

DAFTAR PUSTAKA

- Abdulhusein, H. S., Caglayan, P., Birbir, M., & Birbir, Y. 2023. Negative Effects of Haloversatile Bacteria in Salt on Skins and Their Control with Direct Electric Current in the Leather Industry. *Journal of the Society of Leather Technologists and Chemists*. 107(6): 201-214.
- Abo-Amer, A. E., El-Deep, B. A., & Altalhi, A. D. (2007). Optimization of bacteriocin production by *Lactobacillus plantarum* AA135. *Roum. Arch. Microbiol. Immunol.* 67: 36-40.
- Aini, M., Rahayuni, S., Mardina, V., Quranayati, Q., dan Asiah, N. 2021. Bakteri *Lactobacillus* spp dan peranannya bagi kehidupan. *Jurnal Jeumpa*. 8(2): 614-624.
- Amanatidou, E., Trikoilidou, E., Samiotis, G., Benetis, N. P., & Taousanidis, N. (2012). An easy uncertainty evaluation of the COD titrimetric analysis in correlation with quality control and validation data. Method applicability region. *Analytical Methods*. 4(12): 4204-4212.
- Aulya, W., Fadhlani, F., dan Mardina, V. 2020. Analysis of coliform and colifecal total pollution test on various types of drinking water using the MPN (Most Probable Number) method. *Serambi Journal of Agricultural Technology*. 2(2): 64-72.
- Basaran, B., Yorgancioglu, A., & Bitlisli, B. O. 2019. Performance assessment of green practices in liming with reductive potential chemicals for environmental sustainability. *Revista de Pielarie Incaltaminte*. 19(3): 177.
- Bhardwaj, A., Kumar, S., & Singh, D. 2023. Tannery effluent treatment and its environmental impact: a review of current practices and emerging technologies. *Water Quality Research Journal*. 58(2): 128-152.
- Bhowmick, S., Ahmed, M., Filippov, A., Loaiza, L. C., Shah, F. U., & Johansson, P. 2023. Ambient temperature liquid salt electrolytes. *Chemical Communications*. 59(18): 2620-2623.
- Bian, Z., Liu, W., Jin, J., Hao, Y., Jiang, L., Xie, Y., & Zhang, H. 2022. Rcs phosphorelay affects the sensitivity of *Escherichia coli* to plantaricin BM-1 by regulating biofilm formation. *Frontiers in Microbiology*. 13(1): 1-13.
- Blaszczyk, U., & Moczarny, J. 2016. Bacteriocins of gram-negative bacteria—structure, mode of action and potential applications. *Postepy Mikrobiologii*. 55(2): 157-171.
- Çağlayan, P. I. N. A. R., Birbir, M., Ogan, A. Y. Ş. E., Ventosa, A., Sinchez-Porro, C., & Birbir, Y. A. Ş. A. R. 2016. The Effects of Alternating and Direct Electric Currents on Moderately Halophilic Bacteria in Leather Industry. *Journal of the Society of Leather Technologists and Chemists*. 100: 307-313.

- Caglayan, P., & Birbir, M. E. R. A. L. 2018. Screening of Bacteriocin Production from Moderately Halophilic Skin Isolates to Inhibit Moderately Halophilic Bacteria Producing Protease and Lipase. *Journal of the American Leather Chemists Association*. 113(12).
- Deb Choudhury, S., Allsop, T., Passman, A., & Norris, G. E. 2006. Use of a proteomics approach to identify favourable conditions for production of good quality lambskin leather. *Analytical and bioanalytical chemistry*. 384(3): 723-735.
- Evangelin, Y., Venkateswarulu, T. C., Babu, D. J., & Kasturi, K. 2015. Bacteriocins from lactic acid bacteria and its potential applications. *International Journal of Pharmaceutical Sciences Review and Research*. 32(1): 306-309.
- Farage, M. A., Hood, W., Berardesca, E., & Maibach, H. 2018. Intrinsic and Extrinsic Factors Affecting Skin Surface pH. *Current Problems in Dermatology*. 54: 33-47.
- Fathima, A., Mangai, J. A., & Gulyani, B. B. 2014. An ensemble method for predicting biochemical oxygen demand in river water using data mining techniques. *International journal of river basin management*. 12(4): 357-366.
- Fernandes, J., Kumbhar, R., & Kulkarni, R. 2021. Bacteriocins from lactic acid bacteria: a natural strategy for inhibiting unwanted bacteria. *Resonance*. 26(3): 387-398.
- Gudro, I., Valeika, V., dan Sirvaitytė, J. 2014. Short term preservation of hide using vacuum: influence on properties of hide and of processed leather. *PloS one*. 9(11): 112783.
- Guo, L. D., He, W. Q., Li, H. B., Lin, Y., Sha, S. F., & Wang, L. P. 2022. Analysis of bacteriocin synthesis gene and bacteriocin properties of *Lactobacillus plantarum* WUH3. 48(24): 195-202.
- Gupta, A., & Tiwari, S. K. 2014. Plantaricin LD1: a bacteriocin produced by food isolate of *Lactobacillus plantarum* LD1. *Applied biochemistry and biotechnology*. 172(1): 3354-3362.
- Hashem, M. A., Momen, M. A., dan Hasan, M. 2018. Leaf paste aided goat skin preservation: Significant chloride reduction in tannery. *Journal of Environmental Chemical Engineering*. 6(4): 4423-4428.
- Hernández-González, J. C., Martínez-Tapia, A., Lazcano-Hernández, G., García-Pérez, B. E., & Castrejón-Jiménez, N. S. 2021. Bacteriocins from lactic acid bacteria. A powerful alternative as antimicrobials, probiotics, and immunomodulators in veterinary medicine. *Animals*. 11(4): 979.

- Huang, M. H., Li, Y. M., & Gu, G. W. 2010. Chemical composition of organic matters in domestic wastewater. *Desalination*. 262(1): 36-42.
- Ihsan, W. S., & Sunarsih, S. 2018. Facultative Stabilization Pond: Measuring Biological Oxygen Demand using Mathematical Approaches. *EDP Sciences*. 31(05009): 1-4.
- Jahan, M. A. A., Akhtar, N., Khan, N. M. S., Roy, C. K., Islam, R., dan Nurunnabi, M. 2014. Characterization of tannery wastewater and its treatment by aquatic macrophytes and algae. *Bangladesh Journal of Scientific and Industrial Research*. 49(4): 233-242.
- Jiang, Y. H., Zhao, Y. T., Liu, C., Tan, H., Bu, L. L., & Suo, H. Y. 2024. Antibacterial mechanism of action of *crude* plantaricin LP21-2 against *Escherichia coli* and its potential application in yak milk. *LWT*. 202(1): 116266.
- Kalangi, S. J. 2013. Histofisiologi kulit. *Jurnal Biomedik*. 5(3): 12-20.
- Kanagaraj, J., Panda, R. C., dan Kumar, V. 2020. Trends and advancements in sustainable leather processing: Future directions and challenges—A review. *Journal of Environmental Chemical Engineering*. 8(5): 104379.
- Kanagaraj, J., Selvi, A. T., Senthilvelan, T., Babu, N. C., dan Chandrasekar, B. 2014. Evaluation of new bacteriocin as a potential short-term preservative for goat skin. *Am J Microbiol Res*. 2(3): 86-93.
- Kessel RG. 1998. Basic Medical Histology. The biology of Cells, Tissues, and Organs. New York: Oxford University Press.
- Kuang, Z., Li, X. Y., Xu, C. X., Yang, X. S., & Chi, H. 2019. Research progress of bacteriocins from lactic acid bacteria and its application in aqua culture and processing. *Science and Technology of Food Industry*. 40(4): 292-298.
- Kumar, A., Ruhai, R., & Kataria, R. 2023. Bacteriocins of lactic acid bacteria as a potential antimicrobial peptide. *Biomimicry Materials and Applications*. 83-103.
- Liu, Y., Ong, S. L., Gedye, K., Truglio, M., & Prabakar, S. 2024. Behind the scenes: metagenomic analysis of bacterial communities in sustainable depilation of sheepskin. *Journal of Applied Microbiology*. 135(11): 244.
- Maiworé, J., & Ngang, J. J. E. 2023. Biotechnology of bacteriocins production by LAB. In *Lactic Acid Bacteria as Cell Factories*. 289-310.
- Mallin, M. A., Johnson, V. L., Ensign, S. H., & MacPherson, T. A. 2006. Factors contributing to hypoxia in rivers, lakes, and streams. *Limnology and Oceanography*. 51(1): 690-701.

- Martínez, B., Rodríguez, A., & Suárez, E. 2016. Antimicrobial peptides produced by bacteria: The bacteriocins. *New weapons to control bacterial growth*. 15-38.
- Maurya, S., Priya, T., Tripathi, A., Jayanthi, S., & Vimala, R. 2015. Lactic Acid Bacteria: A Potential Tool in Biological Preservation of Food. *Research Journal Of Pharmaceutical Biological And Chemical Sciences*. 6(3): 550-555.
- Mehrnejad, F., Khadem-Maaref, M., Ghahremanpour, M. M., & Doustdar, F. 2010. Mechanisms of amphipathic helical peptide denaturation by guanidinium chloride and urea: a molecular dynamics simulation study. *Journal of computer-aided molecular design*. 24: 829-841.
- Mohammed, S. A., Madhan, B., Demissie, B. A., Velappan, B., & Selvi, A. T. (2016). *Rumex abyssinicus* (mekmeko) Ethiopian plant material for preservation of goat skins: approach for cleaner leather manufacture. *Journal of cleaner production*. 133: 1043-1052.
- Müller, D. M., Carrasco, M. S., Tonarelli, G. G., & Simonetta, A. C. 2009. Characterization and purification of a new bacteriocin with a broad inhibitory spectrum produced by *Lactobacillus plantarum* Ip 31 strain isolated from dry-fermented sausage. *Journal of Applied Microbiology*. 106(6): 2031-2040.
- Nielsen, D. S., Cho, G. S., Hanak, A., Huch, M., Franz, C. M., & Arneborg, N. 2010. The effect of bacteriocin-producing *Lactobacillus plantarum* strains on the intracellular pH of sessile and planktonic *Listeria monocytogenes* single cells. *International journal of food microbiology*. 141: 53-59.
- Novia, D., Purwati, E., Yuherman, S. M., Juliyarsi, I., Sukma, A., Afriani, R., dan Nurhayani, F. 2018. Introduksi teknologi pada IKM pengumpul dan pembuat kerupuk kulit di Padang. *Jurnal Hilirisasi IPTEKS*. 1(4): 152-162.
- Nur-A-Tomal, M. S., Hashem, M. A., Zahin, M. E. H., Pulok, M. L. H., Das, M. R., & Mim, S. 2021. Goatskin preservation with plant oil: significant chloride reduction in tannery wastewater. *Environmental Science and Pollution Research*. 28: 12889-12897.
- Oh, S., Kim, S. H., Ko, Y., Sim, J. H., Kim, K. S., Lee, S. H., & Kim, Y. J. 2006. Effect of bacteriocin produced by *Lactococcus* sp. HY 449 on skin-inflammatory bacteria. *Food and chemical toxicology*. 44(4): 552-559.
- Othman, M., Ariff, A. B., Rios-Solis, L., & Halim, M. 2017. Extractive fermentation of lactic acid in lactic acid bacteria cultivation: A review. *Frontiers in Microbiology*. 8: 2285.

- Pei, J., Huang, Y., Ren, T., Guo, Y., Dang, J., Tao, Y., & Abd El-Aty, A. M. 2022. The antibacterial activity mode of action of plantaricin YKX against *Staphylococcus aureus*. *Molecules*. 27(13): 4280.
- Peraturan Daerah Istimewa Yogyakarta Nomor 7 Tahun 2016 tentang Baku Mutu Air Limbah.
- Peraturan Menteri Lingkungan Hidup dan Kehutanan Nomor 16 Tahun 2019 tentang Perubahan Kedua atas Peraturan Menteri Lingkungan Hidup Nomor 5 Tahun 2014 tentang Baku Mutu Air Limbah.
- Perez, R. H., Zendo, T., & Sonomoto, K. 2014. Novel bacteriocins from lactic acid bacteria (LAB): various structures and applications. *Microbial cell factories*. 13: 1-13.
- Ravishankar, S., & Juneja, V. K. 2014. Preservatives: traditional preservatives—sodium chloride. 131-136.
- Rotinsulu, M. D., Inal, H., Kalele, J. A. D., dan Tangkere, E. 2015. Pengamatan post-mortem kualitas kulit kambing di Kota Manado. *Jurnal LPPM Bidang Sains dan Teknologi*. 2(1): 82-88.
- Sallam, K. I., Abd-Elghany, S. M., Hussein, M. A., Imre, K., Morar, A., Morshdy, A. E., & Sayed-Ahmed, M. Z. 2020. Microbial decontamination of beef carcass surfaces by lactic acid, acetic acid, and trisodium phosphate sprays. *BioMed Research International*. 2020(1): 1-11.
- Samidurai, S., Khambhaty, Y., dan Alagamuthu, T. S. 2022. Bio-preservation of raw hides/skins: A review on greener substitute to conventional salt curing. *Environmental Science and Pollution Research*. 29(43): 64513-64535.
- Shahid, K., Srivastava, V., dan Sillanpää, M. 2021. Protein recovery as a resource from waste specifically via membrane technology—from waste to wonder. *Environmental Science and Pollution Research*. 28: 10262-10282.
- Sharma, N., dan Vuppu, S. 2023. The utilization of natural eco-benign sources for sustainable management to preserve hides and docking analysis of identified potential phytochemicals. *Environmental Monitoring and Assessment*. 195(11): 1365.
- Smits, S. H., Schmitt, L., & Beis, K. 2020. Self-immunity to antibacterial peptides by ABC transporters. *FEBS letters*. 594(23): 3920-3942.
- Souza, E. L. D., Silva, C. A. D., & Sousa, C. P. D. 2005. Bacteriocins: molecules of fundamental impact on the microbial ecology and potential food biopreservatives. *Brazilian Archives of Biology and Technology*. 48: 559-566.
- Sulaeman, S., Ahmad & Putro, Permono Adi & Nikmatin, S. 2023. An Overview of Osmosis Study in Living Cells and its Implication in

- Forwarding Osmosis for Water Treatment Application. *Biointerface Research in Applied Chemistry*. 13(2): 191.
- Sulistiani, S. 2017. Senyawa Antibakteri yang Diproduksi oleh *Lactobacillus plantarum* dan Aplikasinya untuk Pengawetan Bahan Ikan. *Jurnal Biologi Indonesia*. 13(2): 233-240
- Syaputri, Y., & Iwahashi, H. 2020. Characteristics of heterologous plantaricin from *Lactobacillus plantarum* and its future in food preservation. *Reviews in Agricultural Science*. 8: 124-137.
- Sydykova, G., Smagulova, Z., dan Moissejeva, Y. 2023 Development of Sheepskin Processing Technology Using Whey. *Fibres & Textiles in Eastern Europe*. 31(4): 53-65.
- Todorov, S., & Dicks, L. (2006). Medium components effecting bacteriocin production by two strains of *Lactobacillus plantarum* ST414BZ and ST664BZ isolated from boza. *Biologia*, 61(3), 269-274.
- Van Ba, H., Seo, H. W., Pil-Nam, S., Kim, Y. S., Park, B. Y., Moon, S. S., & Kim, J. H. 2018. The effects of pre-and post-slaughter spray application with organic acids on microbial population reductions on beef carcasses. *Meat Science*. 137: 16-23.
- Wytenbach, T., Liu, D., & Bowers, M. T. 2005. Hydration of small peptides. *International Journal of Mass Spectrometry*. 240(3): 221-232.
- Xin, M., D. Yuan., G. Liu., & F. Han. 2023. Effects of Various Components in Meat on Antibacterial Activities of Nisin and Carvacrol. *Journal of Chinese Institute of Food Science and Technology*. 23(7): 56-67.
- Yang, S. C., Lin, C. H., Sung, C. T., & Fang, J. Y. 2014. Antibacterial activities of bacteriocins: application in foods and pharmaceuticals. *Frontiers in microbiology*. 5: 241.
- Yousefi, H., Moosavi-Nasab, M., Soleimani-Zad, S., Golmakani, M. T., & Majdinasab, M. 2024. Antibacterial metabolites production by *Lactobacillus plantarum* PTCC 1896 in fermented whey and optimization of fermentation conditions for maximum production using RSM. *International Dairy Journal*. 152: 105882.
- Zhang, G., Deng, X., Guan, F., Bai, Z., Cao, L., & Mao, H. 2018. The effect of storage time in saline solution on the material properties of cortical bone tissue. *Clinical biomechanics*. 57: 56-66.