

References

- Arslan, M., Rakha, A., Xiaobo, Z., & Mahmood, M. A. (2019). Complimenting gluten free bakery products with dietary fiber: Opportunities and constraints. *Trends in food science & technology*, 83, 194-202.
- Bahlawan, Z. A. S., Damayanti, A., Majid, N. A., Herstyawan, A., & Hapsari, R. A. (2020). Gembili (*Dioscorea esculenta*) tube modification via hydrogen peroxide oxidation. In *Journal of Physics: Conference Series* (Vol. 1444, No. 1, p. 012007). IOP Publishing.
- Chen, A., Pan, C., & Chen, J. (2024). Comparative Analysis of Bread Quality Using Yeast Strains from Alcoholic Beverage Production. *Microorganisms*, 12(12), 2609.
- Chochkov, R., Savova-Stoyanova, D., Papageorgiou, M., Rocha, J. M., Gotcheva, V., & Angelov, A. (2022). Effects of teff-based sourdoughs on dough rheology and gluten-free bread quality. *Foods*, 11(7), 1012.
- Cock, J. H., & Connor, D. J. (2021). Cassava. In *Crop physiology case histories for major crops* (pp. 588-633). Academic Press.
- Diniyah, N., Iguchi, M., Nanto, M., Yoshino, T., & Subagio, A. (2023). Dynamic Rheological, Thermal, and Structural Properties of Starch from Modified Cassava Flour (MOCAF) with Two Cultivars of Cassava. *Industria: Jurnal Teknologi dan Manajemen Agroindustri*, 12(1), 89-101.
- Eugenia, L., & Pokatong, W. D. R. (2025, February). Wheat flour partially substituted with heat-moisture-treated gembili (*Dioscorea esculenta* L.) flour affected physicochemical and organoleptic properties of pan bread prepared using straight-dough method. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1460, No. 1, p. 012041). IOP Publishing.
- Fitriana, S. (2023). Karakteristik fisikokimia dan fungsional mocaf hasil pregelatinisasi dengan perbedaan suhu dan waktu pemanasan. *Repository Universitas Jember*.

- Fiqtinovri, S. M. (2020). Karakteristik Kimia Dan Amilograf (modified cassava flour) Singkong Gajah (Manihot utilissima). *Jurnal Agrindustri Halal*, 6(1), 049–056.
<https://doi.org/10.30997/jah.v6i1.2162>
- Frediansyah, A. (2018). Microbial fermentation as means of improving cassava production in Indonesia. *Cassava*. <https://doi.org/10.5772/intechopen.71966>
- Gobbetti, M., Rizzello, C. G., Di Cagno, R., & De Angelis, M. (2014). How the sourdough may affect the functional features of leavened baked goods. *Food microbiology*, 37, 30-40.
- Gu, Y., Qian, X., Sun, B., Wang, X., & Ma, S. (2023). Effects of gelatinization degree and boiling water kneading on the rheology characteristics of gluten-free oat dough. *Food Chemistry*, 404, 134715.
- Guiné, R. P. (2022). Textural properties of bakery products: A review of instrumental and sensory evaluation studies. *Applied Sciences*, 12(17), 8628.
- Hasanvand, A. (2024). Statistical Methods in Food Science Research: A Comprehensive Overview.
- Herlina., Kuswardhani, N., & Widjayanthi, L. (2020). Quality development of bagiak (osing ethnic's snack) using gembili (*Dioscorea esculenta* L.) flour. In *E3S Web of Conferences* (Vol. 142, p. 03008). EDP Sciences.
- Incoronato, A. L., Cedola, A., Conte, A., & Del Nobile, M. A. (2021). Juice and by-products from pomegranate to enrich pancake: Characterisation and shelf-life evaluation. *International Journal of Food Science and Technology*, 56(6), 2886-2894.
- Indonesia Gluten-free Products Market (2025-2031) Outlook | Forecast, Share, Growth, Analysis, Industry, Size, Revenue, Value, Trends & Companies*. 6W Research. (2023).
<https://www.6wresearch.com/industry-report/indonesia-gluten-free-products-market>
- Johnly, S., & Krisnadi, A. R. (2023). Analysis of the effect of pancake product substitution using durian seed flour on consumer acceptance: case study of generation Z in DKI Jakarta. *Gema Wiralodra*, 14(2), 817-831.

- Lambebo, T., & Deme, T. (2022). Evaluation of Nutritional Potential and Effect of Processing on Improving Nutrient Content of Cassava (*Mannihot esculenta crantz*) Root and Leaves. *BioRxiv*, 2022-02.
- Lau, S. W., Chong, A. Q., Chin, N. L., Talib, R. A., & Basha, R. K. (2021). Sourdough microbiome comparison and benefits. *Microorganisms*, 9(7), 1355.
- Lawless, H. T., & Heymann, H. (2010). *Sensory Evaluation of Food: Principles and Practices*. Springer.
- Lima, T. T., De Dea Lindner, J., & Martin, J. G. (2024). Sourdough bread market perception in Brazil: First insights. *Trending Topics on Fermented Foods*, 325–339. https://doi.org/10.1007/978-3-031-72000-0_12
- Ma, S., Wang, Z., Guo, X., Wang, F., Huang, J., Sun, B., & Wang, X. (2021). Sourdough improves the quality of whole-wheat flour products: Mechanisms and challenges—A review. *Food Chemistry*, 360, 130038.
- Maghsoud, M., Heshmati, A., Taheri, M., Emamifar, A., & Esfarjani, F. (2024). The influence of carboxymethyl cellulose and hydroxypropyl methylcellulose on physicochemical, texture, and sensory characteristics of gluten-free pancake. *Food Science & Nutrition*, 12(2), 1304-1317.
- Marta, H., Yusnia, S. A., Fetriyuna, F., Arifin, H. R., Cahyana, Y., & Sondari, D. (2024). Application of flour blends from modified cassava and suweg flours in gluten-free steamed brownies. *Polish Journal of Food and Nutrition Sciences*, 74(2), 188-196.
- Mert, I. D., Campanella, O. H., Sumnu, G., & Sahin, S. (2014). Gluten-free sourdough bread prepared with chestnut and rice flour.
- Mohidin, S. R. N. S. P., Moshawih, S., Hermansyah, A., Asmuni, M. I., Shafqat, N., & Ming, L. C. (2023). Cassava (*Manihot esculenta Crantz*): A systematic review for the pharmacological activities, traditional uses, nutritional values, and phytochemistry. *Journal of Evidence-Based Integrative Medicine*, 28, 2515690X231206227.
- Moongngarm, A. (2013). Chemical compositions and resistant starch content in starchy foods. *American Journal of Agricultural and Biological Sciences*, 8(2), 107.

- Nionelli, L., & Rizzello, C. G. (2016). Sourdough-based biotechnologies for the production of gluten-free foods. *Foods*, 5(3), 65.
- Nolasco, E., Jundt, E., Kramp, M. M., Dutta, E., Nishijima, N., Oda, Y., ... & Majumder, K. (2020). Application of dried egg white to enhance the textural properties of fresh and frozen pancakes. *ES Food & Agroforestry*, 2(3), 50-57.
- Pamungkas, W. A. (2024). Physico-Chemical Properties of Gembili (*Dioscorea esculenta* L.) Flour from White-fleshed and Purplish-White-fleshed Tubers. *Jurnal Keteknik Pertanian*, 12(2), 259-271.
- Pérez-Alvarado, O., Zepeda-Hernández, A., Garcia-Amezquita, L. E., Requena, T., Vinderola, G., & García-Cayuela, T. (2022). Role of lactic acid bacteria and yeasts in sourdough fermentation during breadmaking: Evaluation of postbiotic-like components and health benefits. *Frontiers in Microbiology*, 13, 969460.
- Poinot, P., Arvisenet, G., Grua-Priol, J., Fillonneau, C., Le-Bail, A., & Prost, C. (2010). Influence of inulin on bread: Kinetics and physico-chemical indicators of the formation of volatile compounds during baking. *Food Chemistry*, 119(4), 1474-1484.
- Pramanda, I. T., Anjani, D., & Heriawan, G. (2022). Inulin-producing Genes in Gembili (*Dioscorea esculenta*) and Future Applications for Food Industries in Indonesia. *Indonesian Journal of Life Sciences*, 129-154.
- Prameswari, R. D., & Estiasih, T. (2013). Pemanfaatan tepung gembili (*Dioscorea esculenta* L.) dalam pembuatan cookies. *Jurnal Pangan dan Agroindustri*, 1(1), 115-128.
- Qolbiah, S., Kiranawati, T. M., & Larasati, A. (2021). Pengaruh Substitusi Tepung Ubi Gembili (*Dioscorea Esculenta*) terhadap Mutu dan Sifat Hedonik Brownies Panggang. *Jurnal Inovasi Teknologi dan Edukasi Teknik*, 1(2), 151-162.
- Rakmai, J., Haruthaithanasan, V., Chompreeda, P., Chatakanonda, P., & Yonkoksung, U. (2021). Development of gluten-free and low glycemic index rice pancake: Impact of dietary fiber and

- low-calorie sweeteners on texture profile, sensory properties, and glycemic index. *Food hydrocolloids for health*, 1, 100034.
- Ratnayake, W. S., & Jackson, D. S. (2006). Gelatinization and solubility of corn starch during heating in excess water: new insights. *Journal of Agricultural and Food Chemistry*, 54(10), 3712-3716.
- Rayesa, N., & Ali, D. Y. (2022). Sikap Konsumen Milenial Terhadap Produk Berlabel Gluten-Free. *Jurnal Ekonomi Pertanian dan Agribisnis*, 6(4), 1684-1695.
- Rosell, C. M., & Koehler, P. (2023). Chemistry of Cereal Grains. In *Handbook on Sourdough Biotechnology* (pp. 25-66). Cham: Springer International Publishing.
- Ruiz-Capillas, C., Herrero, A. M., Pintado, T., & Delgado-Pando, G. (2021). Sensory analysis and consumer research in new meat products development. *Foods*, 10(2), 429.
- Retnowati, D. S., Kumoro, A. C., & Ratnawati, R. (2018). Physical, thermal and functional properties of flour derived from ubi gembili (*Dioscorea esculenta* L.) tubers grown in Indonesia. *Potravinarstvo Slovak Journal of Food Sciences*, 12(1), 539–545. <https://doi.org/10.5219/937>
- Retnowati, D. S., Ratnawati, R., & Kumoro, A. C. (2019). Nutritional characteristics and potential applications of flour prepared from Indonesian wild white yam (*Dioscorea esculenta* L.). *Reaktor*, 19(2), 43–48. <https://doi.org/10.14710/reaktor.19.2.43-48>
- Richirose, R., & Soedirga, L. C. (2023). Utilization of Cassava-Jicama Composite Flour in Making Gluten-Free Biscuits with Different Types of Fats. *Caraka Tani: Journal of Sustainable Agriculture*, 38(2), 244-259.
- Rubel, I. A., Pérez, E. E., Manrique, G. D., & Genovese, D. B. (2015). Fibre enrichment of wheat bread with Jerusalem artichoke inulin: Effect on dough rheology and bread quality. *Food structure*, 3, 21-29.
- Ruriani, E., Nafi, A., Yulianti, L. D., & Subagio, A. (2013). Identifikasi potensi MOCAF (Modified Cassava Flour) sebagai bahan pensubstitusi teknis terigu pada industri kecil dan menengah di Jawa Timur (Potency Identification of MOCAF (Modified Cassava Flour) as technical substitution of wheat flour in small and medium enterprises in East Java). *Jurnal Pangan*, 22(3), 229-240.

- Sabda, M., Wulanningtyas, H. S., Ondikeleuw, M., & Baliadi, Y. (2019). Characterization of potential local Gembili (*dioscorea esculenta* L) from Papua as alternative of Staple Food. *Buletin Plasma Nutfah*, 25(1), 25. <https://doi.org/10.21082/blpn.v25n1.2019.p25-32>
- Sahda, R. T., & Hartuti, S. (2025). THE PROCESS OF PROCESSING CASSAVA INTO MOCAF FLOUR: PROSES PENGOLAHAN SINGKONG MENJADI TEPUNG MOCAF. *ROCE: Jurnal Pertanian Terapan*, 2(1).
- Sarkar, T., Salauddin, M., Kirtonia, K., Pati, S., Rebezov, M., Khayrullin, M., ... & Lorenzo, J. M. (2022). A review on the commonly used methods for analysis of physical properties of food materials. *Applied Sciences*, 12(4), 2004.
- Schiepatti, A., Maimaris, S., Nicolardi, M. L., Alimenti, E., Venero, M., Costetti, M., Costa, S., & Biagi, F. (2022). Determinants and trends of adherence to a gluten-free diet in adult celiac patients on a long-term follow-up (2000–2020). *Clinical Gastroenterology and Hepatology*, 20(4). <https://doi.org/10.1016/j.cgh.2020.12.015>
- Siswantoro, J., Prabuwno, A. S., & Abdulah, A. (2013). Volume measurement of food product with irregular shape using computer vision and Monte Carlo Method: A Framework. *Procedia Technology*, 11, 764–770. <https://doi.org/10.1016/j.protcy.2013.12.256>
- Stanciu, D., Staykov, H., Dragomanova, S., Tancheva, L., Pop, R., Ielciu, I., & Crişan, G. (2024). Gluten unraveled: Latest insights on terminology, diagnosis, pathophysiology, dietary strategies, and intestinal microbiota modulations—a decade in Review. *Nutrients*, 16(21), 3636. <https://doi.org/10.3390/nu16213636>
- Sulistyawati, E., Rismaya, R., Susilo, A., Hakiki, D., & Luthfian, A. (2024). The effect of gembili flour (*dioscorea esculenta* L.) substitution on dietary fiber contents, sensory, and chemical characteristics of Cookies. *Canrea Journal: Food Technology, Nutritions, and Culinary Journal*, 54–65. <https://doi.org/10.20956/canrea.v7i1.1048>

- Sulistyo, J., Shya, L. J., Mamat, H., & Wahab, N. A. (2016). Nutritional value of fortified cassava flour prepared from modified cassava flour and fermented protein hydrolysates. *AIP Conference Proceedings*, 1744, 020030. <https://doi.org/10.1063/1.4953504>
- Susila, A., Aristya, V. E., Ondikeleuw, M., Malik, A., & Cempaka, I. G. (2023). Cultivation and culture of *dioscorea esculenta* in Papua. *IOP Conference Series: Earth and Environmental Science*, 1253(1), 012020. <https://doi.org/10.1088/1755-1315/1253/1/012020>
- Triyono, B., Handoyo, S., & Laili, N. (2019). Analysis for development of mocaf-based functional food industry in Indonesia.
- Udoro, E. O., Anyasi, T. A., & Jideani, A. I. O. (2021). Process-induced modifications on quality attributes of cassava (*Manihot esculenta* Crantz) flour. *Processes*, 9(11), 1891.
- Ukpabi, U. J. (2010). Farmstead bread making potential of lesser yam ('*Dioscorea esculenta*') flour in Nigeria. *Australian journal of crop science*, 4(2), 68-73.
- Umbara, D. M. A. (2020, October). Karakteristik Roti Kering Bagelen dengan Substitusi Tepung Gembili. In *SENASTER" Seminar Nasional Riset Teknologi Terapan"* (Vol. 1, No. 1).
- Wang, S., Li, C., Copeland, L., Niu, Q., & Wang, S. (2015). Starch retrogradation: A comprehensive review. *Comprehensive reviews in food science and food safety*, 14(5), 568-585.
- Wang, Z., & Wang, L. (2024). Impact of sourdough fermentation on nutrient transformations in cereal-based foods: Mechanisms, practical applications, and health implications. *Grain & Oil Science and Technology*.
- Wahjuningsih, S. B., & Susanti, S. (2018). Chemical, physical, and sensory characteristics of analog rice developed from the mocaf, arrowroot, and red bean flour. In *IOP Conference Series: Earth and Environmental Science* (Vol. 102, No. 1, p. 012015). IOP Publishing.
- Wahyuni, N., & Ab-Latif, Z. (2020). Mocaf flour as an alternative ingredient: A study on batik-patterned cookies. *Journal of Technology and Operations Management*, 15(1), 40-49.

- Yang, X., Pan, Y., Li, S., Li, C., & Li, E. (2022). Effects of amylose and amylopectin molecular structures on rheological, thermal and textural properties of soft cake batters. *Food Hydrocolloids*, 133, 107980.
- Yerizam, M., Andayana, S., & Oktavia, U. (2020, April). Effect of Temperature and Starter Concentration on the Fermentation Process in Making MOCAF. In *Journal of Physics: Conference Series* (Vol. 1500, No. 1, p. 012050). IOP Publishing.
- Yuniardi, F., Dewi, R., & Wahyudi, A. (2023). Propagation of Gembili (*dioscorea esculenta*. l) accession from West Papua by in-vitro callus induction. *E3S Web of Conferences*, 444, 04007. <https://doi.org/10.1051/e3sconf/202344404007>
- Zaidiyah, Z., Nur, B. M., Lubis, Y. M., Nasution, I. S., Nadia, F., & Khaira, U. (2022, December). Loaf volume and porosity for sourdough bread based modified cassava flour by linier regression and sensory evaluation approach. In *IOP Conference Series: Earth and Environmental Science* (Vol. 1116, No. 1, p. 012068). IOP Publishing.
- Zhang, Y., Li, G., Wu, Y., Yang, Z., & Ouyang, J. (2019). Influence of amylose on the pasting and gel texture properties of chestnut starch during thermal processing. *Food chemistry*, 294, 378-383.