143.
- fyKadriah, I.A.K., Susianingsih, E., Sukenda, S., Yuhana, M., & Harris, E. 2013. Desain Primer Spesifik Untuk Deteksi Dini Penyakit Vibriosis pada Udang Penaeid. J. Ris. Akuakultur, 8(1): 131-143.
- Kartikawati, A., dan Gusmaini. 2018. Potensi bakteri endofit yang diisolasi dari tanaman jahe merah untuk memacu pertumbuhan benih lada. Jurnal Penelitian Tanaman Rempah dan Obat. 29(1): 37 – 46.
- Khotimah, K., E. Sulistyningsih, and A. Wibowo. 2017. In vitro induced resistance of fusarium wilt disease (*Fusarium oxysporum* f.sp. *cepae*) by salicylic acid in shallot CV 'Bima Brebes'. Agricultural Science, 2(1):001-008.
- Lahlali, R., O. Mchacti, N. Radouane, S. Ezrari, Z. Belabess, S. Khayi, R. Mentag, A. Tahiri, and E. A. Barka. 2020. The potential of novel bacterial isolates from natural soil for the control of brown rot disease (*Monilinia fructigena*) on apple fruits. Agronomy, 10(11):1-19.
- Ledowycck, C., J. Vangronsveld, E.R.B. Moore, S. Taghvi, M. Mazgeay, and D. Lelie. 2020. Endophytic bacteria and thei potential applications. Critical Reviews in Plant Sciences. 21(16): 583-606.
- Lelana, N. E., I. Anggraeni, N dan Mindawati. 2015. Uji Antagonis *Aspergillus* sp. dan *Trichoderma* spp. Terhadap *Fusarium* sp., Penyebab Penyakit Rebah Kecambah pada Sengon. Jurnal Penelitian Hutan Tanaman, 12(1):23–28.

- Mahiout, D. B. S., M. Y. Bendahmane, H. Benkada, N. Mekouar, Berrahal, and M. Rickauer. 2018. First report of *Colletotrichum gloeosporioides* on citrus in Algeria. *Phytopathologia Mediterania*, 57(2): 355-359.
- Malfanova, N. V. 2013. Endophytic bacteria with plant growth promoting and biocontrol abilities. Leiden University, Netherlands.
- Melanie, F., K. Weeks, L. Chan, A. Leyton, A. Bowes, B. Guiffre, M. Sullivan, and B. J. Hudson. *Colletotrichum gloeosporioides* sensu lato causing deep soft tissue mycosis following a penetrating injury. *Medical Mycology Case Reports*, 9(2): 1-10
- Melliawati, R., A. C. Djohan, dan Yopi. 2015. Seleksi bakteri asam laktat sebagai penghasil enzim protoase. *Prosiding Seminar Nasional Masyarakat Biodiversiti Indonesia*, 1(2):184-188).
- Mora, I., J. Cabrefiga, dan E. Montesinos. 2011. Antimicrobial peptide genes in *Bacillus* strains from plant environments. *International Microbiology*, 14:213- 223.
- Nanjundan. J., R. Ramasamy, S. Uthandi, and M. Ponnusamy. 2019. Antimicrobial activity and spectroscopic characterization of surfactin class of lipopeptides from *Bacillus amyloliquefaciens* SR1. *Microbial pathogenesis*, 128, 374-380.
- Ningsih, R., Mukarlina, dan R. Linda. 2012. Isolasi dan identifikasi jamur dari organ bergejala sakit pada tanaman jeruk siam (*Citrus nobilis* var. *microcarpa*). *Jurnal Protobiont*, 1(1): 1-7.
- Nugraheni, A. S., S. Djauhari, A. Cholil, dan E.P. Utomo. 2014. Potensi minyak atsiri serai wangi (*Cymbopogon winterianus*) sebagai fungisida nabati terhadap penyakit antraknosa (*Colletotrichum gloeosporioides*) pada buah apel (*Malus sylvestris* Mill). *Jurnal HPT (Hama Penyakit Tumbuhan)*, 2(4), 92-102.
- Oktaviana, M. A., N. Y. Haryono, dan Y. Yunimar. 2022. Uji antagonis bakteri endofit terhadap fungi patogen *Colletotrichum* sp. penyebab penyakit antraknosa pada stroberi (*Fragaria ananassa*). *Proceedings of Life and Applied Sciences*, 1:86-94.
- Pal, K. K., B. M. Gardener. 2006. Biological control of plant pathogens. *The plant health instructor*, 2(5), 1117-1142.
- Peres, N.A., L. W. Timmer, J. E. Adaskaveg, dan J. C. Correll. 2005. Lifestyles of *Colletotrichum acutatum*. *Plant Disease* (89):784-769.
- Phoulivong, S., E. H. C. McKenzie, dan K. D. Hyde. 2012. Cross Infection of *Colletotrichum* species; a case study with tropical fruits. *Current Research in Environmental & Applied Mycology*, (2): 99-111.
- Prasetyoputri, A., dan A. Ines. 2006. Mikroba endofit: Sumber molekul acuan baru yang berpotensi. *BioTrends: Majalah Populer Bioteknologi*, 1(2):13-15.
- Purwanto, U. M., F. H. Pasaribu, dan M. Bintang. 2014. Isolasi bakteri endofit dari tanaman sirih hijau (*Piper betle* L.) dan potensinya sebagai penghasil senyawa antibakteri. *Current biochemistry*, 1(1):51-57.
- Rachmatunnisa, R., I. Rukmi, dan S. Pujiyanto. 2017. Aktivitas antagonistik kapang endofit duwet (*Syzygium cumini* (L.) Skeels) terhadap *Alternaria porri* penyebab bercak ungu pada bawang merah (*Allium ascalonicum* L.) secara *in-vitro*. *Jurnal Biologi*, 6(1):71-78.
- Rahmat, M. S., M. S. Akhter, M. A. Maya, A. H. M. A. Rahman, dan M. Akanda. 2011. Field resistance of chili cultivas against anthracnose disease caused by *Colletotrichum capsici*. *Thai Journal of Agriculture Science*, 44: 243-250.
- Ramarathnam, R., S. Bo, Y. Chen, W. D. Fernando, G. Xuewen, and T. De Kievit. 2007. Molecular and biochemical detection of fengycin-and bacillomycin D-producing

- Bacillus* spp., antagonistic to fungal pathogens of canola and wheat. Canadian Journal of Microbiology, 53(7), 901-911.
- Reuther, W., H. J. Webber, dan L. D. Batchelor. 1967. The Citrus Industry, Volume I: History, World Distribution, Botany, and Varieties. University of California, Division of Agricultural Sciences, California.
- Ryan, R. P., K. Germaine, A. F. Franks, D. J. Ryan, and D. N. Dowling. 2008. Bacterial endophytes: Recent developments and applications. FEMS Microbiology Letters, 278(1):1-9.
- Serdani, A. D., L. Q. Aini, A. L. Abadi. 2018. Isolasi dan identifikasi bakteri endofit dari tanaman padi (*Oryza sativa*) sebagai pengendali penyakit hawar daun bakteri akibat *Xanthomonas oryzae* pv. *Oryzae*. Jurnal Viabel Pertanian, 12(1):18-26.
- Shidiq, M. A. A., S. Widyaningsih, A. Wibowo, and A. Widiastuti. 2024. First report of *Colletotrichum queenslandicum* and *Colletotrichum endophyticum* causing citrus anthracnose in Indonesia. Journal of the Saudi Society of Agricultural Sciences, 1-11.
- Silalahi, L.F.Br., Mukarlina., dan Rahmawati. 2020. Karakterisasi dan identifikasi genus bakteri endofit dari daun dan batang jeruk siam (*Citrus nobilis* var. *microcarpa*) sehat di Desa Anjungan Kalimantan Barat. Protrobiont, 9(1): 26-29.
- Stanković, S., S. Mihajlović, V. Draganić, I. Dimkić, G. Vukotić, Tanja Berić and D. Fira1. 2012. Screening for the presence of biosynthetic genes for antimicrobial lipopeptides in natural isolates of *Bacillus* sp. Archives Biology Science, 64(4) : 1425-1432
- Su, Z., X. Chen, X. Liu, Q. Guo, S. Li, X.Lu, X. Zhang, P. Wang, L. Dong, W. Zhao, and P. Ma. 2020. Genome mining and UHPLC–QTOF–MS/MS illuminate the potential antimicrobial active compounds and specificity of biosynthetic gene clusters in *Bacillus subtilis* NCD-2.
- Suhandono, S., M. K. Kusumawardhani, P. and Aditiawati. 2016. Isolation and molecular identification of endophytic bacteria from rambutan fruits (*Nephelium Lappaceum* L.) Cultivar Binjai. HAYATI Journal of Biosciences, 23(1):31-44.
- Susi. 2002. Isolasi Kitinase dari *Scleroderma columnae* dan *Trichoderma harzianum*, Jurnal Ilmu Dasar, 3(1) : 30 – 35.
- Susilowati., N. D., E. I. Riyanti, M. Setyowati, and K. Mulya. 2018. Indole-3-acetic acid producing bacteria and its application on the growth of rice. AIP Conference Proceedings. 2002(1). AIP Publishing.
- Syafriani, E., F. Riwany, R. Hendayani, R.. Kamelia, I. Ferita, F. Fatchiyah, dan J. Jamsari. 2019. Studi Awal Empat Isolat Bakteri Antagonis terhadap Jamur *Colletotrichum gloeosporioides*. Plumula: Berkala Ilmiah Agroteknologi, 6(2):109-122.
- Trianom, B., T. Arwiyanto, dan T. Joko. 2019. Morphological and molecular characterization of sumatra disease of clove in Central Java, Indonesia. Tropical Life Sciences Research. 30(2): 107–118.
- Wang, W., D.D. de Silva., A. Moslemi., J. Edwards., P. K. Ades., P. W. Crous., and P. W. J. Taylor. 2021. *Colletotrichum* species causing anthracnose of citrus in Australia. Jurnal Fungi, 7 (1):1–24.
- Wibawa, I. G. K. S., D. N. Suprpta, dan K. Khalimi. 2019. Uji Antagonis Bakteri Endofit terhadap *Colletotrichum scovillei* Penyebab Penyakit Antraknosa Pada Cabai Besar (*Capsicum annuum* L.). Journal Agriculture Science and Biotechnol, 8(1):31-41.

- Widiyani, T., P. A. Okid, H. Elisa, L. Shanti, dan B. Agung. 2022. Peningkatan kualitas dan kuantitas produk UMKM sari buah jeruk sebagai minuman imunostimulan alami untuk menarik daya beli masyarakat di masa pandemi. *Jurnal Pengabdian Kepada Masyarakat*, 19(1), 182-192.
- Wisanggeni, G.A., Suryanti, and T. Joko. 2023. The potential of *Bacillus subtilis* subsp. *subtilis* RJ09 as a biological control agenst against leaf spot diseases on clove. *Jurnal Fitopatologi Indonesia*, 19(3), 118–126.
- Yang, R., Wenyu, Y., Ping, L., Juan, L., Mingmei, L., Zuhua, W., and Dengke, S. 2024. Endophytic *Bacillus amyloliquefaciens* Mdgb15 is a potential biocontrol agent against tree peony gray mold caused by *Botrytis cinerea*. *European Journal of a Plant Pahtology*, 169 : 431-445.
- Yaraguppi, D. A., Z. K. Bagewadi, N. Mahanta, S. P. Singh, T. M. Y. Khan, S. H. Deshpande, C. Soratur, S. Das, and D. Saikia. 2022. Gene expression and characterization of iturin A lipopeptide biosurfactant from *Bacillus aryabhatai* for enhanced oil recovery. *Gels* 8(7):1-15.
- Yun-feng, Y., L. Qi-qin, F. Gang, Y. Gao-qing, M. Jian-hua, dan L. Wei. 2012. Identification of antifungal substance (iturin A2) produced by *Bacillus subtilis* b47 and its effect on southern corn leaf blight. *Journal of Intergrative Agriculture*, 11(1):90-99.
- Zaoari, I., L. Jlaiel, S. Tounsi, and M. Trigui. 2016. Biocontrol activity of the endophytic *Bacillus amyloliquefaciens* strain CEIZ-11 against *Pythium aphanidermatum* and purification of its bioactive compounds. *Biological Control*, 100:54-62.
- Zhafarina, S.A., A. Wibowo, and A. Widiastuti. 2021. Multi-genetic analysis of *Colletotrichum* spp. associated with postharvest disease of fruits anthracnose in special region of Yogyakarta, Indonesia. *Pakistan Journal of Biological Sciences: PJBS*, 24(1):53–65.
- Zhao, P., C. Quan, Y. Wang, J. Wang, S. Fan. 2014. *Bacillus amyloliquefaciens* Q- 426 as a potential biocontrol agenst against *Fusarium oxysporum* f. sp. *spinaciae*. *Journal of Basic Microbiology*, 54(5):448-456.
- Zhou, L., J. Wang, F. Wu, C. Yin, K. H. Kim, and Y. Zhang. 2022. Termite nest associated *Bacillus siamensis* YC-9 mediated biocontrol of *Fusarium oxysporum* f. sp. *cucumerinum*. *Frontiers in Microbiology*. 13:1-13.