

## DAFTAR PUSTAKA

- Adam, P. B. 1990. The Potential of Mycoparasites for Biological Control Plant: Diseases. *Annu.Rev.Phytopathol.* 28: 59-72
- Agustin, W., S. Ilyas., S. W. Budi., I. Anas., dan F. C. Suwarno. 2010. Inokulasi Fungi Mikoriza Arbuskula (Fma) dan Pemupukan P Untuk Meningkatkan Hasil dan Mutu Benih Cabai (*Capsicum annum L.* ). *Jurnal Agronomy Indonesia* 38: 218 – 224
- Arora, J., S. Goyal., and K. G. Ramawat. 2012. Co-evolution of Pathogens, Mechanism Involved in Pathogenesis and Biocontrol of Plant Diseases : an Overview. In: *Plant Defences – Biological Control*. Eds: J. M. Merillon and K. G. Ramawat. Springer Science and business Media: 424 pages.
- Awa, O. C., S. Osunlaja, O. Oworu, O. Sosanya. 2012. First Report of Fruit Anthracnose in Mango caused by *Colletotrichum gloeosporioides* in Southwestern Nigeria. *Intl J. Sci. and Tech Res.* 1: 30 -34. ISSN 2277-8616
- Badan Pusat Statistik. 2014. Produktivitas Cabe Besar Berdasarkan Provinsi 2009-2013. [www.bps.go.id](http://www.bps.go.id). Diakses tanggal 25 Februari 2015.
- Bassiri, E. 2013. Staining and Bacterial Cell Morphology. [http://www.sas.upenn.edu/Labmanuals/biol275/Table\\_of\\_contents\\_files/7-staining.pdf](http://www.sas.upenn.edu/Labmanuals/biol275/Table_of_contents_files/7-staining.pdf). Diakses tanggal 18 juni 2016.
- Benhamou, N., and I. Chet. 1997. Cellular and Molecular Mechanisms Involved in the Interaction between *Trichoderma harzianum* and *Pythium ultimum*. *Appl. Environ. Microbiol.* 63: 2095-2099.
- Beyer, M., S. Roding., A. Ludewig., J.A. Verret. 2004. Germination and Survival of *Fusarium graminearum* Macroconidia as Affected by Environmental Factors. *J of Phytopathol.* 152: 92-97
- Boonchan, S., M. L. Britz, and G. A. Stanley. 2000. Degradation and Mineralization of High-Molecular-Weight Polycyclic Aromatic Hydrocarbons by Defined Fungal-Bacterial Cocultures. *Appl.Environ. Microbiol.*, 66: 1007-1019.
- Bradford, M. 1976. A Rapid and Sensitive Method for the Quantitation of Microorganisms Quantities of Protein in Utilizing the Principle of Protein-Dye Binding. *Anal. Biochem* 72: 248-254.
- Bregar, O., Stanislav., M. Celar., and F. Javornik. 2012. Proteome Analysis of the Plant Pathogenic Fungus *Monilinia laxa* Showing Host Specificity. *J Biotechnol.* 50: 326-333.
- Calvo, A. M., WilSon., R. A. Bok., J. W. Keller. 2002. Relationship between Secondary Metabolism and Fungal Development. *Microbiol and Mol Biol Rev.* 66: 447-459

- Cang, S., M. Sanada., O. Johdo., S. Ohta., Y. Nagamatsu., and A. Yoshimoto. 2000. High Production of Prodigiosin by *Serratia marcescens* Grown on Ethanol. Biotech Lett. 22: 1761-1765.
- Carlile, M. J., S. C. Warkinson., G. W. Gooday. 2001. The Fungi. Academic Press. London. 603 pages.
- Cerkauskas, R. 2004. AVRDC Fact Sheet: Anthracnose. AVRDC – The World Vegetable Centre.
- Chakrabortty, S., S. Bhattacharya., and A. Das. 2012. Optimization of Process Parameters for Chitinase Production by Marine Isolate of *Serratia marcescens*. Biological Science. 2: 08-20.
- Cochrane, V. W. 1958. Physiology of Fungi. Wyley International Edition. New york. pp 200-201
- Cook, R., and J. K. F. Baker . 1983. The Nature and Practice of Biological Control of Plant Pathogens. American Phytopathological Society, St. Paul, Minnesota. pp 80-84.
- De Oliveira Costa, B. and E. Nahas. 2012. Growth and Enzymatic Responses of Phytopathogen Fungi to Glucose in Culture Media and Soil. Brazilian Journal of Microbiology. 43: 332-340
- Duffy, B. K. And Defago. 1999. Environmental Factor Modulating Antibiotic and Siderophore Biosynthesis by *Pseudomonas fluorescens* Biocontrol Strains. Appl. Environ.Microbiol. 65: 2429-2438
- Dwijoseputro. 1978. Dasar-dasar Mikrobiologi. Jakarta. Djambatan.
- Eberl, L., M.K. Winson, C. Sternberg., G. S. A. B. Stewart., G. Christiansen., S. R. Chabra., M. Daykin., P. William., S. Molin., M. Givskov. 1996. Involvement of N-acyl-L-homoserine Lactone Auto Inducer in Control of Multicellular Behavior of *Serratia liquefaciens*. Mol. Microbiol. 20: 127-136.
- Elson, M. K., D. A. Schisler and M. A. Jackson. 1998. Carbon-to-Nitrogen Ratio, Carbon Concentration, and Amino Acid Composition of Growth Media Influence Conidiation of *Helminthosporium solani*. Mycrological Society of America. 90: 406-413.
- Fernandez, R., and J. V. Jorrin-Novo. 2011. Contribution of Proteomics to the Study of Plant Pathogenic Fungi. Journal of Proteomo Reseach. 11: 3-16.
- Freeman, S., T. Katan, and E. Shabi. 1998. Characterization of *Colletotrichum* Spesies Responsible for Anthracnose Diseases of Various Fruits. Plant Disease. 82: 596-605
- Gesheva, V., V. Ivanova., R. Gesheva. 2005. Effect of Nutriens on the Production of AK-111-81 Macrolide Antibiotic by *Streptomyces hygroscopicus*. Microbiological Research. 160: 243-248

- Griffin, R. 1996. Fungal Physiology. Wiley-Liss. Inc. New York. pp 1-5.
- Grosch R., F. Faltin., J. Lottman., A. Kofoet, and G. Berg. 2005. Effectiveness of 3 Antagonistic Bacterial Isolates to Control *Rhizoctonia solani* Kuhn on Lettuce and Potato. Canad. J. Microbiol. 60: 99-106
- Harnas, H. 2015. Analisis Protein Diferensial Aktivitas Antagonis Bakteri UBCR\_012 Terhadap Jamur *Colletotrichum gloeosporioides* pada Berbagai Sumber Nutrisi Nitrogen dan Karbon. [Thesis]. Pascasarjana Fakultas Pertanian, Universitas Andalas, Padang.
- Havenga, W., E.S. Jager., L. Korsten. 1999. Factors Affecting Biocontrol Efficacy of *Bacillus subtilis* against *Colletotrichum gloesosporioides*. Pretoria. South African Avocado Growers. 22: 12-20
- Hidayat, F. 2010. Pengujian Primer Spesifik untuk Deteksi Berbasis PCR Spesies *Colletotrichum* sp Patogen Penyebab Penyakit Antraknosa pada Pertanaman Cabai (*Capsicum* sp). [Skripsi]. Fakultas Pertanian Universitas Andalas. Padang. 41 Hal
- Illahi, Z. 2010. Uji Akurasi Primer Spesifik *Colletotrichum* sp Penyebab Antraknosa pada Tanaman Cabai (*Capsicum* sp). [Skripsi]. Padang. Universitas Andalas. Hal 32-33.
- Indratmi, D. 2008. Mekanisme Penghambatan *Colletotrichum gloeosporioides* Patogen Penyakit Antraknosa pada Cabai dengan Khamir *Debaryomyces* Sp. Laporan hasil penelitian. Universitas Muhamadiyah Malang : Malang. Hal 1-7.
- Islam, M.R., Y.T. Jeong., Y.S. Lee., and C.H. Song. 2012. Isolation and Identification of Antifungal Compounds from *Bacillus subtilis* C9 Inhibiting the Growth of Plant Pathogenic Fungi. J. Mycobiology 40: 59-66.
- Jawetz, A. 2001. Mikrobiologi Kedokteran. ECG: Jakarta. 854 hal.
- Kim, K.D., and B. J. O J. Yang. 1999. Differential Interaction of a *Colletotrichum gloeosporioides* Isolate with Green and Red Peper Fruits. Phytoparasitica 27: 1-10
- Kurbanoglu, E. B., M. Ozdal., O.G. Ozdal., O. F. Algur. 2015. Enhanced Production of prodigiosin MO-1 Using Ramhorn Peptone. Brazilian Journal Microbiol. 46: 631-637.
- Kurniasih, R., S. Djauhari., A. Muhibuddin., dan E. P. Utomo. 2014. Pengaruh Sitronelal Serai Wangi (*Cymbopogon winterianus* Linn) Terhadap Penekanan Serangan *Colletotrichum* sp. pada Tanaman Bawang Daun (*Allium fistulosum* L.). Jurnal HPT. 2: 5-10.
- Martin, S. M., and Demain. 1980. Control of Antibiotic Biosynthesis. Microbiology. 44: 230-251

- Merrick, M. J., and R. A. Edwards. 1995. Nitrogen Control in Bacteria. Microbiological Reviews. 604-622
- Miao, L., T. F. N. Kwong,, P. Y. Qian. 2006. Effect of Culture Conditions on Mycelial Growth, Antibacterial Activity, and Metabolite Profiles of the Marine-Derived Fungus *Arthrinium c.f. saccharicola*. Applied Microbiology and Biotechnology. 72: 1063-1703
- Mufidah, N. U. 2013. Penyakit Antraknosa pada Tanaman Cabai. [www.skpkarimun.or.id](http://www.skpkarimun.or.id). Diakses tanggal 04 Mei 2015.
- Nagarajkumar, M., J. Jayaraj., S. Muthurisnan., R. Bhaskaran., And R. Velazhahan. 2005. Detoxification of Oxalic Acid by *Pseudomonas fluorescens*: Implication for the Biological Control of Rice Sheath Blight caused *Rhizoctonia solani*. J Microbial. Res. 160: 291-298.
- Prusky, D., S. Barad., N. Luria., and D. Ment. 2014. pH Modulation of Host Envirotment, A Mechanism Modultating Fungal Attack in Postharvest Pathogen Interaction. In: postharvest pathology. (Eds) Prusky, D. And M. L. Gullino. Springer International Publishing Switzerland. pp 11-25.
- Rep, M., H. C. Van der Does., M. Meijer., R. Van Wijk., P. M. Houterman., H. L. Dekker., C. G. De Koster., and B. J. C. Cornelissen. 2004. A Small, Cysteinerich Protein Secreted by *Fusarium oxyporum* during Colonization of Xylem Vessels is Required For 1-3-Mediated Resistance in Tomato. Molecular Microbiology 53: 1373-1383.
- Riwany, F. 2012. Pengujian Antagonisme Bakteri Rizosfir Terhadap Pertumbuhan *Colletotrichum* sp secara In-vitro. [skripsi] Universitas Andalas. Padang. 63 hal.
- Rossy, M, J., V. L., Oliveira. 2011. Growth of the Ectomycorrhizal Fungus *Pisolithus microcarpus* in Different Nutritional Conditions. Brazilian Journal of Microbiology. 42: 624-632
- Sanchez, S., A. Chavez., A. Forero., Y. G. Huante., A. Romero., M. Sanchez., D. Rocha., B. Sanchez., M. Avalos., S. G. Trampe., R. R. Sanoja., E. Langley., and B. Ruiz. 2010. Carbon Source Regulation of Antibiotic Production. The Journal of Antibiotic. 63: 442-459.
- Schipper, B., Baker., A. W. Baker. 1987. Interactions between Deleterious and Beneficial Rhizosphere Microorganism and the Effect of Cropping Ractices. Ann. Rev. Phytopathol 25: 339-358
- Semangun, H. 1989. Penyakit-penyakit Tanaman Hortikultura Indonesia. Gajah Madah University Press. Yogyakarta. 850 hal
- Semangun, H. 2007. Penyakit – Penyakit Tanaman Hortikultura Di Indonesia. Gadjah Mada University press : Yogyakarta. 854 hal

- Shapiro, S. 1989. Nitrogen Assimilation in Actinomycetes and the Influence of Nitrogen Nutrition on Actinomycete Secondary Metabolism. E-Books. 309 hal
- Sitepu, D. 1993. Konsep Pengendalian Hayati pada Penyakit Tanaman. Kumpulan Makalah Simposium Pendidikan Fitopatologi dan Pengendalian Hayati. Yogyakarta. Hal 69-79.
- Someya, N., M. Nakajima., watanabe., T. Hibi., and K. Akutsu. 2003. Influence of Bacteria Isolated from Rice Plants and Rhizospheres on Antibiotic Production by the Antagonistic Bacterium *Serratia marcescens* Strain B2. J. Gen. Plant Pathol. 69: 342-347.
- Stirling, A. M., K. P. Pegg., A. C. Hayward., and G. R Stirling. 2000. Effect of Copper Fungicide on *Colletotrichum gloeosporioides* and Other Microorganism on Avocado and Fruit. Aust. J. Agric. Res. 50: 1459- 1468.
- Strom, K., J. Schnurer., and P. Melin. 2005. Co-cultivation of Antifungal *Lactobacillus plantarum* Milab 393 And *Aspergillus nidulans*, Evaluation of Effects on Fungal Growth and Protein Expression. FEMS Microbial Lett. 246: 119-124.
- Sulistiyowati, E., S. Sukamto., dan Purwantara. 2009. Pedoman Teknis Hama dan Penyakit Tanaman Kakao. Puslitkoka. Jember.
- Suryaningsih, E. R., Sutarya., A.S. Duriat. 1996. Penyakit Tanaman Cabai Merah dan Pengendaliannya. Balai Penelitian Tanaman Sayuran. Lembang. Hal 64-83.
- Syafriani, E., F. Riwany, R. Kamelia, I. Ferita, F. Fatchiyah, and J. Jamsari, 2016. A Promising Novel Rhizobacteria Isolate UBCR\_12 as Antifungal for *Colletotrichum gloeosporioides*. Res. J. Pharm. Biol. Chem. Sci. 7: 2202-2204.
- Tawiah, A. A., S. Y. Gbedema., F. Adu., V. E. Boamah., and K. Annan. 2012. Antibiotic Producing Microorganism from River Wiwi, Lake Bosomtwe and the Gulf Of Guinea at Doakor Sea Beach, Ghana. BMC Microbiology. 12: 234-236
- Vinale, F., E. L. Ghisalberti., K. Sivasithamparam., R. Marra., A. Riteini., R. Ferracane., S. Woo., and M. Lorito. 2009. Factors Affecting The Production of *Trichoderma harzianum* Secondary Metabolism during the Interaction with Different Plant Pathogens. Letters in Applied Microbiology. 48: 705-711
- Volk, W. 1984. Mikrobiologi Dasar. Erlangga. Jakarta . Edisi ke V. 230 hal.
- Waluyo, L. 2005. Mikrobiologi Umum. UMM press: Malang. 180 hal.
- Wang, K., P. S. Yan., and L. X. Chao. 2014. Chitinase from A Novel Strain of *Serratia marcencens* JPP1 for Biocontrol of Aflatoxin: Molecular

- Characterization and Production Optimization using Response Surface Methodology. Biomed Research International. 14: 1-8.
- Yan, S., Y. Liang., J. Zhang., C. liu. 2012. *Aspergillus flavus* Grown in Peptone as the Carbon Source Exhibits Spore Density- and Peptone Concentration-dependent Aflatoxin B<sub>1</sub> biosynthesis. BMC Microbiology. DOI: 10.1186/1471-2180-12-106
- Yodsuwan, N., A. Owatworakit, A. Ngaokla., N. Soykeabkaew. 2012. Effect of Carbon and Nitrogen Sources on Bacterial Cellulose Production for Bionanocomposite materials. Mae Fah Luang University International Conference. Thailand. 6 pages.
- Youn, L. S., H. Tindwa., Y. S. Lee., K. W. Naing., S. H. Hong., Y. Nam., and K. Y. Kim. 2012. Biocontrol of Anthracnose in Pepper Using Chitinase,  $\beta$ -1,3-glucanase and 2-furancarboxaldehyde Produced by *Streptomyces cavourensis* SY224. Journal of Microbiology and Biotechnology 22: 1359-1366.
- Yulia, A., dan F. Widiantini. 2007. Potensi Bakteri Antagonis Piloflen Daun Mangga dalam Menekan Penyakit Antraknosa Buah Mangga (*Mangifera indica L.*). J Agri. 18: 1-7.
- Zhang, C., X. Zhang., and S. Shen. 2014. Proteome Analysis For Antifungal Effects of *Bacillus subtilis* KB-1122 On *Magnaporthe grisea* P131. J Micro Biotec. 30: 1763-1774.