

DAFTAR PUSTAKA

- Aflaha, I., ruddin, B., & Surapati, dan U. (2018). The Development of Rapid, Accurate and Simple Identification Techniques for Bacterial Grain Rot (*Burkholderia Glumae*) on Rice. *International Journal of Current Research and Academic Review*, 6(12), 1–6.
- Akimoto-Tomiyama, C. (2021). Multiple endogenous seed-born bacteria recovered rice growth disruption caused by *Burkholderia glumae*. *Scientific Reports*, 11(1).
- Anggereini, E. (2008). *Random Amplified Polymorphic DNA (RAPD)*, Suatu Metode Analisis DNA Dalam Menjelaskan Berbagai Fenomena Biologi. *Biospecies*, 1(2), 73–76.
- Badan Karantina Pertanian. (2008). *Pedoman Diagnosis OPTK Golongan Bakteri*. Departemen Pertanian.
- Bobihoe, J., Salvia, E., Hendri, J., Hernita, D., & Endrizal. (2022). Potential for development of local rice genetic resources into excellent varieties in Merangin reGENCY, Jambi province. *IOP Conference Series: Earth and Environmental Science*, 978(1).
- Borriboon, W., Lontom, W., Pongdontri, Theerakulpisut, P., & Dongsansuk, A. (2018). Effects of Short-and Long-Term Temperature on Seed Germination, Oxidative Stress and Membrane Stability of Three Rice Cultivars (Dular, KDML105 and Riceberry). *Pertanika J. Trop. Agric. Sci.*, 41(1), 151–162.
- Bosshard, P. P., Abels, S., Zbinden, R., Böttger, E. C., & Altwegg, M. (2003). Ribosomal DNA sequencing for identification of aerobic gram-positive rods in the clinical laboratory (an 18-month evaluation). *Journal of Clinical Microbiology*, 41(9), 4134–4140. <https://doi.org/10.1128/JCM.41.9.4134-4140.2003>
- BPS. (2023). *Luas Panen dan Produksi Padi di Provinsi Sumatera Barat 2023 (Angka Sementara)*.
- BPS. (2024). *Luas Panen, Produksi, dan Produktivitas Padi Menurut Kabupaten Kota Hasil Kerangka Sampel Area (KSA)*.
- BPTP. (2023). *Varietas Unggul Tanaman Pangan Yang Telah Dilepas Di Provinsi Sumatera Barat*.
- Brenner, Don. J., Krieg, Noel. R., & Staley, James. T. (2005). *Bergey's Manual of Systematic Bacteriology Systematic Bacteriology Second Edition Volume Two*.
- Chilvers, M. (2012). Molecular Diagnostics in Plant Disease Diagnostic Clinic What's the Status? *Fungal Genomics & Biology*, 2(1). <https://doi.org/10.4172/2165-8056.1000e102>
- Chompa, S. S., Akter, A., Sadeq, B. M., Rahman, E., Buraq, A., Sadeq, M., Rashid, H. O., Ibnat, N., & Hossain, B. (2022). An Overview of Major Bacterial Diseases of Rice and Management Strategies for Their Control in Malaysia. *Global Scientific Journal*, 10(4), 1074–1104.

- Cram, M. M., & Fraedrich, S. W. (2010). Seed Diseases and Seedborne Pathogens of North America. *Tree Planters' Notes*, 53(2), 35–44.
- Dadlani, M., & Yadava, D. K. (2023). Seed Science and Technology: Biology, Production, Quality. In *Seed Science and Technology: Biology, Production, Quality*. Springer Nature.
- Degrassi, G., Devescovi, G., Bigirimana, J., & Venturi, V. (2010). *Xanthomonas oryzae* pv. *oryzae* XKK.12 contains an AroQ γ chorismate mutase that is involved in rice virulence. *Phytopathology*, 100(3), 262–270.
- Deldavleh, K., M., B., & Harighi, B. (2013). Bacterial leaf blight of Christ's thorn in Iran: a new disease caused by *Sphingomonas* sp. *Journal of Plant Pathology*, 85(1), 75–78.
- Deng, Z. Y., Gong, C. Y., & Wang, T. (2013). Use of proteomics to understand seed development in rice. *Proteomics*, 13, 1784–1800.
- Departemen Pertanian. (2007). *Keputusan Menteri Pertanian No: 73/Kpts/SR.120/2/2007 tentang Pelepasan Galur Padi Sawah Lokal Anak Daro Sebagai Varietas Unggul Dengan Nama Anak Daro*.
- Departemen Pertanian. (2017). *Keputusan Menteri Pertanian No: 33/Kpts/SR.030/5/2017 tentang Pelepasan Galur Padi Sawah Lokal Bujang Merantau Sebagai Varietas Unggul Dengan Nama Bujang Merantau*.
- Dinas Pertanian Kabupaten Agam. (2014). *Makalah usulan pelepasan Varietas padi sawah Ampek Angkek*.
- Dwimartina, F. F., Laila, F. & Al, & Asad, F. (2022). Deteksi Molekuler *Burkholderia Glumae* Pada Varietas Padi Mekongga di Kecamatan Indramayu. *Gema Wiralodra*, 13(1), 23–33.
- Endah, N. S., Abadi, G. M., & El, R. (2014). Faktor-Faktor Yang Mempengaruhi Produksi Padi Sawah (*Oryza sativa* L.) Di Kabupaten Serdang Bedagai. *Jurnal Pengkajian Dan Pengembangan Teknologi Pertanian*, 23(1), 11–24.
- FAO. (2010). *Seeds in emergencies : a technical handbook*. Food and Agriculture Organization of the United Nations.
- Fatimah, Zaenal Mustopa, A., & Kusnandarsyah, I. (2014). Identification and characterization of virulence factor of several Indonesian *Xanthomonas oryzae* pv. *oryzae*. *Microbiology Indonesia*, 8(3), 103–111.
- Felsenstein, J. (1985). Confidence limits on phylogenies: An approach using the bootstrap. *Evolution*, 39(4), 783–791.
- Fory, P. A., Triplett, L., Ballen, C., Abello, J. F., Duitama, J., Aricapa, M. G., Prado, G. A., Correa, F., Hamilton, J., Leach, J. E., Tohme, J., & Mosquera, G. M. (2014). Comparative analysis of two emerging rice seed bacterial pathogens. *Phytopathology*, 104(5), 436–444.
- Goszczyńska, T., Serfontein, J. J., & Serfontein, S. (1999). *Introduction to practical phytobacteriology : a manual for phytobacteriology*. ARC - Plant Protection Research Institute.

- Hajihassani, M., Hajihassani, A., & Khaghani, S. (2012). Incidence and distribution of seed-borne fungi associated with wheat in Markazi Province, Iran. *African Journal of Biotechnology*, 11(23), 6290–6295.
- Ham, J. H., Melanson, R. A., & Rush, M. C. (2011). *Burkholderia glumae*: Next major pathogen of rice? *Molecular Plant Pathology*, 12(4), 329–339.
- 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.
- Hausufa, A., & Rusae, A. (2018). Cendawan Patogen pada Beberapa Varietas Jagung di Kabupaten Timor Tengah Utara. *Jurnal Pertanian Konservasi Lahan Kering*, 3(2), 21–23.
- Isnaeni, S. J., & Masnilah, R. (2020). Identifikasi penyebab penyakit busuk bulir bakteri pada tanaman padi (*Oryza sativa*) dan pengendaliannya menggunakan isolat *Bacillus* spp. secara in vitro. *Jurnal Proteksi Tanaman Tropis*, 1(1), 14.
- ITIS. (2022a). *Burkholderia glumae* (Kurita and Tabei, 1967) Urakami et al., 1994. Integrated Taxonomic Information System .
- ITIS. (2022b). *Oryza sativa* L. Integrated Taxonomic Information System.
- Janda, J. M., & Abbott, S. L. (2007). 16S rRNA gene sequencing for bacterial identification in the diagnostic laboratory: Pluses, perils, and pitfalls. *Journal of Clinical Microbiology*, 45(9), 2761–2764.
- Jonit, N. Q., Low, Y. C., & Tan, G. H. (2016). *Xanthomonas oryzae* pv. *oryzae*, Biochemical Tests, Rice (*Oryza sativa*), Bacterial Leaf Blight (BLB) Disease, Sekinchan. *Journal of Applied & Environmental Microbiology*, 4(3), 63–69.
- Juanda, B. R. (2016). Peningkatan Produksi Padi Melalui Potensi Dan Pengembangan Wilayah Produksi Benih Unggul Di Propinsi Aceh. *Jurnal Penelitian Agrosamudra*, 3(2), 72–80.
- Kang, I. J., Kang, M. H., Noh, T. H., Shim, H. K., Shin, D. B., & Heu, S. (2016). Simultaneous detection of three bacterial seed-borne diseases in rice using multiplex polymerase chain reaction. *Plant Pathology Journal*, 32(6), 575–579.
- Khaeruni, A., Taufik, M., Wijayanto, T., & Johan, E. (2014). Perkembangan Penyakit Hawar Daun Bakteri pada Tiga Varietas Padi Sawah yang Diinokulasi pada Beberapa Fase Pertumbuhan. *Jurnal Fitopatologi Indonesia*, 10(4), 119–125.
- Kimura, M. (1980). Journal of Molecular Evolution A Simple Method for Estimating Evolutionary Rates of Base Substitutions Through Comparative Studies of Nucleotide Sequences. *J. Mol. Evol*, 16, 111–120.
- Kini, K., Agnimonhan, R., Dossa, R., Soglonou, B., Gbogbo, V., Ouedraogo, I., Kpemoua, K., Traoré, M., & Silue, D. (2017). First report of *Sphingomonas* sp. causing bacterial leaf blight of rice in Benin, Burkina Faso, The Gambia, Ivory Coast, Mali, Nigeria, Tanzania and Togo . *New Disease Reports*, 35(1), 32–32.

- Krittidetch, A., Wilawan, C., & Dusit, A. (2013). Detection of *Acidovorax avenae* subsp. *avenae* in commercial corn seeds and its correlation with seedling transmission. *African Journal of Biotechnology*, 12(45), 6376–6381.
- Kumar, S., Stecher, G., Li, M., Knyaz, C., & Tamura, K. (2018). MEGA X: Molecular evolutionary genetics analysis across computing platforms. *Molecular Biology and Evolution*, 35(6), 1547–1549.
- Kurnia, I. G. A. M. (2020). *Perbedaan Padi Inbrida Dengan Padi Hibrida*. Dinas Pertanian Buleleng.
- Lee, D.-Y., & Vera Cruz, C. (2014). Specificity of Multiplex PCR in the Detection of *Xanthomonas oryzae* pv. *oryzae* and *Xanthomonas oryzae* pv. *oryzicola* in Rice (*Oryza sativa* L.) Seeds. *Journal of the Korean Society of International Agriculture*, 26(4), 425–429.
- Li, B., Liu, B., Yu, R., Tao, Z., Wang, Y., Xie, G., Li, H., & Sun, G. (2011). Bacterial brown stripe of rice in soil-less culture system caused by *Acidovorax avenae* subsp. *avenae* in China. *Journal of General Plant Pathology*, 77(1), 64–67.
- Liu, H., Tian, W. X., Ibrahim, M., Li, B., Zhang, G. Q., Zhu, B., & Xie, G. L. (2012). Characterization of pilP, a gene required for twitching motility, pathogenicity, and biofilm formation of *Acidovorax avenae* subsp. *avenae* RS-1. *European Journal of Plant Pathology*, 134(3), 551–560.
- Madigan, M., Martinko, J., & Parker, J. (2015). *Brock Biology of Microorganisms* (16th ed.). Pearson Education.
- Midha, S., Bansal, K., Sharma, S., Kumar, N., Patil, P. P., Chaudhry, V., & Patil, P. B. (2016). Genomic resource of rice seed associated bacteria. *Frontiers in Microbiology*, 6.
- Munkvold, G. P. (2009). Seed pathology progress in academia and industry. *Annual Review of Phytopathology*, 47, 285–311.
- Nandakumar, R., Shahjahan, A. K. M., Yuan, X. L., Dickstein, E. R., Groth, D. E., Clark, C. A., Cartwright, R. D., & Rush, M. C. (2009). *Burkholderia glumae* and *B. gladioli* cause bacterial panicle blight in rice in the Southern United States. *Plant Disease*, 93(9), 896–905.
- Noer, M. N. (2020). *Komunitas Aktinobakteri di Tanah Perkebunan Kelapa Sawit PTPN VI Jambi Berdasarkan Sekuens Amplikon Gen 16S rRNA*. Institut Pertanian Bogor .
- Nuryanto, B. (2018). Pengendalian Penyakit Tanaman Padi Berwawasan Lingkungan Melalui Pengelolaan Komponen Epidemik. *Jurnal Penelitian Dan Pengembangan Pertanian*, 37(1), 1.
- Nuryetti, & Atman. (2013). Keunggulan Kompetitif Padi Sawah Varietas Lokal Di Sumatera Barat. *Jurnal Pengkajian Dan Pengembangan Teknologi Pertanian* , 1(2), 102–110.
- OEPP/EPPO. (2007). Diagnostic *Xanthomonas oryzae* Specific Scope This Standard Describes a Diagnostic Protocol for *Xanthomonas oryzae* pv. *oryzae* and *oryzicola*. In *EPPO Bulletin*, 37(3). Blackwell Publishing Ltd.

- Ortega, L., & Rojas, C. M. (2021). Bacterial panicle blight and *Burkholderia glumae*: From pathogen biology to disease control. In *Phytopathology*, 111(5), pp 772–778. American Phytopathological Society.
- Parwasih, R. (2019). *Identifikasi Secara Molekuler Dan Teknik Eliminasi Dengan Elektroterapi Bakteri Patogen Dari Benih Padi*. Insititut Pertanian Bogor.
- Patil, S. S., Prasannakumar, M. K., & Reddy, N. K. (2023). Morphological and Biochemical Characterization of *Xanthomonas oryzae* pv. *oryzae* Isolates from different Regions of India. *Mysore J. Agric. Sci*, 57(3), 344–355.
- Pedraza, L. A., Bautista, J., & Uribe-Vélez, D. (2018). Seed-born *Burkholderia glumae* infects rice seedling and maintains bacterial population during vegetative and reproductive growth stage. *Plant Pathology Journal*, 34(5), 393–402.
- Popoola, A., Ganiyu, S., Enikuomihin, O., Bodunde, J., Adedibu, O., Durosomo, H., & Karunwi, O. (2015). Isolation and Characterization of *Ralstonia solanacearum* Causing Bacterial Wilt of Tomato in Nigeria. *Nigerian Journal of Biotechnology*, 29(1), 1.
- Prakash, O., Verma, M., Sharma, P., Kumari, M., Singh, A., Kumari, A., Jit, S., Gupta, S. K., Khanna, M., & Lal, R. (2007). Polyphasic approach of bacterial classification-An overview of fi recent advances. *Indian J. Microbiol*, 47, 98–108.
- Pratiwi, S. H. (2016). Growth and Yield of Rice (*Oryza sativa* L.) on various planting pattern and addition of organic fertilizers. *Gontor AGROTECH Science Journal*, 2(2).
- Putri, D. F. (2022). *Uji Ketahanan Beberapa Varietas Padi Lokal Asal Sumatera Barat Terhadap Serangan Penyakit Hawar Daun Bakteri (Xanthomonas oryzae pv. oryzae)*. Universitas Andalas.
- Rahayu, M. (2016). Patologi dan Teknis Pengujian Kesehatan Benih Tanaman Aneka Kacang. *Buletin Palawija*, 14(2), 78–88.
- Ramachandran, K., Vijaya, S. I., Ahmad, F. N., Amzah, B., & Zakaria, L. (2021). Characterization and identification of *Burkholderia glumae* as the causal pathogen of bacterial panicle blight of rice (*Oryza sativa* L.) in Malaysian rice granaries. *Journal of General Plant Pathology*, 87(3), 164–169.
- Rinanda, T. (2011). Analisis Sekuensing 16S rRNA Di Bidang Mikrobiologi. *Jurnal Kedokteran Syiah Kuala*, 3, 172–177. <http://rdp.cme.msu.edu/html/>
- Rizal, N. S. M., Neoh, H. M., Ramli, R., Periyasamy, P. R. A. L. K., Hanafiah, A., Samat, M. N. A., Tan, T. L., Wong, K. K., Nathan, S., Chieng, S., Saw, S. H., & Khor, B. Y. (2020). Advantages and limitations of 16S rRNA next-generation sequencing for pathogen identification in the diagnostic microbiology laboratory: perspectives from a middle-income country. *Diagnostics*, 10(10).
- Saitou, N., & Nei, M. (1978). The Neighbor-joining Method: A New Method for Reconstructing Phylogenetic Trees'. *Molecular Biology and Evolution*, 4, 406–425.

- Saylendra, A. (2010). Identifikasi Cendawan Terbawa Benih Padi Dari Kecamatan Ciruas Kabupaten Serang Banten. *Jurnal Agroekotek*, 2(2), 24–27.
- Schaad, N. W., Jones, J. B., & Wesley, C. (2001). *Laboratory guide for identification of plant pathogenic bacteria*. American Phytopathological Society.
- Sellappan, K., Datta, K., Parkhi, V., & Datta, S. K. (2009). Rice caryopsis structure in relation to distribution of micronutrients (iron, zinc, β -carotene) of rice cultivars including transgenic indica rice. *Plant Science*, 177(6), 557–562.
- Shewry, P. R., Wan, Y., Hawkesford, M. J., & Tosi, P. (2020). Spatial distribution of functional components in the starchy endosperm of wheat grains. *Journal of Cereal Science*, 91.
- Sobianti, S., Soesanto, L., & Hadi, S. (2020). Inventarisasi Jamur Patogen Tular-Benih pada Lima Varietas Padi. *Agro Bali : Agricultural Journal*, 3(1), 1–15. <https://doi.org/10.37637/ab.v3i1.416>
- Song, W. Y. , Kim, H. M. , Hwang, C. Y. , & Schaad, N. W. (2004). Detection of *Acidovorax avenae* ssp. *avenae* in Rice Seeds Using BIO-PCR. *J. Phytopathology* , 152, 667–676.
- Sudir, Nuryanto, B., & Kadir, T. S. (2012). Epidemiologi, Patotipe, dan Strategi Pengendalian Penyakit Hawar Daun Bakteri pada Tanaman Padi. *IPTEK Tanaman Pangan*, 7(2).
- Suharti, T., Joko, T., & Arwiyanto, T. (2017). Deteksi Bakteri Patogen Terbawa Benih Akor (*Acacia auriculiformis* A. Cunn. Ex . BENTH.). *J Trop Plant Pests Dis*, 17(1), 19–36.
- Swings, J., Van Den Mooter, M., Vauterin, L., Hoste, B., Gillis, M., Mew, A N, T. W., & Kersters, D. K. (1990). Reclassification of the Causal Agents of Bacterial Blight. *International Journal Of Systematic Bacteriology* , 40(3), 309–311.
- Takaiwa, F., Wakasa, Y., Hayashi, S., & Kawakatsu, T. (2017). An overview on the strategies to exploit rice endosperm as production platform for biopharmaceuticals. *Plant Science*, 6(3), 982–1005.
- Tasliyah. (2012). Gen Ketahanan Tanaman Padi Terhadap Bakteri Hawar Daun (*Xanthomonas oryzae* pv. *oryzae*). *Jurnal Litbang Pertanian*, 31(3), 103–112.
- Tenriawaru, N., Salam, M., Ridwan, M., Sirajuddin, S. N., Al -Tawaha, A. R. M., & Syam, S. H. (2023). Comparison of the Application of Local and Superior Rice Varieties in Terraced Rice Fields and their Implications for Farmers' Income. *Universal Journal of Agricultural Research*, 11(3), 537–546.
- Tewari, S., & Sharma, S. (2019). Molecular Techniques for Diagnosis of Bacterial Plant Pathogens. In *Microbial Diversity in the Genomic Era* (pp. 481–497). Elsevier.
- Tran, Q., Pham, D. T., & Phan, V. (2017). Using 16S rRNA gene as marker to detect unknown bacteria in microbial communities. *BMC Bioinformatics*, 18.

- Tri, W. A., Meliah, S., & Abdjad, A. N. (2011). *Xanthomonas oryzae* pv. *oryzae* Bakteri Penyebab Hawar Daun Pada Padi: Isolasi, Karakterisasi, Dan Telaah Mutagenesis Dengan Transposon. *Makara Sains*, 15(1), 89–96.
- Tsedaley, B. (2015). *Review on Seed Health Tests and Detection Methods of Seedborne Diseases*. 5(5).
- Waris, M., Hemalatha, P., Mishra, M. K., & Kar, A. K. (2018). Management of Seed Borne Pathogens of Rice. *International Journal of Current Microbiology and Applied Sciences*, 7(10), 3638–3648.
- Wiarpiz, W. (2022). *Inventarisasi Penyakit Tanaman Padi (Oryza sativa L.) di Kecamatan Lubuk Basung dan Tanjung Raya, Kabupaten Agam, Sumatra Barat*. Institut Pertanian Bogor.
- Widarti, A., Giyanto, G., & Mutaqin, K. H. (2020). Insidensi Penyakit Busuk Bulir Padi, Identifikasi, dan Keragaman Bakteri *Burkholderia glumae* pada Beberapa Varietas Padi di Jawa Barat. *Jurnal Fitopatologi Indonesia*, 16(1), 9–20.
- Willems, A., Goor, M., Thielemans, S., Gillis, M., Kersters, K., & de Ley, J. (1992). Transfer of Several Phytopathogenic *Pseudomonas* Species to *Acidovorax* as *Acidovorax avenae* subsp. *avenae* subsp. nov., comb. nov., *Acidovorax avenae* subsp. *citruilli*, *Acidovorax avenae* subsp. *cattleyae*, and *Acidovorax konjaci*. *International Journal of Systematic and Evolutionary Microbiology*, 42(1), 107–119.
- Wu, X., Liu, J., Li, D., & Liu, C. M. (2016). Rice caryopsis development II: Dynamic changes in the endosperm. *Journal of Integrative Plant Biology*, 58(9), 786–798.
- Xie, G. L., Zhang, G. Q., Liu, H., Lou, M. M., Tian, W. X., Li, B., Zhou, X. P., Zhu, B., & Jin, G. L. (2011). Genome sequence of the rice-pathogenic bacterium *Acidovorax avenae* subsp. *avenae* RS-1. *Journal of Bacteriology*, 193(18), 5013–5014.
- Yu, X. run, Zhou, L., Xiong, F., & Wang, Z. (2014). Structural and histochemical characterization of developing rice caryopsis. *Rice Science*, 21(3), 142–149.
- Yuktika, M., Nurdin, & Ratih, S. D. (2014). Inventarisasi Jamur Dan Bakteri Yang Berasosiasi Dengan Benih Padi (*Oryza sativa* L.) Di Lampung. *Jurnal Agrotek Tropika*, 2(3), 453–458.
- Zhang, Z., Schwartz, S., Wagner, L., & Miller, W. (2000). A Greedy Algorithm for Aligning DNA Sequences. *Journal of Computation Biology*, 7(1–2), 203–214.
- Zhao, J. Y., Chen, J., Hu, Z. T., Li, J., Fu, H. Y., Rott, P. C., & Gao, S. J. (2023). Genetic and morphological variants of *Acidovorax avenae* subsp. *avenae* cause red stripe of sugarcane in China. *Frontiers in Plant Science*, 14.
- Zhou, S. R., Yin, L. L., & Xue, H. W. (2013). Functional genomics based understanding of rice endosperm development. *Current Opinion in Plant Biology*, 16(2), 236–246.
- Zia-Ul-Hussnain, S., Haque, M. I., Mughal, S. M., Shah, K. N., Irfan, A., Afghan, S., Shahazad, A., Batool, A., Khanum, P., Hussain, K., Nawaz, K., Hassan, M. N., & Hafeez, F. Y. (2011). Isolation and biochemical characterizations of the

bacteria (*Acidovorax avenae* subsp. *avenae*) associated with red stripe disease of sugarcane. *African Journal of Biotechnology*, 10(37), 7191–7197.

