

DAFTAR PUSTAKA

- Adedokun, E. O., Rather, I. A., Bajpai, V. K., & Park, Y.-H. 2015. Biocontrol efficacy of *Lactobacillus fermentum* YML014 against food spoilage moulds using the tomato puree model. *Frontiers in Life Science*, 9(1):64–68.
- Al-Hazmi, N. A. 2010. Determination of patulin and ochratoxin A using HPLC in apple juice samples in Saudi Arabia. *Saudi Journal of Biological Sciences*, 17(4):353–359.
- Altschul, S.F., Gish, W., Miller, W., Myers, E.W. & Lipman, D.J. 1990. Basic local alignment search tool. *Journal of Molecular Biology*, 215:403-410.
- Anastassiadou, M., Arena, M., Auteri, D., Brancato, A., Bura, L., Cabrera, L., Chaideftou, E., Chiusolo, A., Crivellente, F., Lentdecker, C., Egsmose, M., Fait, G., Greco, L., Ippolito, A., Istace, F., Jarrah, S., Kardassi, D., Leuschner, R., Lostia, A., Lythgo, C., Magrans, O., Mangas, I., Miron, I., Molnar, T., Padovani, L., Manuel, J., Morte, P., Pedersen, R., Reich, H., Santos, M., Serafimova, R., Sharp, R., Stanek, A., Sturma, J., Szentes, C., Terron, A., Tiramani, M., Vagenende, B., Villamar-Bouza, L. 2020. Peer review of the pesticide risk assessment of the active substance *Bacillus amyloliquefaciens* strain AH2. *European Food Safety Authority (EFSA) Journal*, 18(7):1-18.
- Andrews S. 2010. *FastQC: A quality control tool for high throughput sequence data*. Retrieved from <http://www.bioinformatics.babraham.ac.uk/projects/fastqc>.
- Bankevich, A., Nurk, S., Antipov, D., Gurevich, A. A., Dvorkin, M., Kulikov, A. S., Lesin, V. M., Nikolenko, S. I., Pham, S., Prjibelski, A. D., Pyshkin, A. V., Sirotkin, A. V., Vyahhi, N., Tesler, G., Alekseyev, M. A., Pevzner, P. A. 2012. SPAdes: A new genome assembly algorithm and its applications to single-cell sequencing. *Journal of Computational Biology*, 19(5): 455–477.
- Biolyse Pharma Corporation. 2018. *What is gene annotation in bioinformatics?* Retrieved from <http://www.biolyse.ca/what-is-gene-annotation-in-bioinformatics/>.
- Campoli, P., Abdallah, Q. A., Robitaille, R. Solis, N. V., Fielhaber, J. A., Kristof, A. S., Laverdiere, M., Filler, S. G., Sheppard, D. C. 2011. Concentration of antifungal agents within host cell membranes: a new paradigm governing the efficacy of prophylaxis. *Antimicrobial Agents and Chemotherapy*, 55(12).
- Carver, T. J., Rutherford, K. M., Berriman, M., Rajandream, M.-A., Barrell, B. G., & Parkhill, J. 2005. ACT: the Artemis comparison tool. *Bioinformatics*, 21(16): 3422–3423.

- Chen, K., Tian, Z., Luo, Y., Cheng, Y., Long, C. 2018. Antagonistic activity and the mechanism of *Bacillus amyloliquefaciens* DH-4 against citrus green mold. *Phytopathology*, 108(11):1253-1262.
- Cortés-Zavaleta, O., López-Malo, A., Hernández-Mendoza, A., & García, H. S. 2014. Antifungal activity of *Lactobacilli* and its relationship with 3-phenyllactic acid production. *International Journal of Food Microbiology*, 173:30–35.
- Damayanti, E., Suryani, A., Sofyan, A., Karimy, M., Julendra, H. 2015. Seleksi bakteri asam laktat dengan aktivitas anti jamur yang diisolasi dari silase dan saluran cerna ternak. *Agritech*, 35:2:164-169.
- Damoglou, A.P. and Campbell, D.S. 1986. The effect of pH on the production of patulin in apple juice. *Letters in Applied Microbiology*, 2: 9-11.
- Darling, A. C. E., Mau, B., Blattner, F. 2004. Mauve: Multiple alignment of conserved genomic sequence with rearrangements. *Genome Research*, 14(7): 1394–1403.
- De Clercq, N., Vlaemynck, G., Van Pamel, E., Colman, D., Heyndrickx, M., Van Hove, F., De Meulenaer, B., Devlieghere, F., Van Coillie, E. 2016. Patulin production by *Penicillium expansum* isolates from apples during different steps of long-term storage. *World Mycotoxin Journal*, 9(3):379–388.
- Djaenuddin, N. 2016. Interaksi bakteri antagonis dengan tanaman: Ketahanan terinduksi pada tanaman jagung. *Iptek Tanaman Pangan*, 11(2):143-148.
- Duarte, E. A. A., Damasceno, C. L., de Oliveira, T. A. S., Barbosa, L. de O., Martins, F. M., de Queiroz Silva, J. R., de Lima, T. E. F., da Silva, R. M., Kato, R. B., Bortolini, D. E., Azevedo, V., Goes-Neto, A., Soares, A. C. F. 2018. Putting the mess in order: *Aspergillus welwitschiae* (and not *A. niger*) is the etiological agent of sisal bole rot disease in Brazil. *Frontiers in Microbiology*, 9:1-21.
- Edwards, D. J., Holt, K. E. 2013. Bacterial Comparative Genomics Tutorial -Version 2. *BMC Microbial Informatics*, 1-33.
- Ellen, Ellen. 2011. “Identifikasi dan karakterisasi *Lactobacillus fermentum* dari tembolok ayam kampung”. Bachelor thesis, Universitas Pelita Harapan.
- Fitriyana, N., Suwasono, S., Kusnadi, J. 2015. Isolasi dan identifikasi bakteri asam laktat indigenus dari fermentasi alami biji kakao sebagai kandidat agen antikapang. *Agrointek*, 9(1):33-41.
- Frisvad, J. C., Smedsgaard, J., Samson, R. A., Larsen, T. O., Thrane, U. 2007. Fumonisin B2 production by *Aspergillus niger*. *Journal of Agricultural and Food Chemistry*, 55(23):9727–9732.
- Gerbaldo, G. A., Barberis, C., Pascual, L., Dalcero, A., & Barberis, L. 2012. Antifungal activity of two *Lactobacillus* strains with potential probiotic properties. *FEMS Microbiology Letters*, 332(1), 27–33.

- Ghazvini, R., Kouhsari, E., Zibafar, E., Hashemi, S., Amini, A., Niknejad, F. 2016. Antifungal activity and aflatoxin degradation of *Bifidobacterium bifidum* and *Lactobacillus fermentum* against toxigenic *Aspergillus parasiticus*. *The Open Microbiology Journal*, 10:197-201.
- Gong, A.-D., Li, H.-P., Yuan, Q.-S., Song, X.-S., Yao, W., He, W.-J., Zhang, J., Liao, C. 2015. Antagonistic mechanism of Iturin A and Plipastatin A from *Bacillus amyloliquefaciens* S76-3 from wheat spikes against *Fusarium graminearum*. *PLOS ONE*, 10(2):1-18.
- Gu, Q., Yang, Y., Yuan, Q., Shi, G., Wu, L., Lou, Z., Huo, R., Wu, H., Borriss, R., Gao, X. 2017. Bacillomycin D produced by *Bacillus amyloliquefaciens* is involved in the antagonistic interaction with the plant-pathogenic fungus *Fusarium graminearum*. *Applied and Environmental Microbiology*, 83(19):1-13.
- Hanif, A., Zhang, F., Li, P., Li, C., Xu, Y., Zubair, M., Gao, X. 2019. Fengycin produced by *Bacillus amyloliquefaciens* FZB42 inhibits *Fusarium graminearum* growth and mycotoxins biosynthesis. *Toxins*, 11(5): 1-11.
- Hatmanti, A. 2000. Pengenalan *Bacillus* spp. *Oseana*, 25(1), 31-41.
- Jin, P., Wang, H., Tan, Z., Xuan, Z., Dahar, G. Y., Li, Q. X., Miao, G., Liu, W. 2020. Antifungal mechanism of Bacillomycin D from *Bacillus velezensis* HN-2 against *Colletotrichum gloeosporioides* Penz. *Pesticide Biochemistry and Physiology*, 163:102-107.
- Karami, S., Roayaei, M., Zahedi, E., Bahmani, M., Mahmoodnia, L., Hamzavi, H., Kopaei, M. 2017. Antifungal effects of *Lactobacillus* species isolated from local dairy products. *International Journal of Pharmaceutical Investigation*, 7(2):77-81.
- Kim, M., Radhakrishnan, R., Kang, S., You, Y., Jeong, E., Kim, J., Lee, I. 2017. Plant growth promoting effect of *Bacillus amyloliquefaciens* H-2-5 on crop plants and influence on physiological changes in soybean under soil salinity. *Physiology and Molecular Biology of Plants*, 23(3): 571–580.
- Klewicki, R., Klewicka, E., Kolodziejczyk, K., Sojka, M., Nowak, A. 2016. Antifungal activity of *Lactobacillus* sp. bacteria in the presence of xylitol and galactosyl-xylitol. *BioMed Research International*, 2016:1-8.
- Koumoutsi, A., Chen, X., Vater, J., Borriss, R. 2007. DegU and YczE positively regulate the synthesis of Bacillomycin D by *Bacillus amyloliquefaciens* strain FZB42. *Applied and Environmental Microbiology*, 73:21.
- Lamboni, Y., Frisvad, J. C., Hell, K., Linnemann, A. R., Nout, R. M. J., Tamo, M., et al. 2016. Occurrence of *Aspergillus* section *Flavi* and section *Nigri* and aflatoxins in raw cashew kernels (*Anacardium occidentale* L.) from Benin. *Lebensmittel-Wissenschaft & Technologie-Food Science and Technology*, 70:71–77.

- Lee, S., An, C., Xu, S., and Yamamoto, N. 2016. High-throughput sequencing reveals unprecedented diversities of *Aspergillus* species in outdoor air. *Letters in Applied Microbiology*, 63:165–171.
- Lee, T., Park, D., Kim, K., Lim, S., Yu, N., Kim, S., Kim, H., Jung, K., Jang, J., Park, J., Ham, H., Lee, S., Hong, S., Kim, J. 2017. Characterization of *Bacillus amyloliquefaciens* DA12 showing potent antifungal activity against mycotoxigenic *Fusarium* species. *The Plant Pathology Journal*, 33(5): 499–507.
- Li, X., Zhang, Y., Wei, Z., Guan, Z., Cai, Y., Liao, X. 2016. Antifungal activity of isolated *Bacillus amyloliquefaciens* SYBC H47 for the biocontrol of peach gummosis. *PLOS ONE*, 11(9):1-22.
- Maget-Dana, R., Thimon, L., Peypoux, F., & Ptak, M. 1992. Surfactin/iturin A interactions may explain the synergistic effect of surfactin on the biological properties of iturin A. *Biochimie*, 74(12): 1047–1051.
- Mangurana, W. O. I., Yusnaini., Sahidin. 2019. Analisis LC-MS/MS (Liquid Chromatograph Mass Spectrometry) dan metabolit sekunder serta potensi antibakteri ekstrak n-heksana spons *Callyspongia aerizusa* yang diambil pada kondisi tutupan terumbu karang yang berbeda di Perairan Teluk Staring. *Jurnal Biologi Tropis*, 19(2): 131-141.
- Mardanova, A. M., Hadieva, G. F., Lutfullin, M. T., Khilyas, I. V., Minnullina, L. F., Gilyazeva, A. G., Bogomolnaya, L. M., Sharipova, M. R. 2017. *Bacillus subtilis* strains with antifungal activity against the phytopathogenic fungi. *Agricultural Sciences*, 8(1):1-20.
- Massi, F. P., Sartori, D., de Souza Ferranti, L., Iamanaka, B. T., Taniwaki, M. H., Vieira, M. L., et al. 2016. Prospecting for the incidence of genes involved in ochratoxin and fumonisin biosynthesis in Brazilian strains of *Aspergillus niger* and *Aspergillus welwitschiae*. *International Journal of Food Microbiology*, 221:19–28.
- McCallum, J. L., Tsao, R., Zhou, T. 2002. Factors affecting patulin production by *Penicillium expansum*. *Journal of Food Protection*, 65(12):1937–1942.
- Medeot, D., Fernandez, M., Morales, G., Jofré, E. 2020. Fengycins from *Bacillus amyloliquefaciens* MEP218 exhibit antibacterial activity by producing alterations on the cell surface of the pathogens *Xanthomonas axonopodis* pv. *vesicatoria* and *Pseudomonas aeruginosa* PA01. *Frontiers in Microbiology*, 10:1-12
- Meena, K. R., & Kanwar, S. S. 2015. Lipopeptides as the antifungal and antibacterial agents: Applications in food safety and therapeutics. *BioMed Research International*, 2015:1–9.
- Mogensen, J. M., Frisvad, J. C., Thrane, U., Nielsen, K. F. 2010. Production of fumonisin B2 and B4 by *Aspergillus niger* on grapes and raisins. *Journal of Agricultural and Food Chemistry*, 58 (2):954–958.

- Mora, I., Cabrefiga, J., Montesinos, E. 2015. Cyclic lipopeptide biosynthetic genes and products, and inhibitory activity of plant-associated *Bacillus* against phytopathogenic bacteria. *PLOS ONE*, 10(5): 1-21.
- Muhialdin, B. J., Hassan, Z., & Sadon, S. K. 2011. Antifungal activity of *Lactobacillus fermentum* Te007, *Pediococcus pentosaceus* Te010, *Lactobacillus pentosus* G004, and *L. paracasi* D5 on selected foods. *Journal of Food Science*, 76(7):M493–M499.
- Muhialdin, B. J., Hassan, Z., Saari, N. 2018. In vitro antifungal activity of lactic acid bacteria low molecular peptides against spoilage fungi of bakery products. *Annals of Microbiology*, 68(9): 557–567.
- Naghmouchi, K., Belguesmia, Y., Bendali, F., Spano, G., Seal, B. S., & Drider, D. 2019. *Lactobacillus fermentum*: a bacterial species with potential for food preservation and biomedical applications. *Critical Reviews in Food Science and Nutrition*, 1–13.
- Nett, J & Andes, D. 2015. *Antifungal Agents Spectrum of Activity, Pharmacology, and Clinical Indications*. Retrieved from https://www.medicine.wisc.edu/sites/default/files/antifungal_agents_spectrum_netts_andes.pdf.
- Newell, P. D., Roco, C. A., Fricker, A. D., Merkel, S. M., & Chandransu, P. 2013. A small-group activity introducing the use and interpretation of BLAST. *Journal of Microbiology & Biology Education*, 14(2):238–243.
- Noorabadi, M. T., Babaeizad, V., Zare, R., Asgari, B., Haidukowski, M., Epifani, F., Stea, G., Moretti, A., Logrieco, A. F., Susca, A. 2020. Isolation, molecular identification, and mycotoxin production of *Aspergillus* species isolated from the *Rhizosphere* of sugarcane in the South of Iran. *Toxins*. 12(122):1-15.
- Nováková, A., Hubka, V., Valinová, Š., Kolarík, M., Hillebrand-Voiculescu, A. M. 2017. Cultivable microscopic fungi from an underground chemosynthesis-based ecosystem: a preliminary study. *Folia Microbiologica*, 63:43–55.
- Pennstate Extension. 2017. *Potential Health Effects of Pesticides*. Retrieved from <https://extension.psu.edu/potential-health-effects-of-pesticides>.
- Perrone, G., Susca, A. 2017. *Penicillium* species and their associated mycotoxins. *Methods in Molecular Biology*, 1542:107-119.
- Pfliegler, W., Pócsi, I., Györi, Z., Pusztahelyi, T. 2020. The *Aspergilli* and their mycotoxins: Metabolic interactions with plants and the soil biota. *Frontiers in Microbiology*, 10:1-21.
- Purba, K, S., Khalimi, K., Suniti, N, W. 2021. Uji aktivitas antijamur *Bacillus cereus* terhadap *Colletotrichum Fructicola* KRRCR penyebab penyakit antraknosa pada buah cabai rawit (*Capsicum frutescens* L.). *Jurnal Agroekoteknologi Tropika*, 10(1):50-58.

- Qi, T. F., Renaud, J. B., McDowell, T., Seifert, K. A., Yeung, K. K.-C., & Sumarah, M. W. 2016. Diversity of mycotoxin-producing Black *Aspergilli* in Canadian Vineyards. *Journal of Agricultural and Food Chemistry*, 64(7):1583–1589.
- Ongena, M., Jourdan, E., Adam, A., Paquot, M., Brans, A., Joris, B., Arpigny, J., Thonart, P. 2007. Surfactin and fengycin lipopeptides of *Bacillus subtilis* as elicitors of induced systemic resistance in plants. *Environmental Microbiology*, 9(4): 1084–1090.
- Ongena, M., & Jacques, P. 2008. *Bacillus* lipopeptides: versatile weapons for plant disease biocontrol. *Trends in Microbiology*, 16(3):115–125.
- Rabbee, M. F., Baek, H. 2020. Antimicrobial activities of lipopeptides and polyketides of *Bacillus velezensis* for agricultural applications. *Molecules*, 25(21):1-16.
- Radi, N., Abdelmonem, A., Ziada, A. 2015. A study on the antifungal effects of *Lactobacillus spp.* on *Candida*. *Al-Azhar Assiut Medical*, 13(1):122-125.
- Ramarathnam, R., Chen, S., Fernando, W., Xuewen, G., Kievit, T. 2007. Molecular and biochemical detection of fengycin- and bacillomycin D-producing *Bacillus spp.*, antagonistic to fungal pathogens of canola and wheat. *Canadian Journal of Microbiology*, 53(7):901-11.
- Raza, W., Hussain, Q., Shen, Q. 2012. Production, regulation and transportation of Bacillibactin in *Bacillus subtilis*. *Journal of the Chemical Society of Pakistan*, 34(4).
- Romero, D., de Vicente, A., Rakotoaly, R. H., Dufour, S. E., Veening, J.-W., Arrebola, E., Cazorla, F. M., Kuipers, O. P., Paquot, M., Pérez-García, A. 2007. The iturin and fengycin families of lipopeptides are key factors in antagonism of *Bacillus subtilis* toward *Podospaera fusca*. *Molecular Plant-Microbe Interactions*, 20(4):430–440.
- Sarwar, A., Hassan, M. N., Imran, M., Iqbal, M., Majeed, S., Brader, G., Sessitsch, A., Hafeez, F. Y. 2018. Biocontrol activity of surfactin A purified from *Bacillus* NH-100 and NH-217 against rice bakanae disease. *Microbiological Research*, 209:1–13.
- Sun, M., Wang, S., Jiang, L., Bai, Y., Sun, X., Li, J., Wang, B., Yao, X., Liu, X., Li, Q., Geng, C., Zhang, C., Yang, G. 2018. Patulin Induces autophagy-dependent apoptosis through lysosomal-mitochondrial axis and impaired mitophagy in HepG2 Cells. *Journal of Agricultural and Food Chemistry*, 66(46):1-34.
- Susca, A., Proctor, R. H., Morelli, M., Haidukowski, M., Gallo, A., Logrieco, A. F., Moretti, A. 2016. Variation in fumonisin and ochratoxin production associated with differences in biosynthetic gene content in *Aspergillus niger* and *A. welwitschiae* isolates from multiple crop and geographic origins. *Frontiers in Microbiology*, 7:1-15.

- Szigeti, G., Kocsubé, S., Dóczy, I., Bereczki, L., Vágvölgyi, C., and Varga, J. 2012. Molecular identification and antifungal susceptibilities of black *Aspergillus* isolates from otomycosis cases in Hungary. *Mycopathologia*, 174:143–147.
- Tao, Y., Bie, X., Lv, F., Zhao, H., & Lu, Z. (2011). Antifungal activity and mechanism of fengycin in the presence and absence of commercial surfactin against *Rhizopus stolonifer*. *The Journal of Microbiology*, 49(1): 146–150.
- Tsang, C. C., Hui, T. W., Lee, K. C., Chen, J. H., Ngan, A. H., Tam, E. W., et al. 2016. Genetic diversity of *Aspergillus* species isolated from onychomycosis and *Aspergillus hongkongensis* sp. nov., with implications to antifungal susceptibility testing. *Diagnostic Microbiology and Infectious Disease*, 84:125–134.
- Varga, J., Baranyi, N., Chandrasekaran, M., Vágvölgyi, C., Kocsubé, S. 2015. Mycotoxin producers in the *Aspergillus* genus: an update. *Acta Biologica Szegediensis*, 59(2):151-167.
- Visagie, C. M., Hirooka, Y., Tanney, J. B., Whitfield, E., Mwange, K., Meijer, M., et al. (2014). *Aspergillus*, *Penicillium* and *Talaromyces* isolated from house dust samples collected around the world. *Studies in Mycology*, 78:63-139.
- Vitullo, D., Di Pietro, A., Romano, A., Lanzotti, V., & Lima, G. 2011. Role of new bacterial surfactins in the antifungal interaction between *Bacillus amyloliquefaciens* and *Fusarium oxysporum*. *Plant Pathology*, 61(4):689–699.
- Wang, L., Lee, F., Tai, C., Kuo, H. 2008. *Bacillus velezensis* is a later heterotypic synonym of *Bacillus amyloliquefaciens*. *International Journal of Systematic and Evolutionary Microbiology*, 58:671-675.
- Wang, Y., Wang, L., Liu, F., Wang, Qi., Selvaraj, J. N., Xing, F., Zhao, Y., Liu, Y. 2016. Ochratoxin A producing fungi, biosynthetic pathway and regulatory mechanisms. *Toxin*, 8(83):1-15.
- Wheeler, J. L., Harrison, M. A., Koehler, P. E. 1987. Presence and stability of patulin in pasteurized apple cider. *Journal of Food Science*, 52:479-480.
- Whitaker, C., Pammenter, N. W., & Berjak, P. 2008. Infection of the cones and seeds of *Welwitschia mirabilis* by *Aspergillus niger* var. *phoenicis* in the Namib-Naukluft Park. *South African Journal of Botany*, 74(1):41–50.