DAFTAR PUSTAKA

Abdullah, D., Poddar, S., Rai, R. P., Purwati, E., Dewi, N. P., & Pratama, Y. E. (2021). Molecular Identification of Lactic Acid Bacteria an Approach to Sustainable Food Security. *Journal of Public Health Research*, *10*, 23–29. https://doi.org/10.4081/jphr.2021.2508

Abubakar, Y., Muzaifa, M., Widayat, H. P., & Maulina, A. (2020). KARAKTERISTIK STARTER KERING DARI ISOLAT BAKTERI INDIGENOUS KAKAO ACEH Characteristics of Dry Starters of Indigenous Cocoa Aceh Bacteria Isolate Program Studi Teknologi Hasil Pertanian Universitas Syiah Kuala , Banda Aceh Mutu kakao sangat dipengaruhi ole. *Gontor AGROTECH Science Journal*, *5*(2), 89–109.

Afiati, F., Setiyoningrum, F., Priadi, G., & Qyasaty, V. (2022). Quantification of Lactic Acid as Secondary Metabolite of Lactic Acid Bacteria Isolated from Milk and Its Derivatived Products Preparation of Growth Media and. *Proceedings Ofthe 6th Food Ingredient Asia Conference (6th FiAC 2020) - Food Science, Nutrition and Health*, 132–136. https://doi.org/10.5220/0010546700003108

Ajibola, O. O., Thomas, R., & Bakare, B. F. (2023). Food Science and Human Wellness Selected fermented indigenous vegetables and fruits from Malaysia as potential sources of natural probiotics for improving gut health. *Food Science and Human Wellness*, *12*(5), 1493–1509. https://doi.org/10.1016/j.fshw.2023.02.011

Anafarida, O., & Badruzsaufari. (2020). ANALISIS FILOGENETIK MANGGA (MANGIFERA SPP.) BERDASARKAN GEN 5,8S RRNA. *Ziraa'ah*, *45*(2016), 120–126.

Anggraeni, L., Lubis, N., & Junaedi, E. C. (2021). Review: Pengaruh Konsentrasi Garam Terhadap Produk Fermentasi Sayuran. *Jurnal Sains Dan Kesehatan*, *3*(6), 891–899.

Azzahra, R. N., Putri, F. D., Wulandari, A. P., Lei, J., & Syaputri, Y. (2025). Review Article *Plantaricin* : Production Dynamics , Functional Applications , and Challenges in Food Biopreservation. *Journal of Food Processing and Preservation*, *2025*, 1–19. https://doi.org/10.1155/jfpp/6215738

Balouiri, M., Sadiki, M., & Ibnsouda, S. K. (2016). Methods for in vitro evaluating antimicrobial activity: A review. *Journal of Pharmaceutical Analysis*, *6*(2), 71–79. https://doi.org/10.1016/j.jpha.2015.11.005

Chang, L., Wang, D., Peng, C., Wang, Q., Xu, B., & Tong, Z. (2023). A method for high-concentration agarose gel preparation and its application in high-resolution separation of low-molecular-weight nucleic acids and proteins. *International Journal of Biological Macromolecules*, *231*, 123358.

https://doi.org/https://doi.org/10.1016/j.ijbiomac.2023.123358

Chao, S., Wu, R., Watanabe, K., & Tsai, Y. (2009). Diversity of Lactic Acid Bacteria in Suan-tsai and Fu-tsai , Traditional Fermented Mustard Products of Taiwan. *International Journal of Food Microbiology*, *135*(3), 203–210. https://doi.org/10.1016/j.ijfoodmicro.2009.07.032

Chen, P., Tan, W., Cheng, H., Chen, S., & Ye, X. (2025). The Protective Effect of Freezing Temperatures on Different Lactic Acid Bacteria and its Mechanism. *Lwt - Food Science and Technology*, *215*, 1–10. https://doi.org/10.1016/j.lwt.2024.117226

Choi, S., Baek, M., Chung, M. J., Lim, S., & Yi, H. (2021). Distribution of bacteriocin genes in the lineages of Lactiplantibacillus plantarum. *Scientific Reports*, 1–10. https://doi.org/10.1038/s41598-021-99683-1

Danilova, T. A., Adzhieva, A. A., Danilina, G. A., Polyakov, N. B., Soloviev, A. I., & Zhukhovitsky, V. G. (2019). Antimicrobial Activity of Supernatant of Lactobacillus plantarum against Pathogenic Microorganisms. *Immunology and Microbiology*, *167*(6), 751–754. https://doi.org/10.1007/s10517-019-04615-9

Derendinger, B., Vos, M. De, Nathavitharana, R. R., Dolby, T., & Simpson, J. A. (2018). Widespread use of incorrect PCR ramp rate negatively impacts multidrug-resistant tuberculosis diagnosis (MTBDR plus). *Scientific Reports*, 1–8. https://doi.org/10.1038/s41598-018-21458-y

Dimitrakopoulou, M., Panteleli, E., & Vantarakis, A. (2021). Improved PCR-DGGE analysis by emulsion-PCR for the determination of food geographical origin : A case study on Greek PDO " avgotaracho Mesolonghiou ." *Current Research in Food Science*, *4*, 746–751. https://doi.org/10.1016/j.crfs.2021.10.005

Efendi, M. R., Safitri, Y., & Rusdi, M. S. (2024). Isolation and Characterization of Bacteria from Bekasam-Fermented Fish (Rasbora sp) and Their Antibacterial Potential Materials and Methode. *Journal of Pharmacy and Science*, *8*(1), 29–35.

Ekblad, B., Kyriakou, P. K., Oppega, C., Nissen-meyer, J., Kaznessis, Y. N., & Kristiansen, P. E. (2016). Structure − Function Analysis of the Two-Peptide Bacteriocin *Plantaricin* EF. *Biochemistry*, *55*, 5106–5116. https://doi.org/10.1021/acs.biochem.6b00588

Flórez, A. B., & Mayo, B. (2018). Genome Analysis of Lactobacillus plantarum LL441 and Genetic Characterisation of the Locus for the Lantibiotic *Plantaricin* C. *Frontiers in Microbiology*, *9*, 1–11. https://doi.org/10.3389/fmicb.2018.01916

Gaspar, C., Donders, G. G., Oliveira, R. P. De, Queiroz, J. A., Tomaz, C., & Oliveira, J. M. De. (2018). Bacteriocin production of the probiotic

Lactobacillus acidophilus KS400. *AMB Express*, *8*(153), 1–8. https://doi.org/10.1186/s13568-018-0679-z

Ginneken, S. Van, Lories, B., & Steenackers, H. P. (2026). The probiotic Lactiplantibacillus plantarum ATCC10241 inhibits wound-associated pathogens through the secretion of organic acids. *Scientific Reports*, *16*(14201), 1–16.

Gisela, G., Leonardo, A. E., Lucia, P., Rodrigo, V., Eduard, G., & Angeles, C. M. (2014). Enhacement of the Viability of Lactobacillus plantarum during the Preservation and Storage Process Based on the Response Surface Methodology. *Food and Nutrition Sciences*, *5*, 1746–1755.

Gizachew, S., & Engidawork, E. (2024). Genomic Characterization of Lactiplantibacillus plantarum Strains : Potential Probiotics from Ethiopian Traditional Fermented Cottage Cheese. *Genes*, *15*(1389), 1–18.

Green, M. R., & Sambrook, J. (2020). Nested Polymerase Chain Reaction (PCR). *Cold Spring Harbor Protocol*, 175–179. https://doi.org/10.1101/pdb.prot095182

Gurur, G., Seda, G., Remzi, S., Ayşe, C., & Biray, N. (2024). A novel Lactiplantibacillus plantarum strain : probiotic properties and optimization of the growth conditions by response surface methodology. *World Journal of Microbiology and Biotechnology*, *40*(2), 1–18. https://doi.org/10.1007/s11274-023-03862-3

HASAN, A. (2018). PENENTUAN WAKTU PRODUKSI OPTIMUM BAKTERIOSIN ASAL Lactobacillus plantarum B1765 BERDASARKAN AKTIVITAS PENGHAMBATANNYA TERHADAP Staphylococcus aureusDETERMINATION OF OPTIMUM BACTERIOCIN PRODUCTION TIME FROM Lactobacillus plantarum B1765 BASED ON ANTIMICROB. *Unesa Journal of Chemistry*, *7*. https://doi.org/10.26740/ujc.v7n1.p%p

Hidayatulloh, A., Gumilar, J., & Harlia, E. (2019). POTENSI SENYAWA METABOLIT YANG DIHASILKAN Lactobacillus plantarum ATCC 8014 SEBAGAI BAHAN BIOPRESERVASI DAN ANTI BAKTERI PADA BAHAN PANGAN ASAL HEWAN. *Jurnal Ilmu Dan Teknologi Peternakan*, *7*(2), 1–6.

Hockett, K. L., & Baltrus, D. A. (2017). Use of the Soft-agar Overlay Technique to Screen for Bacterially Produced Inhibitory Compounds 2 . Separation and Concentration of High Molecular Weight Bactericidal Compounds by Polyethylene Glycol (PEG) Precipitation. *Journal of Visualized Experiments*, *119*, 1–5. https://doi.org/10.3791/55064

Intan, K., Diani, A., Suci, A., Nurul, R., & Barat, J. (2021). Aktivitas Antibakteri Kayu Manis (Cinnamomun burmanii) terhadap Pertumbuhan Staphylococcus aureus. *Jurnal Kesehatan Perintis*, *8*(2), 121–127.

Iodice, A. (2026). *The Role of Quorum Sensing Mechanism in the Functional Properties of Lactic Acid Bacteria*.

Issaoui, K. El, Khay, E. O., Abrini, J., Zinebi, S., Amajoud, N., Senhaji, N. S., & Abriouel, H. (2021). Molecular identification and antibiotic resistance of bacteriocinogenic lactic acid bacteria isolated from table olives. *Archives of Microbiology*, *203*(2), 597–607. https://doi.org/10.1007/s00203-020-02053-0

Jaiswal, A. N., & Vagga, A. (2022). Cryopreservation : A Review Article. *Cureus*, *14*(11), 1–6. https://doi.org/10.7759/cureus.31564

Jungare, K. A., Radha, R., & Sreekanth, D. (2022). Cryopreservation of biological samples – A short review. *Proceedings*, *51*, 1637–1641. https://doi.org/https://doi.org/10.1016/j.matpr.2021.11.203

Kareem, R. A., & Razavi, S. H. (2020). *Plantaricin* Bacteriocins : As Safe Alternative Antimicrobial Peptides in Food Preservation — A Review. *Journal of Food Safety*, *40*, 1–12. https://doi.org/10.1111/jfs.12735

Khorshidian, N., Khanniri, E., Koushki, M. R., & Sohrabvandi, S. (2022). An Overview of Antimicrobial Activity of Lysozyme and Its Functionality in Cheese. *Frontiers in Nutrition*, *9*, 1–12. https://doi.org/10.3389/fnut.2022.833618

Kim, D., Jeong, D., Kim, H., Kang, I., Chon, J., Song, K., & Seo, K. (2016). Antimicrobial Activity of Kefir against Various Food Pathogens and Spoilage Bacteria. *Korean Journal Food Science of Animal*, *36*(6), 787–790.

Kurniati, D. E., Catur, R., Hardiyanti, R., & Rachmawati, D. (2025). Optimization of PCR Primers for Detection of Extended-Spectrum Beta-Lactamase Targeting CTX-M and TEM Genes. *Journal of Biological Science*, *7*(1), 326–333. https://doi.org/10.5614/3bio.2025.7.1.5

Kusuma, A. B. (2022). Optimalisasi Ekstraksi DNA Dan PCR Untuk Identifikasi Molekuler Pada 4 Jenis Karang Lunak Berbeda. *Jurnal Enggano*, *7*(2), 175–182.

Leite, J. A., Tulini, F. L., Reis-Teixeira, F. B. dos, Rabinovitch, L., Chaves, J. Q., Rosa, N. G., Cabral, H., & De Martinis, E. C. P. (2016). Bacteriocin-like inhibitory substances (BLIS) produced by Bacillus cereus: Preliminary characterization and application of partially purified extract containing BLIS for inhibiting Listeria monocytogenes in pineapple pulp. *Lwt - Food Science and Technology*, *72*, 261–266. https://doi.org/10.1016/j.lwt.2016.04.058

Li, Y., Pinones, M., Breeland, A., & Jiang, P. (2024). Single-round QuikChange PCR for engineering multiple site-directed mutations in plasmid DNA. *Analytical Biochemistry*, *694*, 115621. https://doi.org/https://doi.org/10.1016/j.ab.2024.115621

Liao, Y.-C., Cheng, Y.-C., Lee, C.-C., Hsu, H.-Y., Cheng, Y.-F., Lin, S.-H., Lin, J.-S., Koichi, W., & Young, S.-L. (2026). Assessment of the Safety and

Potential Probiotic Properties of Lactiplantibacillus plantarum LP28 Based on Whole Genome Sequencing and Phenotypic and Oral Toxicity Analyses. *Microorganisms*, *14*(843), 1–24.

Liu, G., Nie, R., Liu, Y., Li, X., Duan, J., Hao, X., & Shan, Y. (2022). *Bacillus subtilis BS-15 Effectively Improves Plantaricin Production and the Regulatory Biosynthesis in Lactiplantibacillus plantarum RX-8*. *12*(January), 1–13. https://doi.org/10.3389/fmicb.2021.772546

Liu, Y., Liu, S., Li, Z., Huo, C., Wang, G., Zeng, X., & Xin, B. (2025). LuxR-Type Regulator RRP 6 Positively Regulates the Biosynthesis of *Plantaricin* EF and Improves Its Production in Lactiplantibacillus plantarum 163. *Microorganisms*, *13*(2780), 1–19.

Lorenzo, J. M., Munekata, P. E., Dominguez, R., Pateiro, M., Saraiva, J. A., & Franco, D. (2018). Main Groups of Microorganisms of Relevance for Food Safety and Stability : General Aspects and Overall Description. In *Innovative Technologies for Food Preservation*. Elsevier Inc. https://doi.org/10.1016/B978-0-12-811031-7.00003-0

Lucena-aguilar, G., Sanchez-Lopez, A. M., Barberan-Aceituno, C., Carrillo-Avila, J. A., Lopez-Guerrero, J. A., & Aguilar-Quesada, R. (2016). DNA Source Selection for Downstream Applications Based on DNA Quality Indicators Analysis. *Biopreservation and Biobanking*, *14*(4), 264–270. https://doi.org/10.1089/bio.2015.0064

Madhi, K. S., Khudor, M. H., & Othman, R. M. (2023). Cloning and Expression of Synthetic *Plantaricin* F Gene. *Journal Pure Applied Microbiology*, *17*(1), 289–297. https://doi.org/10.22207/JPAM.17.1.18

Mangalisu, A., Armayanti, A. K., & Wulandari, Z. (2022). Antimicrobial Activity of Lactobacillus plantarum in Fermented Chicken Egg towards Pathogenic Bacteria Antimicrobial Activity of Lactobacillus plantarum in Fermented Chicken Egg towards Pathogenic Bacteria. *International Conference on Sustainable Animal Resource and Environment*, *1020*. https://doi.org/10.1088/1755-1315/1020/1/012023

Mangunwardoyo, W., Salamah, A., Sukara, E., & Dinoto, A. (2016). Diversity and distribution of culturable lactic acid bacterial species in Indonesian Sayur Asin. *Iranian Journal of Microbiology*, *8*(4), 274–281.

Manzoor, A., & Tayyeb, A. (2019). Microbial Pathogenesis Functional probiotic attributes and gene encoding plantaracin among variant Lactobacillus Plantarum strains. *Microbial Pthogenesis*, *131*, 22–32. https://doi.org/10.1016/j.micpath.2019.03.016

Marliana, N., Kurniati, I., Patria, C., Dermawan, A., Mulia, S., Laboratorium, T., & Poltekkes, M. (2022). UJI KEPEKAAN ANTIBIOTIKA Staphylococcus aureus DAN Escherichia coli PADA MEDIA TAHU PENGGANTI MUELLER HINTON AGAR. *Jurnal Riset Kesehatan*, *14*(2), 319–324.

Mcbrayer, D. N., Cameron, D., Tal-gan, Y., & Cameron, C. (2020). *Biomolecular Chemistry quorum sensing modulators in Gram-positive bacteria*. https://doi.org/10.1039/d0ob01421d

Md Sidek, N. L., Halim, M., Tan, J. S., Abbasiliasi, S., Mustafa, S., & Ariff, A. B. (2018). Stability of bacteriocin-like inhibitory substance (BLIS) produced by pediococcus acidilactici kp10 at different extreme conditions. *BioMed Research International*, *2018*. https://doi.org/10.1155/2018/5973484

Menezes, L. A. A., Sardavo, M. L. S., Duarte, R. T. D., Mazzon, R. R., Neviani, E., Gatti, M., & Lindner, J. D. D. (2020). Sourdough Bacterial Dynamics Revealed by Metagenomic Analysis in Brazil. *Journal International Food Microbiology*, *85*, 1–30. https://doi.org/10.1016/j.fm.2019.103302

Meng, F., Liu, Y., Nie, T., Tang, C., Lyu, F., Bie, X., Lu, Y., Zhao, M., & Lu, Z. (2022). *Plantaricin* A , Derived from Lactiplantibacillus plantarum , Reduces the Intrinsic Resistance of Gram-Negative Bacteria to Hydrophobic Antibiotics. *Applied and Environmental Microbiology*, *88*(10), 1–16.

Mokoena, M. P. (2017). Lactic Acid Bacteria and Their Bacteriocins: Classification, Biosynthesis and Applications against Uropathogens: A Mini-Review. *Molecules*, *22*(8), 1–13. https://doi.org/10.3390/molecules22081255

Monafathia, Mubari, N. R., & Widanarni. (2018). OPTIMIZATION OF BACTERIOCIN PRODUCTION FROM Lactobacillus plantarum IN05 BY USING RESPONSE SURFACE METHODOLOGY. *Pakistan Journal of Biotechnology*, *15*(3), 785–791.

Morya, V., Hayden, A., Zhou, L., Cole, D., & Halvorsen, K. (2026). A 3D printed mini-gel electrophoresis system for rapid and inexpensive DNA nanoswitch biosensing. *BioRxiv*, 1–16.

Muhammad, A., & Andriyanto, E. (2026). Analisis Komparatif Metode Difusi Sumuran dan Difusi Cakram dalam Evaluasi Aktivitas Antibakteri Ciprofloxacin terhadap Escherichia coli ATCC 35218 Copyright © 2026 Afivudien Muhammad , Eko Andriyanto . dilakukan oleh Sri dewi Haryati pada tahun 2017 deng. *Berkala Ilmiah Kedokteran Dan Kesehatan Masyarakat*, *4*(1), 19–25. https://doi.org/10.20885/bikkm.vol4.iss1.art3

Najmiyati, E., & Akhadi, D. H. (2012). VIABILITAS DAN KINERJA KONSORSIUM MIKROBA PENDEGRADASI HIDROKARBON SETELAH PENYIMPANAN DALAM PENDINGIN DAN PENYIMPANAN BEKU. *Ecolab*, *6*(2), 61–104.

Nguyen, H. H., Park, J., Park, S. J., Lee, C.-S., Hwang, S., Shin, Y., Ha, T. H., & Kim, M. (2018). Long-Term Stability and Integrity of Plasmid-Based DNA Data Storage. *Polymers*, *10*(28), 1–10. https://doi.org/10.3390/polym10010028

Park, M., Kim, M., Park, T., & Soo, C. (2021). Cryobiology Effect of

Cryopreservation on The Bacterial Community Structure of Filamentous Cyanobacteria , Trichormus variabilis. *Cryobiology*, *98*(July 2020), 87–95. https://doi.org/10.1016/j.cryobiol.2020.12.003

Parlindungan, E., Lugli, G. A., Ventura, M., Sinderen, D. Van, & Mahony, J. (2021). Lactic Acid Bacteria Diversity and Characterization of Probiotic Candidates in Fermented Meats. *Foods*, *10*(1519), 1–23.

Petkova, M., Gotcheva, V., Dimova, M., Bartkiene, E., & Angelov, A. (2022). Screening of Lactiplantibacillus plantarum Strains from Sourdoughs for Biosuppression of Pseudomonas syringae pv . syringae and Botrytis cinerea in Table Grapes. *Microorganisms*, *10*(2094), 1–20.

Prakash, O., Nimonkar, Y., & Desai, D. (2020). A Recent Overview of Microbes and Microbiome Preservation. *Indian Journal of Microbiology*, *60*(3), 297–309. https://doi.org/10.1007/s12088-020-00880-9

Pratiwi, A. K., Rahmawati, & Kurniatuhadi, R. (2025). FASE PERTUMBUHAN ISOLAT BAKTERI ASAM LAKTAT (BAL) FERMENTASI REBUNG BAMBU APUS (Gigantochloa apus). *Jurnal Probiont*, *14*(2), 57–60.

Putri, A. L. O., & Kusdiyantini, E. (2018). Isolasi dan identifikasi bakteri asam laktat dari pangan fermentasi berbasis ikan (Inasua) yang diperjualbelikan di Maluku-Indonesia from Maluku-Indonesia. *Jurnal Biologi Tropika*, *1*(2), 6–12.

Putriani, K., & Sugara, B. (2024). Aktivitas Antibakteri Ekstrak Daun Ketapang (Terminalia Catappa L .) Terhadap Staphylococcus Aureus. *INNOVATIVE: Journal Of Social Science Research Volume*, *4*(1), 4178–4187.

Rahardhian, M. R. R., & Rahmawati, F. N. I. (2025). Aktivitas Antibakteri Sediaan Face Scrub Ekstrak Etanol Daun Amis-amisan (Houttuynia cordata Thunb) terhadap Bakteri Staphylococcus aureus. *Cermin Dunia Kedokteran*, *52*(3), 147–154. https://doi.org/10.55175/cdk.v52i3.1218

Rahayu, E. S., Suroto, D. A., Mariyatun, M., Pramesi, P. C., Rahayu, E. S., Suroto, D. A., Mariyatun, M., & Pramesi, P. C. (2024). Complete genome sequence of Indonesian probiotic strain. *Microbiology Resource Announcements*, *13*(7), 1–4.

Rahmah, V. A., Tanuwiria, U. H., & Islami, R. Z. (2025). KONSENTRASI DAN KEMURNIAN DNA HASIL EKSTRAKSI RUMPUT ODOT, JAGUNG HIBRIDA, PADI IR64 DAN PADI CIHERANG. *Agrinimal Jurnal Ilmu Ternak Dan Tanaman*, *13*(2), 119–126.

Rahman, M., Sazili, A. Q., Ahmad, S. A., Khalil, K. A., Ismail-fitry, M. R., & Sarker, S. K. (2025). Inhibitory Efficacy , Production Dynamics , and Characterization of Postbiotics of Lactic Acid Bacteria. *BMC Microbiology*, *25*(485), 1–20.

Rajput, H., Meena, K. K., & Panwa, N. L. (2025). A Comprehensive Review of

Preservation Techniques for Probiotic Lactic Acid Bacteria : Focus on Cryopreservation and Lyophilization. *Journal of Advances in Biology & Biotechnology*, *28*(7), 1309–1325.

Reitermayer, D., Kafka, T. A., Lenz, C. A., & Vogel, R. F. (2018). Interrelation between Tween and the membrane properties and high pressure tolerance of Lactobacillus plantarum. *BMC Microbiology*, *18*(72), 1–14.

Samal, K. C., Sahoo, J. P., Behera, L., & Dash, T. (2021). Understanding the BLAST (Basic Local Alignment Search Tool) Program and a Step-by-step Guide for its use in Life Science Research. *Bhartiya Krishi Anushandhan Patrika*, *36*(1), 55–61. https://doi.org/10.18805/BKAP283

Sandra, S., Rustiati, E. L., Srihanto, E. A., Wahyuningsih, S., Priyambodo, P., Pratiwi, D. N., Febriansyah, M., Lestari, S. W., Winarno, W., Thesalonika, N., Mayda, M., Ashari, Andriyani, Y., Afandi, A., Lidya, A., Permatasari, N., & Suhada, S. (2025). UJI KEBERHASILAN AMPLIFIKASI GEN N-METHYLTRANSFERASE PADA KOPI ROBUSTA DI PERKEBUNAN KOPI RAKYAT LEMBAH GUNUNG BETUNG, BOGOREJO, LAMPUNG. *Biogenerasi Jurnal Pendidikan Biologi*, *10*(2), 1021–1026.

Santosa, E. A., & Retnaningrum, E. (2020). ASAM LAKTAT DARI LIMBAH PRODUKSI TEMPE PHENOTYPIC CHARACTERIZATION AND ANTIMICROBIA ACTIVITY OF LACTIC. *Jurnal Sains Dasar*, *9*(1), 1–10.

Sari, Z. A. A., & Febriawan, R. (2021). Perbedaan Hasil Uji Aktivitas Antibakteri Metode Well Diffusion dan Kirby bauer terhadap Pertumbuhan Bakteri. *Jurnal Medika Hutama*, *2*(4), 1156–1162.

Schottroff, F., Fröhling, A., Zunabovic-pichler, M., & Krottenthaler, A. (2018). Sublethal Injury and Viable but Non-culturable (VBNC) State in Microorganisms During Preservation of Food and Biological Materials by Non-thermal Processes. *Frontiers in Microbiology*, *9*(2773), 1–19. https://doi.org/10.3389/fmicb.2018.02773

Septiani, V., Choirunnisa, A., & Syam, A. K. (2017). UJI AKTIVITAS ANTIMIKROBA EKSTRAK ETANOL DAUN KARUK (Piper sarmentosum Roxb.) TERHADAP Streptococcus mutans DAN Candida albicans. *Kartika Jurnal Ilmiah Farmasi*, *5*(1), 7–14. https://doi.org/10.26874/kjif.v5i1.87

Shi, C., Chen, Y., Li, C., Al-asmari, F., Cui, H., & Lin, L. (2024). Potential Application of Lactiplantibacillus plantarum in Food Bio-preservation – A Comprehensive Review with a Focus on the Antibacterial and Anti-Virulence Effects on Foodborne Pathogens Potential Application of Lactiplantibacillus plantarum in Food Antibacterial and Anti-Virulence Effects on Foodborne. *Food Reviews International*, *40*(9), 2993–3019. https://doi.org/10.1080/87559129.2024.2317283

Shuhong, L. I., Chenjian, L. I. U., Beibei, R. E. N., Qiangkun, L. I., Yiyong, L. U. O., En, Y., & Xiaoran, L. I. (2019). Comparison of Antibacterial Activity and

Major Organic Acids in Fermentation Broths of Different Lactobacillus plantarum Strains. *Basic Research*, *40*(05), 8–16. https://doi.org/10.7506/spkx1002-6630-20171028-338

Soenarno, M. S., Arief, I. I., Sumantri, C., Taufik, E., & Nuraida, L. (2020). Karakterisasi Plantarisin IIA-1A5 sebagai Antimikroba dan Evaluasi Aktivitas Sediaan Kering Beku Terenkapsulasi. *Jurnal Aplikasi Teknologi Pangan*, *9*(1), 30–37.

Sogandi, Mustopa, A. Z., & Artika, I. M. (2019). The Characterization of Bacteriocins Produced by Lactobacillus plantarum Strains Isolated from Traditional Fermented Foods in Indonesia and The Detection of its *Plantaricin*-encoding Genes. *Indonesian Journal of Biotechnology*, *24*(1), 1–7. https://doi.org/10.22146/ijbiotech.42582

Sowersby, D. S., & Lewis, L. K. (2024). SURE gel electrophoresis: A method for improved detection and purification of dilute nucleic acid samples. *Analytical Biochemistry*, *684*, 115373. https://doi.org/https://doi.org/10.1016/j.ab.2023.115373

Sugata, M., Sunardi, J., Victor, H., & Tan, T. J. (2025). Evaluation of *Plantaricin* Gene Expression in Lactiplantibacillus plantarum Strain SU-KC1a. *Jurnal Sains Dan Teknologi*, *9*(1), 25–31.

Sulistiani. (2017). Senyawa Antibakteri yang Diproduksi oleh Lactobacillus plantarum dan Aplikasinya untuk Pengawetan Bahan Ikan. *Jurnal Biologi Indonesia*, *13*(2), 233–240.

Sumual, A., Fatimawali, F., & Tallei, T. E. (2019). UJI ANTIBAKTERI DARI BAKTERI ASAM LAKTAT HASIL FERMENTASI SELADA ROMAIN (Lactuca sativa var. longifolia Lam.). *Pharmacon*, *8*(2), 306–314. https://doi.org/10.35799/pha.8.2019.29296

Suryani, E. M., Jatmiko, Y. D., & Mustafa, I. (2023). Detection of *Plantaricin*-Encoding Gene and Its Partial Purification in Lactobacillus plantarum BP102. *Jurnal Biodjati*, *8*(2), 233–247. https://doi.org/10.15575/biodjati.v8i2.27851

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. https://doi.org/https://dx.doi.org/10.7831/ras.8.0_124

Syrokou, M. K., Stasinopoulou, P., Paramithiotis, S., Bosnea, L., Mataragas, M., Papadopoulos, G. K., Skandamis, P. N., & Drosinos, E. H. (2021). The Effect of Incubation Temperature , Substrate and Initial pH Value on *Plantaricin* Activity and the Relative Transcription of *pln* Genes of Six Sourdough Derived Lactiplantibacillus plantarum Strains. *Fermentation*, *7*(320), 1–20.

Tajabadi, N., Mardan, M., Saari, N., Mustafa, S., Bahreini, R., Yazid, M., & Manap, A. (2013). Identification of Lactobacillus plantarum, Lactobacillus pentosus

and Lactobacillus fermentum from Honey Stomach of Honeybee. *Brazilian Journal of Microbiology*, *44*(3), 717–722.

Toualbia, M., Bouras, A. E. D., Koiche, M., & Kerkoud, M. (2018). Isolation , identification and characterization of Lactobacillus plantarum from camel milk and its antagonist effect against diarrheal bacteria. *Emirates Journal of Food and Agriculture*, *30*(4), 283–287. https://doi.org/10.9755/ejfa.2018.v30.i4.1663

Triani, N. (2020). ISOLASI DNA TANAMAN JERUK DENGAN MENGGUNAKAN METODE CTAB (CETYL TRIMETHYL AMMONIUM BROMIDE). *G-Tech Jurnal Teknologi Terapan*, *3*(2), 221–226.

Vaysi, N., Amir, S., Hadian, H., Mahaleh, S., Zadeh, E., Nami, Y., & Panahi, B. (2025). Machine Learning Based Association Analysis of *Plantaricin* Gene Occurrence and Diversity with Antimicrobial Potential in Lactiplantibacillus plantarum Strains Isolated from Iranian Traditional Dairy Products. *Applied Food Research*, *5*(2), 101396. https://doi.org/10.1016/j.afres.2025.101396

Wang, J., Wu, P., Dhital, S., Yu, A., & Chen, X. D. (2025). Impact of Freezing and Freeze Drying on Lactobacillus rhamnosus GG Survival : Mechanisms of Cell Damage and the Role of Pre-Freezing Conditions and Cryoprotectants. *Foods*, *14*(1817), 1–15.

Webber, D. M., & Wallace, M. A. (2022). Stop Waiting for Tomorrow : Disk Diffusion Performed on Early Growth Is an Accurate Method for Antimicrobial Susceptibility Testing with Reduced Turnaround Time. *Journal of Clinical Microbiology and Biochemical Technology*, *60*(5), 1–10.

Weckx, S., Meulen, R. Van Der, Allemeersch, J., Huys, G., Vandamme, P., Hummelen, P. Van, & Vuyst, L. De. (2010). Community Dynamics of Bacteria in Sourdough Fermentations as Revealed by Their Metatranscriptome. *Applied and Environmental Microbiology*, *76*(16), 5402–5408. https://doi.org/10.1128/AEM.00570-10

Xu, Z., Wang, J., Zheng, W., Zhao, S., Yang, Q., Yu, D., & Zhu, Y. (2023). Original article Antibacterial activity and mechanism of a novel bacteriocin produced by Lactiplantibacillus plantarum against Escherichia coli and Staphylococcus aureus. *International Journal of Food Science and Technology*, *58*, 181–193. https://doi.org/10.1111/ijfs.16186

Yadav, M. K., & Tiwari, S. K. (2023). Methods for Determination of Antimicrobial Activity of Bacteriocins of Lactic Acid Bacteria. *Microbiology*, *92*(6), 745–765. https://doi.org/10.1134/S0026261723600520

Yilmaz, B., Bangar, S. P., Echegaray, N., Suri, S., Tomasevic, I., Lorenzo, J. M., Melekoglu, E., & Ozogul, F. (2022). The Impacts of Lactiplantibacillus plantarum on the Functional Properties of Fermented Foods : A Review of Current Knowledge. *Microorganisms*, *10*(826), 1–18.

Yousef, F. E. A., Hussein, M. A., Taha, R. M., Mwaheb, M. A., & Hussein, M. A. (2025). Therapeutic potential of Lactobacillus plantarum HBUAS68394 in mitigating DSS- induced colitis. *Egyptian Journal of Botany*, *65*(4), 261–275. https://doi.org/10.21608/ejbo.2025.363646.3211

Yulianti, S., Islami, R. Z., Mansyur, & Pramudyawardani, E. F. (2024). Analisis konsentrasi dan kemurnian Deoxyribo Nucleic Acid (DNA) dari rumput pakan ternak. *AGRIVET Jurnal Ilmu Pertanian Dan Peternakan*, *12*(02), 167–179.

Yunita, R., Rosadi, F. N., Jamsari, & Azizah, A. (2023). Optimization of Annealing Temperature for Amplification of The Exon One Region of The HPPD gene in HA1 Accession Sunflowers. *IOP Conference Series: Earth and Environmental Science*, 1–7. https://doi.org/10.1088/1755-1315/1160/1/012002

Zare, D., Aryaee, H., Mirdamadi, S., & Shirkhan, F. (2024). The Benefits and Applications of Lactobacillus plantarum in Food and Health : A Narrative Review. *Iran Journal Public Health*, *53*(10), 2201–2213.

Zhang, P. Q., Tan, P. C., Gao, Y. M., Zhang, X. J., Xie, Y., & Zheng, D. N. (2022). The Effect of Glycerol as A Cryoprotective Agent in The Cryopreservation of Adipose Tissue. *Stem Cell Research & Therapy*, *13*(152), 1–13. https://doi.org/10.1186/s13287-022-02817-z

Zheng, J., Wittouck, S., Salvetti, E., Franz, C. M. A. P., Harris, H. M. B., Mattarelli, P., Toole, W. O., Pot, B., Vandamme, P., Walter, J., Watanabe, K., Wuyts, S., Felis, G. E., Ganzle, M. G., & Lebeer, S. (2020). A Taxonomic Note on The Genus Lactobacillus : Description of 23 Novel Genera , Emended Description of The Genus Lactobacillus Beijerinck 1901 , and Union of Lactobacillaceae and Leuconostocaceae. *International Journal of Systematic and Evalutionary Microbiology*, *70*, 2782–2858. https://doi.org/10.1099/ijsem.0.004107