DAFTAR PUSTAKA

1. Murray CJ, Ikuta KS, Sharara F, Swetschinski L, Robles Aguilar G, Gray A, et al. Global burden of bacterial antimicrobial resistance in 2019: a systematic analysis. The Lancet. 2022 Feb 12;399(10325):629–55. doi:10.1016/S0140-6736(21)02724-0 PubMed PMID: 35065702.
2. Yadav MK, Tiwari SK. Methods for Determination of Antimicrobial Activity of Bacteriocins of Lactic Acid Bacteria. Microbiology (Russian Federation). 2023;92(6):745–65. doi:10.1134/S0026261723600520
3. Yilmaz B, Bangar SP, Echegaray N, Suri S, Tomasevic I, Lorenzo JM, et al. The Impacts of Lactiplantibacillus plantarum on the Functional Properties of Fermented Foods: A Review of Current Knowledge. Microorganisms. 2022;10(4):1–18. doi:10.3390/microorganisms10040826
4. Chen X, Bai H, Mo W, Zheng X, Chen H, Yin Y, et al. Lactic Acid Bacteria Bacteriocins: Safe and Effective Antimicrobial Agents. Int J Mol Sci. 2025;26(9):1–28. doi:10.3390/ijms26094124 PubMed PMID: 40362364.
5. Mokoena MP. Lactic acid bacteria and their bacteriocins: Classification, biosynthesis and applications against uropathogens: A mini-review. Molecules. 2017;22(8). doi:10.3390/molecules22081255 PubMed PMID: 28933759.
6. Prema P, Ali D, Nguyen VH, Pradeep BV, Veeramanikandan V, Daglia M, et al. A Response Surface Methodological Approach for Large-Scale Production of Antibacterials from Lactiplantibacillus plantarum with Potential Utility against Foodborne and Orthopedic Infections. Antibiotics. 2024;13(5):1–16. doi:10.3390/antibiotics13050437
7. Lin TH, Pan TM. Optimization of antimicrobial substances produced from Lactobacillus paracasei subsp. paracasei NTU 101 (DSM 28047) and Lactobacillus plantarum NTU 102 by response surface methodology. J Food Sci Technol. 2015;52(9):6010–6. doi:10.1007/s13197-014-1703-1
8. Gökmen GG, Sarıyıldız S, Cholakov R, Nalbantsoy A, Baler B, Aslan E, et al. A novel Lactiplantibacillus plantarum strain: probiotic properties and optimization of the growth conditions by response surface methodology. World J Microbiol Biotechnol. 2024;40(2). doi:10.1007/s11274-023-03862-3 PubMed PMID: 38194015.
9. Rocchetti MT, Russo P, Capozzi V, Drider D, Spano G, Fiocco D. Bioprospecting antimicrobials from lactiplantibacillus plantarum: Key factors underlying its probiotic action. Int J Mol Sci. 2021;22(21). doi:10.3390/ijms222112076
10. Pandey KR, Joshi C, Vakil B V. Statistical optimization for enhanced yields of probiotic Bacillus coagulans and its phage resistant mutants followed by kinetic modelling of the process. Springerplus. 2016;5(1). doi:10.1186/s40064-016-3325-8
11. Bezerra MA, Santelli RE, Oliveira EP, Villar LS, Escaleira LA. Response surface methodology (RSM) as a tool for optimization in analytical chemistry. Talanta. 2008;76(5):965–77. doi:10.1016/j.talanta.2008.05.019 PubMed PMID: 18761143.
12. Ferreira SLC, Bruns RE, Ferreira HS, Matos GD, David JM, Brandão GC, et al. Box-Behnken design: An alternative for the optimization of analytical methods. Anal Chim Acta. 2007;597(2):179–86. doi:10.1016/j.aca.2007.07.011 PubMed PMID: 17683728.
13. Zheng J, Wittouck S, Salvetti E, Franz CMAP, Harris HMB, Mattarelli P, et al. 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. Int J Syst Evol Microbiol. 2020;70(4):2782–858. doi:10.1099/ijsem.0.004107 PubMed PMID: 32293557.
14. Chaudhary A, Saharan B singh. Probiotic Properties of Lactobacillus plantarum. J Pure Appl Microbiol. 2019;13(2):933–48. doi:10.22207/JPAM.13.2.30
15. Garcia-Gonzalez N, Battista N, Prete R, Corsetti A. Health-promoting role of lactiplantibacillus plantarum isolated from fermented foods. Microorganisms. 2021;9(2):1–30. doi:10.3390/microorganisms9020349

16. Soltani S, Hammami R, Cotter PD, Rebuffat S, Said L Ben, Gaudreau H, et al. Bacteriocins as a new generation of antimicrobials: Toxicity aspects and regulations. FEMS Microbiol Rev. 2021;45(1):1–24. doi:10.1093/femsre/fuaa039 PubMed PMID: 32876664.
17. da Silva Sabo S, Vitolo M, González JMD, Oliveira RP de S. Overview of Lactobacillus plantarum as a promising bacteriocin producer among lactic acid bacteria. Food Research International. 2014;64:527–36. doi:10.1016/j.foodres.2014.07.041
18. Choi S, Baek M gyung, Chung MJ, Lim S, Yi H. Distribution of bacteriocin genes in the lineages of Lactiplantibacillus plantarum. Sci Rep. 2021;11(1):1–10. doi:10.1038/s41598-021-99683-1 PubMed PMID: 34625657.
19. Diep DB, Straume D, Kjos M, Torres C, Nes IF. An overview of the mosaic bacteriocin pln loci from Lactobacillus plantarum. Peptides (NY). 2009;30(8):1562–74. doi:10.1016/j.peptides.2009.05.014 PubMed PMID: 19465075.
20. Li Y, Yu S, Weng P, Wu Z, Liu Y. Purification and antimicrobial mechanism of a novel bacteriocin produced by Lactiplantibacillus plantarum FB-2. Lwt. 2023;185(July). doi:10.1016/j.lwt.2023.115123
21. Golneshin A, Gor MC, Williamson N, Vezina B, Van TTH, May BK, et al. Discovery and characterisation of circular bacteriocin plantacyclin B21AG from Lactiplantibacillus plantarum B21. Heliyon. 2020;6(8). doi:10.1016/j.heliyon.2020.e04715
22. Tayler S, May E. A comparison of methods for the measurement of microbial activity on stone. Studies in Conservation. 1995;40(3):163–70. doi:10.1179/sic.1995.40.3.163
23. Todorov SD, de Melo Franco BDG, Tagg JR. Bacteriocins of Gram-positive bacteria having activity spectra extending beyond closely-related species. Benef Microbes. 2019;10(3):315–28. doi:10.3920/BM2018.0126 PubMed PMID: 30773930.
24. Kaper JB, Nataro JP, Mobley HLT. Pathogenic Escherichia coli. Nature Reviews Microbiology. 2004. p. 123–40. doi:10.1038/nrmicro818 PubMed PMID: 15040260.
25. Tenaillon O, Skurnik D, Picard B, Denamur E. The population genetics of commensal Escherichia coli. Nature Reviews Microbiology. 2010. p. 207–17. doi:10.1038/nrmicro2298 PubMed PMID: 20157339.
26. Riley LW. Extraintestinal Foodborne Pathogens FO11CH12_Riley ARjats.cls [Internet]. Vol. 28. 2025;28:25. doi:10.1146/annurev-food-032519
27. Pitout JDD, DeVinney R. Escherichia coli ST131: A multidrug-resistant clone primed for global domination. F1000Research. Faculty of 1000 Ltd; 2017. doi:10.12688/f1000research.10609.1
28. Pingkan W, Kaunang J, Sihombing M. Staphyloccocus Aureus [Internet]. Available from: https://www.researchgate.net/publication/366466283
29. Murtius WS. Praktek Dasar Mikrobiologi Universitas Andalas Padang, Sumatera Barat. 2018.
30. Balouiri M, Sadiki M, Ibnsouda SK. Methods for in vitro evaluating antimicrobial activity: A review. J Pharm Anal. 2016;6(2):71–9. doi:10.1016/j.jpha.2015.11.005 PubMed PMID: 29403965.
31. Hockett KL, Baltrus DA. Use of the soft-agar overlay technique to screen for bacterially produced inhibitory compounds. Journal of Visualized Experiments. 2017;2017(119):1–5. doi:10.3791/55064 PubMed PMID: 28117830.
32. Wiegand I, Hilpert K, Hancock REW. Agar and broth dilution methods to determine the minimal inhibitory concentration (MIC) of antimicrobial substances. Nat Protoc. 2008;3(2):163–75. doi:10.1038/nprot.2007.521 PubMed PMID: 18274517.
33. Trawczyńska I, Kwiatkowska-Marks S. Application of Response Surface Methodology for Optimization of the Biosorption Process from Copper-Containing Wastewater. Molecules. 2023 Jan 1;28(1). doi:10.3390/molecules28010444 PubMed PMID: 36615635.
34. Djimtoingar SS, Derkyi NSA, Kuranchie FA, Yankyera JK. A review of response surface methodology for biogas process optimization. Cogent Engineering. Cogent OA; 2022. doi:10.1080/23311916.2022.2115283
35. Wyantuti S, Fadhilatunnisa B, Fauzia RP, Jia Q, Rahmani AA, Irkham, et al. Response surface methodology box-behnken design to optimise the hydrothermal synthesis of

gadolinium nanoparticles. Chinese Journal of Analytical Chemistry. 2023 Oct 1;51(10). doi:10.1016/j.cjac.2023.100316

36. Podder S, Mukherjee S. Response Surface Methodology (Rsm) As A Tool In Pharmaceutical Formulation Development. Asian Journal of Pharmaceutical and Clinical Research. Innovare Academics Sciences Pvt. Ltd; 2024. p. 18–25. doi:10.22159/ajpcr.2024v17i11.52149
37. Szpisják-Gulyás N, Al-Tayawi AN, Horváth ZH, László Z, Kertész S, Hodúr C. Methods for experimental design, central composite design and the Box–Behnken design, to optimise operational parameters: A review. Acta Alimentaria. Akademiai Kiado ZRt.; 2023. p. 521–37. doi:10.1556/066.2023.00235
38. Avval MN, Hosseininezhad M, Pahlavanlo A, Ghoddusi HB. Creating Optimal Conditions for Bacteriocin Production from Lactiplantibacillus plantarum Isolated from Traditionally Fermented Fruits and Vegetables. Journal of Research and Innovation in Food Science and Technology. 2023;11(4):351–66. doi:10.22101/JRIFST.2022.331749.1332
39. Thuy TTD, Lu HF, Bregente CJB, Huang FCA, Tu PC, Kao CY. Characterization of the broad-spectrum antibacterial activity of bacteriocin-like inhibitory substance-producing probiotics isolated from fermented foods. BMC Microbiol. 2024;24(1):1–15. doi:10.1186/s12866-024-03245-0 PubMed PMID: 38468236.
40. Geletu US, Usmael MA, Ibrahim AM. Isolation, Identification, and Susceptibility Profile of E. coli, Salmonella, and S. aureus in Dairy Farm and Their Public Health Implication in Central Ethiopia. Vet Med Int. 2022;2022. doi:10.1155/2022/1887977 PubMed PMID: 35198138.
41. Cui G, Pan C, Xu P, Li Y, Wang L. Purification and characterization of a novel bacteriocin produced by Enterococcus faecalis CG-9 from human saliva. Vol. 2818. 2020;2818. doi:10.1080/13102818.2020.1830714
42. Yuliana T, Pratiwi AR, Zahratunnisa S, Rialita T, Cahyana Y, Harlina PW, et al. Purification and Partial Characterization of a Bacteriocin Produced by Lactobacillus pentosus 124-2 Isolated from Dadih. Applied Sciences (Switzerland). 2023;13(7). doi:10.3390/app13074277
43. Wayah SB, Philip K. Pentocin MQ1: A novel, broad-spectrum, pore-forming bacteriocin from Lactobacillus pentosus CS2 with quorum sensing regulatory mechanism and biopreservative potential. Front Microbiol. 2018;9(MAR):1–13. doi:10.3389/fmicb.2018.00564
44. Yadav MK, Singh B, Tiwari SK. Comparative Analysis of Inhibition-Based and Indicator-Independent Colorimetric Assay for Screening of Bacteriocin-Producing Lactic Acid Bacteria. 2019;687–95.
45. Abanoz HS, Kunduhoglu B. Antimicrobial Activity of a Bacteriocin Produced by Enterococcus faecalis KT11 against Some Pathogens and Antibiotic-Resistant Bacteria. Vol. 38. 2018;38(5):1064–79.
46. Madigan M, Blender K, Buckley D. Edition Microorganisms. Sixteenth Edition. 2021;1129.
47. Barbosa J, Albano H, Silva B, Almeida MH, Nogueira T, Teixeira P. Characterization of a lactiplantibacillus plantarum r23 isolated from arugula by whole-genome sequencing and its bacteriocin production ability. Int J Environ Res Public Health. 2021;18(11). doi:10.3390/ijerph18115515 PubMed PMID: 34063896.
48. Liu G, Nie R, Liu Y, Li X, Duan J, Hao X, et al. Bacillus subtilis BS-15 Effectively Improves Plantaricin Production and the Regulatory Biosynthesis in Lactiplantibacillus plantarum RX-8. Front Microbiol. 2022;12(January):1–13. doi:10.3389/fmicb.2021.772546
49. Venugopal A, Steinberg D, Moyal O, Yonassi S, Glaicher N, Gitelman E, et al. Computational Analysis of Morphological Changes in Lactiplantibacillus plantarum Under Acidic Stress. Microorganisms. 2025;13(3). doi:10.3390/microorganisms13030647
50. Yang E, Fan L, Yan J, Jiang Y, Doucette C, Fillmore S, et al. Influence of culture media, pH and temperature on growth and bacteriocin production of bacteriocinogenic lactic acid bacteria. AMB Express. 2018;8(1). doi:10.1186/s13568-018-0536-0 PubMed PMID: 29368243.

51. Abbasiliasi S, Tan JS, Tengku Ibrahim TA, Bashokouh F, Ramakrishnan NR, Mustafa S, et al. Fermentation factors influencing the production of bacteriocins by lactic acid bacteria: A review. RSC Adv. 2017;7(47):29395–420. doi:10.1039/c6ra24579j
52. O'Connor PM, Kuniyoshi TM, Oliveira RP, Hill C, Ross RP, Cotter PD. Antimicrobials for food and feed; a bacteriocin perspective. Curr Opin Biotechnol. 2020;61:160–7. doi:10.1016/j.copbio.2019.12.023 PubMed PMID: 31968296.
53. Bezerra MA, Santelli RE, Oliveira EP, Villar LS, Escaleira LA. Response surface methodology (RSM) as a tool for optimization in analytical chemistry. Talanta. 2008;76(5):965–77. doi:10.1016/j.talanta.2008.05.019 PubMed PMID: 18761143.
54. Granato D, de Araújo Calado VÔM, Jarvis B. Observations on the use of statistical methods in Food Science and Technology. Food Research International. 2014;55:137–49. doi:10.1016/j.foodres.2013.10.024
55. Muliadi FNA, Halmi MIE, Wahid SBA, Gani SSA, Zaidan UH, Mahmud K, et al. Biostimulation of microbial communities from Malaysian agricultural soil for detoxification of metanil yellow dye; a response surface methodological approach. Sustainability (Switzerland). 2021;13(1):1–15. doi:10.3390/su13010138
56. Guo X, Bai X, Zheng Z, Qiu Z, Qiao X, Qiao Y. Optimization of Culture Conditions for Bacteriocin Production by Pediococcus Acidilactici CCFM18 and Characterization of Its Biological Properties. Fermentation. 2025;11(8):1–14. doi:10.3390/fermentation11080470
57. da Silva Sabo S, Vitolo M, González JMD, Oliveira RP de S. Overview of Lactobacillus plantarum as a promising bacteriocin producer among lactic acid bacteria. Food Research International. 2014;64:527–36. doi:10.1016/j.foodres.2014.07.041
58. Shanmugam JS, Doss SS. Innovations in process engineering approaches for enhanced bacteriocin production. J Ind Microbiol Biotechnol. 2026;53(October 2025). doi:10.1093/jimb/kuag010 PubMed PMID: 41837519.
59. Pribadi R, Odilia S, Mangunwardoyo W, Sahlan M, Malik A, Indonesia U, et al. Malaysian Journal of Microbiology media by using response surface methodology. Vol. 16. 2020;16(5):364–74.
60. Muliadi FNA, Halmi MIE, Wahid SBA, Gani SSA, Zaidan UH, Mahmud K, et al. Biostimulation of microbial communities from Malaysian agricultural soil for detoxification of metanil yellow dye; a response surface methodological approach. Sustainability (Switzerland). 2021;13(1):1–15. doi:10.3390/su13010138
61. Kleanthous C, Armitage JP. The bacterial cell envelope. Philosophical Transactions of the Royal Society B: Biological Sciences. 2015;370(1679):1–16. doi:10.1098/rstb.2015.0019 PubMed PMID: 26370932.