

DAFTAR PUSTAKA

- Afrilia, L. (2016). Kolonisasi Beberapa Jamur Antagonis Pada Akar Tanaman Cabai (*Capsicum annum* L.) dan Pengaruhnya terhadap Penekanan Penyakit Antraknosa yang Disebabkan oleh *Colletotrichum gloeosporioides* (Penz & Sacc.). [Skripsi]. Padang. Fakultas Pertanian. Universitas Andalas.
- Agrios, G. N. (1996). Ilmu penyakit tumbuhan. Gadjah Mada University Press. Yogyakarta.
- Agustina, F., Wahyudin, N., & Purwasih, R. (2022). Optimization of red chili production in central Bangka regency. *Society*, 10(1), 67-76.
- Agustina, N. (2020). Kemampuan antagonis isolat *Beauveria bassiana* endofit terhadap *Colletotrichum capsici* (Syd.) Butler and Bisby penyebab antraknosa pada tanaman cabai (*Capsicum annum* L.) secara *In-vitro*. [Skripsi]. Fakultas Pertanian. Universitas Andalas. Padang.
- Ahmad. (2004). *Kimia lingkungan*. Jakarta : Penerbit ANDI Yogyakarta.
- Alviana, V. F., & Susila, A. D. (2009). Optimasi dosis pemupukan pada budidaya cabai (*Capsicum annuum* L.) menggunakan irigasi tetes dan mulsa polyethylene. *Jurnal Agronomi Indonesia*, 37(1), 28–33.
- Amaria, W., Harni, R., & Samsudin. (2015). Evaluasi jamur antagonis dalam menghambat pertumbuhan *Rigidoporus microporus* penyebab penyakit jamur akar putih pada tanaman karet. *JTIDP*. 2(1), 51–60.
- Anggrahini, D. S, Arif W., & Subandiyah, S. (2020). Morphological and molecular identification of *Colletotrichum* spp. associated with chili anthracnose disease in Yogyakarta Region. *J. Perlindungan Tanaman Indonesia*, 24(2), 161-174.
- [AVRDC] Asian Vegetable Research and Development Center. (2009). Development of locally adapted, multiple disease resistant and high yielding chilli (*Capsicum annuum*) cultivars for China, India, Indonesia, and Thailand Phase II. Taiwan (TW): AVRDC Publication.
- [AVRDC]. (2010). Characterization of *Colletotrichum* spp. causing pepper anthracnose and development of resistant pepper lines. The World Vegetable Center. Asian Seed Congress. Available at : www.apsaseed.org/.../3 AVRDC search update.
- Azadi, N., Shirzad, A., & Mohammadi, H. (2015). Study of biological control of tomato damping-off disease by some isolates of *Beauveria bassiana* First National Conference on Agriculture, Environment and Food Security, University of Jiroft, Jiroft.

- Azadi, N., Shirzad, A., & Mohammadi, H. (2015). Study some of biocontrol mechanisms *Beauveria bassiana* against *Rhizoctonia* disease in tomato. M.Sc. [Thesis]. Azarbaijan Shahid Madani University, Tabriz, Iran.
- Azadi, N., Shirzad, A., & Mohammadi, H. (2016). A study of some biocontrol mechanisms of *Beauveria bassiana* against *Rhizoctonia* disease on tomato. *Acta Biologica Szegediensis*, 60(2), 119-127.
- Barnet, H. L., & Hunter, B. B. (1972). Illustrated Genera Of Imperfect Fungi Fourth Edition. *The American Phytopathological Society*.
- Barra-Bucarei, L., France, A., & Millas, P. (2019). *Crossing frontiers: Endophytic entomopathogenic fungi for biological control of plant diseases*. In *Endophytes for a Growing World*; Cambridge University Press: Cambridge.
- Batson, J.r., W.E., Caceres, J., Benson, M., Cubeta, M.A., Brannen, P.M., Kermy, D.S., Elliott, M.L., Huber, D.M., Hiclanan, M.V., Keinath, A.P., Dubose, V., Ownley, B., Canaday, C., Rothrock, C.S., Schneider, R.W., and Sumner, D.R. (1999) *Biological and cultural tests for control of Plant Diseases*, 15, 149- 150.
- Bayu, M. S. Y. I., Prayogo, S., & Indriati, S.W. (2023). *Beauveria Bassiana* : Biopesisida ramah lingkungan dan efektif untuk mengendalikan hama dan penyakit tanaman. *Buletin Palawija*, 19(1).
- Bosland, P. W., & Kotava, E. J. (2012). Peppers: vegetable and spice *Capsicum*. Second ed. CAB International. Wallingford, UK.
- BPS [Badan Pusat Statistik]. (2023). Luas panen, produktivitas, produksi cabai nasional. Jakarta. Badan Pusat Statistik.
- Bucarei, L. B., Iglesias, A. F., Gonzales, M. G., Aguayo, G. S., Fernandez, J. C., Castro, J. F., & Campos, J. O. (2019). Antifungal Activity of *Beauveria bassiana* Endophyte Against *Botrytis cinerea* In Two Solanaceae Crops. *Microorganisme*, 8(1), 68-92.
- Buren, A. M., Andre, C., & Ishimaru, C.A. (1993). Biological control of the bacterial ring rot pathogen by endophytic bacteria isolated from potato. *Phytopathology*, 184(2), 265-271.
- Campo, S., Gilbert, K. B., & Carrington, J. C. (2016). Small RNA-based antiviral defense in the phytopathogenic fungus *Colletotrichum higginsianum*. *PLoS Pathog*, 12(6), 1-36.
- Cannon, P. F., Damm, U., Johnston, P. R., & Weir, B. S. (2012). *Colletotrichum*- current status and future directions. *Studies in mycology*, 73(1), 181–213.

- Castillo-Lopez, D., & Sword, G. A. (2015). The endophytic fungal entomopathogens *Beauveria bassiana* and *Purpureocillium lilacinum* enhance the growth of cultivated cotton (*Gossypium hirsutum*) and negatively affect survival of the cotton bollworm (*Helicoverpa zea*). *Biological Control*, 89, 53-60.
- Chen, C., Bauske, E. M., Musson, G., Rodríguez- Kábana, R., & Kloepfer, J. W. (1995). Biological control of Fusarium wilt on cotton by use of endophytic bacteria. *Biological Control*, 5(1), 83–91.
- Cyntia, A. (2020). Perendaman benih cabai (*capsicum annuum* l.) dengan beberapa isolat *beauveria bassiana* (bals.) Vuill endofit terhadap potensi penekanan patogen tular benih *Colletotrichum* spp. Dan meningkatkan pertumbuhan bibit. [Skripsi]. Fakultas Pertanian. Universitas Andalas. Padang.
- Dai, C., & Xi, L. (2008). Screening of endophytic fungi that promote the growth of euphorbia pekinensis. *African Journal of Biotechnol*, 7(19), 3505–3510.
- Damm, U., Cannon, P. F., Woudenberg, J. H., & Crous, P. W. (2012a). The *Colletotrichum acutatum* species complex. *Studies in Mycology*, 73, 37–113.
- Damm, U., Cannon, P. F., Woudenberg, J. H., Johnston, P. R., Weir, B. S., & Tan, Y. P. (2012b). The *Colletotrichum boninense* species complex. *Studies in Mycology*, 73, 1–36.
- Damm, U., Sato, T., Alizadeh, A., Groenewald, J. Z., & Crous, P. W. (2019). The *Colletotrichum dracaenophilum*, *C. magnum* and *C. orchidearum* species complexes. *Studies in Mycology*, 92, 1–46.
- Darmawan, E. (2016). Eksplorasi Jamur Entomopatogen *Beauveria bassiana*, *Metarrhizium anisopliae*, dan jamur antagonis *Trichoderma* sp pada beberapa sampel tanah pertanaman tembakau. [Skripsi]. Jember. Fakultas Pertanian. Universitas Jember.
- De Silva, D. D., Ades, P. K., & Taylor, P. W. J. (2021). Pathogenicity of *Colletotrichum* species causing anthracnose of *Capsicum* in Asia. *Plant Pathology*, 70, 875–884.
- De Silva, D. D., Groenewald, J. Z., Crous, P. W., Ades, P. K., Nasruddin, A., & Mongkolporn, O. (2019). Identification, prevalence and pathogenicity of *Colletotrichum* species causing anthracnose of *Capsicum annuum* in Asia. *IMA Fungus*, 10, 1-32
- Devi., Nirjanta, N., Wahab., & Femina. (2012). Antimicrobial properties of endophytic fungi isolated from medicinal plant *Camellia sinensis*. *International Journal of Pharma and Bio Sciences*, 3(3), 420 – 427.

- Djarwaningsih, T. (2005). *Capsicum* spp. (Chilli): origin, distribution, and its economical value, Biodiversitas. *Journal of Biological Diversity*, 6(4), 292-294.
- Dumaria, T. (2010). Pengaruh Aplikasi Starter Solution Pada Tiga Genotipe Cabai (*Capsicum Annum* L.) Terhadap Pertumbuhan Tanaman Serta Kejadian Penyakit Penting Cabai. [Skripsi]. Fakultas Pertanian. Institut Pertanian Bogor. Bogor.
- Duriat, A. S., Gunaeni, N., & Wulandari, A. (2007). Penyakit penting tanaman cabai dan pengendaliannya. Bandung: Balai Penelitian Tanaman Sayuran. Retrieved from <http://www.balitsa.litbang.pertanian.go.id>.
- Fitriyah, D., Jose, C., & Saryono. (2013). Skrining aktivitas antimikroba dan uji fitokimia dari kapang endofitik tanaman dahlia (*Dahlia variabilis*). *Jurnal Indonesian Chemia Acta*, 3(2), 50–55.
- Fransiska, N. (2019). Tingkat serangan penyakit antraknosa pada tanaman cabai (*Capsicum annuum* L.) di Kabupaten lima puluh kota. [Skripsi]. Fakultas Pertanian, Universitas Andalas. Padang.
- Gabriel, B. P., & Riyanto. (1989). *Metarrhizium anisopliae* (Metch) Sor: Taksonomi, patologi, produksi, dan aplikasinya. Proyek Pengembangan Perlindungan Tanaman Perkebunan. Direktorat Perlindungan Tanaman Perkebunan. Departemen Pertanian. Jakarta.
- Gao, F. K., Dai, C. C., & Liu, X. Z. (2010). Mechanisms of fungal endophytes in plant protection against pathogens. *African Journal of Microbiology Research*, 4(13), 1346-1351.
- Gothandapani, S., Boopalakrishnan, G., Prabhakaran, N., Chethana B.S., Aravindhan, M., Saravanakumar, M., & Ganeshan, G. (2014). Evaluation of entomopathogenic fungus against *Alternaria porri* (Ellis) causing purple blotch disease of onion. *Phytopathology and Plant Protection*, 48(2), 135-144.
- Grahovac, M., Indic, D., Vukovic, S., Hrustc, J., Gvozdenac, S., Mihajlovic, M., & Tanovic. (2012). Morphological and ecological features as differentiation criteria for *Colletotrichum* species. *Zemdirbyste Agriculture*, 99(21), 89–196.
- Greenfield, M., Gómez-Jiménez, M. I., Ortiz, V., Vega, F. E., Kramer, M., & Parsa, S. (2016). *Beauveria bassiana* and *Metarrhizium anisopliae* endophytically colonize cassava roots following soil drench inoculation. *Biological Control*, 95, 40–48.
- Haded, E. A., & Nurawan, A. (1988). Pengujian Beberapa Metode Isolasi Mikroorganisme Rimpang Jahe. *Buletin Penelitian Tanaman Rempah dan Obat*, 3(1), 43-46.

- Haniah, M. (2008). Isolasi jamur endofit dari daun sirih (*Piper betle* L.) sebagai antimikroba terhadap *Escherichia coli*, *Staphylococcus aureus* dan *Candida albicans*. [Skripsi]. Fakultas Sains dan Teknologi Universitas Islam Negeri Malang, Malang.
- Harman, G. E., Howell, C. R., Viterbo, A., Chet, I., & Lorito, M. (2004). *Trichoderma Species - Opportunistic, A Virulent Plant Symbionts*. *Nature Reviews Microbiology*, 2(1), 43-56.
- Harni, R., Amaria, W., Khaerati., & Taufiq, E. (2016). Isolasi dan seleksi jamur endofit asal tanaman kakao sebagai agens hidup *Phytophthora palmivora*. *Buletin Jurnal Tanaman Industri Dan Penyegar*, 3(3), 141–150.
- Harpenas, A., & Dermawan, R. (2014). *Budidaya cabai unggul*. Jakarta. Penebar Swadaya.
- Hartuti, N., & Sinaga, R. M. (1995). Pengaruh macam alat pengering dan jenis antioksidan terhadap mutu cabai merah kering (*Capsicum annuum* L.). Laporan Penelitian Bagian Pasca Panen Balitsa.
- Hasyim, A., Setiawati, W., & Sutarya, R. (2015). Screening for resistance to anthracnose caused by *Colletotrichum acutatum* in chili pepper (*Capsicum annuum* L.) in Kediri, East Java. *Advances in Agriculture & Botanics*, 6(2), 104-118.
- Hersanti., Kretini., & Fathin, S. A. (2016). Pengaruh beberapa sistem teknologi pengendalian terpadu terhadap perkembangan penyakit antraknosa (*Colletotrichum capsici*) pada cabai merah Cb-1 Unpad di musim kemarau 2015. *Jurnal Agrikultura*, 27(2), 83-88.
- Hersanti., Fei, L., & Zulkarnaen, I. (2004). Pengujian kemampuan campuran senyawa benzothiadiazol 1% - Mankozeb 48% dalam meningkatkan ketahanan cabai merah terhadap penyakit antraknosa. Prosiding Kongres Nasional XVI dan Seminar Hasil PFI, Bogor.
- Herwidayarti, K. H., Ratih, S., & Sembodo, D. R. J. (2013). Keparahan penyakit antraknosa pada cabai (*Capsicum annum* L.) dan berbagai jenis gulma. *Jurnal Agrotek Tropika*, 1(1), 102-106.
- Ibrahim, R., Hidayat, S. H., & Widodo. (2017). Keragaman morfologi genetika, dan patogenesitas *Colletotrichum acutatum* penyebab antraknosa cabai di Jawa dan Sumatera. *Jurnal Fitopatologi Indonesia*, 13(1), 9-16.
- Ilyas, M. (2007). Isolasi dan Identifikasi Mikoflora Kapang pada Sampel Serasa Daun Tumbuhan di Kawasan Gunung Lawu, Surakarta, Jawa Tengah. *Biodiversitas*, 8(2), 105 – 110.
- Indratmi, D. (2012). Penggunaan *Debaryomyces* sp. dan *Schizosaccharomyces* sp. dengan adjuvant untuk pengendalian penyakit antraknosa pada mangga. *Jurnal Gamma*, 5(1), 21-27.

- IPGRI (International Plant Genetic Resources Institute). (1995). Descriptors for *Capsicum* (*Capsicum* spp.). Roma. ITA: International Plant Genetic Resources Institute.
- Jaber, L. R., & Alananbeh, K. M. (2018). Fungal entomopathogens as endophytes reduce several species of *Fusarium* causing crown and root rot in sweet pepper (*Capsicum annuum* L.). *Biological Control*, 126, 117-126.
- Jaber, L. R., & Araj, S. E. (2018). Interactions among endophytic fungal entomopathogens (Ascomycota: Hypocreales), the green peach aphid *Myzus persicae* Sulzer (Homoptera: Aphididae), and the aphid endoparasitoid *Aphidius colemani* Viereck (Hymenoptera: Braconidae). *Biol. Control*, 116, 53–61.
- Jaber, L. R., & Ownley, B. H. (2018). Can we use entomopathogenic fungi as endophytes for dual biological control of insect pests and plant pathogens. *Biological Control*, 116, 36–45.
- Jaber, L. R., & Salem, N. M. (2014). Endophytic colonisation of squash by the fungal entomopathogen *Beauveria bassiana* (Ascomycota: Hypocreales) for managing *Zucchini Yellow Mosaic Virus* in Cucurbits. *Biocontrol science and technology*, 24(10), 1096–1109.
- Jallow, M. F. A., Dugassa-Gobena, D., & Vidal, S. (2004). Indirect interaction between and unspecialized endophytic fungus and a polyphagous moth. *Basic and Applied Ecology*, 5(2), 183–191.
- Johnston, P. R., & Jones, D. (1997). Relationships among *Colletotrichum* isolates from fruitrots assessed using rDNA sequences. *Mycologia*, 89(3), 420–430.
- Kambar, Y., Vivek, M. N., Manasa, M., Kekuda, P. T. R., & Nawaz, N. A. S. (2013). Inhibitory effect of cow urine against *Colletotrichum capsici* isolated from anthracnose of chilli (*Capsicum annuum* L.). *Science, Technology and Arts Research Journal*, 2(4), 91-93.
- Kang, B. K., Min, J. Y., Kim, Y. S., Park, S. W., Nguyen, V. B., & Kim, H. T. (2005). Semi-selective medium for monitoring *Colletotrichum acutatum* causing pepper anthracnose in the field. *Research in Plant Disease*, 11(1), 21-27.
- Kartika, T. R., Sastrahidayat, R. I., & Abadi, L. A. (2014). Pengaruh jenis air terhadap perkembangan spora cendawan *Colletotrichum capsici* pada cabai dan *Fusarium oxysporum* f. sp. *lycopersicii* pada Tomat. *Jurnal HPT* 2(3), 109-120.
- Kim, K. D., Oh, B. J., & Yang, J. (1999). Differential interaction of a *Colletotrichum gloeosporioides* isolate with green and red pepper fruits. *Pytoparasitica*, 27(2), 97 –106.

- Kim, K. H., Yoon, J. B., Park, H. G., Park, E. W., & Kim, Y. H. (2004). Structural modifications and programmed cell death of chili pepper fruit related to resistance responses to *Colletotrichum gloeosporioides* infection. *Phytopathology*, 94(12), 1295 -1304.
- Kim, S. H., Yoon, J. B., Do, J. W., & Park, H. G. (2007). Resistance to anthracnose caused by *Colletotrichum acutatum* in chilli pepper (*Capsicum annuum* L.). *Journal of crop science and biotechnology*, 10(4), 277–280.
- Krestini, E. H., Kirana, R., & Azmi, C. (2012). Intensitas serangan penyakit antraknose terhadap tujuh genotip cabai (*Capsicum annuum* L.) di laboratorium. Prosiding Seminar Nasional Pemanfaatan SDG Lokal Mendukung Industri Perbenihan Nasional, Universitas Padjadjaran, hlm. 98-103.
- Kronstadt, J. W. (2000). Fungal pathology. Klower Academic Publisher. Netherlands.
- Kumar, V., Singh, G. P., Babu, A. M., Ahsan, M. M., & Datta, R. K. (2016). Germination, penetration, and invasion of *Beauveria bassiana* on silkworm *Bombyx mori* causing white muscardine. *Italian Journal of Zoology*, 6(1), 39-43.
- Latifian, M., Rad, B., Amani, M., & Rahkhodaei, E. (2013). Mass production of entomopathogenic fungi *Beauveria bassiana* (Balsamo) by using agricultural products based on liquid-solid diphasic method for date palm pest control. *International Journal of Agriculture and Crop Sciences*, 5(19), 2337-2341.
- Liao, C. Y., Chen, M. Y., Chen, Y. K., Wang, T. C., Sheu, Z. M., Kuo, K. C., Chang, P. F. L., Chung, K. R., & Lee, M. H. (2012). Characterization of three *Colletotrichum acutatum* isolates from *Capsicum* spp. *European Journal of Plant Pathology*, 133(3), 599–608.
- Martin, M., & Garcia-Figueroes, F. (1999). *Colletotrichum acutatum* and *Colletotrichum gloeosporioides* cause anthracnose on olives. *European Journal of Plant Pathology*, 105(8), 733–741.
- Martoredjo, T. (2009). *Ilmu penyakit pascapanen*. PT Bumi Aksara. Jakarta.
- Mascarin, G.M, Jackson, M.A, Kobori, N.N, Behle, R.W, Junior, I.B.
- Marwan, H. (2011). Potensi bakteri endofit sebagai agens pengendalian hayati terhadap penyakit darah pada tanaman pisang. [Disertasi]. Institut Pertanian Bogor.

- Mascarin, G. M., Jackson, M. A., Kobori, N. N., Behle, R. W., & Júnior, I. D. (2015). Liquid culture fermentation for rapid production of desiccation tolerant blastospores of *Beauveria bassiana* and *Isaria fumosorosea* strains. *Journal of Invertebrate Pathology*, 127, 11-20.
- Moloinyane, S., & Nchu, F. (2019). The Effects of Endophytic *Beauveria bassiana* Inoculation on Infestation Level of *Planococcus ficus*, Growth and Volatile Constituents of Potted Greenhouse Grapevine (*Vitis vinifera* L.). *Toxins*, 11(2), 1-13.
- Montri, P., Taylor, P. W. J., & Mongkolporn, O. (2009). Pathotypes of *Colletotrichum capsici*, the causal agent of chili anthracnose, in Thailand. *Plant Disease*, 93(1), 17-20.
- Naipinta, R. (2016). Kolonisasi Beberapa Jamur Antagonis pada Buah Cabai (*Capsicum annum* L.) Terhadap Penyakit Antraknosa yang disebabkan oleh *Colletotrichum gloeosporioides* Penz. [Skripsi]. Fakultas Pertanian. Universitas Andalas. Padang.
- Namasivayam., Raja, K., & Prakash. (2014). Screening of bioactive compound by Gc-Mc from *Fusarium venenatum*. *International Journal of PhamTech Research*, 6(6), 1833-1837.
- Nishizawa, T., Komatsuzaki, M., Sato, Y., Kaneko, N., & Ohta, H. (2010). Molecular characterization of fungal communities in non-tilled, cover-cropped upland rice field soils. *Microbes and environments*, 25(3), 204- 210.
- Oh, B.J., Kim, K. D., & Kim, Y. S. (1999). Effect of cuticular wax layers of green and red pepper fruits on infection by *Colletotrichum gloeosporioides*. *Journal of Phytopathology*, 147(9), 547–552.
- Ortiz., Urquiza, A., & Keyhani, N. O. (2016). Molecular genetics of *Beauveria bassiana* infection of insects. *Advances in Genetics*, 94, 165-249.
- Otten, W., Bailey, D. J., & Gilligan, C. A. (2004). Empirical evidence of spatial thresholds to control invasion of fungal parasites and saprotrophs. *New Phytologist*, 163(1), 125-132.
- Ownley, B. H., Gwinn, K. D., & Vega, F. E. (2010). Endophytic fungal entomopathogens with activity against plant pathogens: ecology and evolution. *BioControl*, 55, 113–128.
- Pachoute, J., dos Santos, G. R., & de Souza, D. J. (2023). Antagonistic effects of *Beauveria bassiana* against seed-borne fungi of cowpea (*Vigna unguiculata*). *Biologia*, 79, 1-16.

- Palupi, H., Yulianah, I., & Respatijarti. (2015). Uji ketahanan 14 galur cabai besar (*Capsicum annum L.*) terhadap penyakit antraknosa (*Colletotrichum spp*) dan layu bakteri (*Ralstonia solanacearum*). *Jurnal Proteksi Tanaman*, 3(8), 640–648.
- Panjaitan, H. (2012). Identifikasi Fungi yang Berkembang pada Batang Sawit (*Elaeis guineensis Jacq.*) Pasca Penebangan. [Skripsi]. Fakultas Pertanian, Universitas Sumatera Utara. Medan.
- Paramita, N. R., Sumardiyono, C., & Sudarmadi. (2014). Pengendalian kimia dan ketahanan *Colletotrichum spp.* terhadap fungisida simoksanil pada cabai merah. *Jurnal Perlindungan Tanaman Indonesia*, 18(1), 41-46.
- Park, H. K., Kim, B.S., & Lee, W.S. (1990). Inheritance of resistance to anthracnose (*Colletotrichum spp*) in pepper (*Capsicum annum L.*). I. Genetic analysis of anthracnose resistance by diallel crosses. *Journal of the Korean Society for Horticultural Science*, 31, 91-105.
- Park, S. K. (2005). Differential interaction between pepper genotypes and *Colletotrichum* isolates causing anthracnose. [Thesis]. Seoul Nat. Univ. Seoul, Korea.
- Peres, N. A., Timmer, L. W., Adaskaveg, J. E., & Correll, J. C. (2005). Lifestyles of *Colletotrichum acutatum*. *Plant disease*, 89(8), 784–796.
- Petlamul, W., Sriporngam, T., Buakwan, N., Buakaew, S., & Mahamad, K. (2017). The capability of *Beauveria bassiana* for cellulase enzyme production. *Proceedings of the 7th International Conference on Bioscience, Biochemistry and Bioinformatics*. pp. 62-66.
- Photita, W., Taylor, P. W. J., Ford, R., Lumyong, P., McKenzie, H. C., & Hyde, K. D. (2005). Morphological and molecular characterization of *Colletotrichum* species from herbaceous plants in Thailand. *Fungal Diversity*, 18(2), 117 -133.
- Pratama, D. (2017). *Teknologi budidaya cabai merah*. Badan Penerbit Universitas Riau.
- Putra, F. S. (2019). Aplikasi cendawan endofit *Beauveria bassiana* (Bals.) Vuill pada benih cabai (*Capsicum annuum L.*) untuk mengendalikan *Myzus persicae* dan meningkatkan pertumbuhan tanaman cabai. [Skripsi]. Fakultas Pertanian. Universitas Andalas. Padang.
- Putri, P. P., Adisyahputra., & Asadi. (2014). Keragaman karakter morfologi, komponen hasil, dan hasil plasma nutfaf kedelai (*Glycine max L.*) *Bioma*, 10(2), 41-48.
- Rachmawati, R., Rahabistara, A., & Afandhi, A. (2016). Daya antagonis tiga jamur patogen serangga terhadap jamur patogen tular tanah *Fusarium* sp (Hypocreales = Nectriaceae) secara *in vitro*. *Jurnal HPT*, 4(2), 93-101.

- Radji, M. (2005). Peranan bioteknologi dan mikroba endofit dalam pengembangan obat herbal. *Majalah Ilmu Kefarmasian*, 2(3), 113-126.
- Rahma, H., Trizelia., Martinus., Flawerina, G., & Hendra, Y. (2023). *In-vitro Antagonism of Beauveria bassiana against Curvularia lunata*. AIP Conference Proceedings.
- Rangkuti, E. E., Wiyono, S., & Widodo. (2017). Identifikasi *Colletotrichum* spp. asal tanaman pepaya. *Jurnal Fitopatologi Indonesia*, 13(5), 175-183.
- Rante, H., Taebe, B., & Intan, S. (2013). Isolasi fungi endofit penghasil senyawa antimikroba dari daun cabai katokkon (*Capsicum annum* L. var. chinensis) dan profil KLT bioautografi. *Majalah Farmasi dan Farmakologi*, 17(2), 39–46.
- Rasmussen, J. B., Hammerschmidt, R., & Zook M. N. (1991). Systemic induction of salicylic-acid accumulation in cucumber after inoculation with *Pseudomonas syringae* pv. *syringae*. *Plant Physiol*, 97(4), 1342–1347.
- Ratanacherdchai, K., Wang, H. K., Lin, F. C., & Soytong, K. (2007). RAPD analysis of *Colletotrichum* species causing chilli anthracnose disease in Thailand. *J Agric Technol*, 3, 211–219.
- Ratulangi, M. M., Sembel, D. T., Rante, C. S., Dien, M.F., Meray, E. R. M., Hamming, M., Shepard, M., Carner, G., & Benson, E. (2012). Diagnosis dan insidensi penyakit antraknosa pada beberapa varietas tanaman cabe di kota Bitung dan Kabupaten Minahasa. Universitas Sam Ratulangi. Manado.
- Ropalia. (2015). Potensi mikrob endofit dan aplikasinya dengan kompos tandan kosong kelapa sawit untuk pengendalian penyakit kuning pada lada. [Tesis]. Institut Pertanian Bogor. Bogor.
- Rukmana, R., & Oesman, Y. Y. (2002). Bertanam cabai dalam pot. Yogyakarta : Kanisius.
- Saikkonen, K., Faeth, S. H., Helander, M., & Sullivan, T. J. (1998). Fungal Edophytes: A continuum of interactions with host plants. *Annual review of Ecology and Systematics*, 29(1): 319-343.
- Sakinah, M. A. I., Suzianti, I. V., & Latiffah, Z. (2014). Phenotypic and molecular characterization of *Colletotrichum* species associated with anthracnose of banana (*Musa* spp) in Malaysia. *Gen Mol Res*, 13(2), 3627-3637.
- Salaisek, A. N. (2016). Tingkat serangan antraknosa pada tanaman cabai (*Capsicum annuum* L.) di kota Padang. [Skripsi]. Padang. Fakultas Pertanian. Universitas Andalas.

- Sakthivel, K., Manigundan, Sneha, S., Patel, A., Charisma, K., Neelam, S., Gautam, R. K., & Kumar, A. (2018). First report of *Colletotrichum plurivorum* from the Andaman and Nicobar islands causing anthrachnose in chili (*Capsicum annum*). *New Disease Report*, 38(26), 26-31.
- Salim, M. A. (2012). Pengaruh antraknosa (*Colletotrichum capsici* dan *Colletotrichum acutatum*) terhadap respons ketahanan delapan belas genotipe buah cabai merah (*Capsicum annum L.*). *JISTEK*, 6(1-2), 182- 187.
- Sambrook, J., Fritsch, E. F., & Maniatis, T. (1989). Molecular cloning: a laboratory manual. Ed ke-3. New York (US): Cold Spring.
- Saputra, R. (2019). Aplikasi cendawan endofit untuk pengendalian *Myzus persicae* Sulz. (Hemiptera = Aphididae) dan peningkatan pertumbuhan tanaman cabai (*Capsicum annum L.*). [Skripsi]. Fakultas Pertanian. Universitas Andalas. Padang. 43 hal.
- Saragih, M., Trizelia., Nurbailis., & Yusniwati. (2021). Aplikasi cendawan *Beauveria bassiana* melalui perendaman benih dan pengaruhnya terhadap kolonisasi dan kandungan klorofil daun tanaman cabai merah (*Capsicum annum L.*). *Jurnal Pertanian Tropik*, 8(2), 107-116.
- Semangun, H. (2007). *Penyakit-penyakit tanaman hortikultura di Indonesia*. Gadjah Mada University Press. Yogyakarta.
- Setiyowati, H., Surahman, M., & Wiyono, S. (2007). Pengaruh seed coating dengan fungisida benomil dan tepung curcuma terhadap patogen antraknosa terbawa benih dan viabilitas benih cabai besar (*Capsicum annum L.*). *Buletin Agronomi*, 35(3), 176-182.
- Sharma, P., Kaur, M., Sharma, O., Sharma, P., & Pathania, A. (2005). Morphological, pathological and molecular variability in *Colletotrichum capsici*, the cause of fruit rot of chillies in the subtropical region of North-Western India. *J Phytopathol*, 153(4), 232–237.
- Siddiqui, I. A., & Shaukat, S. S. (2003). Endophytic bacteria: Prospects and opportunities for the biological control of plant parasitic nematodes. *Nematologia Mediterranea*, 31, 111–120
- Sinaga., Ernawati., Noverita., & Fitria, D. (2009). Daya antibakteri jamur endofit yang diisolasi dari daun dan rimpang lengkuas (*Alpinia galanga Sw.*). *Jurnal Farmasi Indonesia*, 4(4), 161–170.
- Smith, B. J., & Black, L. L. (1990). Morphological, cultural and pathogenic variation among *Colletotrichum* species isolated from strawberry. *Plant Dis*, 74(1), 69–76.

- Srisapoom, T., Saksirirat, W., Mongkolthanaruk, W., & Niamsanit, S. (2021). Avirulent *Colletotrichum* strain for controlling anthracnose disease in chili caused by *Colletotrichum capsici*. *Internasional Jurnal of Agricultural Technology*, 17(5), 1943-1956.
- Srivastava, L. M. (2002). *Plant growth and development, Hormones and Environment*. Academic Press, Orlando. 772 hal.
- Sudantha, I. M., & Abadi, A. L. (2011). Uji efektifitas beberapa jenis jamur endofit *Trichoderma* spp. isolat lokal NTB terhadap jamur *Fusarium oxysporum* f. sp. *vanillae* penyebab penyakit busuk Batang pada bibit vanili. *Jurnal Crop Agro*, 4(2), 64-73
- Sudirga, S. K. (2016). Isolasi dan identifikasi jamur *Colletotrichum* spp. isolat pcc penyebab penyakit antraknosa pada buah cabai besar (*Capsicum annuum* L.) Di Bali. *Jurnal metamorfosa*, 3(1), 23–30.
- Suhardi. (1989). Serangan penyakit antraknosa pada tanaman Lombok Di Kabupaten Demak. *Warta Penelitian Pengembangan Pertanian*.
- Sukapiring, D. N., Soekarno, B. P. W., & Yuliani, T. S. (2016). Potensi metabolit sekunder cendawan endofit tanaman cabai sebagai penghambat *Fusarium* sp. Patogen asal biji secara *in vitro*. *J Fitopatol Indones*, 12(1), 1-8.
- Sumarni, N., & Muhamram, A. (2005). *Budidaya tanaman cabai merah*. Bandung. Balai Penelitian Tanaman Sayuran.
- Suryanarayanan, T. S., Thirunavukkarasu, N., Govindarajulu, M. B., Sasse, F., Jansen, R., & Murali, T. S. (2009). Fungal endophytes and bioprospecting. *Fungal Biol Rev*, 23(1– 2), 9–19.
- Suryaningsih, E., Sutarya, R., & Duriat, A. S. (1996). Penyakit Tanaman Cabai Merah Dan Pengendaliannya. *Balai Penelitian Sayur, Lembang*. Bandung.
- Sutton, B. C. (1992). The genus *Glomerella* and it's anamorph *Colletotrichum*. Di dalam: Bailey JA, Jeger MJ, editor. *Colletotrichum*. Biology, Pathology and Control. London (UK):CAB International. Hlm 124.
- Suwardani, N. W., Purnomowati., & Sucianto, E. T. (2014). Kajian Penyakit yang Disebabkan oleh Cendawan Pada Tanaman Cabai Merah (*Capsicum annuum* L.) di Pertanaman Rakyat Kabupaten Brebes. *Scripta Biologica*, 1(3), 223-226.
- Syukur, M., Sujiprihati, S., & Siregar, A. (2010). Pendugaan parameter genetika beberapa karakter agronomi cabai F4 dan evaluasi daya hasilnya menggunakan rancangan perbesaran (*Augmented Design*). *Jurnal Agrotropika*, 15(1), 9-16.
- Syukur, M., Sujiprihati, S., & Yunianti, R. (2012). Teknik pemuliaan tanaman. Penebar Swadaya. Jakarta.

- Syukur, M., Sujiprihati, S., Koswara, J., & Widodo. (2007). Pewarisan ketahanan cabai (*Capsicum annuum* L.) terhadap antraknosa yang disebabkan oleh *Colletotrichum acutatum*. *Jurnal Agronomi Indonesia*, 35(2), 112–117.
- Syukur, M., Sujiprihati, S., Koswara, J., & Widodo. (2009). Ketahanan terhadap antraknosa yang disebabkan oleh *Colletotrichum acutatum* pada beberapa genotipe cabai (*Capsicum annuum* L.) dan korelasinya dengan kandungan kapsaicin dan peroksidase. *Jurnal Agron Indonesia*, 37(3), 233-239.
- Than, P. P., Jeewon, R., Hyde, K. D., Pongsupasamit, S., Mongkolporn, O., & Taylor, P. W. J. (2008). Characterization and pathogenicity of *Colletotrichum* species associated with anthracnose on chilli (*Capsicum* spp.) in Thailand. *Plant Pathology*, 57, 562-572.
- Than, P. P., Prihastuti, H., & Phoulivong, S. (2008). Chilli anthracnose disease caused by *Colletotrichum* species. *Journal of Zhejiang University Science B*, 9(10), 764–778.
- Tjitosoepomo, G. (2010). *Taksonomi tumbuhan spermatophyta* Yogyakarta: Gajah Mada University press.
- Tondok, E. T. (2012). Keragaman cendawan endofit pada buah kakao dan potensinya dalam pengendalian busuk buah *Phytophthora*. [Disertasi]. Institut Pertanian Bogor. Bogor.
- Trizelia. (2005). Cendawan entomopatogen *Beauveria bassiana* (Bals.) Vuill. (*Deuteromycotina: Hyphomycetes*): keragaman genetik, karakterisasi fisiologi, dan virulensnya terhadap *Crocidolomia pavonana* (F.) (Lepidoptera: Pyralidae). Bogor. Institut Pertanian Bogor.
- Trizelia., Armon, N., & Jailani, H. (2015). Keanekaragaman cendawan entomopatogen pada rizosfer berbagai tanaman sayuran. *Pros Sem Nas Masy Biodiv Indon*, 1(5), 998-1004.
- Trizelia., Rahma, H., & Martinus. (2018). Diversitas genetik dan karakterisasi cendawan endofit tanaman cabai yang berpotensi sebagai biopestisida dan biofertilizer. Laporan Akhir Guru Besar. Padang. Universitas Andalas. (Unpublish)
- Trizelia., Reflinaldon., & Martinus. (2018). Induksi ketahanan tanaman cabai terhadap kutu daun (*Aphididae*) menggunakan cendawan endofit *Beauveria bassiana*. Laporan Hasil Penelitian. Padang.
- Umarella, U. (2006). Pemanfaatan minyak sereh dan filtrat *Trichoderma* sp. untuk mengendalikan cendawan patogen terbawa benih *Acacia mangium* Willd [Tesis]. Bogor (ID): Institut Pertanian Bogor.
- Vega, F. E. (2008). Insect pathology and fungal endophytes. suistanable perennial Crops Laboratory, United States Department of Agriculture. *J. Invert. Pathol*, 98(32), 277-9.

- Vega, F. E., Meyling, N. V., Luangsa-ard, J. J., & Blackwell, M. (2012). Fungal entomopathogens. *Insect pathology*, 2, 171-220.
- Vinale, F., Sivasithamparam, K., Ghisalberti, E. L., Woo, S. L., Nigro, M., Marra, R., & Lorito, M. (2014). *Trichoderma* secondary metabolites active on plants and fungal pathogens. *The Open Mycology Journal*, 8(1), 127-139.
- Vurukonda, S. S. K. P., Giovanardi, D., & Stefani, E. (2018). Plant growth promoting and biocontrol activity of *Streptomyces* spp. as endophytes. *International Journal of Molecular Sciences*, 19(4), 1–26.
- Widodo, W. D. (2007). Status of chili anthracnose in Indonesia. In. first international symposium on chili anthracnose. Hoam Faculty House, Seoul National University, Seoul, Korea.
- Wiratama, I. D. M. P., Sudiarta, I. P., Sukewijaya, I. M., Sumiartha, K., & Utama, M. S. (2013). Kajian ketahanan beberapa galur dan varietas cabai terhadap serangan antraknosa di desa Abang songan kecamatan kintamani Kabupaten Bangli. *E-jurnal Agroekoteknologi Tropika*, 2(2), 71- 81.
- Wusani, M. (2004). Pola pewarisan karakter ketahanan terhadap penyakit antraknosa (*Colletotrichum gloesporioides* Penz) pada cabai (*Capsicum annuum* var Jatilaba x *Capsicum chinense*-27). [Tesis]. Sekolah Pascasarjana IPB. Bogor.
- Yu, H., Zhang, L., Li, L., Zheng, C., Guo, L., Li, W., Sun, P., & Qin, L. (2010). Recent developments and future prospects of antimicrobial metabolites produced endophytes. *Microbiological research*, 165(6), 437-449.
- Yuan, Y., Feng, H., Wang, L., Li, Z., Shi, Y., Zhao, L., & Zhu, H. (2017). Potential of endophytic fungi isolated from cotton roots for biological control against *Verticillium* Wilt disease. *Plos One*, 12(1), 1–12.
- Yuliana, A. (2020). Pengaruh Lama Perendaman benih cabai (*Capsicum annum* L.) dengan *Beauveria bassiana* (Bals.) Vuill terhadap penekanan patogen tular benih *Colletotrichum* spp. [Skripsi]. Universitas Andalas. Padang.
- Yuliana, A., Trizelia, T., & Sulyanti, E. (2023). Aplikasi cendawan entomopatogen *Beauveria bassiana* pada benih bawang merah dan pengaruhnya terhadap perkecambahan dan pertumbuhan bibit. *Jurnal Sains Agro*, 8(2), 88-96.
- Yun, H. K., Ahmad, A. H., Muid, S., & Seeelan, J. S. S. (2009). First report of *Colletotrichum*, spp causing diseases on *Capsicum* spp in Sabah, Borneo, Malaysia. *JoTT Communcation*, 1(8), 419-424.
- Zadoks, J. C & Schein, R. D. (1979). Epidemiology and plant disease management. Agric. University Wageningen, Netherlands.

Zhao, J., Zhou, L., Wang, J., Shan, I., Zhong, L., Liu, X., & Gao, X. (2010). Endophytic fungi for producing bioactive compounds originally from their host plants. *Curr Res, Technol Educ Trop Appl Microbiol Microbial Biotechno*, 1, 567-576.

Zivkovic, S. T., Stosic, S. S., Stevanovic, M. L, Gasic, K. M, Aleksic, G. A, Vucurovic, I. B., & Ristic, D. T. (2017). *Colletotrichum orbiculare* on watermelon: identification and in vitro inhibition by antagonistic fungi. *Matica Srpska Journal of Natural Science*, 133, 331–343.

