DAFTAR PUSTAKA

Advinda, L., M. Fifendy, M. Biomed, dan Iryani. 2013. Penyimpanan Bakteri *Pseudomonas fluoresen* pada Beberapa Bahan Pembawa dan Uji Potensinya Sebagai Pengendali *Blood Disease Bacteria* (BDB) Tanaman Pisang. Universitas Negeri Padang, Padang.

Aeny, T.N., R. Suharjo, dan S. Mujim. 2007. Skrining bakteri antagonis *Ralstonia* sp., penyebab penyakit layu bakteri pada pisang di Lampung. J. HPT Tropika 3(2): 100-110.

Anonim. 2006. *Distribution Pattern of Pests of Plant Fruits. The General Directorate of Horticulture*. Indonesian Agricultural Department, Jakarta.

Aris, M. Sukenda, E. Harris, M.F. Sukadi, dan M. Yuhana. 2013. Identifikasi molekular bakteri patogen dan desain primer PCR. Budidaya Perairan 1(3): 43-50.

Ariyanto, S. 2008. Penghambatan penyakit darah (*Blood Disease Bacterium*) pada pisang menggunakan silika dan *Pseudomonas putida* strain 217. Fakultas Pertanian. Universitas Gadjah Mada. Skripsi.

Atkinson, M. M., J-S. Huang, and J. A. Knopp. 1985. Hypersensitivity of suspension-cultured tobacco cells to pathogenic bacteria. Phytopathology 75: 1270-124.

Bacon, C. W. dan D. M. Hinton. 2007. Bacterial Endophytes: The Endophitic Niche, Its Occupants, and Its Utility. *In*: S. S. Gnanamanickam (Eds.) Plant Asociated Bacteria. Springer, Berlin, p. 155-194.

Baharuddin, B., Rudolph K., and Niepold F. 1994. Production of monospesific antiserum against the Blood disease bacterium affecting banana and plantain. Molecular Plant Pathology 84(6): 570-575.

Balosi, F., I. Lakani, dan J. Panggeso. 2014. Eksplorasi bakteri endofit sebagai agens pengendalian hayati terhadap penyakit darah pada tanaman pisang secara *in-vitro*. E-J. Agrotekbis 2(6): 579-586.

Campbell, N.A. 2002. Biologi Edisi Kelima Jilid I. Erlangga, Jakarta.

Clarridge, J.E. 2004. Impact of 16S rRNA genes sequence analysys for identification of bacteria on clinical microbiology and infectious disease. Clinical Microbiology Reviews 17(4): 840-862.

Dharmayanti NLPI. 2011. Filogenetika molekuler: metode taksonomi organisme berdasarkan sejarah evolusi. Wartazoa 21(1): 1-10.

Dimyati, A., Djatnika, C. Hermanto, N. Nasir and A. Hasyim. 2000. Current research activities on banana disease and pests in Indonesia. *In*: Molina, A.B., V.N. Roa and M.A.G. Maghuyop (eds.) Advancing banana and plantain R&D in Asia and the Pasific-Vol 10. Proceeding of the 10th INIBAP-ASPNET Regional Advisort Committee meeting held at Bangkok, Thaland, p: 110-122.

Devi, R.K., L.Q. Aini, dan A.L. Abadi. 2013. Uji metode inokulasi dan patogenisitas *Blood Disease Bacterium* (BDB) pada buah pisang (*Musa* sp.). Jurnal HPT 1(1): 40-46.

Eden-Green, S. J. 1992. Characteristics of *Pseudomonas solanacearum* and related bacteria from banana and plantain in South East Asia, p.51-57. In: M. Lemmattre, S. Freigoun, K. Rudolph, and J. G. Swings, Eds. Plant Pathogenic Bacteria. INRA Editions, Paris.

Eden-Green, S. J. 1994. Banana Blood Disease. Musa Disease Fact Sheet No.3. 2p. INIBAP, Montpellier, France.

Edy, N. 2011. Pengendalian hayati penyakit darah pada pisang dengan Pseudomonad flouresen dan *Bacillus* spp. J. Agroland 18(1): 29-35.

Edy, N., S. Subandiyah, C. Sumardoyono, dan J. Widada. 2011. Karakterisasi dan deteksi cepat bakteri penyebab penyakit darah pada pisang. Jurnal Perlindungan Tanaman Indonesia 17(1): 26-30.

Ehtisham, M., F. Wani, I. Wani, P. Kaur, and S. Nissar. 2016. Polymerae Chain Reaction (PCR): back to basics. Indian Journal of Contemporary Dentistry 4(2): 30-35.

Fanani, A. K., A. L. Abadi, dan L. Q. Aini. 2015. Ekplorasi bakteri patogen pada beberapa spesies tanaman kantong semar (*Nepenthes* sp.). Jurnal HPT 3(3): 104-110.

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.

Giri, R.E.A. 2004. Regulasi Ekspresi Gen pada Organisme Bakteri. KPP Bioteknologi Bandung, Bandung.

Hadiwiyono. 2011. Blood bacterial wilt disease of banana: the distrubtion of pathogen in infected plant, symptoms, and potentiality of diseased tissues as source of infective inoculums. BIOSCIENCE 3(3): 112-117.

Hadiwiyono and S. Widono. 2012. Endophytic *Bacillus*; the potentiality of antagonism to wilt pathogen and promoting growth to micro-plantlet of banana in vitro. Biomirror 3(6):1-4.

Hadiwiyono and S. Widono. 2013. Vigor of planlet from microplanlet treated by filtrate and cell suspension of some isolates of *Bacillus* and resistence to banana wilt pathogen after acclimatization. Esci Journal Plant Pathology 2(2): 70-75.

Hallmannn J, Quadt-Hallmannn A, Mahaffee WF, Kloepper JW. 1997. Bacterial endophytes in agricultural crops. Can. J. Microbiol 43:895-914.

Harahap, L.H. 2015. Deteksi dan Identifikasi Penyakit Darah Pisang (oleh *Ralstonia solanacearum Ras 2* (Smith) *Yabuuchiet al;*) Di Beberapa Kabupaten di Sumatera Utara dalam Rangka Akselerasi Ekspor Buah Pisang. <http://bbkpbelawan.karantina.pertanian.go.id/wpcontent/uploads/2015/05/Penyakit -Darah-Pisang.pdf>.Diakses pada 28 Agustus 2018.

Haris, A., A. Hartanto, dan D. S. Widodo. 2009. Pengaruh kalsium, hormon auksin, giberellin dan sitokinin terhadap pertumbuhan dan perkembangan tanaman jagung. Jurnal Kimia Sains dan Aplikasi 12(3): 72-75.

Harish, S., M. Kavino, N. Kumar, D. Saravanakumar, K. Soorianathasundaram, and R. Samiyappan. 2008. Biohardening with plant grwoth promoting rhizosphere and endpophytic bacteria induces systemic resistence against *Banana bunchy top virus*. Applied Soil Ecology 39(2): 187-200.

Harni, R. 2016. Prosfek pengembangan bakteri endofit sebagai agens hayati pengendalian nematoda parasit tanaman perkebunan. Perspektif 15(12): 31-49.

Hatmanti, A. 2000. Pengenalan *Bacillus* spp. Oseana 25(1): 31-41.

Janda, J.M. and S.L. Abbott. 2007. 16S rRNA gene sequencing for bacterial identification in the diagnostic laboratory: pluses, perils, and pitfalls. Journal Of Clinical Microbiology 45(9): 2761-2764.

Klement, Z. 1982. Hypersensitivity. *In*: M. S. Mount and G. H. Lacy (Eds.) Phytopathogenic Prokaryotes, Academic Press, New York, p: 149-177.

Lamb. T.G., D.W. Tonkyn, and D.A. Kluepfel. 1996. Movement of *Pseudomonas aureofaciens* from the rhizosphere to aerial plant tissue. Can. J. Microbiol 42:112-1120.

Lane, D.J. 1991. 16S/23S rRNA sequnceing. In Nucleid Acid Techniques in Bacterial Systematics, pp. 115-175. Edited by E. Stack-ebrant and M.Goodfellow. Wiley, New York.

Latupeirissa, Y. 2014. Seleksi dan identifikasi bakteri bermanfaat asal tanaman pisang tongkat langit (*Musa troglodytarum* L.) untuk mengendalikan penyakit darah pisang. Institut Pertanian Bogor. Tesis.

Lisboa, M. P., D. Bizani, A. Brandelli, D. Bonatto, and J. A. A. Henriques. 2006. Characterization of bacteriocin-likesubstance produced *Bacillus amyloliquefaciens* isolated from the Brazilian Atlantic forest. Interational Microbiology 9:111-118.

Long, H. H., N. Furuya, D. Karose, I. Yamamoto, M. Takeshi, and Y. Takanami. 2004. Identification of endophytic bacterial isolate and their in vitro and in vivo antagonist againt *Ralstonia solanacearum*. Journal Faculty Agricultur Kyushu University 49(2): 223-241.

Machmud, M. 1985. Bacterial Wilt in Indonesia, p. 30-34. In: G. J. Persley. Eds. Bacterial Wilt Disease in Asia and South Pasific. Proceedings of an international Workshop held at PCARRD, Los Banos, Philippines.

Marwan H. 2011. Isolasi da seleksi bakteri endofit untuk pengendalian penyakit darah pada tanaman pisang. Jurnal Hama dan Penyakit Tanaman Tropika 11(2):112-119.

Molina, A. B., and R. V. Valmayor. 1998. Banana Production Systems in Southeast Asia. *In*: C. Ploq, E. Fourė and E. A. Frison (Eds.) Bananas and Food Security. International Symposium, Douala, Cameroon, p: 423-436.

Moyer, C.L., F.C. Dobbs, and D.M. Karl. 1994. Estimation of diversity and community structure throuhg restriction fragment length polymorphism distribution analysis of bacterial 16S rRNA genes from a microbial mat at an active, hydrothermal vent system, Loihi Seamount, Hawaii. Applied and EnvironmentalMicrobiology 60(3): 871-879.

Nasir, M. 2002. Bioteknologi Potensi dan Keberhasilannya dalam Bidang Pertanian. Persada, Jakarta

Nawangsih, A.A. 2007 Pemanfaatan bakteri endofit pada pisang untuk mengendalikan penyakit darah: isolasi, uji penghambatan *in vitro* dan *in planta.* Jurnal Ilmu Pertanian Indonesia 12(1): 43-49.

Pillay, V. K., and J. Nowak. 1997. Inoculum density, temperature, and genotype effect on in vitro growth promotion and epiphytic and endophytic colonization of tomato (*Lycopersicon esculentum* L.) seedlings inoculated with a pseudomonad bacterium. Can. Journal Microbiology seedlings inoculated with a pseudomonad bacterium. Can. Journal Microbiology 43: 354-361.

Promosiana, A. dan H.D. Atmojo. 2015. Statistik Produksi Hortikultura Tahun 2014. Direktorat Jenderal Hortikultura, Kementerian Pertanian, Jakarta.

Putri, S. U. 2013. Antagonisme in vitro *Bacillus* endofit terhadap bakteri darah pisang dan kemampuan memacu pertumbuhan bibit pisang. Fakultas Pertanian. Universitas Sebelas Maret. Skripsi.

Rohmah, Y. 2016. Outlook Komoditas Pertanian Sub Sektor Hortikultura: Pisang. Pusat Data dan Sistem Informasi Pertanian, Kementerian Pertanian, Jakarta.

Rosenblueth, M and E. Martinez-Romero. 2006. Bacterial endophytes and their interactions with host. Review. MPMI 19(8): 827-837.

Rustam. 2007. Uji metode inokulasi dan kerapatan populasi *Blood Disease Bacterium* pada tanaman pisang. J. Hort 17(4): 387-392.

Safni, I., I. Cleenwerck, P. De Vos, M. Fegan, L. Sly, and U. Kappler. 2014. Polyphasic taxonomic revision of the *Ralstonia solanacearum* species complex: proposal to emend the description of *Ralstonia solanacearum* and *Ralstonia syzigii* and reclassify current *R. syzigii* strains as *Ralstonia syzigii* subsp. *syzigii* subsp. nov., *R. solanacearum* phylotype IV strains as *Ralstonia syzigii* subsp. *indonesiensis* subsp. nov., banana blood disease bacterium strains as *Ralstonia syzigii* subsp. *celebesensis* subsp. nov. And *R. solanacearum* phylotype I and III strains as *Ralstonia pseudosolanacearum* sp. nov. International Journal of Systematic and Evolutionary Microbiology 64: 3087-3103.

Safni,I., S. Subandiyah, and M. Fegan. 2018. Ecology, epidemiology and disease management of *Ralstonia syzygii* in Indonesia. Review: Frontiers in Microbiology 9:419.

Sahlan, Nurhadi, dan C. Hermanto. 1996. Penyakit-Penyakit Utama Tanaman Pisang. Balitbu, Solok.

Saitou, N. and M. Mei. 1987. The neighbor-joining method: a new method for constructing phylogenetic trees. Mol. Biol. Evol 4:406-425.

Sari, J.P. 2018. Pemanfaatan bakteri endofit dari akar pisang sebagai agens pengendali hayati terhadap *R. syzygii* subsp.*celebesensis*. Fakultas Pertanian. Universitas Gadjah Mada. Skripsi.

Sasmito, D.E.K., R. Kurniawan, dan I. Muhimmah. 2014. Karakteristik primer *Polymerase Chain Reaction* (PCR) untuk sekuensing DNA: Mini Review. Seminar Nasional Informatika Medis: Fakultas Teknologi Industri, Universitas Islam Indonesia, Yogyakarta.

Semangun, H. 2007. Penyakit-Penyakit Tanaman Hortikultura Di Indonesia (Edisi Kedua). Gadjah Mada University Press, Yogyakarta.

Souza, S. A., A. A. Xavier, M. R. Costa, A. M. S. Cardoso, M. C. T. Pereira, and S. Nietsche. 2013. Endpohytic bacterial diversity in banana 'prata ana'(*Musa* spp.) roots. Genetics and Molecular Biology 36(2): 252-264.

Subandiyah, S., S. Indarti., T. Harjaka, S.N.H. Utami, C. Sumardiyono and Mulyadi. 2005. Bacterial wilt disease complex of banana in Indonesia. In: C. Allen, P. Prior, and A.C. Hayward. Bacterial wilt disease and the *Ralstonia solanacearum* spesies complex. APS Press. St. Paul. Minnesota U.S.A.

Suharjo, R., E. Martono, dan S. Subandiyah. 2006. Potensi *Erionata thrax* sebagai agen penyebar patogen penyebab penyakit layu bakteri pada tanaman pisang (*Blood Disease Bacterium*). J. HPT Tropika 6(2): 100-106.

Sumardi, C. N. Ekowati, K. Handayani, dan Nurhayati. 2012. Isolasi dan karakterisasi *Bacillus* sp. penghasil antimikroba dari saluran pencernaan ayam kampung (*Gallus domesticus*). Prosiding SNSMAIP III ISBN No. 978-602-98559-1-3.

Susanti, A.A. 2014. Outlook Komoditi Pisang. Pusat Data dan Sistem Informasi Pertanian, Kementerian Pertanian, Jakarta.

Suswati, A. Indrawaty, dan Friardi. 2015. Aktivitas enzim peroksidase pisang kepok dengan aplikasi *Glomus* tipe 1. Jurnal HPT Tropika 15(2): 141-151.

Upreti, R. and P. Thomas. 2015. Root-associated bacterial endophytes from *Ralstonia solanacearum* resistant and susceptible tomato cultivars and their pathogen antagonistic effects. Front Microbiol 6:255.

Wardlaw, C. W. 1972. Banana Disease: Including Plantains and Abaca. 2nd edition. Prentice Hall Press, London.

Zhou, N., J. Zhang, H. Liu and Y. Xiao. 2007. Molecular characterization of a novel *ortho*-nitrophopenol catabolic gene cluster in *Alcaligenes* sp. strain NyZ215. Journal of Bacteriology 189(18): 6587-6593.

Zinniel, D. K., P. Lambrecht, N. B. Harris, Z. Feng, D. Kuczmarski, P. Higley, C. A. Ishimaru, A. Arunakumari, R. G. Barletta, and A.K. Vidaver. 2002. Isolation and characterization of endophytic colonizing bacteria from agronomic crops and prairie plants. Apllied amd Enviromental Microbiology 68(5): 2198-2208.