

DAFTAR PUSTAKA

- Abdulhusein, H. S., P. Caglayan., M. Birbir., & Y. Birbir. 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.
- Adams, M.R and M.O. Moss. 2008. *Food Microbiology*. 3rd ed. The Royal Society of Chemistry Publishing, UK.
- Adib., P. Ali dan I. Taufiq. 2018. Analisis kekayaan industri penyamakan kulit di kawasan industri Aceh Ladong, Aceh Besar, Aceh. *Jurnal Teknoligi Industri UII* 24(1): 01-08.
- Ahmed, W., K. A. Hamilton., A. Vieritz., D. Powell., A. Goonetilleke., M. T. Hamilton., and T. Gardner. 2017. Microbial risk from source-separated urine used as liquid fertilizer in sub-tropical Australia. *Microbial Risk Analysis*. 5(9): 53-64.
- Aini, M., S. Rahayuni., V. Mardina., Quranayati., dan N. Asiah. 2021. Bakteri *Limosilactobacillus spp* dan peranannya bagi kehidupan. *Jurnal Jeumpa*. 8(2): 614-624.
- Aly, A.E.A.E., A. M. Metwally., H. Atia., A. M. Hassanein, and H. M. Elshishtawy. 2023. The protective action of bacteriocins produced by selected strains of lactic acid bacteria against common pathogenic bacteria in Domiati cheese. *Egyptian Journal of Chemistry*. 66(8): 59-66.
- Amoozegar, M. A., and M. Siroosi., 2015. Hydrolytic enzymes in halophilic bacteria, properties and biotechnological potential. *Halophiles: Biodiversity and Sustainable Exploitation*. 355-378.
- Aulya, W., F. Fadhliani., dan V. Mardina. 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).
- Azam, M., R. Srivastava., and T, Ahmed., 2024. Isolation and Characterization of Bacteriocin Producing *LeviLimosilactobacillus Brevis* Strain ABRIINW-K from Buffalo Dung. *J. Pure Appl. Microbiol*, 18(19): 2137-2146.
- Banerji, R., A. Karkee., And S. D. Saroj., 2022. Bacteriocins against foodborne pathogens. *Applied Biochemistry and Microbiology*. 58(5):518-539.
- Bangar, S.P., S. Suri., M. Trif., and F. Ozogul. 2022. Organic acids production from lactic acid bacteria: A preservation approach. *Food bioscience*, 46(77): 101-115.

- Bhardwaj, A., S. Kumar., & D. Singh. 2023. Tannery effluent treatment and its environmental impact: a review of current practices and emerging technologies. *Water Quality Research Journal*. 58(2): 128-152.
- Bryan, C. A., P. G. Crandall., and S. C. Ricke. 2018. Antimicrobial resistance in foodborne pathogens. *Food and Feed Safety Systems and Analysis*. 16(35): 99-115.
- Caglayan, P., & M. E. R. A. Birbir,. 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): 1-11.
- Daba, G.M. and W. A. Elkhateeb. 2024. Ribosomally synthesized bacteriocins of lactic acid bacteria: Simplicity yet having wide potentials—A review. *International Journal of Biological Macromolecules*, 256(128): 300-325.
- Deleu, L.J., M. A. Lambrecht., V. D. Vondel., and J. A. Delcour. 2019. The impact of alkaline conditions on storage proteins of cereals and pseudo-cereals. *Current Opinion in Food Science*. 25(9): 98-103.
- Dhanjai., S. Ankita., Z. Huimin., C. Jiping., and S. M. Mugo. 2019. Water Analysis: Determination of Chemical Oxygen Demand. *Encyclopedia Analytical Science*.
- Dhiman, S., dan G. Mukherjee. 2021. Biotechnological approaches towards treatment and recycling of wastewater from tanneries and leather industry. *Microbial Ecology of Wastewater Treatment Plants*. 9(12): 249-268.
- Farage, M. A., W. Hood., E. Berardesca., & H. Maibach. 2018. Intrinsic and extrinsic factors affecting skin surface pH. *Current Problems in Dermatology*. 54(9): 33-47.
- Faridah. R., E. Taufik, dan I. I. Arief. 2017. Pertumbuhan dan produksi bakteriosin *Limosilactobacillus Limosi* *Limosilactobacillus fermentum* asal dangke pada media whey dangke. *Jurnal Agripet*. 17(2): 81-86.
- Fitriyanto, N. A., I. Azhar., R. A. Prasetyo., M. Z. Abidin., Y. Erwanto., N. Kurniawati., dan A. Pertiwinigrum. 2021. Survival ability of *Bacillus cereus* LS2B in the presence of tannery wastewater. *Earth and Environmental Science*. 667(1): 1-7.
- Fontoura, J., D. Ody., And M. Gutterres. 2016. Performance of antimicrobial agents for the preservation of chrome leather. *Journal of the American Leather Chemists Association*, 111(06): 221-229.
- Fu. X., Z. Mingxia., J. Su., S. Yuanyuan., Z. Rui., W. Kun., F. Xuehua., J. Danfeng., dan Z. Feng. 2019. Algal response based on in situ

- experiments of nutrients enrichment bioassays in lake chaohu (China). *Earth dan Environmental Science*. 304(8): 1-8.
- Gao, M., Y. Tian., X. Zhang., C. Zhang., and B. Peng., 2021. A substrate protection approach to applying the calcium ion for improving the proteolysis resistance of the collagen. *Applied Microbiology and Biotechnology*. 105(20): 9191-9209.
- Hasdar, M., dan Y. D. Rahmawati. 2017. Kajian potensi kulit domba asal Brebes sebagai bahan dasar produksi gelatin halal. *Jurnal Aplikasi Teknologi Pangan* 6(1): 1-6.
- Hashem, M. A., M. A. Momen., dan M. Hasan. 2018. Leaf paste aided goat skin preservation: Significant chloride reduction in tannery. *Journal of Environmental Chemical Engineering*, 6(4): 4423-4428.
- Hashem, M. A., M. A. Hasan., M. M. Islam., M. N. Arman., and M. H. R. Sheikh. 2021. Ficus hispida leaf paste for goatskin preservation: Pollution reduction in tannery wastewater. *Environmental Progress and Sustainable Energy*. 40(5): 1-9.
- Hishida, M., A. Kaneko., Y. Yamamura., and K. Saito., 2023. Contrasting changes in strongly and weakly bound hydration water of a protein upon denaturation. *The Journal of Physical Chemistry B*. 127(28): 6296-6305.
- Hossain M. K., M. M. Hossain., K. Fatema., S. Chakma., Y. Mahmud., T. Akter., S. Siddique., Al-Tamanna., and M. A. Razzaq. 2024. An eco-friendly approach to preserve goatskins using tamarindus indica leaf. *Journal Textile & Leather*. 7(4):893-914.
- Kalangi, S. J. 2013. Histofisiologi kulit. *Jurnal Biomedik: JBM*. 5(3): 12-20.
- Kanagaraj, J., A. T. Selvi., T. Senthilvelan., N. C. Babu., dan B. Chandrasekar. 2014. Evaluation of new bacteriocin as a potential short-term preservative for goat skin. *Am J Microbiol Res*, 2(3): 86-93.
- Kasmi, M., K. Djebali., M. Hamdi., And I. Trabelsi. 2018. Physical–chemical treatment process optimization for high polluting dairy effluents prior fermentation. *International Journal of Environmental Science and Technology*. 15(9): 779-790.
- Kaur, B., P. P. Balgi., B. Mittu., B. Kumar., and N. Garg., 2013. Biomedical applications of fermenticin HV6b isolated from *Limosilactobacillus* *LimosiLimosilactobacillus fermentum* HV6b MTCC10770. *Biomed Research International*. 2013(1): 1-8.
- Kavouras, P., E. Pantazopoulou., S. Varitis., G. Vourlias., K. Chrissafis., G. P. Dimitrakopulos., M. Mitrakas., A. I. Zouboulis., T. Karakostas., and A. Xenidis. 2015. Incineration of tannery sludge under oxic and

- anoxic conditions: study of chromium speciation. *Hazard Mater Journal*. 283: 672–679.
- Khyati, J., K. Pravir., and K. Rashmi. 2023. Bacteriocins as promising alternatives to conventional antimicrobial agents. *Research Journal of Biotechnology* 18(4): 133-140.
- Kingkaew. E., H. Konno., Y. Hosaka., W. Phongsopitanun., and S. Tanasupawat. 2023. Characterization of lactic acid bacteria from fermented fish (pla-paeng-daeng) and their cholesterol-lowering and immunomodulatory effects. *Microbes and environments*. 38(1): 22-44.
- Kumar, A., R. Ruhal., & R. Kataria., 2023. Bacteriocins of lactic acid bacteria as a potential antimicrobial peptide. *Biomimicry Materials and Applications*. 83-103.
- Kumar, V., P. Sheoran., A. Gupta., J. Yadav., and S. K. Tiwari., 2016. Antibacterial property of bacteriocin produced by *Limosilactobacillus plantarum* LD4 isolated from a fermented food. *Annals of Microbiology*. 66(9):1431-1440.
- Lakner, G., J. Lakner., G. Racz., and M. Kłos., 2020. Concentration dependence modeling of reverse osmosis. *Desalination and Water Treatment*, 192: 437-443.
- Lawal, A.S. and C. P. Odums., 2015. Tanning of different animal skins/hides and study of their properties for textile application. *British Journal of Applied Science & Technology*. 5(6):575-588.
- Limeneh, D.Y., T. Tesfaye., M. Ayele., N. M. Husien., H. Ferede., A. Haile., W.CMengie., A. Abuhay., G. G. Gelebo., M. Gibril., And F. Kong. 2022. A comprehensive review on utilization of slaughterhouse by-product: Current status and prospect. *Sustainability*, 14(11): 1-20.
- Liu, Y., S. L. Ong., K. Gedye., M. Truglio., & S. Prabakar. 2024. Behind the scenes: metagenomic analysis of bacterial communities in sustainable depilation of sheepskin. *Journal of Applied Microbiology*, 135(11): 244.
- Mari, A., D. N. Parisouli., and M. Krokida., 2024. Exploring osmotic dehydration for food preservation: methods, modelling, and modern applications. *Foods*. 13 (17): 2-23.
- Mira, N.P., R. Marshall., M. J. F. Pinheiro., R. Dieckmann., S. Al Dahouk., N. Skroza., K. Rudnicka., P. A. Lund., and D. Biase. 2024. On the potential role of naturally occurring carboxylic organic acids as anti-infective agents: opportunities and challenges. *International Journal of Infectious Diseases*. 140(7):119-123.
- Mohammed, S. A., B. Madhan., B. A. Demissie., B. Velappan., and A. T. Selvi. (2016). *Rumex abyssinicus* (mekmeko) Ethiopian plant

- material for preservation of goat skins: approach for cleaner leather manufacture. *Journal Of Cleaner Production*. 133(88): 1043-1052.
- Nová, I., K. Fraňa, and T. Lipiňki., 2021. Monitoring of the interaction of aluminum alloy and sodium chloride as the basis for ecological production of expanded aluminum. *Physics of Metals and Metallography*. 122(13): 1-13.
- Otieno, D.O. 2011. Biology of Prokaryotic Probiotics, In *Probiotics, Microbiology Monographs* (M.T. Liong, ed.) pp. 1- 25. Springer-Verlag. Berlin.
- Pawiroharsono dan Suyanto. 2008. Penerapan Enzim untuk Penyamakan Kulit Ramah Lingkungan. Pusat Teknologi Bioindustri Badan Pengkajian dan Penerapan Teknologi. Jakarta.
- Peraturan Menteri Lingkungan Hidup dan Kehutanan Republik Indonesia. No 16. Tahun 2019.
- Pintado, A., J. A. Ferreira., M. M. E. Pintado., A. M. P. Gomes., F. X. Malcata., dan M. A. Coimbra. 2020. Efficiency of purification methods on the recovery of exopolysaccharides from fermentation media. *Carbohydrate Polymers*. 231 (11): 1-8.
- Rastogi. V., D. C. Swift., B. Richard., and G. Martin. 2022. Femtosecond diffraction studies of the sodium chloride phase diagram under laser shock compression. *Journal of Applied Physics*. 8(7): 1-46.
- Sahu, P., S. C. Upadhyay., K. Liya., D. Gohil., S. V. Srinivasan., and A. Kumar. 2024. Waste management and salt recovery from solid residue of tannery common effluent treatment plant. *Indian Chemical Engineer*. 66(3): 221-233.
- Sallam, K. I., S. M. Abd-Elghany., M. A. Hussein., K. Imre., A. Morar., A. E. Morshdy., & M. Z. Sayed. 2020. Microbial decontamination of beef carcass surfaces by lactic acid, acetic acid, and trisodium phosphate sprays. *BioMed Research International*, 2020(1): 2324358.
- Samidurai, S., Y. Khambhaty., dan T. Alagamuthu. 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.
- Shafique, B., M. M. A. N. Ranjha., M. A. Murtaza., N. Walayat., A. Nawaz., W. Khalid., S. Mahmood., M. Nadeem., M. F. Manzoor., K. Ameer., and R. M. Aadil. 2022. Recent trends and applications of nanoencapsulated bacteriocins against microbes in food quality and safety. *Microorganisms*, 11(1): 70-85.
- Sharma, N., dan S. Vuppu. 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.
- Shashank Maurya, S. M., T. P. Tanwi Priya., A. T. Adarsh Tripathi., S. Jayanthi., & R. Vimala. 2015. Lactic acid bacteria: a potential tool in biological preservation of food.
- Soeparno. 1994. Ilmu dan Teknologi Daging. Gadjah Mada University Press. Yogyakarta.
- Tsiron, T. and P. S. Taoukis. 2019. Advance in conventional and nonthermal processing of fish for quality improvement and self life extension.
- Umu, Ö.C., M. Gueimonde., M. Oostindjer., K. V. Ovchinnikov., C. G. Reyes., S.Arbulu., P. E. Hernández., B. Martínez., D. B. Diep., and N. Salazar. 2020. Use of fecal slurry cultures to study in vitro effects of bacteriocins on the gut bacterial populations of infants. *Probiotics and Antimicrobial Proteins*. 12(18):1218-1225.
- Van Ba, H.,H. Seo., S. Pil-Nam., Y. S. Kim., B. Y. Park., S. S. Moon, S., and J. H. Kim. 2018. The effects of pre-and post-slaughter spray application with organic acids on microbial population reductions on beef carcasses. *Meat Scienc*. 137(9): 16-23.
- Velappan, B., S. Gnanasekaran., J. S. Victor., T. Alagumuthu., V. Nagarajan., V. K. Chinnaraj., and M. Chellappa., 2022. Characterization and application of dried neem leaf powder as a bio-additive for salt less animal skin preservation for tanneries. *Environmental Science and Pollution Research*. 29(9): 3763-3772.
- Wang, Y., Yu, P., Tu, Y., Wang, Y., J. H. Sun, J., H. Yi., and X. Han. 2024. Serine and threonine activate Ser/Thr kinase gene to increase the density of *Limosilactobacillus bulgaricus* sP2. 1 under salt stress. 209(3): 1-11.
- Wannun, P., S. Piwat., and R. Teanpaisan., 2016. Purification, characterization, and optimum conditions of *fermencin* SD11, a bacteriocin produced by human orally *Limosilactobacillus LimosiLimosilactobacillus fermentum* SD11. *Applied Biochemistry And Biotechnology*. 179(79): 572-582.
- Wayah, S.B. and K. Philip., 2018. Characterization, yield optimization, scale up and biopreservative potential of *fermencin* SA715, a novel bacteriocin from *Limosilactobacillus LimosiLimosilactobacillus fermentum* GA715 of goat milk origin. *Microbial Cell Factories*. 17(8): 1-18.
- Wibowo, R.L.M.S.A., dan A. Emiliana. 2016. Pengaruh pengawetan garam KCL pada kualitas kulit ikan buntal (*arothon reticularis*). *Jurnal Berkala Penelitian Teknologi Kulit, Sepatu, dan Produk Kulit*. 15(1): 25-34.

- Wu, J., Zhao, L., Liu, X., Chen, W. and Gu, H., 2017. Recent progress in cleaner preservation of hides and skins. *Journal of Cleaner Production*. 148(56): 158-173.
- Xu, J., X. Fan., Y. Hu., M. Liu., L. Du., Z. Wu., M. Tu., N. Ling., And D. Pan., 2024. *Fermencin* B2: A promising heat-stable cationic peptide for targeted inhibition of *Staphylococcus aureus*. *LWT*. 206(116): 1-12.
- Yap, P.G., Z. W. Lai., and T. S. Tan. 2022. Bacteriocins from lactic acid bacteria: Purification strategies and applications in food and medical industries: A review. *Beni-Suef University Journal of Basic and Applied Sciences*. 11(1): 1-18.
- Zhang, J.C., H. Liu., Y. H. Xie., and H. X. Zhang. 2015. Antimicrobial Characters of Bacteriocin Produced by *Streptococcus lactis* S5-3. CRC Press.
- Zhang, Q.Y., Z. B. Yan., Y. M. Meng., X. Y. Hong., G., Shao., J. J. Ma., X. R. Cheng., J. Liu., J. Kang., and C. Y. Fu., 2021. Antimicrobial peptides: mechanism of action, activity and clinical potential. *Military Medical Research*. 8(12):1-25.
- Zhao, Y., H. Kan., J. Zhao., H. Zhang., Q. Zhai, and W. Chen. 2019. *Limosilactobacillus Limosi* *Limosilactobacillus fermentum* and its potential immunomodulatory properties. *Journal of Functional Foods*. 56(2019): 21-32.