

## DAFTAR PUSTAKA

- Adetoro, A. O., Opara, U. L., & Fawole, O. A. (2020). Effect of blanching on enzyme inactivation, physicochemical attributes and antioxidant capacity of hot-air dried pomegranate (*Punica granatum* L.) arils (cv. Wonderful). *Processes*, *9*(1), 25. <https://doi.org/10.3390/pr9010025>
- 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>
- Akarchariya, N., Sirilun, S., Julsrigival, J., & Chansakaowa, S. (2017). Chemical profiling and antimicrobial activity of essential oil from *Curcuma aeruginosa* Roxb., *Curcuma glans* K. Larsen & J. Mood and *Curcuma* cf. *Xanthorrhiza* Roxb. Collected in Thailand. *Asian Pacific Journal of Tropical Biomedicine*, *7*(10), 881–885. <https://doi.org/10.1016/j.apjtb.2017.09.009>
- Bennour, N., Mighri, H., Eljani, H., Zammouri, T., & Akrouit, A. (2020). Effect of solvent evaporation method on phenolic compounds and the antioxidant activity of *Moringa oleifera* cultivated in Southern Tunisia. *South African Journal of Botany*, *129*, 181–190.
- Chang, Y.-H., Chang, K.-S., Chen, C.-Y., Hsu, C.-L., Chang, T.-C., & Jang, H.-D. (2018). Enhancement of the efficiency of bioethanol production by *Saccharomyces cerevisiae* via gradually batch-wise and fed-batch increasing the glucose concentration. *Fermentation*, *4*(2), 45. <https://doi.org/10.3390/fermentation4020045>
- Chaudhary, P., Janmeda, P., Docea, A. O., Yeskaliyeva, B., Abdull Razis, A. F., Modu, B., Calina, D., & Sharifi-Rad, J. (2023). Oxidative stress, free radicals and antioxidants: potential crosstalk in the pathophysiology of human diseases. *Frontiers in Chemistry*, *11*, 1158198. <https://doi.org/10.3389/fchem.2023.1158198>
- Chen, A., Qu, T., Smith, J. R., Li, J., Du, G., & Chen, J. (2024). Osmotic tolerance in *Saccharomyces cerevisiae*: Implications for food and bioethanol industries. *Food Bioscience*, *60*, 104451. <https://doi.org/10.1016/j.fbio.2024.104451>
- Christodoulou, M. C., Orellana Palacios, J. C., Hesami, G., Jafarzadeh, S., Lorenzo, J. M., Domínguez, R., Moreno, A., & Hadidi, M. (2022). Spectrophotometric methods for measurement of antioxidant activity in food and pharmaceuticals. *Antioxidants*, *11*(11), 2213. <https://doi.org/10.3390/antiox11112213>

- 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. I. Factors influencing variability and error. *Applied Microbiology*, *22*(4), 659–665. <https://doi.org/10.1128/am.22.4.659-665.1971>
- De Figueiredo, C. M., Hock, D. H., Trichez, D., Magalhães, M. D. L. B., Lopes, M. L., De Amorim, H. V., & Stambuk, B. U. (2021). High foam phenotypic diversity and variability in flocculant gene observed for various yeast cell surfaces present as industrial contaminants. *Fermentation*, *7*(3), 127. <https://doi.org/10.3390/fermentation7030127>
- Don, S. M. 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>
- Ejuama, C. K., Onusiriuka, B. C., Bakare, V., Ndibe, T. O., Yakubu, M., & Ademu, E. G. (2021). Effect of *Saccharomyces cerevisiae* – Induced fermentation on the antioxidant property of roselle calyx aqueous extract. *European Journal of Biology and Biotechnology*, *2*(3), 33–38. <https://doi.org/10.24018/ejbio.2021.2.3.201>
- Elhalis, H. (2024). Expanding the horizons of *Saccharomyces cerevisiae*: nutrition, oenology, and bioethanol production. *Sustainability*, *16*(24), 11151. <https://doi.org/10.3390/su162411151>
- Fakruddin, Md., Hossain, Md. N., & Ahmed, M. M. (2017). Antimicrobial and antioxidant activities of *Saccharomyces cerevisiae* IFST062013, a potential probiotic. *BMC Complementary and Alternative Medicine*, *17*(1), 64. <https://doi.org/10.1186/s12906-017-1591-9>
- Gulcin, İ., & Alwasel, S. H. (2023). DPPH radical scavenging assay. *Processes*, *11*(8), 2248. <https://doi.org/10.3390/pr11082248>
- Gupta, P. D., & Birdi, T. J. (2017). Development of botanicals to combat antibiotic resistance. *Journal of Ayurveda and Integrative Medicine*, *8*(4), 266–275. <https://doi.org/10.1016/j.jaim.2017.05.004>
- Hossain, M. L., Lim, L. Y., Hammer, K., Hettiarachchi, D., & Locher, C. (2022). A review of commonly used methodologies for assessing the antibacterial activity of honey and honey products. *Antibiotics*, *11*(7), 975. <https://doi.org/10.3390/antibiotics11070975>
- Ignjatijević, A., Anđić, T., Lješević, M., Nikolić, B., Ganić, T., Spasović, S., & Vuletić, S. (2025). Assessment of Antioxidant Activity and Dose-Dependent Effect on Genotoxicity/Antigenotoxicity of *Pulmonaria officinalis* Ethanolic Extract. *Pharmaceutics*, *17*(9), 1134.

- Ji, Q. Y., Wang, W., Yan, H., Qu, H., Liu, Y., Qian, Y., & Gu, R. (2023). The effect of different organic acids and their combination on the cell barrier and biofilm of *Escherichia coli*. *Foods*, 12(16), 3011.
- Kemenkes RI. (2020). *Farmakope Indonesia (Edisi VI)*. Jakarta: Kementerian Kesehatan RI.
- Malahubban, M., Kamaludeen, J., Mustafa, S., Hanafiah, M. H. M. A., Barudi, M. E., & Zakry, F. A. A. (2025). Nutritional and antibacterial properties of yeast-fermented herbs for functional poultry feeds. *Journal of Phytology*, 66–71. <https://doi.org/10.25081/jp.2025.v17.9086>
- Marques, W. L., Raghavendran, V., Stambuk, B. U., & Gombert, A. K. (2016). Sucrose and *Saccharomyces cerevisiae*: a relationship most sweet. *FEMS Yeast Research*, 16(1), fov107. <https://doi.org/10.1093/femsyr/fov107>
- Matuszewska, A., Jaszek, M., Stefaniuk, D., Ciszewski, T., & Matuszewski, Ł. (2018). Anticancer, antioxidant, and antibacterial activities of low molecular weight bioactive subfractions isolated from cultures of wood degrading fungus *Cerrena unicolor*. *PLOS ONE*, 13(6), e0197044. <https://doi.org/10.1371/journal.pone.0197044>
- Ni, D., Chen, C., Yang, Y., Tian, J., Tu, H., Yang, F., & Ye, X. (2024). Changes in polyphenols and antioxidant activity in fermentation substrate during maotai-flavored liquor processing. *Foods*, 13(12), 1928. <https://doi.org/10.3390/foods13121928>
- Nugraha, A. C., Praseta, A. T., & Mursiti, S. (2017). *Isolasi, identifikasi, uji aktivitas senyawa flavonoid sebagai antibakteri dari Daun mangga*. 6(2).
- Nurmiati, N., Periadnadi, P., Putra, W. D., & Syafrina, V. P. (2025). Antimicrobial and antioxidant activity of ants nest plant extract on the growth of test microorganisms. *Jurnal Biologi Tropis*, 25(2), 1304–1313. <https://doi.org/10.29303/jbt.v25i2.8700>
- Nwozo, O. S., Effiong, E. M., Aja, P. M., & Awuchi, C. G. (2023). Antioxidant, phytochemical, and therapeutic properties of medicinal plants: A review. *International Journal of Food Properties*, 26(1), 359-388.
- Ocaño-Higuera, V. M., López-Avilés, G., Almendariz-Tapia, F. J., Del-Toro-Sánchez, C. L., Tapia-Hernández, J. A., Garzón-García, A. M., ... & 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), 3506.
- 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 characterisation. *LWT Food Science and Technology*, 154(3), 1e10. <https://doi.org/10.1016/j.lwt.2021.112728>
- Park, S., Park, B. R., Jeong, D., Park, J., Ko, J. K., Kim, S. J., ... & Kim, S. R. (2023). Functional expression of RuBisCO reduces CO<sub>2</sub> emission during

fermentation by engineered *Saccharomyces cerevisiae*. *Process Biochemistry*, 134, 286-293.

- Perez-Samper, G., Cerulus, B., Jariani, A., Vermeersch, L., Barrajon Simancas, N., Bisschops, MM, ... & Verstrepen, KJ (2018). Efek crabtree membentuk fase lag *Saccharomyces cerevisiae* selama peralihan antara sumber karbon yang berbeda. *MBio*, 9 (5), 10-1128
- Rahayu, D. U. C., & Sugita, P. (2018). Antibacterial activity of curcumenol from rhizomes of Indonesian *Curcuma aeruginosa* (Zingiberaceae). *Rasayan Journal of Chemistry*, 11(2). <https://doi.org/10.31788/RJC.2018.1122076>
- Rismawati, R., Dwi Jatmiko, Y., & Widyarti, S. (2022). Antibacterial activity of *Pluchea indica* leaf extract was increased after being fermented with *Saccharomyces cerevisiae* and added with its cell-free supernatant. *Biotropika: Journal of Tropical Biology*, 10(2), 111–116. <https://doi.org/10.21776/ub.biotropika.2022.010.02.04>
- Rumpf, J., Burger, R., & Schulze, M. (2023). Statistical evaluation of DPPH, ABTS, FRAP, and Folin-Ciocalteu assays to assess the antioxidant capacity of lignins. *International Journal of Biological Macromolecules*, 233, 123470. <https://doi.org/10.1016/j.ijbiomac.2023.123470>
- Santoso, P. N. C., Sari, N. L. P. E. K., & Dewi, S. R. (2024). Antibacterial activity of Balinese Traditional Herbs *Elephantopus Scaber* Linn and *Curcuma aeruginosa* Roxb against *Burkholderia pseudomallei*, *Staphylococcus aureus*, and *Salmonella typhimurium*. *Intisari Sains Medis*, 15(2), 764–768. <https://doi.org/10.15562/ism.v15i2.2090>
- Sari, A. P., & Supratman, U. (2022). Phytochemistry and biological activities of *Curcuma aeruginosa* (Roxb.). *Indonesian Journal of Chemistry*, 22(1), 576. <https://doi.org/10.22146/ijc.70101>
- 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), 3941. <https://doi.org/10.3390/molecules29163941>
- Sintos, A. M. L., & Cabrera, H. S. (2024). Network pharmacology reveals *Curcuma aeruginosa* Roxb. Regulates MAPK and HIF-1 Pathways to treat androgenetic alopecia. *Biology*, 13(7), 497. <https://doi.org/10.3390/biology13070497>
- Suharsanti, R., Wahyuono, S., Yuniarti, N., & Astuti, P. (2024). Antioxidant activity and pancreatic lipase inhibition of *Curcuma aeruginosa* Roxb rhizome fractions. *Jurnal Biodjati*, 9(2), 228–243. <https://doi.org/10.15575/biodjati.v9i2.33900>
- Suyudi, S. D., Vifta, R. L., & Trisnaningsih, H. (2024). Karakteristik, aktivitas antioksidan, dan formulasi emulgel ekstrak jahe emprit (Zingiber

officinale var Amarum). *Usadha Journal of Pharmacy*, 288–301. <https://doi.org/10.23917/ujp.v3i3.362>

- Tan, Y., Gao, M., Li, L., Jiang, H., Liu, Y., Gu, T., & Zhang, J. (2024). Functional components and antioxidant activity were improved in ginger fermented by *Bifidobacterium adolescentis* and *Monascus purpureus*. *LWT*, 197, 115931. <https://doi.org/10.1016/j.lwt.2024.115931>
- Trisnaputri, D. R., Isrul, M., Hazan, N., Ida Fitriah, W. O., Syafrie, F. A., & Alani, F. W. (2024). Uji Aktivitas antimikroba ekstrak etanol rimpang temu hitam (*Curcuma aeruginosa* Roxb.) terhadap *Staphylococcus epidermidis*, *Escherichia coli* dan *Candida albicans*. *Jurnal Mandala Pharmacon Indonesia*, 10(2), 618–627. <https://doi.org/10.35311/jmpi.v10i2.658>
- Walker, G. M., & Stewart, G. G. (2016). *Saccharomyces cerevisiae* in the production of fermented beverages. *Beverages*, 2(4), 30.
- Wang, B., Rutherford-Markwick, K., Zhang, X.-X., & Mutukumira, A. N. (2022). Kombucha: production and microbiological research. *Foods*, 11(21), 3456. <https://doi.org/10.3390/foods11213456>
- 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>
- Zhang, Z., Xiong, F., Wang, Y., Dai, C., Xing, Z., Dabbour, M., Mintah, B., He, R., & Ma, H. (2019). Fermentation of *Saccharomyces cerevisiae* in a one liter flask coupled with an external circulation ultrasonic irradiation slot: Influence of ultrasonic mode and frequency on the bacterial growth and metabolism yield. *Ultrasonics Sonochemistry*, 54, 39–47. <https://doi.org/10.1016/j.ultsonch.2019.02.017>
- Zhao, D., Yan, M., Xu, H., Liang, H., Zhang, J., Li, M., & Wang, C. (2023). Antioxidant and antiaging activity of fermented coix seed polysaccharides on *Caenorhabditis elegans*. *Nutrients*, 15(11), 2474. <https://doi.org/10.3390/nu15112474>
- 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>