

## DAFTAR PUSTAKA

- Abedi, E., & Hashemi, S. M. B. (2020). Lactic acid production - producing microorganisms and substrates sources-state of art. *Heliyon*, *6*(10), e04974. <https://doi.org/10.1016/j.heliyon.2020.e04974>
- Ahmad, V., Khan, M. S., Jamal, Q. M. S., Alzohairy, M. A., Al Karaawi, M. A., & Siddiqui, M. U. (2017). Antimicrobial potential of bacteriocins: in therapy, agriculture and food preservation. *International Journal of Antimicrobial Agents*, *49*(1), 1–11. <https://doi.org/10.1016/j.ijantimicag.2016.08.016>
- Angelini, P., Flores, G. A., Cusumano, G., Venanzoni, R., Pellegrino, R. M., Zengin, G., Di Simone, S. C., Menghini, L., & Ferrante, C. (2023). Bioactivity and Metabolomic Profile of Extracts Derived from Mycelial Solid Cultures of *Hypsizygus marmoreus*. *Microorganisms*, *11*(10). <https://doi.org/10.3390/microorganisms11102552>
- Anjana, & Tiwari, S. K. (2022). Bacteriocin-Producing Probiotic Lactic Acid Bacteria in Controlling Dysbiosis of the Gut Microbiota. *Frontiers in Cellular and Infection Microbiology*, *12*(May), 1–11. <https://doi.org/10.3389/fcimb.2022.851140>
- Baran, A., Kwiatkowska, A., & Potocki, L. (2023). Antibiotics and Bacterial Resistance—A Short Story of an Endless Arms Race. *International Journal of Molecular Sciences*, *24*(6). <https://doi.org/10.3390/ijms24065777>
- Barroso, R. G. M. R., Damaso, M. C. T., Machado, F., & Gonçalves, S. B. (2024). Lactic Acid Production by *Enterococcus durans* Is Improved by Cell Recycling and pH Control. *Fermentation*, *10*(3), 149. <https://doi.org/10.3390/fermentation10030149>
- Benítez-Chao, D. F., León-Buitimea, A., Lerma-Escalera, J. A., & Morones-Ramírez, J. R. (2021). Bacteriocins: An Overview of Antimicrobial, Toxicity, and Biosafety Assessment by in vivo Models. *Frontiers in Microbiology*, *12*(April), 1–18. <https://doi.org/10.3389/fmicb.2021.630695>
- C., M. L., P., F. H., & M., H. H. (1990). Acid Tolerance of *Leuconostoc mesenteroides* and *Lactobacillus plantarum*. *Applied and Environmental Microbiology*, *56*(7), 2120–2124. <https://doi.org/10.1128/aem.56.7.2120-2124.1990>

- Cotter, P. D., Ross, R. P., & Hill, C. (2013). Bacteriocins-a viable alternative to antibiotics? *Nature Reviews Microbiology*, *11*(2), 95–105. <https://doi.org/10.1038/nrmicro2937>
- Darbandi, A., Asadi, A., Mahdizade Ari, M., Ohadi, E., Talebi, M., Halaj Zadeh, M., Darb Emamie, A., Ghanavati, R., & Kakanj, M. (2022). Bacteriocins: Properties and potential use as antimicrobials. *Journal of Clinical Laboratory Analysis*, *36*(1), 1–40. <https://doi.org/10.1002/jcla.24093>
- Eghbal, N., Liao, W., Dumas, E., Azabou, S., Dantigny, P., & Gharsallaoui, A. (2022). Microencapsulation of Natural Food Antimicrobials: Methods and Applications. *Applied Sciences (Switzerland)*, *12*(8). <https://doi.org/10.3390/app12083837>
- Goa, T., Beyene, G., Mekonnen, M., & Gorems, K. (2022). Isolation and Characterization of Lactic Acid Bacteria from Fermented Milk Produced in Jimma Town, Southwest Ethiopia, and Evaluation of their Antimicrobial Activity against Selected Pathogenic Bacteria. *International Journal of Food Science*, 2022. <https://doi.org/10.1155/2022/2076021>
- Guerra, N. P. (2014). Modeling the batch bacteriocin production system by lactic acid bacteria by using modified three-dimensional Lotka-Volterra equations. *Biochemical Engineering Journal*, *88*, 115–130. <https://doi.org/10.1016/j.bej.2014.04.010>
- Gutiérrez-Ríos, H. G., Suárez-Quiroz, M. L., Hernández-Estrada, Z. J., Castellanos-Onorio, O. P., Alonso-Villegas, R., Rayas-Duarte, P., Cano-Sarmiento, C., Figueroa-Hernández, C. Y., & González-Rios, O. (2022). Yeasts as Producers of Flavor Precursors during Cocoa Bean Fermentation and Their Relevance as Starter Cultures: A Review. *Fermentation*, *8*(7). <https://doi.org/10.3390/fermentation8070331>
- Hou, M., Wang, Z., Sun, L., Jia, Y., Wang, S., & Cai, Y. (2023). Characteristics of lactic acid bacteria, microbial community and fermentation dynamics of native grass silage prepared in Inner Mongolian Plateau. *Frontiers in Microbiology*, *13*(January). <https://doi.org/10.3389/fmicb.2022.1072140>
- Jabłońska-Ryś, E., Skrzypczak, K., Sławińska, A., Radzki, W., & Gustaw, W. (2019). Lactic Acid Fermentation of Edible Mushrooms: Tradition,

Technology, Current State of Research: A Review. *Comprehensive Reviews in Food Science and Food Safety*, 18(3), 655–669. <https://doi.org/10.1111/1541-4337.12425>

- Jang, H.-Y., Kim, M. J., Jeong, J. Y., Hwang, I. M., & Lee, J.-H. (2024). Exploring the influence of garlic on microbial diversity and metabolite dynamics during kimchi fermentation. *Heliyon*, 10(2), e24919. <https://doi.org/10.1016/j.heliyon.2024.e24919>
- Kała, K., Pająk, W., Sułkowska-Ziaja, K., Krakowska, A., Lazur, J., Fidurski, M., Marzec, K., Zięba, P., Fijałkowska, A., Szewczyk, A., & Muszyńska, B. (2022). *Hypsizygus marmoreus* as a Source of Indole Compounds and Other Bioactive Substances with Health-Promoting Activities. *Molecules*, 27(24), 1–18. <https://doi.org/10.3390/molecules27248917>
- Kandler, O. (1983). Carbohydrate metabolism in lactic acid bacteria. *Antonie van Leeuwenhoek*, 49(3), 209–224. <https://doi.org/10.1007/BF00399499>
- Karant, S., Feng, S., Patra, D., & Pradhan, A. K. (2023). Linking microbial contamination to food spoilage and food waste: the role of smart packaging, spoilage risk assessments, and date labeling. *Frontiers in Microbiology*, 14(June), 1–17. <https://doi.org/10.3389/fmicb.2023.1198124>
- Koduru, L., Kim, Y., Bang, J., Lakshmanan, M., Han, N. S., & Lee, D.-Y. (2017). Genome-scale modeling and transcriptome analysis of *Leuconostoc mesenteroides* unravel the redox governed metabolic states in obligate heterofermentative lactic acid bacteria. *Scientific Reports*, 7(1), 15721. <https://doi.org/10.1038/s41598-017-16026-9>
- Kumariya, R., Garsa, A. K., Rajput, Y. S., Sood, S. K., Akhtar, N., & Patel, S. (2019). Bacteriocins: Classification, synthesis, mechanism of action and resistance development in food spoilage causing bacteria. *Microbial Pathogenesis*, 128(January), 171–177. <https://doi.org/10.1016/j.micpath.2019.01.002>
- Lawalata, H. J. (2023). Lactic acid bacteria as an exopolysaccharides (EPS) producing starter from pakoba fruit (*Syzygium* sp.), endemic species at Minahasa, North Sulawesi. *Indian Journal of Microbiology Research*, 10(4), 235–242. <https://doi.org/10.18231/j.ijmr.2023.041>

- Leska, A., Nowak, A., & Motyl, I. (2022). Isolation and Some Basic Characteristics of Lactic Acid Bacteria from Honeybee (*Apis mellifera* L.) Environment—A Preliminary Study. *Agriculture (Switzerland)*, *12*(10). <https://doi.org/10.3390/agriculture12101562>
- Li, H., Jiang, D., Liu, W., Yang, Y., Zhang, Y., Jin, C., & Sun, S. (2020). Comparison of fermentation behaviors and properties of raspberry wines by spontaneous and controlled alcoholic fermentations. *Food Research International*, *128*, 108801. <https://doi.org/https://doi.org/10.1016/j.foodres.2019.108801>
- Li, Q., Kang, J., Ma, Z., Li, X., Liu, L., & Hu, X. (2017). Microbial succession and metabolite changes during traditional serofluid dish fermentation. *LWT*, *84*, 771–779. <https://doi.org/https://doi.org/10.1016/j.lwt.2017.06.051>
- Manoharan, M., & Balasubramanian, T. S. (2022). An Extensive Review on Production, Purification, and Bioactive Application of Different Classes of Bacteriocin. *Journal of Tropical Biodiversity and Biotechnology*, *7*(3), 1–29. <https://doi.org/10.22146/jtbb.72735>
- Mokoena, M. P. (2017). Lactic acid bacteria and their bacteriocins: Classification, biosynthesis and applications against uropathogens: A mini-review. *Molecules*, *22*(8). <https://doi.org/10.3390/molecules22081255>
- Mótyán, J., Tóth, F., & Tózsér, J. (2013). Research Applications of Proteolytic Enzymes in Molecular Biology. *Biomolecules*, *3*(4), 923–942. <https://doi.org/10.3390/biom3040923>
- Nadeem, H., Rashid, M. H., Siddique, M. H., Azeem, F., Muzammil, S., Javed, M. R., Ali, M. A., Rasul, I., & Riaz, M. (2015). Microbial invertases: A review on kinetics, thermodynamics, physiochemical properties. *Process Biochemistry*, *50*(8), 1202–1210. <https://doi.org/10.1016/j.procbio.2015.04.015>
- Paramastri, P. K., & Qurrohman, M. T. (2022). Efektifitas Ekstrak Lidah Mertua (*Sansevieria trifasciata* var *laurentii*) Sebagai Antifungi *Candida albicans*. *The Journal of Muhammadiyah Medical Laboratory Technologist*, *5*(2), 149. <https://doi.org/10.30651/jmlt.v5i2.13478>
- Perez, R., Perez, M. T., & Elegado, F. (2015). Bacteriocins from Lactic Acid Bacteria: A Review of Biosynthesis, Mode of Action, Fermentative

- Production, Uses, and Prospects. *International Journal of Philippine Science and Technology*, 8(2), 61–67. <https://doi.org/10.18191/2015-08-2-027>
- Periferakis, A.-T., Periferakis, A., Periferakis, K., Caruntu, A., Badarau, I. A., Savulescu-Fiedler, I., Scheau, C., & Caruntu, C. (2023). Antimicrobial Properties of Capsaicin: Available Data and Future Research Perspectives. In *Nutrients* (Vol. 15, Issue 19). <https://doi.org/10.3390/nu15194097>
- Pircalabioru, G. G., Popa, L. I., Marutescu, L., Gheorghe, I., Popa, M., Czobor Barbu, I., Cristescu, R., & Chifiriuc, M. C. (2021). Bacteriocins in the era of antibiotic resistance: rising to the challenge. *Pharmaceutics*, 13(2), 1–15. <https://doi.org/10.3390/pharmaceutics13020196>
- Setyawan, R. H., Saskiawan, I., Widhyastuti, N., Kasirah, K., & Mulyadi, M. (2023). Potensi Prebiotic Dari Ekstrak Jamur Tiram Putih (*Pleurotus Ostreatus*). *Berita Biologi*, 22(1), 51–59. <https://doi.org/10.55981/beritabiologi.2023.806>
- Sharma, B. R., Halami, P. M., & Tamang, J. P. (2022). Novel pathways in bacteriocin synthesis by lactic acid bacteria with special reference to ethnic fermented foods. *Food Science and Biotechnology*, 31(1), 1–16. <https://doi.org/10.1007/s10068-021-00986-w>
- Sidooski, T., Brandelli, A., Bertoli, S. L., Souza, C. K. de, & Carvalho, L. F. de. (2019). Physical and nutritional conditions for optimized production of bacteriocins by lactic acid bacteria—A review. *Critical Reviews in Food Science and Nutrition*, 59(17), 2839–2849. <https://doi.org/10.1080/10408398.2018.1474852>
- Simons, A., Alhanout, K., & Duval, R. E. (2020). Bacteriocins, antimicrobial peptides from bacterial origin: Overview of their biology and their impact against multidrug-resistant bacteria. *Microorganisms*, 8(5). <https://doi.org/10.3390/microorganisms8050639>
- Sionek, B., Szydłowska, A., Küçüköz, K., & Kołożyn-Krajewska, D. (2023). Traditional and New Microorganisms in Lactic Acid Fermentation of Food. *Fermentation*, 9(12), 1–21. <https://doi.org/10.3390/fermentation9121019>
- Skrzypczak, K., Gustaw, K., Jabłońska-Ryś, E., Sławińska, A., Gustaw, W., & Winiarczyk, S. (2020). Spontaneously Fermented Fruiting Bodies of *Agaricus*

- bisporus as a Valuable Source of New Isolates of Lactic Acid Bacteria with Functional Potential. *Foods*, 9(11). <https://doi.org/10.3390/foods9111631>
- Surati, S. (2021). Bacteriocin, Antimicrobial as A New Natural Food Preservative: Its Potential and Challenges. *Eruditio : Indonesia Journal of Food and Drug Safety*, 1(1), 63–82. <https://doi.org/10.54384/eruditio.v1i1.34>
- Szutowska, J., & Gwiazdowska, D. (2021). Probiotic potential of lactic acid bacteria obtained from fermented curly kale juice. *Archives of Microbiology*, 203(3), 975–988. <https://doi.org/10.1007/s00203-020-02095-4>
- Tamang, J. P., Watanabe, K., & Holzapfel, W. H. (2016). Review : Diversity of Microorganisms in Global Fermented Foods and Beverages. 7(March). <https://doi.org/10.3389/fmicb.2016.00377>
- Tang, H., Huang, W., & Yao, Y.-F. (2023). The metabolites of lactic acid bacteria: classification, biosynthesis and modulation of gut microbiota. *Microbial Cell (Graz, Austria)*, 10(3), 49–62. <https://doi.org/10.15698/mic2023.03.792>
- Teusink, B., Bachmann, H., & Molenaar, D. (2011). Systems biology of lactic acid bacteria: a critical review. *Microbial Cell Factories*, 10(1), S11. <https://doi.org/10.1186/1475-2859-10-S1-S11>
- Udhayashree, N., Senbagam, D., Senthilkumar, B., Nithya, K., & Gurusamy, R. (2012). Production of bacteriocin and their application in food products. *Asian Pacific Journal of Tropical Biomedicine*, 2(1 SUPPL.). [https://doi.org/10.1016/S2221-1691\(12\)60197-X](https://doi.org/10.1016/S2221-1691(12)60197-X)
- Veetil, V. N., & Chitra, V. (2022). Optimization of Bacteriocin Production by *Lactobacillus plantarum* using Response Surface Methodology. *Cellular and Molecular Biology*, 68(6), 105–110.
- Wang, Y., Wu, J., Lv, M., Shao, Z., Hungwe, M., Wang, J., Bai, X., Xie, J., Wang, Y., & Geng, W. (2021). Metabolism Characteristics of Lactic Acid Bacteria and the Expanding Applications in Food Industry. *Frontiers in Bioengineering and Biotechnology*, 9(May), 1–19. <https://doi.org/10.3389/fbioe.2021.612285>
- Wu, D., Dai, M., Shi, Y., Zhou, Q., Li, P., & Gu, Q. (2022). Purification and characterization of bacteriocin produced by a strain of *Lactocaseibacillus rhamnosus* ZFM216. *Frontiers in Microbiology*, 13(November), 1–12. <https://doi.org/10.3389/fmicb.2022.1050807>

- Zacharof, M. P., & Lovitt, R. W. (2012). Bacteriocins Produced by Lactic Acid Bacteria a Review Article. *APCBEE Procedia*, 2, 50–56. <https://doi.org/10.1016/j.apcbee.2012.06.010>
- Zielińska, D., Kolożyn-Krajewska, D., & Laranjo, M. (2018). Food-Origin Lactic Acid Bacteria May Exhibit Probiotic Properties: Review. *BioMed Research International*, 2018. <https://doi.org/10.1155/2018/5063185>
- Zimmerman, T., & Ibrahim, S. A. (2021). *Autolysis and Cell Death Is Affected by pH in L. reuteri DSM 20016 Cells.*