

BAB VI

DAFTAR PUSTAKA

- Afrianto, S. & Wariya, C. (2020) Karakteristik growol yang dibuat dengan variasi varietas ubi kayu (*Manihot esculenta* Crantz) dan lama fermentasi, *agriTECH*, 40(3), pp. 254–261.
- Almasyhuri, Ridwan, E., Yuniati, H. & Hermana (1999) Pengaruh fermentasi terhadap kandungan protein dan komposisi asam amino dalam singkong, *PGM*, 22, pp. 55–61.
- Ardita, N., Rachmawati, N. & Setiawati, E. (2015) Application of EM-4 in fermentation processes and its effect on microbial activity, *Bioflux Journal*, pp. 1–7.
- Bamidele, O.P., Fasogbon, M.B. & Oladiran, D.A. (2025) Effects of natural fermentation time on chemical composition, antioxidant activities, and phenolic profile of cassava root flour, *Journal of Food Composition and Analysis*, 16(1), pp. 275–283.
- Blois, M.S., 1958. *Antioxidant determinations by the use of a stable free radical*. *Nature*, 181(4617), pp.1199–1200.
- Brand-Williams, W., Cuvelier, M.E. & Berset, C., 1995. *Use of a free radical method to evaluate antioxidant activity*. *LWT - Food Science and Technology*, 28(1), pp.25–30.
- Cheeke, P.R. & Shull, L.R. (1985) *Natural toxicants in feeds and livestock*. Westport, CT: AVI Publishing Inc.
- Dahal, P. & Tamang, M.K. (2021) Effects of different processing methods on anti-nutritional factors of cassava (*Manihot esculenta* Crantz), *Journal of Food and Nutritional Disorders*, 10(5).

- Fu, T.J. *et al.* (2018) Role of fermentation in increasing the antioxidant properties of cassava, *Journal of Food Science and Technology*, 55(6), pp. 2425–2434.
- Gänzle, M.G. & Follador, R. (2012) Metabolism of oligosaccharides and starch in lactobacilli: a review, *Microbiology*. doi:10.3589/micb.2012.00340.
- Hasanah, N., Haryuni, N. & Wahyono, N.D. (2024) The effect of EM-4 dosage in fermentation on the quality of soy milk waste as an alternative feed ingredient, *IOP Conference Series: Earth and Environmental Science*, 1338, 012020.
- Hawashi, M., Altway, A., Widjaja, T. & Gunawan, S. (2019) Optimization of process conditions for tannin content reduction in cassava leaves during solid state fermentation using *Saccharomyces cerevisiae*, *Heliyon*, 5, e02298.
- Je-Ruei Liu, Yuh-Yih Lin, Ming-Ju Chen, Li-Ju Chen, & Chin-Wen Lin. (2005). Antioxidative activities of kefir. *Asian-Australasian Journal of Animal Sciences*, 18(4), 567–573.
- Joshi, D. & Adhikari, N. (2019) An overview on common organic solvents and their toxicity, *Journal of Pharmaceutical Research International*, 28(3), pp. 1–18.
- Jusman, N. H., Wikandari, P. R., & Saputri, R. D. (2025). *Kajian peningkatan aktivitas antioksidan pada umbi-umbian melalui fermentasi*. Jurnal Ilmiah Pangan Halal, 7(2), 219.
- Kemung, H. M., Tan, L. T. H., Khan, T. M., Chan, K. G., Pusparajah, P., Goh, B. H., & Lee, L. H. (2020). Antioxidant activities of *Streptomyces* sp. strain MUSC 14 isolated from mangrove forest soil. *BioMed Research International*, 2020, Article ID 6402607. <https://doi.org/10.1155/2020/6402607>

- Kumar, A., Shukla, S., Singh, P., Dubey, N.K. & Prakash, B. (2010) Functional characterization of volatile constituents and antioxidant potential of essential oils, *Food Control*, 21(7), pp. 905–911.
- Kumar, A., Singh, B. & Sharma, R. (2025) Phenolic acids in fermented foods: microbial biotransformation, antioxidant mechanisms, and functional health implications, *Frontiers in Molecular Biosciences*, pp. 1–15.
- Kurniawan, L., Maryudi, M. & Erna, A. (2024) Utilization of tofu liquid waste using EM-4 fermentation, *Equilibrium Journal of Chemical Engineering*, 8(1), pp. 100–112.
- Lei, V., Amoa-Awua, W.K.A. & Brimer, L. (1999) Degradation of cyanogenic glycosides by *Lactobacillus plantarum*, *International Journal of Food Microbiology*, 53, pp. 169–174.
- Lestari, L.A., Lestari, P.M. & Utami, F.A. (2014) *Kandungan zat gizi makanan khas Yogyakarta*. Yogyakarta: Gadjah Mada University Press.
- Lusiana, A., Ningrum, Y. D. A., & Putri, C. N. (2024). Pengaruh lama fermentasi terhadap aktivitas antioksidan pada variasi teh kombucha dengan metode ABTS (2,2-azinobis (3-ethylbenzothiazolin)-6-sulphonic acid). *Jurnal Ilmiah Sultan Agung*, 1.
- Natsir, N.A. (2014) Pengaruh lama fermentasi ubi kayu terhadap kadar asam lemak, *Jurnal Biologi Sel*, 3(2).
- Nofia, Y., Wasita, B. & Susilawati, T.N. (2021) The level of flavonoid and antioxidant activity of growol flour, *Indonesian Journal of Nutrition and Dietetics*, 9(2), pp. 257–260.
- Nuritasari, Y. (2012) Isolasi dan seleksi mikroba penghasil enzim penggumpak, Skripsi, Institut Pertanian Bogor.

- Oluwaseun, A., Adeyemi, I. & Ajayi, O. (2020) Effects of processing methods on phenolic and antioxidant capacities, *Food Research International*, pp. 1–10.
- Perkasa, A., Sulistiono, A. R., Aprian, F., Risdiana, S. F., & Mustaqim. (n.d.). *EM4 sebagai agen pengolahan sampah organik: Mewujudkan pemberdayaan masyarakat yang ramah lingkungan di RW 07 Kelurahan Manggahang*.
- Pogačar, M.Š., Turk, D.M. & Fijan, S. (2022) Knowledge of fermentation and health benefits, *BMC Public Health*, 22(1), pp. 1–11.
- Rui, S., Fengrui, G., Yining, Z., Hong, S., Xuewen, Y., Changping, W., & Chunjia, Y. (2025). Biological activity of secondary metabolites of actinomycetes and their potential sources as antineoplastic drugs: A review. *Frontiers in Microbiology*, 16, 1550516. <https://doi.org/10.3389/fmicb.2025.1550516>
- Puspaningtyas, D.E., Sari, P.M., Kusuma, N.H. & SB, D.H. (2019) Analisis potensi prebiotik growol, *Gizi Indonesia*, 42(2), pp. 83–90.
- Puspaningtyas, D.E., Sari, P.M. & Kusuma, N.H. (2020) Indeks glikemik cookies berbasis growol, *Jurnal Gizi dan Pangan*, 15(3), pp. 211–218.
- R, A.E., Lestari, L.A. & Juffrie, M. (2017) Konsumsi growol dan diare, *Jurnal Gizi Klinik Indonesia*, 7(1), pp. 27–33.
- Rachmawati, N., Setiawati, E. & Ardita, N. (2006) Microbial composition of EM-4, *Indonesian Journal of Microbiology*, pp. 1–6.
- Risna, Y.K. *et al.* (2022) Kurva pertumbuhan bakteri asam laktat, *Jurnal Peternakan Indonesia*, 24(1), pp. 1–7.
- Sari, D.P. & Santoso, B. (2017) Peningkatan protein melalui fermentasi singkong, *Jurnal Pangan, Gizi dan Mikrobiologi*, 3(2), pp. 145–152.

- Sari, N.P. *et al.* (2024) Antioxidant characteristics of fermented pumpkin flour, *Jurnal Pangan dan Agroindustri*, 12(1), pp. 22–30.
- Sari, P.M. & Puspaningtyas, D.E. (2019) Skor aktivitas prebiotik growol, *Ilmu Gizi Indonesia*, 2(2), pp. 101–106.
- Sarıtaş, S., Mondragon Portocarrero, A. C., 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>
- Sasikumar, P. *et al.* (2013) Secretion of oxalate decarboxylase in *Lactobacillus plantarum*, *Hindawi*, Article ID 208428.
- Slavin, J. (2013) Fiber and prebiotics: mechanisms and health benefits, *Nutrients*, 5, pp. 1417–1435.
- Suprihatin (2010) *Teknologi fermentasi*. Surabaya: UNESA Press.
- Sukandiasyah, F. *et al.* (2023) Aktivitas antioksidan ekstrak temu ireng, *Jurnal Mandala Pharmacon Indonesia*, 9(1), pp. 62–70.
- Trinovani, E. *et al.* (2022) Aktivitas antioksidan tape ketan hitam, *Medical Sains*, 7(4).
- Valdiviezo-Campos, J.E., Neglia Cermeño, C.S. & Ruiz-Reyes, S.G. (2026) Agitation-assisted extraction of phenolics, *Journal of Applied Pharmaceutical Science*, 16(1), pp. 275–283.
- Wang, Y. *et al.* (2023) Antioxidant activity of fermented pumpkin juice, *Food Chemistry*, 401, 134122.
- Wariyah, C. & Luwihana, S. (2015) Improvement of growol as functional food, pp. 150–156.

Wariyah, C. & Luwihana, S. (2016) Effects of washing on fermented cassava, *International Food Conference*.

Wariyah, C., Riyanto & Kanetro, B. (2018) Effects of fermentation duration on growol, *International Conference Proceedings*.

Who. (2023). *Non Communicable Disease*. World Health Organization.
<https://www.who.int/news-room/fact-sheets/detail/noncommunicable-diseases>

Wicaksono, M. *et al.* (2022) Pengembangan growol sebagai oleh-oleh, *Jurnal Pengabdian*, 5(1), pp. 11–21.

Yunilas (2022) *Cocktail inokulum sebagai kultur starter fermentasi*. Medan: USU Press.

Zulkeple, N.M. *et al.* (2011) Fermentation of prawn waste using EM, *Journal of Fundamental Sciences*, 7(2), pp. 108–112.