

## DAFTAR PUSTAKA

- Adeniji. A.A, O.S. Aremu, dan O.O Babalola. 2018. Selecting lipopeptide-producing, Fusarium-suppressing *Bacillus* spp.: metabolomic and genomic probing of *Bacillus velezensis* NWUMFkBS10. *J Microbiology Open*. 25(742): 1-13.
- Agilent, W. 1998. Basic of LC-MS. New York: HewLett Packard, Inc.
- Ali, S.M., N.A. Khan, K. Sagathevan, A. Anwar, dan R. Siddiqui. 2019. Biologically active metabolite(s) from haemolymph of red-headed centipede *Scolopendra subspinipes* possess broad spectrum antibacterial activity. *AMB Expr*. 9(95): 1-17.
- Alshaibani, M.M , No. MohamadZin, J. Jalil , N. Marzuki Sidik , S. Junaidah Ahmad, N. Kamal, dan E. RuAngelie. 2017. Research article review jmb isolation, purification, and characterization of five active diketopiperazine derivatives from Endophytic *Streptomyces* sp. SUK 25 with antimicrobial and cytotoxic activitie. *J Microbiol Biotechnol*. 27(7): 1249-256
- Andersen, J.B. J.F. Owe, dan N.E. Gilhus. 2010. Myasthenia gravis requiring pyridostigmine treatment in a national population cohort. *European Journal Neurology*. 17(12):1445-1450.
- Andriyani, E., Fais, N.L. dan Muarifah, S., 2019. Perkembangan penelitian metode deteksi kandungan babi untuk menjamin kehalalan produk pangan olahan. *Journal of Islamic Studies and Humanities*. 4(1): 104-126.
- Arora, D.S., dan D.K. Sandhu. 1985. Laccase production and wood degradation by a white-rot fungus *Daedalea flavida*. *Enzyme Microb. Technol*. 7:405-408.
- Artiningsih., A. 2006. Aktivitas ligninolitik jenis ganoderma pada berbagai sumber karbon. *Biodiversitas J*. 7(4): 307-311
- ASHP, team. 2021. Progestin-Only (drospirenone) Oral Contraceptives . <<https://medlineplus.gov/druginfo/meds/a621011.html>>. Diakses pada tanggal 2 Juni 2023.
- Auyong, A.S.M., R. Ford, dan P.W.J. Taylor. 2015. the role of cutinase and its impact on pathogenicity of *Colletotrichum truncatum*. *J Plant pathol Microb*. 6(259): 3-11
- Avivi, S., dan D.M.A. I. Buqori. 2022. *Metabolomik: Manfaatnya bagi pemuliaan*. 1<sup>st</sup> ed. 1-2. Jember: UPT Percetakan dan Penerbitan Universitas Jember, Press.
- Azmi, N.M., M. Taib, N. Anuar, K.M. Hanafiah, A.A.K Al-Shammery, M. Saaid dan K. Awang. 2020. Chemicals constituents isolated from cultivate *Alpinia conchigera* griff. and antimicrobial activity. *Tropical Life Sciences Research J*, 31(1): 159-178.

- Bahar, M., R. Zare, S. Rezaee, H.Z. Zadeh, dan S. Hajmansour. 2009. The relationship between cutinases and the pathogenicity/virulence of *Fusarium solani* in potato tubers. *Phytopathol Mediterr J*. 48: 403–410.
- Barale, S.S., S.G. Ghane, dan K.D. Sonawane KD. 2022. Purification and characterization of antibacterial surfactin isoforms produced by *Bacillus velezensis*. *SK AMB J*. 12(1): 7-20.
- Basy, L.L., T. Hertiani, R. Murwanti, dan E. Damayanti. 2023. Investigation of Cox-2 inhibition of *Laportea decumana* (Roxb). Wedd extract to support its analgesic potential. *Journal of Ethnopharmacology*. 318 (116857): 1-7.
- Belhaj, I., S. Amara, G. Parsiegla, P. Sutto-Ortiz, dan M. Sahaka. 2018. Galactolipase activity of *Talaromyces thermophilus* lipase on galactolipid micelles, monomolecular films and UV-absorbing surface-coated substrate. *Biochimica et Biophysica Acta Molecular and Cell Biology of* 1863 (9): 1006-1015.
- Blin, K., Shaw, S., H.E. Augustijn, Z.L. Reitz, F. Biermann, M. Alanjary, A. Fetter, B.R. Terlouw, W.W. Metcalf, E. J.N. Helfrich, G.P. van-Wezel, M.H. Medema, dan T. Weber. 2023. antiSMASH 7.0: new and improved predictions for detection, regulation, chemical structures and visualization. *J Nucleic Acids Research*. 10(1093): 1-5.
- Bogdan I. Cioroiu, Ioana C. Caba, Irina Prisăcaru, Mona E. Cioroiu, Mihai I. Lazar, Marius Niculaua. 2010. New approach for determination of the degradation products of fenpropiridone hydrochloride found in oral liquid formulation. *Biomedical Chromatography J*. 32(5): 44-59.
- Borriss, R., X.H. Chen, C. Rueckert, J. Blom, A. Becker, B. Baumgarth, B. Fan, R. Pukall, P. Schumann, P. C. Spröer, C. 2018. Relationship of *Bacillus amyloliquefaciens* clades associated with strains DSM 7T and FZB42T: A proposal for *Bacillus amyloliquefaciens* subsp. *amyloliquefaciens* subsp. nov. and *Bacillus amyloliquefaciens* subsp. *plantarum* subsp. nov. based on complete genome sequence comparisons. *Int J Syst Evol Microbiol*. 61: 786-1801.
- Breton, F., R. Miranti, Z. Lubis, Z. Hayun, S. Umi, A. Flori, S.P.C. Nelson, T. Durand-gasselin, J.C. Jacquemard, dan H. de-Franqueville. 2009. Ganoderma disease of the oil palm: hypothesis on natural infection and implementation of an early artificial inoculation test to screen oil palm progenies for their level of resistance. *Agritop cirad sr j*. 12(102): 1-8
- Cai, X., X. Kang, H. Xi, C. Liu, dan Y. Xue. 2016. Complete genome sequence of the endophytic biocontrol strain *Bacillus velezensis* CC09. *J Genome Announc*. 4: 1016-1028.
- Cai, X.C., C.H. Liu, B.T. Wang, Y.R. Xue. 2017. Genomic and metabolic traits endow *Bacillus velezensis* CC09 with a potential biocontrol agent in control of wheat powdery mildew disease. *J Microbiol Res*. 196(1016): 89-94.

- Calogui, G. 2021. Vitamin B7 or H (Biotin). Hypersensitivity to Vitamins J. 7(2174): 52-54.
- Cambria, M.T., S. Ragusa, V. Calabrese, dan A. Cambria. 2011. Enhanced laccase production in white-rot fungus *Rigidoporus lignosus* by the addition of selected phenolic and aromatic compounds. *Appl Biochem Biotechnol J*. 163(3):415-22.
- Chen, L., J. Heng, S. Qin, dan K. Bian. 2018. A comprehensive understanding of the biocontrol potential of *Bacillus velezensis* LM2303 against *Fusarium* head blight. *J PLoS One*. 13(198560): 1-12.
- Claverie, J.M. dan C. Notredame. 2003. *Bioinformatics for dummies*. 2<sup>nd</sup> ed. 10-11. New York: Willey Publishing, Inc.
- Daria, W., K. Dobrawa, H. Li-Hang, S. Tang-Long, dan C. Ying-Lien. 2020. Antifungal Activity of Morpholine and Piperidine Based Surfactants. *Tenside Surfactants Detergents* 57(2): 104-108
- Diabankana, R.G.C., E.U. Shulga, S.Z. Validov, dan D. M. Afordoanyi. 2022. Genetic characteristics and enzymatic activities of *Bacillus velezensis* KS04AU as a stable biocontrol agent against phyto patogens. *Int J Plant Biol*. 13(3390): 201-222.
- Do, E., H.G. Lee, M. Park, Y.J. Cho, D.H. Kim, S.H. Park, D. Eun, T. Park, S. An dan W.H. Jung 2019. Antifungal mechanism of action of lauryl betaine against skin-associated fungus *Malassezia restricta* sp. *J Mycobiology*. 10(1080): 1-14.
- Fu, S.F., J.Y. Wei, H.W. Chen, Y.Y. Liu, H.Y. Lu, dan J.Y. Chou. 2015. Indole-3-acetic acid: a widespread physiological code in interactions of fungi with other organisms. *J Plant Signal Behav*. 10(8): 104-115.
- Gadzhiev M.K. 1981. Use of falimint postoperatively in tonsillectomy. *Vestn Otorinolaringol J*. 4(68): 1-6
- Gilardi, G., S. Demarchi, M.L. Gullino, dan A. Garibaldi. 2015. Nursery treatments with non-conventional products against crown and root rot, caused by *Phytophthora capsici*, on zucchini. *J Phytoparasitica*. 43(1007): 501–508.
- Gong, W., J. Wang, Z. Chen, B. Xia, dan G. Lu. 2011. Solution structure of LCI, a novel antimicrobial peptide from *Bacillus subtilis*. *J Biochemistry*. 50(18): 3621-3627.
- Gosse, J.T., S. Ghosh, A. Sproule, D. Overy, N. Cheeptham, dan C.N. Boddy. 2019. Whole genome sequencing and metabolomics study of cave *Streptomyces* isolates ICC1 and ICC4. *J Front Microbiol*. 10(1020): 1-12.
- H. Kim. 2016. Risk assessment of di(2-ethylhexyl) phthalate in the workplace. *Journal of Toxicology and Environmental Health*. 31(23): 201-211.
- Hanson, J. R. 2011. *Natural products: The Secondary Metabolites*. Royal Society of Chemistry. Cambridge. p. 1-22.

- Hayakawa K., N. Katsumata, M. Hirano, K. Yoshikawa, T. Ogata, T. Tanaka, dan T. Nagamine. 2008. Determination of biotin (vitamin H) by the high-performance affinity chromatography with a trypsin-treated avidin-bound column. *J Chromatogr B Analyt Technol Biomed Life Sci.* 15(869): 93-100.
- HMDB. 2023. Metabocard for Indoleacrylic acid (HMDB0000734) <<https://hmdb.ca/metabolites/HMDB0000734>>. Diakses pada tanggal 2 Juni 2023.
- Ho, C.L. 2023. Comparative Genomics Analysis of *Ganoderma* Orthologs Involved in Plant- patogenesis. *Forests J.* 14(3): 1-20.
- Ichihashi, S., dan D. Okamura. 2017. Useful biocontrol composition having excellent pesticidal activity and biocontrol method using the same. *Jpn Kokai Tokkyo Koho.* 10(1958): 105-121.
- Ihori, Y., S. Watanabe, I. Shuuji, C.K. Kang, dan Y. Shiinoki. 2018. Preparation of guanidine compounds as agrochemical fungicides. *PCT Int Appl J.* 97(126): 531-543.
- Jin, Q., Q. Jiang, L. Zhao, C. Su, S. Li, F. Si, S. Li, C. Zhou, Y. Mu, dan M. Xiao. 2017. Complete genome sequence of *Bacillus velezensis* S3-1: a potential biological pesticide with plant patogen inhibiting and plant promoting capabilities. *J Biotechnol.* 259(1016): 199-203.
- Khaleghi, F dan Nemeč. 2017. Brivaracetam (Briviact): A Novel Adjunctive Therapy for Partial-Onset Seizures. *Pharmacy and Therapeutics J.* 242(2): 92-96/
- Kim, D.H., C.G. Park, S.H. Kim dan Y.J. Kim. 2009. The effects of mono-(2-Ethylhexyl) phthalate (MEHP) on human Estrogen Receptor (hER) and Androgen Receptor (hAR) by YES/YAS In Vitro Assay. *J Molecules.* 24(1558): 1-10.
- Köller, W. 1991. The plant cuticle. A barrier to be overcome by plant pathogens. P.219- 246. New York: Plenum Press
- Kuzubova, N.A., E.S. Lebedeva, A.N. Fedin, I.V. Dvprakovskaya, T.N. Preobrazhenskaya dan O.N. Titova. 2013. Effect of Fenspiride on Bronchial Smooth Muscle of Rats with Chronic Obstructive Pulmonary Diseases. *J Smooth Muscle Res.* 49: 46–54.
- LeWitt, P.A., J. Li, K.H. Wu, dan K. Lu. 2023. Diagnostic metabolomic profiling of Parkinson's disease biospecimens. *Neurobiol Dis J.*177(105962): 1-9
- Li, H., X. Han, J. Zhang, Y. Dong, S. Xu, Y. Bao, C. Chen, Y. Feng, Q. Cui dan W. Li. 2019. An effective strategy for identification of highly unstable bacillaenes. *J Nat Prod.* 82: 3340–3346.
- Linda J. Stephen and Martin J. Brodie. 2017. Brivaracetam: a novel antiepileptic drug for focal-onset seizures. *Therapeutic Advances in Neurological Disorders.* 11: 1-10

- Linda, R.N., J.G.M. Jan, Verschuuren, dan M.R. Tannemaat. 2022. The effectiveness and side effects of pyridostigmine in the treatment of myasthenia gravis: a cross-sectional study. *Neuromuscular Disorders J.* 32: 790–799
- Mark, S., Barber, S.V. McConnell, dan S.B. DeCaux. 2000. Antimicrobial intermediates of the general phenylpropanoid and lignin specific pathways. *Phytochemistry.* 54(1): 53-56.
- Melinda, Y.N., J. Widada, T.D. Wahyuningsih, R. Febriansah, E. Damayanti, dan M. Mustofa. 2021. Metabologenomics approach to the discovery of novel compounds from *Streptomyces* sp. GMR22 as anti-SARS-CoV-2 drugs . *Heliyon J.* 7(e08308): 1-9.
- Migahed, M.A., S.M. El-kousy, R.F. Tayel, dan E.G. Zaki. 2017. Synthesis, characterization, surface active properties, biological activity of ethoxylated dodecyl benzenesulfonamide. *J Pharm Biol Chem Sci* 8(1967): 1-12.
- Nandhini, S.U., S. Sangareshwari, and L. Kumari. 2015. Gas chromatography-mass spectrophotometry analysis of bioactive constituents from the marine *Streptomyces*. *Asian J Pharm Clin Res.* 8(2): 1-3.
- Nirwati, H., E. Damayanti, E. N. Sholikhah, M. Mustofa , dan J Widada. 2022. Soil-derived *Streptomyces* sp. GMR22 producing antibiofilm activity against *Candida albicans*: bioassay, untargeted LC-HRMS, and gene cluster analysis d. *Heliyon J.* 8(e09333): 1-8.
- Oelkers W. 2000. Drospirenone: a new progestogen with antimineralocorticoid activity resembling natural progesterone. *Eur J Contracept Reprod Health Care.* 3:17-24.
- Okada, M., Sato, I., Cho, S. *et al.* 2005. Structure of the *Bacillus subtilis* quorum-sensing peptide pheromone ComX. *J Nat Chem Biol* 1: 23-24.
- Parihar, J.S. dan IY. Kim. 2016. Second-Line Hormonal for Castrate-Resistant Prostate Cancer. 2<sup>nd</sup> edition. P533-540. New York: Academic Press.
- Peypoux, F., M. Guinand, G. Michel, L. Delcambe, B. C. Das, dan E. Lederer. 1978. Structure of iturin-A, a peptidolipid antibiotic from *Bacillus subtilis*. *J Biochem.* 17(106): 3992-3996.
- Pubchem, Tim. 2021. <<https://pubchem.ncbi.nlm.nih.gov/compound/Bacilysin>>. Diakses pada tanggal 2 Juli 2023.
- Puets, A., A. Artati, J. Adamski, K. Schuett, F. Romeo, R. Stoehr, N. Marx, M. Federici, M. Lehrke dan B.A. Kappel. 2022. Non-targeted metabolomics identify polyamine metabolite acisoga as novel biomarker for reduced left ventricular function. *ESC Heart Fail J.* 9(1): 564-573
- Rabbee, M.F., dan Baek, K. 2020. Antimicrobial activities of lipopeptides and polyketides of *Bacillus velezensis* for agricultural applications. *J Molecules.* 25(4973): 1-16.

- Rance, L.B., A.L. Tseng dan A. Bayoumi. 1996. Megestrol for appetite stimulation and as a progestin in hormone replacement therapy. *Arch Intern Med J.* 156(21): 2487-2498.
- Reichardt, C. 2003. Solvents and Related Titles from Organic Synthesis Workbook II Chemical Synthesis Using Supercritical Fluids. 472. Marburg: WILEY-VCH, Inc.
- Reis, J., A. Gaspar, N. Milhazes, dan F. Borges. 2017. Chromone as a Privileged Scaffold in Drug Discovery: Recent Advances Miniperspective. *Journal of Medicinal Chemistry.* 60(19): 7941-7957
- Rowdhwal, S.S.S., dan J. Chen. 2018. Toxic effects of di-2-ethylhexyl phthalate: an overview. *BioMed Research International J.* 10(115): 1-10
- Ru, I.R. 2020. Falimint: instructions for use and what it is for, price, reviews, analogues. Falimint instructions for use. <<https://iia-rf.ru/en/>>. Diakses pada tanggal 2 Juli 2023.
- Scholz., R, J. Vater, A. Budiharjo, Z. Wang, Y. He, K. Dietel, T. Schwecke, S. Herfort, P. Lasch, dan R. Borriss. 2014. Amylocyclicin, a novel circular bacteriocin produced by *Bacillus amyloliquefaciens* FZB42. *J Bacteriol.* 196(10): 1842-1852.
- Starr, A.M., M. Zabet-Moghaddam, dan M.S. Francisco. 2022. Identification of a novel secreted metabolite cyclo(phenylalanyl-prolyl) from *Batrachochytrium dendrobatidis* and its effect on *Galleria mellonella*. *J. BMC Microbiol.* 22 (293): 1-11.
- Su, Z., G. Liu, X. Liu, S. Li, X. Lu, P. Wang, W. Zhao, X. Zhang, L. Dong, Qu, Y, J. Zhang, S. Mo, Q. Guo dan P. Ma. 2023. Functional analyses of the *Bacillus velezensis* HMB26553 genome provide evidence that its genes are potentially related to the promotion of plant growth and prevention of cotton rhizoctonia damping-off. *J Cells.* 12(1301): 1-17.
- Sudarmadji, S., B. Haryon dan Suhardi. 1997. Prosedur Analisis untuk Bahan Makanan dan Pertanian. Yogyakarta: Penerbit Liberti.
- Sugiana, F.A., Widyowati, H., Warisman, M.A., Suryani, dan Desriani. 2018. Low cost and comprehensive pork detection in processed food products with a different food matrix. *Indonesian Journal of Biotechnology.* 23(1): 208-219.
- Sui, Y., J. Liu, M. Wisniewski, S. Droby, J. Norelli, dan V. Hershkovitz. 2012. Pretreatment of the yeast antagonist, *Candida oleophila*, with glycine betaine increases oxidative stress tolerance in the microenvironment of apple wounds. *Int J Food Microbiol.* 15(157): 45-51.
- Tanwar, B., A. Kumar, P. Yogeewari, D. Sriram, dan A.K. Chakraborti. 2016. Design, development of new synthetic methodology, and biological evaluation of substituted quinolines as new anti-tubercular leads. *Bioorg Med Chem Lett J.* 26: 5960-5966

- Trivella, D.B.B., dan R. de Felicio. 2018. The tripod for bacterial natural product discovery: genome mining, silent pathway induction, and mass spectrometry-based molecular networking. *J Clin Microbiol.* 3(2): 1-5.
- Trott, O., and A. J. Olson. 2019. Autodock vina: improving the speed and accuracy of docking. *J. Comput Chem.* 31: 455–461.
- Tsalgatidou, P.C., E.E. Thomludi, E. Baira, K. Papadimitriou, A. Skagia, A. Venieraki, dan P. Katinakis. 2022. Integrated genomic and metabolomic analysis illuminates key secreted metabolites produced by the novel endophyte *Bacillus halotolerans*. Involved in Diverse Biological Control Activities Microorganisms J. 10 (399): 1-13.
- Vaishali, M. Patil, N. Masand, S. Verma, dan V. Masand. 2021. Chromones: Privileged scaffold in anticancer drug discovery. *Chem Biol Drug Des.* 10(1111): 1–11
- Van Heel, A.J., A. Jong, C. Song, J.H. Viel, J. Kok, dan O.P. Kuipers. 2018. BAGEL4: a user-friendly web server to thoroughly mine RiPPs and bacteriocins. *J Nucleic Acid. Res.* 46: 278-281.
- Van-Heel, A. J., A. Jong, C. Song, J. H. Viel, J. Kok, dan O. P. Kuipers. 2018. BAGEL4: a user-friendly web server to thoroughly mine RiPPs and bacteriocins. *J Nucleic Acids. Res.* 46: 278-281.
- Vanittakom, N., dan W. Loeffler. 1986. Fengycin-A novel antifungal lipopeptide antibiotic produced by *Bacillus subtilis* F-29-3. *J. Antibiot.* 39(7): 888-90.
- Wang, W.Y., W.L. Kong, Y.C.Z. Liao dan L.H. Zhu. 2022. Identification of *Bacillus velezensis* SBB and its antifungal effects against *Verticillium dahliae*. *J Fungi.* 8(1021): 1-12.
- Weber, T., K. Blin, S. Duddela, D. Krug, H.U. Kim, R. Brucoleri, S.Y. Lee, M.A. Fischbach, R. Müller, W. Wohlleben, R. Breitling, E. Takano, and M.H. Medema. 2015. AntiSMASH 3.0-a comprehensive resource for the genome mining of biosynthetic gene clusters. *J Nucleic Acids Res.* 43(1): 237-243.
- Widada J, E. Damayanti, dan Mustofa. 2021. Complete Genome Sequence of *Bacillus amyloliquefaciens* GMEKP1, Isolated from a Natural Bamboo Hive of Stingless Bees. *Microbiol Resour Announc.* 10(44): e0065921
- Wu, C., dan W.A.V. Donk. 2021. Engineering of new-to-nature ribosomally synthesized and post-translationally modified peptide natural products. *Current Opinion in Biotechnology J.* 69: 221-231.
- Wu, L. H. Wu, L. Chen, S. Xie, H. Zang, R. Borriss, dan X. Gao. Bacilysin from *Bacillus amyloliquefaciens* FZB42 has specific bactericidal activity against harmful algal bloom species. *J Appl Environ Microbiol.* 80: 7512–7520.
- Wu, L., H. Wu, L. Chen, S. Xie, H. Zang, R. Borriss, dan X. Gao. 2014. Bacilysin from *Bacillus amyloliquefaciens* FZB42 has specific bactericidal activity

- against harmful algal bloom species. *Appl Environ Microbiol.* 80(24):7512-7520.
- Xu, Y.J., C. Wang, W.E. Ho, C.N. Ong. 2014. Recent developments and applications of metabolomics in microbiological investigations *TrAC. J Trends Anal Chem.* 56(1016): 37–48.
- Yan P.S, Y. Song, E. Sakuno, H. Nakajima, H. Nakagawa, K. Yabe. 2014. Cyclo(L-leucyl-L-prolyl) produced by *Achromobacter xylosoxidans* inhibits aflatoxin production by *Aspergillus parasiticus*. *J. Appl Environ Microbiol.* 70(12):7466-73.
- Yao, X., M. Shen dan P. Xin. 2010. High performance liquid chromatography and liquid chromatography-mass spectrometry used for health care food analysis. *Chemistry Bulletin J.* 73: 684-688.
- Yazgan, A., G. Oëzcengiz, dan M.A. Marahiel. 2001. *Tn10* insertional mutations of *Bacillus subtilis* that block the biosynthesis of bacilysin. *Biochimica et Biophysica Acta.* 1518: 87-94.
- Ye, P. Wu, Y. Huang, H. Xie, X. Wei, N. Feng dan Wanhui. 2007. Two new antifungal alkaloids produced by *Streptoverticillium morookaense*. *J Antibiot.* 60(3): 179-183.
- Zhang, C., X. Ou, J. Wang, Z. Wang, W. Du, J. Zhao, dan Y. Han. 2022. Antifungal peptide P852 controls *Fusarium* sp. wilt in faba bean (*Vicia faba* L.) by promoting antioxidant defense and isoquinoline alkaloid, betaine, and arginine biosyntheses. *J Antioxidants.* 11(1767): 1-20.
- Zhong, Z., B. He, , J. Li, dan Y.X. Li. 2020. Challenges and advances in genome mining of ribosomally synthesized and post-translationally modified peptides (RiPPs). *Synthetic and Systems Biotechnology J.* 5: 155-172.