



DAFTAR PUSTAKA

- Adedayo, A. A., and Babalola, O. O. 2023. Fungi that promote plant growth in the rhizosphere boost crop growth. *Journal of Fungi* 9(2): 239.
- Aini, N., W. S. D. Yamika, and B. Ulum. 2019. Effect of nutrient concentration, PGPR and AMF on plant growth, yield, and nutrient uptake of hydroponic lettuce. *International Journal of Agriculture & Biology* 21: 175-183.
- Alexopoulos, C. J. 1996. *Introductory Mycology*. John Wiley and Sons, New York.
- Alifia, R. Y., A. L. Abadi, dan F. A. Choliq. 2023. Mekanisme antagonisme beberapa isolat jamur endofit terhadap patogen *Colletotrichum gloeosporioides* penyebab penyakit antraknosa pada tanaman anggrek dendrobium secara in vitro. *PLANTROPICA: Journal of Agricultural Science* 8(2): 124-133.
- Andrie, B. M., A. Novianty, I.S Nurahman, T. Kurniawati, dan S. Aziz. 2022. Analisis titik impas usahatani tumpangsari cabai merah. *Seminar Nasional Hasil Penelitian Agribisnis* 6(1): 185-189.
- Anggraeni, W., E. Rusmiyanto, dan Rahmawati. 2019. Isolasi dan identifikasi jamur pada buah cabai rawit (*Capsicum frutescens* L.) yang bergejala antraknosa dari lahan pertanian di dusun jeruk. *Jurnal Protobiont* 8(2): 94-100.
- Anggrahini, D. S., A. Wibowo, and S. Subandiyah. 2020. Morphological and molecular identification of *Colletotrichum* spp. associated with chili anthracnose disease in Yogyakarta Region. *Jurnal Perlindungan Tanaman Indonesia* 24(2): 161-174.
- Antasionasti, I., S. S. Abdullah, J. P. Siampa, dan I. Jayanto. 2022. Aktivitas antioksidan buah cabai rawit melalui pengujian dpph. *Pharmacon* 11(4):1824-1828.
- Ayaz, M., Li, C. H., Ali, Q., Zhao, W., Chi, Y. K., Shafiq, M, and Huang, W. K. 2023. Bacterial and fungal biocontrol agents for plant disease protection: Journey from lab to field, current status, challenges, and global perspectives. *Molecules* 28(18): 6735.
- Bakti, A. K. S., dan Aidawati, N. 2022. Efektivitas tiga isolat *Trichoderma* sp. asal pasang surut dalam mengendalikan penyakit moler *Fusarium oxysporum* f. sp *cepae* pada



- bawang merah (*Allium Ascalonicum* L.). Rawa Sains: Jurnal Sains STIPER Amuntai, 12(2): 68-76.
- Banya, M., S. Garg, and N. L. Meena. 2020. A review: chilli anthracnose, its spread and management. *Journal of Pharmacognosy and Phytochemistry* 9(4):1432-1438.
- Begum, N., C. Qin, M.A. Ahanger, S. Raza, M. I. Khan, M. Ashraf, and L. Zhang. 2019. Role of arbuscular mycorrhizal fungi in plant growth regulation: implications in abiotic stress tolerance. *Frontiers in Plant Science* 10: 1068.
- Bridžiuvienė D., and Repečkienė J. 2009 Interspecific relation peculiarities between soil and phytopatogenic fungi. *Scientific Works Lithuanian Institute of Horticulture Lithuanian, University of Agriculture* 28:19–28.
- Calistru, C., M. McLean, and P. Berjak. 1997. In vitro studies on the potential for biological control of *Aspergillus flavus* and *Fusarium moniliforme* by *Trichoderma* species. *Mycopathologia* 137: 115-124.
- Carmona-Hernandez, S., J. J. Reyes-Pérez, R. G. Chiquito-Contreras, G. Rincon-Enriquez, C. R. Cerdan-Cabrera, and L. G. Hernandez-Montiel. 2019. Biocontrol of postharvest fruit fungal diseases by bacterial antagonists: A review. *Agronomy* 9(3): 121.
- Chaturvedi, R. 2022. Role of fungal endophytes in plant growth promotion. *International Journal For Research in Applied Science and Engineering Technology* 10: 2207-2212.
- Ciofini, A., F. Negrini, R. Baroncelli, and E. Baraldi. 2022. Management of post-harvest anthracnose: current approaches and future perspectives. *Plants* 11(14): 1856.
- Cycoń, M., A. Mrozik, and Z. Piotrowska-Seget. 2019. Antibiotics in the soil environment degradation and their impact on microbial activity and diversity. *Frontiers in microbiology*, 10: 338.
- Darsini, N. N., I. M. Sudana, I. D. N. Suprapta, D. N. Nyana. 2017. Exploring antagonistic candidate fungi for controlling pathogenic fungi (*Colletotrichum gloeosporioides*) causing anthracnose disease in kintamani siam orange plants (*Citrus nobilis* lour var. hass). *International Journal on Advanced Science, Engineering and Information Technology* 7(1): 269-275.



- De Silva, D. D., J. Z. Groenewald, P. W. Crous, P. K. Ades, A. Nasruddin, O. Mongkolporn, and P. W. Taylor. 2019. Identification, prevalence and pathogenicity of *Colletotrichum* species causing anthracnose of *Capsicum annuum* in Asia. IMA fungus 10: 1-32.
- De Silva, D. D., P. K. Ades, and P. W. Taylor. 2021. Pathogenicity of *Colletotrichum* species causing anthracnose of Capsicum in Asia. Plant Pathology 70(4): 875-884.
- El-Maraghy, S. S., A. T. Tohamy, and K. A. Hussein. 2021. Plant protection properties of the Plant Growth-Promoting Fungi (PGPF): Mechanisms and potentiality. Journal of Fungal Biology 11(1): 391-415.
- Elsherbiny, E. A., M. A. Selim, and A. M. Elattaapy. 2023. Plant Growth-Promoting Fungi for Growth Improvement and Resistance Induction. In Plant Mycobiome: Diversity, Interactions and Uses 267-289.
- Fardhani, D. M., Y. Safitri, R. Pradana, I. A. Nugraheni. 2023. Uji antagonis *Trichoderma* spp. terhadap *Colletotrichum* spp. penyebab penyakit antraknosa pada tanaman cabai rawit (*Capsicum frutescens*) secara in vitro. Seminar Nasional Penelitian dan Pengabdian Kepada Masyarakat LPPM Universitas' Aisyiyah Yogyakarta 1:491-497.
- Fokkema NJ. 1976. Antagonism Between Fungal Saprophytes and Pathogens on Aerial Plant Surfaces. In: Microbiological of Aerial Plant Surfaces. Academic Press: London.
- Fortunati, E., A. Mazzaglia, and G. M. Balestra. 2019 Sustainable control strategies for plant protection and food packaging sectors by natural substances and novel nanotechnological approaches. Journal of the Science of Food and Agriculture 99: 986–1000.
- Gandjar, I. 2006. Mikologi Dasar dan Terapan. Yayasan Obor Indonesia. Jakarta.
- Hassine, M., Aydi-Ben-Abdallah, R., Jabboun-Khireddine, H., and Daami-Remadi, M. 2022. Soil-borne and compost-borne *Penicillium* sp. and *Gliocladium* spp. as potential microbial biocontrol agents for the suppression of anthracnose-induced decay on tomato fruits. Egyptian Journal of Biological Pest Control 32(1): 20.
- Hayatudin, H. 2021. Pengaruh pupuk NPK dan interval waktu penyiangan terhadap pertumbuhan dan hasil tanaman cabai rawit lokal buol (*Capsicum Frutescens* L.). JAGO TOLIS: Jurnal Agrokompleks Tolis 1(2): 39-44.



- He, Y., Q. Chen, C. Shu, M. Yang, and E. Zhou. 2016. *Colletotrichum truncatum*, a new cause of anthracnose on Chinese flowering cabbage (*Brassica parachinensis*) in China. Tropical Plant Pathology 41: 183-192.
- Herath, H. M. S. N., M. Y. Rafii, S. I. Ismail, J. N. Jaafar, and S. I. Ramlee. 2024. Exploiting phenotypic and genotypic diversity against *Colletotrichum truncatum* in chilli hybrids developed using resistant breeding lines. Plant Genetic Resources 22(1): 37-44.
- Huang, H., C. Tian, Y. Huang, and H. Huang. 2020. Biological control of poplar anthracnose caused by *Colletotrichum gloeosporioides* (Penz.) Penz. & Sacc. Egyptian Journal of Biological Pest Control 30(1): 1-9.
- Huda, N., W. Imaningsih, dan S. S. Hakim. 2019. Uji antagonisme kapang endofit tanaman galam (*Melaleuca cajuputi*) terhadap *Colletotrichum truncatum*. Jurnal Mikologi Indonesia 3(2): 59-74.
- Huong, N. T. M., P. T. T. Hoai, P. T. H. Thao, T. T. Huong, and V. D. Chinh. 2022. Growth stimulation, phosphate resolution, and resistance to fungal pathogens of some endogenous fungal strains in the rhizospheres of medicinal plants in Vietnam. Molecules 27(16): 5051.
- Hutauruk, I. C. P., and Pinem, M. I. 2020. Ability test of endophytic fungi to suppress the development of anthracnose disease (*Colletotrichum capsici*) in chili plants (*Capsicum annum*) in the Karo Highland. In IOP Conference Series: Earth and Environmental Science 454(1): 012185).
- Ichsan, O. A. N., dan Padya, I. R. 2022. Sosialisasi keamanan pangan pada pembuatan saus cabai di Desa Durian Dangkal Kabupaten Lahat. Jurnal Univ. Bi Mengabdi 1(1): 64-67.
- Islamy, I., dan Wisudawati, L. M. 2023. Sistem monitoring smart garden tanaman cabai berbasis IoT menggunakan protokol MQTT, node red, dan telegram bot. Teknotan: Jurnal Industri Teknologi Pertanian 17(3): 197-206.
- Iswarya, B and Ramesh, K.V. 2019. Promising Antimicrobial Compounds from an Endophytic Fungus *Penicillium daleae* EF 4 Isolated from the Seaweed *Enteromorpha flexuosa* Linn. Res. Rev. A J. Microbiol. Virol. 9: 26–39.



- Kamle, M., R. Borah, H. Bora, A. K. Jaiswal, R. K. Singh, R. and P. Kumar. 2020. *Systemic Acquired Resistance (SAR) and Induced Systemic Resistance (ISR)*: role and mechanism of action against phytopathogens. *Fungal biotechnology and bioengineering* 457-470.
- Karyani, T., A. Susanto, E. Djuwendah, and H. Hapsari, H. 2020. Red chili agribusiness and the risks faced by the farmers. In IOP Conference Series: Earth and Environmental Science 466(1): 012002.
- Korlina, E., I. Sulastrini, N. Gunaeni. 2023. Uji Patogenisitas isolat *Colletotrichum* sp. asal bawang merah (*Allium ascalonicum*) terhadap perkembangan penyakit antraknos pada varietas cabai. In Gunung Djati Conference Series 18: 178-184.
- Madala, N., and Nutakki, M. K. 2020. Hot pepper-history-health and dietary benefits & production. *International Journal of Current Microbiology and Applied Sciences* 9(4): 2532-2538.
- Mariana, M., E. Liestiany, F. R. Cholis, dan N. S. Hasbi. 2021. Penyakit antraknosa cabai oleh *Colletotrichum* sp. di lahan rawa Kalimantan Selatan. *JIPI* 23(1): 30-36.
- Mongkolporn, O., and Taylor, P. W. J. 2018. Chili anthracnose: *Colletotrichum* taxonomy and pathogenicity. *Plant Pathology* 67(6): 1255-1263.
- Munch, S., U. Lingner, D. S. Floss, N. Ludwig, N. Sauer, and H. B. Deising. 2008. The hemibiotrophic lifestyle of *Colletotrichum* species. *Journal of plant physiology*, 165(1): 41-51.
- Murali, M., B. Naziya, B, M. A, Ansari, M. N Alomary, S. AlYahya, A. Almatroudi, K. N. Amruthesn. 2021. Bioprospecting of rhizosphere-resident fungi: Their role and importance in sustainable agriculture. *Journal of Fungi* 7(4): 314.
- Murdijati-Gardjito, N. N. U., D. O. Tisadewi, dan S. Dewi. 2019. Profil Sambal Indonesia Kuliner Cita Rasa Pedas: Cita Rasa Nikmat yang Selalu Memikat. Ningtoon Cookery. Yogyakarta.
- Naveen, J., H. M. Navya, G. Hithamani, P. Hariprasad, and S. R. Niranjana. 2021. Pathological, biochemical and molecular variability of *Colletotrichum truncatum* incitant of anthracnose disease in chilli (*Capsicum annuum* L.). *Microbial pathogenesis*, 152(104611): 1-10.



- Nawrocka, J., U. Małolepsza, K. Szymczak, M. Szczech. 2018. Involvement of metabolic components, volatile compounds, PR proteins, and mechanical strengthening in multilayer protection of cucumber plants against *Rhizoctonia solani* activated by *Trichoderma atroviride* TRS25. *Protoplasma* 255: 359-373.
- Nayak, S., S. Samanta, and A. K. Mukherjee. 2020. Beneficial role of *Aspergillus* sp. in agricultural soil and environment. *Frontiers in Soil and Environmental Microbiology* 17-36.
- Naziya, B., M. Murali, and K. N. Amruthesh. 2019. Plant Growth-Promoting Fungi (PGPF) instigate plant growth and induce disease resistance in *Capsicum annuum* L. upon infection with *Colletotrichum capsici* (Syd.) Butler & Bisby. *Biomolecules* 10(41):1-18.
- Novita, N., E. Firmansyah, dan S. Isnaeni. 2021. Keefektifan *Trichoderma* sp. dalam mengendalikan layu *Fusarium* pada tanaman mentimun (*Cucumis sativus* L.). *AGROSCRIPT: Journal of Applied Agricultural Sciences* 3(1): 19-30.
- Nurjasmi, R., dan Suryani, S. 2020. Uji antagonis actinomycetes terhadap patogen *Colletotrichum capsici* penyebab penyakit antraknosa pada buah cabai rawit. *Jurnal Ilmiah Respati* 11(1): 1-12.
- Paradisa, Y. B., M. E. Wahyuni, A. Y. Perdani, and A. H. Prianto. 2020. Evaluasi pestisida nabati dengan ekstrak mimba (*Azadirachta* sp.) untuk pengendalian pertumbuhan antraknosa pada buah cabai. *Jurnal Fitopatologi Indonesia* 16(3): 112-122.
- Pasalo, N. M., F. E. F. Kandou, dan M. F. O. Singkoh. 2022. Uji antagonisme jamur *Trichoderma* sp. terhadap patogen *Fusarium* sp. pada tanaman bawang merah Allium cepa isolat lokal tonsewer secara in vitro. *Jurnal Ilmu Alam dan Lingkungan* 13(2): 1-7.
- Patty, J., dan Uruilal, C. 2021. *Trichoderma indigenous* Maluku: karakteristik morfologi dan antagonismenya terhadap patogen tanaman. *Jurnal Keteknikan Pertanian Tropis dan Biosistem* 9(2): 172-182.
- Purwantisari, S., A. Priyatmojo, R. P. Sancayaningsih, dan R. S. Kasiamdari. 2016. Masa inkubasi gejala penyakit hawar daun tanaman kentang yang diinduksi ketahanannya oleh jamur antagonis *Trichoderma viride*. *Bioma: Berkala Ilmiah Biologi* 18(2): 41-47.



- Purwantisari, S., A. Priyatmojo, R. P. Sancayaningsih, R. S. Kasiamdari, and K. Budihardjo. 2018. Systemic inducing resistance against late blight by applying antagonist *Trichoderma Viride*. In Journal of Physics: Conference Series 1025: 012053.
- Putra, A., E. Hayati, dan E. Kesumawati, E. 2023. Identifikasi karakter kualitatif beberapa genotipe tanaman cabai (*Capsicum annuum L*) F4 di dataran menengah. Jurnal Ilmiah Mahasiswa Pertanian 8(2): 73-80.
- Rahman, F. A., I. Safni, dan L. Lisnawita. 2023. Kelimpahan jamur non-patogenik pada rhizosfer daerah endemik patogen magnaporthe grisea penyebab penyakit blas pada tanaman padi (*Oryza sativa L.*). Agro Bali: Agricultural Journal 6(2): 395-404.
- Rangkuti, E. E., D. Suryanto, K. Nurtjahja, dan E. Munir. 2014. Kemampuan bakteri endofit tanaman semangka dalam menekan perkembangan penyakit bercak daun yang disebabkan oleh jamur *Colletotrichum* sp. Jurnal Hama dan Penyakit Tumbuhan Tropika 14(2): 170-177.
- Rusli, J., H. Hafsan, dan E. Sukmawaty. 2021. Efek antagonis jamur rhizosfer terhadap jamur patogen tanaman kentang. Filogeni: Jurnal Mahasiswa Biologi 1(1): 1-6.
- Sari, N., dan Kasiamdari, R. S. 2021. Identifikasi dan uji patogenisitas *Colletotrichum* spp. dari cabai merah (*Capsicum annuum*): Kasus di Kricaan, Magelang, Jawa Tengah. Jurnal Ilmu Pertanian Indonesia 26(2): 243-250.
- Semangun, H. 2002. Penyakit-penyakit Tanaman Hortikultura di Indonesia. Gadjah Mada University Press.
- Siddiqui, Y., and Ali, A. 2014. *Colletotrichum gloeosporioides* (Anthracnose). In Postharvest Decay 337-371.
- Silva, D. D., J. Z. Groenewald, P. W. Crous, P. K. Ades, A. Nasruddin, O. Mongkolporn, and P. W. 2019. Identification, prevalence and pathogenicity of *Colletotrichum* species causing anthracnose of *Capsicum annuum* in Asia. IMA fungus 10(1): 1-32.
- Siregar, A. L. Z. 2022. Budidaya tanaman cabai caplak guna meningkatkan perekonomian masyarakat pesisir dusun II desa percut sei tuan. Martabe: Jurnal Pengabdian Kepada Masyarakat 5(6): 2331-2337.



- Sondakh, Y. A., F. R. Tulungen, J. Lengkong, dan W. F. Pantouw. 2021. Intensitas serangan penyakit antraknosa pada pertanaman cabai di Kecamatan Amurang Barat, Minahasa Selatan. *Jurnal AGROBISNIS* 3(1): 17-22.
- Sudania, S., R. Ropalia, dan R. Kusmiadi. 2023. The inhibitory potential of botanical fungicides against *Colletotrichum capsici* the causal agent of anthracnose on chili in-vitro. *CROPSAVER-Journal of Plant Protection*, 6(1): 40-48.
- Suriana, N. 2012. Cabai Sehat dan Berkhasiat. Andi Offset. Yogyakarta.
- Syahputri, L. A. 2022. Isolasi dan uji patogenitas jamur penyakit antraknosa pada tanaman cabai merah besar (*Capsicum annuum* L.). Seminar Nasional Sains dan Teknologi Terapan 5: 480-489.
- Thambugala, K. M., D. A. Daranagama, A. J. Phillips, S. D. Kannangara, S. D., and I. Promputtha. 2020. Fungi vs. fungi in biocontrol: An overview of fungal antagonists applied against fungal plant pathogens. *Frontiers in cellular and infection microbiology*, 10: 604923.
- Tirtana, Z. Y. G., L. Sulistyowati, dan A. Cholil. 2014. Eksplorasi jamur endofit pada tanaman kentang (*Solanum tuberosum* L) serta potensi antagonismenya terhadap *Phytophthora infestans* (Mont.) De Barry penyebab penyakit hawar daun secara in vitro. *Jurnal HPT (Hama Penyakit Tumbuhan)* 2(1): 91-101.
- Torres-Calzada, C., R. Tapia-Tussell, I. Higuera-Ciapara, E. Huchin-Poot, R. Martin-Mex, A. Nexticapan-Garcez, and D. Perez-Brito. 2018. Characterization of *Colletotrichum truncatum* from papaya, pepper and physic nut based on phylogeny, morphology and pathogenicity. *Plant pathology* 67(4): 821-830.
- Triasih, U., S. Wuryantini, S., dan D. Agustina. 2022. Karakterisasi Cendawan rizosfer kebun jeruk organik dan potensinya dalam menghambat pertumbuhan *Botryodiplodia theobromae* dan *Colletotrichum gloeosporioides*. *Jurnal Fitopatologi Indonesia* 18(5): 205-212.
- Tukidi, T., E. Enita, B. J. Laksono, E. Erwandri, G. M. Tama. 2024. Pengaruh konsentrasi ekstrak kentang pada media *Potato Dextrose Agar* terhadap pertumbuhan miselium bibit biakan murni jamur tiram putih (*Pleurotus ostreatus*). *Jurnal Pertanian Agros* 26(1): 4983-4991.



- Villa-Rivera, M. G., and Ochoa-Alejo, N. 2020. Chili pepper carotenoids: Nutraceutical properties and mechanisms of action. *Molecules* 25(23): 5573.
- Vinayarani, G., K. N. Madhusudhan, and H. S. Prakash. 2019. Induction of systemic resistance in turmeric by rhizospheric isolate *Trichoderma asperellum* against rhizome rot disease. *Journal of Plant Pathology* 101: 965-980.
- Wisnujati, N. S., dan Siswati, E. 2021. Analisis produksi dan produktivitas cabai rawit (*Capsicum frutescens* L) di INDONESIA. *Jurnal Ilmiah Sosio Agribis* 21(1): 18:29.
- Wulandari, S. F. dan M. Ali. 2018. Isolasi dan uji antagonis jamur endofit dari tanaman bawang merah (*Allium ascalonicum* L.) terhadap *Alternaria porri* Ellis Cif. *Jurnal Online Mahasiswa Faperta* 5(1): 1-9.
- Yadav, M., M. K. Dubey, and R. S. Upadhyay. 2021. Systemic resistance in chilli pepper against anthracnose (caused by *Colletotrichum truncatum*) induced by *Trichoderma harzianum*, *Trichoderma asperellum* and *Paenibacillus dendritiformis*. *Journal of Fungi* 7(4): 307.
- Yahya, N., A. D. Serdani, P. Puspitorini, dan J. Widiatmanta. 2023. Pengaruh jenis media tanam dan pemberian mikoriza terhadap pertumbuhan dan hasil tanaman cabai rawit (*Capsicum frutescens* L.). *Seminar Nasional Ekonomi dan Teknologi* 49-58.
- Yulia, E., H. S. Muhamad, F. Widiantini, dan W. Kurniawan, 2019. Perlakuan benih dengan ekstrak Anredera cordifolia untuk menekan kejadian penyakit hawar bibit pada benih cabai terinfeksi *Colletotrichum acutatum*. *Jurnal Agrikultura* 30(2): 75-82.
- Zakaria, L. 2021. Diversity of *Colletotrichum* Species Associated with Anthracnose Disease in Tropical Fruit Crops—A Review 11(4): 297.
- Ziaulhaq, W., dan Amalia, D. R. 2022. Pelaksanaan budidaya cabai rawit sebagai kebutuhan pangan masyarakat. *Indonesian Journal of Agriculture and Environmental Analytics* 1(1): 27-36.