DAFTAR PUSTAKA

Ahmed, N., Karobari, M. I., Yousaf, A., Mohamed, R. N., Arshad, S., Basheer, S. N., Peeran, S. W., Noorani, T. Y., Assiry, A. A., Alharbi, A. S., & Yean, C. Y. (2022). The antimicrobial efficacy against selective oral microbes, antioxidant activity and preliminary phytochemical screening of Zingiber officinale. *Infection and Drug Resistance*, *15*, 2773–2785. https://doi.org/10.2147/IDR.S364175

Azara, R., & Saidi, I. A. (2020). *Buku ajar mikrobiologi pangan*. UMSIDA Press, 1–128. https://doi.org/10.21070/2020/978-623-6833-64-3

Budiansyah, A., Haroen, U., Syafwan, S., & Kurniawan, K. (2023). Antioxidant and antibacterial activities of the rhizome extract of Curcuma zedoaria extracted using some organic solvents. *Journal of Advanced Veterinary and Animal Research*, *10*(3), 347–360. https://doi.org/10.5455/javar.2023.j687

Choironi, N. A., Sunarto, S., Utami, E. D., & Fareza, M. S. (2023). GC-MS analysis and antibacterial activity of essential oils of five Syzygium species leaves. *ALCHEMY Jurnal Penelitian Kimia*, *19*(1), Article 1. https://doi.org/10.20961/alchemy.19.1.67401.61-67

Darwesh, O. M., Eweys, A. S., Zhao, Y.-S., & Matter, I. A. (2023). Application of environmental-safe fermentation with Saccharomyces cerevisiae for increasing the cinnamon biological activities. *Bioresources and Bioprocessing*, *10*(1), 12. https://doi.org/10.1186/s40643-023-00632-9

Davis, W. W., & Stout, T. R. (1971). Disc plate method of microbiological antibiotic assay. *Applied Microbiology*, *22*(4), 659–665. https://doi.org/10.1128/am.22.4.659-665.1971

Don, S. M., Rambli, M. M., & Nore, B. F. (2024). Developing herbal-based beverage fermentation using saccharomyces cerevisiae: the physico-chemical properties. *ASEAN Journal on Science and Technology for Development*, *40*(2). https://doi.org/10.61931/2224-9028.1524

Don, S. M., Rambli, M., & Nore, B. F. (2024). Antioxidant content following fermentation of lemongrass for herbal beverage development. *Journal of Food Science and Technology*, *61*(12), 1–14. https://doi.org/10.1007/s13197-024-06005-0

Don, S. M., Rambli, M., & Nore, B. F. (2024). Fermented beverages of natural herbs: Cymbopogon citratus, Zingiber officinale, Moringa oleifera, Mentha, and Curcuma longa. *Biocatalysis and Agricultural Biotechnology*, *58*, 103201. https://doi.org/10.1016/j.bcab.2024.103201

Estiasih, T., Maligan, J. M., Witoyo, J. E., Mu'alim, A. A. H., Ahmadi, K., Mahatmanto, T., & Zubaidah, E. (2025). Indonesian traditional herbal drinks: Diversity, processing, and health benefits. *Journal of Ethnic Foods*, *12*(1), 7. https://doi.org/10.1186/s42779-025-00267-5

Eweys, A. S., Zhao, Y. S., & Darwesh, O. M. (2022). Improving the antioxidant and anticancer potential of *Cinnamomum cassia* via fermentation with *Lactobacillus plantarum*. *Biotechnology Reports*, *36*, e00768. https://doi.org/10.1016/j.btre.2022.e00768

Fakruddin, M., hossain, M. N., & Ahmed, M. M. (2017). Antimicrobial and antioxidant activities of Saccharomyces cerevisiae IFST062013, a potential probiotic. *BMC Complementary and Alternative Medicine*, *17*, 64. https://doi.org/10.1186/s12906-017-1591-9

Falasifah, R., Dewanti, B. S. D., Zubaidah, E., & Sucipto, S. (2025). The influence of sugar concentration and fermentation time of green tea kombucha (Camellia sinensis) on its halal and safety aspects. *Advances in Food Science, Sustainable Agriculture and Agroindustrial Engineering (AFSSAAE)*, *8*(1), 33–42. https://doi.org/10.21776/ub.afssaae.2025.008.01.4

Fariyanto, A. F. I., Putra, I. D. P., Pambudiarto, B. A., & Setiawan, O. (2025). Evaluasi efektivitas penghambatan fermentasi pada minuman legen. *Jurnal Integrasi Proses Dan Lingkungan*, *2*(1), Article 1.

Florenika, N., Ilmi, A. N., & Pujiyanti, A. S. (2025). Mini review: Pengaruh variasi gula dan waktu fermentasi dalam optimalisasi proses fermentasi kombucha. *Bioprospek: Jurnal Ilmiah Biologi*, *17*(2), 40–51. https://doi.org/10.30872/5yez5565

Foxcroft, N., Masaka, E., Oosthuizen, J. (2024). Prevalence trends of foodborne pathogens *Bacillus cereus*, non-STEC *Escherichia coli* and *Staphylococcus aureus* in ready-to-eat foods sourced from restaurants, cafés, catering and takeaway food premises. *International Journal of Environmental Research and Public Health, 21*, 14-26. https://doi.org/10.3390/ijerph21111426

Gulcin, İ. (2025). Antioxidants: A comprehensive review. *Archives of Toxicology*, *99*(5), 1893–1997. https://doi.org/10.1007/s00204-025-03997-2

Harfiani, E., Puspita, R., & Prabarini, I. R. S. (2025). Herbal medicine usage during the COVID-19 pandemic in Indonesia: Trends and determinants. *The Scientific World Journal*, *2025*(1), 1639500. https://doi.org/10.1155/tswj/1639500

Hossain, T. J. (2024). Methods for screening and evaluation of antimicrobial activity: A review of protocols, advantages, and limitations. *European Journal of Microbiology & Immunology*, *14*(2), 97–115. https://doi.org/10.1556/1886.2024.00035

Kementerian Kesehatan Republik Indonesia. (2020). *Farmakope Indonesia Edisi VI.* Kementerian Kesehatan Republik Indonesia.

Kustyawati, M. E. (2018). *Saccharomyces cerevisiae: Metabolit dan Agensia Modifikasi Pangan.* Graha Ilmu. http://grahailmu.id/

Li, M., Chen, X., Deng, J., Ouyang, D., Wang, D., Liang, Y., Chen, Y., & Sun, Y. (2020). Effect of thermal processing on free and bound phenolic compound and antioxidant activities of hawthorn. *Food Chem, 332*. https://doi.org/10.1016/j.foodchem.2020.127429

Maharramova, G., Taslimi, P., Sujayev, A., Farzaliyev, V., Durmaz, L., & Gulçin, İ. (2018). Synthesis, characterization, antioxidant, antidiabetic, anticholinergic, and antiepileptic properties of novel N-substituted tetrahydropyrimidines based on phenylthiourea. *Journal of Biochemical*

and Molecular Toxicology, *32*(12), e22221. https://doi.org/10.1002/jbt.22221

Marvie, I., Fithriyani, D., Wahyuningtyas, A., Talitha, Z. A., Rafifa, A., & Ardiansyah, R. (2025). Effect of Saccharomyces cerevisiae concentration on chemical properties, antibacterial, and antioxidants activities of cascara vinegar. *IOP Conference Series: Earth and Environmental Science*, *1485*(1), 012011. https://doi.org/10.1088/1755-1315/1485/1/012011

Mu, Z., Yang, Y., Xia, Y., Zhang, H., Ni, B., Ni, L., Wang, G., Xiong, Z., Zhang, H., Song, X., & Ai, L. (2023). Enhancement of the aromatic alcohols and health properties of Chinese rice wine by using a potentially probiotic *Saccharomyces cerevisiae* BR14. *LWT*, *181*, 114748. https://doi.org/10.1016/j.lwt.2023.114748

Muliasari, H., Hanifa, N. I., Hajrin, W., Andanalusia, M., & Hidayati, A. R. (2023). Determination of antioxidants by DPPH scavenging activity of ashitaba herb (Angelica keiskei) methanol extract. *Jurnal Biologi Tropis*, *23*(4), 482–490. https://doi.org/10.29303/jbt.v23i4.5686

Ocaño-Higuera, V. M., López-Avilés, G., Almendariz-Tapia, F. J., Del-Toro-Sánchez, C. L., Tapia-Hernández, J. A., Garzón-García, A. M., Dublán-García, O., Vergel-Alfonso, A. A., González-Aguilar, G. A., Valdez-Hurtado, S., Barrales-Cureño, H. J., Ramos-Enríquez, J. R., & Canizales-Rodríguez, D. F. (2025). The effect of fermentation with saccharomyces cerevisiae on the release of bound phenolic compounds from wheat bran and its effect on antioxidant capacity. *Processes*, *13*(11). https://doi.org/10.3390/pr13113506

Opalek, M., Wloch-Salamon, D., & Smug, B. J. (2025). Assessing methods for estimating microbial lag phase duration: A comparative analysis using *Saccharomyces cerevisiae* empirical and simulated data. *FEMS Yeast Research*, *25*, foaf033. https://doi.org/10.1093/femsyr/foaf033

Öztaşkın, N., Kaya, R., Maraş, A., Şahin, E., Gülcin, İ., & Göksu, S. (2019). Synthesis and characterization of novel bromophenols: Determination of their anticholinergic, antidiabetic and antioxidant activities. *Bioorganic Chemistry*, *87*, 91–102. https://doi.org/10.1016/j.bioorg.2019.03.010

Ozturk, T., Ávila-Gálvez, M. Á., Mercier, S., Vallejo, F., Bred, A., Fraisse, D., Morand, C., Pelvan, E., Monfoulet, L.-E., & González-Sarrías, A. (2024). Impact of lactic acid bacteria fermentation on (poly)phenolic profile and in vitro antioxidant and anti-inflammatory properties of herbal infusions. *Antioxidants*, *13*(5), 562. https://doi.org/10.3390/antiox13050562

Pakadang, S. R. (2025). Buku Ajar Metode Pengujian Mikrobiologi Untuk Obat Herbal; Metode Difusi Agar, Pour Plate Agar, Dilusi Cair. Nas Media Pustaka.

Paredes, J. L., Escudero-Gilete, M. L., & Vicario, I. M. (2022). A new functional kefir fermented beverage obtained from fruit and vegetable juice: Development and characterization. *LWT*, *154*, 112728. https://doi.org/10.1016/j.lwt.2021.112728

Pariury, J. A., Juan Paul Christian Herman, Tiffany Rebecca, Elvina Veronica, & I Gusti Kamasan Nyoman Arijana. (2021). Potensi kulit jeruk bali (Citrus

maxima merr) sebagai antibakteri propionibacterium acne penyebab jerawat. *Hang Tuah Medical Journal*, *19*(1), 119–131. https://doi.org/10.30649/htmj.v19i1.65

Puspita, S. D., Yulianti, R., & Mozartha, M. (2019). The effectiveness of white turmeric (Curcuma zedoaria) extracts as root canal irrigation alternative material on Streptococcus viridans. *Journal of Physics: Conference Series*, *1246*(1), 012040. https://doi.org/10.1088/1742-6596/1246/1/012040

Sadeer, N. Bi., Montesano, D., Albrizio, S., Zengin, G., & Mahomoodally, M. F. (2020). The versatility of antioxidant assays in food science and safety—chemistry, applications, strengths, and limitations. *Antioxidants*, *9*(8), 709. https://doi.org/10.3390/antiox9080709

Sajeena, Thesni, B., Shereen, F., Swalah, H., V. (2025). Evaluation and pharmacological activities of Curcuma zedoaria: A review. *Journal of Pharmacognosy and Phytochemistry*, *14*(5), 485–487. https://doi.org/10.22271/phyto.2025.v14.i5f.15611

Sarıtaş, S., Portocarrero, A. C. M., Miranda López, J. M., Lombardo, M., Koch, W., Raposo, A., El-Seedi, H. R., de Brito Alves, J. L., Esatbeyoglu, T., Karav, S., & Witkowska, A. M. (2024). The impact of fermentation on the antioxidant activity of food products. *Molecules*, *29*(16), Article 16. https://doi.org/10.3390/molecules29163941

Sasanti, A. D., Widanarni, W., Sukenda, S., Wahjuningrum, D., Yuhana, M., & Setiawati, M. (2025). Phytochemical screening and antibacterial activity test of Curcuma zedoaria, C. aeruginosa, and C. mangga extracts against Aeromonas hydrophila. *Biodiversitas Journal of Biological Diversity*, *26*(4). https://doi.org/10.13057/biodiv/d260409

Sayuti, K., & Yenrina, R. (2015). Antioksidan Alami dan Sintetik. Andalas University Press.

Shabira, A. P., Tjahjoleksono, A., & Lestari, Y. (2022). Endophytic actinobacteria of Eleutherine palmifolia as antioxidant producer. *Biodiversitas Journal of Biological Diversity*, *23*(8). https://doi.org/10.13057/biodiv/d230844

Stroia, N., & Lodin, A. (2025). Modeling of must fermentation processes for enabling CO_2 rate-based control. *Mathematics*, *13*(10). https://doi.org/10.3390/math13101653

Urcan, A. C., Criste, A. D., Dezmirean, D. S., Bobiș, O., Bonta, V., Burtescu, R. F., Olah, N.-K., Cornea-Cipcigan, M., & Mărgăoan, R. (2024). Enhancing antioxidant and antimicrobial activities in bee-collected pollen through solid-state fermentation: A comparative analysis of bioactive compounds. *Antioxidants*, *13*(3), 292. https://doi.org/10.3390/antiox13030292

Valmai, V. R., Sunarto, & Choironi, N. A. (2019). Aktivitas antibakteri ekstrak etil asetat kulit manggis (Garcinia mangostana L.) terhadap Staphylococcus epidermidis. *Acta Pharm Indo.* https://doi.org/10.5281/zenodo.3703140

Vaou, N., Stavropulou, E., Voidarou, C., Tsigalo, C., Bezirtzoglou, E. (2021). Towards advancees in medicinal plant antimicrobial activity: A review study on challenges and future perspectives. *Microorganisms, 9*(10). https://doi.org/10.3390/microorganisms9102041

Wahyuni, W., & Karim, S. F. (2020). Uji aktivitas antibakteri ekstrak etanol daun kacapiring (Gardenia jasminoides ellis) terhadap bakteri Streptococcus mutans. *Jurnal Sains Dan Kesehatan*, *2*(4), 399–404. https://doi.org/10.25026/jsk.v2i4.191

Walker, G. M., & Stewart, G. G. (2016). Saccharomyces cerevisiae in the production of fermented beverages. *Beverages*, *2*(4), Article 4. https://doi.org/10.3390/beverages2040030

Wang, L., Liu, Y., Luo, Y., Huang, K., & Wu, Z. (2018). Quickly screening for potential α-glucosidase inhibitors from guava leaves tea by bioaffinity ultrafiltration coupled with HPLC-ESI-TOF/MS Method. *Journal of Agricultural and Food Chemistry*, *66*(6), 1576–1582. https://doi.org/10.1021/acs.jafc.7b05280

Watanabe, D., & Hashimoto, W. (2023). Adaptation of yeast Saccharomyces cerevisiae to grape-skin environment. *Scientific Reports*, *13*(1), 9279. https://doi.org/10.1038/s41598-023-35734-z

Yao, P., ZHao, S., Cheng, L., & Zhao, C. (2024). Effects of different fermentation methods on chemical composition, antioxidant activity, and enzymatic inhibition of fermented fig juice. *CyTA: Journal of Food,22*(1). https://doi.org/10.1080/19476337.2024.2326299

Zhang, C., Chen, X., Guo, X., Guo, R., Zhu, L., Qiu, X., Yu, X., Chai, J., Gu, C., & Feng, Z. (2023). A novel strategy for improving the antioxidant, iridoid, and flavor properties of Noni (Morinda citrifolia L.) fruit juice by lactic acid bacteria fermentation. *LWT*, *184*, 115075. https://doi.org/10.1016/j.lwt.2023.115075

Zhang, Y., Chang, C. H., Fan, X. H., Zuo, T. T., & Jiao, Z. (2024). Effect of the initial glucose concentration on the performance of ice wine fermentation of Vidal grape juice. *Scientific Reports*, *14*(1), 31341. https://doi.org/10.1038/s41598-024-82721-z

Zhao, Y.-S., Eweys, A. S., Zhang, J.-Y., Zhu, Y., Bai, J., Darwesh, O. M., Zhang, H.-B., & Xiao, X. (2021). Fermentation affects the antioxidant activity of plant-based food material through the release and production of bioactive components. *Antioxidants*, *10*(12), 2004. https://doi.org/10.3390/antiox10122004

Zubaidah, E., Mahendra P. Z., Sujuti, H., Putri, R. A., & Ardyati, T. (2024). Physicochemical characteristics of kombucha based on various concentration of white turmeric (Curcuma zedoaria (Berg.) Roscoe). *Biocatalysis and Agricultural Biotechnology*, *56*, 102998. https://doi.org/10.1016/j.bcab.2023.102998

Zouine, N., Ghachtouli, N. E., Abed, S. E., Koraichi, S. I. (2024). A comprehensive review on medicinal plant extracts as antibacterial agents: Factors, mechanism insights and future prospects. *Scientific African, 26*. https://doi.org/10.1016/j.sciaf.2024.e02395