

REFERENCES

- Abbasiliasi S, Tan JS, Bashokouh F, Ibrahim TAT, Musttafa S, Vakhshiteh FV, Sivasambo S, Ariff AB (2017) In vitro assessment of *Pediococcus acidilactici* Kp10 for its potential use in the food industry. *BMC Microbiol* 17:121. <https://doi.org/10.1186/s12866-017-1000-z>
- Afifah, N. and Ratnawati, L. (2017). Quality assessment of dry noodles made from blend of mocaf flour, rice flour and corn flour. *IOP Conference Series: Earth and Environmental Science*, 101(1), 012021. <https://doi.org/10.1088/1755-1315/101/1/012021>
- Aini, N., Wijonarko, G., & Sustriawan, B. (2016). Sifat fisik, kimia, dan fungsional tepung jagung yang diproses melalui fermentasi. *Jurnal AgriTech*, 36(2), 160–169. <https://doi.org/10.22146/agritech.12860>
- Amoa-Awua, W.K., Awusi, B.M., Owusu, M., Appiah, V., Ofori, H., Thorsen, L., ... , Jespersen, L. (2014). Reducing the atypical odour of *dawadawa*: Effect of modification of fermentation conditions and post-fermentation treatment on the development of the atypical odour of *dawadawa*. *Food Control*. (42): 335-342. doi: <https://doi.org/10.1016/j.foodcont.2014.02.016>
- Anastasiadou S, Papagianni M, Filiouis G, Ambrosiadis I, Koidis P (2008b) Growth and metabolism of a meat isolated strain of *Pediococcus pentosaceus* in submerged fermentation. Purification, characterization and properties of the produced pediocin SM-1. *Enzyme Microb Technol* 2008b, 43:448–454. <https://doi.org/10.1016/j.enzmictec.2008.05.007>
- Bala, A., Gul, K., & Riar, C.S. (2015). Functional and sensory properties of cookies prepared from wheat flour supplemented with cassava and water chestnut flours. *Cogent Food & Agriculture*. 1(1). doi: 10.1080/23311932.2015.1019815
- Barbut, S. (2017). Chapter 12 - Ingredient Addition and Impacts on Quality, Health, and Consumer Acceptance. *Poultry Quality Evaluation. Quality Attributes and Consumer Values*. Pp.291-311
- Bhagat D, Raina N, Kumar A, Katoch M, Khajuria Y, Slathia PS, Sharma P (2020) Probiotic properties of a phytase producing *Pediococcus acidilactici* strain SMVDUB2 isolated from traditional fermented cheese product. *Kalarei Sci Rep* 10:1926. <https://doi.org/10.1038/s41598-020-58676-2>
- Dewi, S.S., Hastutik S.T., & Setiawan C.K. (2020). Mocaf characteristic test of different varieties of cassava in Gunung Kidul. *IOP Conference Series: Earth and Environmental Science*. 458: 012009. doi:10.1088/1755-1315/458/1/012009

- Edam, M. (2017). APLIKASI BAKTERI ASAM LAKTAT UNTUK MEMODIFIKASI TEPUNG SINGKONG SECARA FERMENTASI LACTIC ACID BACTERIA. FERMENTATION IN THE MODIFICATION OF CASSAVA FLOUR. *Jurnal Penelitian Teknologi Industri* 9(1): 1-8. DOI: [10.33749/jpti.v9i1.3205](https://doi.org/10.33749/jpti.v9i1.3205)
- Erkkilä, S. & Petäjä, E. (2000). Screening of commercial meat starter cultures at low pH and in the presence of bile salts for potential probiotic use. *Meat Science*. 55(3): 297-300. doi: [https://doi.org/10.1016/S0309-1740\(99\)00156-4](https://doi.org/10.1016/S0309-1740(99)00156-4)
- Faridah, A. & Yuhelma, S. (2023). Sensory Churros Analysis Effect of Mocaf Flour Substitution. *Media Pendidikan Gizi dan Kuliner* 12(1): 1-8
- Febriyani, D., Ekawati I.G.A., & Ina, P.T. (2022). Pengaruh Perbandingan Modified Cassava Flour (Mocaf) dan Tepung Kacang Merah (*Phaseolus vulgaris* L.) Terhadap Karakteristik Makaroni (*The Effects of Modified Cassava Flour (Mocaf) and Red Bean Flour (Phaseolus vulgaris* L.) Ratio on The Characteristics of Macaroni). *Jurnal Ilmu dan Teknologi Pangan*, 11(1): 55-64
- Firdaus, M.R., Widyarfendhi, Rusniati, & Respite N.W. (2017). ANALYSIS ON THE SUBSTITUTION ABILITY OF MOCAF TOWARD WHEAT FLOUR, ITS BUSINESS FEASIBILITY, AND ITS INDUSTRY MULTIPLE EFFECTS. *Journal of Wetlands Environmental Management*, 5(2): 23 – 33. doi: <http://dx.doi.org/10.20527/jwem.v5i2.108>
- Fugaban JII, Bucheli JEV, Park YJ, Suh DH, Jung ES, Franco BDGM, Ivanova IV, Holzapfel WH, Todorov SD (2022) Antimicrobial properties of *Pediococcus acidilactici* and *Pediococcus pentosaceus* isolated from silage. *J Appl Microbiol* 132(1):311–330. <https://doi.org/10.1111/jam.1520>
- Gadd, G. M. (2010). Metals, minerals and microbes: geomicrobiology and bioremediation. *Microbiology*, 156(3), 609–643. <https://doi.org/10.1099/mic.0.037143-0>
- Ginting, E. (2009). *Ubikayu: Inovasi Teknologi dan Kebijakan Pengembangan*. Bogor: Pusat Penelitian dan Pengembangan Tanaman Pangan.
- Gunawan, S., Widjaja, T., Zullaikah, S., Ernawati, L., Istianah, N., Aparamarta, H. W., & Prasetyoko, D. (2015). Effect of fermenting cassava with *Lactobacillus plantarum*, *Saccharomyces cerevisiae*, and *Rhizopus oryzae* on the chemical composition of their flour. *International Food Research Journal*, 22(3), 1280–1287.
- Gunkova, P.I., Buchilina, A.S., Maksimiuk, N.N., Bazarnova, Y.G., & Girel, K.S. (2021). Carbohydrate Fermentation Test of Lactic Acid Starter Cultures. IOP Conference Series: Earth and Environmental Science. 852 (2021) 012035. doi:10.1088/1755-1315/852/1/012035
- Hamidi, M.A. & Banowati, E. (2018). Utilization of mocaf flour (modified cassava flour) for revitalization of the use tapioca flour in communities for empowering hulu-hilir human resources in wonogiri regency. IOP Conference Series: Earth and Environmental Science. 243: p.012081. doi: 10.1088/1755-1315/243/1/012081

- Handayani, B.R., Hartiwi, N. & Ariyani, M.D. (2022). Study on the Quality of Fermented Tapioca with Variation of Lactic Acid Bacteria (LAB) Types. *Advances in Biological Sciences Research*. (16): 283-288. doi: 10.2991/absr.k.220101.038
- Hasmi, I. T., Nurlena, N., & Gusnadi, D. (2021). Penggunaan Mocaf Sebagai Substitusi Tepung Terigu Dalam Pembuatan Donat Singkong. *eProceedings of Applied Science*, 7(5).
- Hasrini, R.F., Aviana, T., & Khoiriyah, A. (2021). Fortification of Modified Cassava Flour (Mocaf) Cookies with Rich Nutrition Vegetable Powder. *E3S Web of Conferences*, 232: 03009
- Holland, R., Crow, V., & Curry, B. (2011). Lactic Acid Bacteria | *Pediococcus* spp. *Encyclopedia of Dairy Sciences (Second Edition)*. pp 149-152
- Holland, R., Crow, V., & Curry, B. (2022). Lactic Acid Bacteria: *Pediococcus* spp. *Encyclopedia of Dairy Sciences (Third Edition)*. pp.233-237
- Holzapfel WH, Franz CMAP, Ludwig W, Dicks LMT (2015) *Pediococcus*. In: Whitman WB (ed) *Bergey's Manual of Systematic of Archaea and Bacteria*. John Wiley & Sons. 10.1002/9781118960608
- Isa, N.L.M., Kormin, F., Irwansyah, A.C., Desnilasari, & Hesani, A. (2020). Physicochemical properties and characterization of fermented cassava flour by lactic acid bacteria. *IOP Conference Series Earth and Environmental*. 736(1):01202, DOI:[10.1088/1755-1315/736/1/012023](https://doi.org/10.1088/1755-1315/736/1/012023)
- Kresnowati, M.T.A.P., Turyanto, L., Zaenuddin, A., & Trihatmoko, K. (2019). Effects of Microbial Starter Composition on Nutritional Contents and Pasting Properties of Fermented Cassava Flour. *ASEAN Journal of Chemical Engineering*. 19(1): 12. doi: 10.22146/ajche.50871
- Kristanti, D., Setiaboma, W., & Herminiati, A. (2020). Karakteristik Fisikokimia Dan Organoleptik Cookies Mocaf Dengan Penambahan Tepung Tempe (*Physicochemical and Organoleptic Characteristics of Mocaf Cookies with Tempeh Flour Additions*). *BIOPROPAL Industri*, 11(1): 1-8. doi: <http://dx.doi.org/10.36974/jbi.v11i1.5354>
- Kurniawan, S. (2010) Pengaruh lama fermentasi dan konsentrasi Ca(OH)₂ untuk perendaman terhadap karakteristik tepung mocaf (modified cassava flour) varietas singkong pahit (Pandemir L-2) Bachelor Thesis (Surakarta, Indonesia: Universitas Sebelas Maret)
- Laya, A. & Koubala, B.B. (2020). Polyphenols in cassava leaves (*Manihot esculenta* Crantz) and their stability in antioxidant potential after *in vitro* gastrointestinal digestion. *Heliyon*. 6(3): e03567. doi: [10.1016/j.heliyon.2020.e03567](https://doi.org/10.1016/j.heliyon.2020.e03567)
- Liu, C.Y., Amani, R., Sulaiman, S., Mahmood, K., Ariffin, F., & Nafchi, A.M. (2022). Formulation and characterization of physicochemical, functional, morphological, and antioxidant

- properties of cassava-based rice analogue. *Food Science and Nutrition*. 10(5): 1626–1637. doi: [10.1002/fsn3.2785](https://doi.org/10.1002/fsn3.2785)
- Liu, H., Guo, L., Zhang, L., Xie, C., Li, W., ... , & Li, K. (2020). Study on quality characteristics of cassava flour and cassava flour short biscuits. *Food Science and Nutrition*. 8(1): 521-533. doi: [10.1002/fsn3.1334](https://doi.org/10.1002/fsn3.1334)
- Loebis, E. H., & Meutia, Y. R. (2012). Pembuatan starter mocaf terimobilisasi dari isolat bakteri asam laktat dan aplikasinya pada proses produksi mocaf. *Jurnal Hasil Penelitian Industri*, 25(1), 35–47.
- Martinez, F. A. C., Balciunas, E. M., Salgado, J. M., González, J. M. D., Converti, A., & Oliveira, R. P. de S. (2013). Lactic acid properties, applications and production: A review. *Trends in Food Science & Technology*, 30(1), 70–83. [https://doi.org/ 10.1016/j.tifs.2012.11.007](https://doi.org/10.1016/j.tifs.2012.11.007)
- Mumba, M.S. & Suhartiningsih (2013). PENGARUH SUBSTITUSI MOCAF (MODIFIED CASSAVA FLOUR) TERHADAP SIFAT ORGANOLEPTIK DAN MASA SIMPAN PRODUK TWIST. *Ejournal boga* 2(1): 241-248
- Mweta, D. E., Labuschagne, M. T., Koen, E., Benesi, I. R. M., & Saka, J. D. K. (2008). Some properties of starches from cocoyam (*Colocasia esculenta*) and cassava (*Manihot esculenta* Crantz.) grown in Malawi. *African Journal of Food Science*, 2, 102– 111
- Ningrum, W.E. & Saidi, I.A. (2023). *Characteristics of Mocaf (Modified Cassava Flour) From Cassava (Manihot utilissima): Study of Tape Yeast Concentration and Fermentation Time*. Karakteristik Tepung Mocaf (Modified cassava flour) dari Singkong (Manihot Utilissima): Kajian Konsentrasi Ragi Tape dan Lama Fermentasi. *Procedia of Engineering and Life Science*
- Papagianni, M. (2003). Ribosomally synthesized peptides with antimicrobial properties: biosynthesis, structure, function, and applications. *Biotechnology Advance*. (6):465-99. doi: [10.1016/s0734-9750\(03\)00077-6](https://doi.org/10.1016/s0734-9750(03)00077-6)
- Papagianni, M. & Anastasiadou, S. (2009). Pediocins: The bacteriocins of *Pediococci*. Sources, production, properties and applications. *Microbial Cell Factories*. 8(1): 3. doi: <https://doi.org/10.1186/1475-2859-8-3>
- Ratnawati, L., Desnilasari, D., Kumalasari, R. and Surahman, D.N. (2020). Characterization of modified cassava flour (mocaf)-based biscuits substituted with soybean flour at varying concentrations and particle sizes. *Food Research*, 4 (3) : 645 - 651. doi: [https://doi.org/10.26656/fr.2017.4\(3\).282](https://doi.org/10.26656/fr.2017.4(3).282)
- Reddy, G., Altaf, M., Naveena, B. J., Venkateshwar, M., & Kumar, E. V. (2008). Amylolytic bacterial lactic acid fermentation — A review. *Biotechnology Advances*, 26(1), 22–34. [https://doi.org/10.1016/ j.biotechadv.2007.07.004](https://doi.org/10.1016/j.biotechadv.2007.07.004)

- Richana, N., Budiyanto, A., & Mulyawati, I. (2010). Pembuatan tepung jagung termodifikasi dan pemanfaatannya untuk roti. *Prosiding Pekan Serealia Nasional*, 446–454
- Sahidin, I. (2018). USE OF BEING MOCAF flour CASSAVA FOR IMPROVED REVENUE DIVERSIFICATION AND MEDIUM MICRO SMALL VILLAGE IN DISTRICT .43(, 1) العدد الحا, BAR DAY litter. Abdi Karya Society Journal <https://doi.org/10.1017/CBO9781107415324.004>
- Salim. (2011). Cassava flour processing Being MOCAF flour. Yogyakarta: ANDI.
- Seveline, Heldyana, R., & Kurniawati, S. (2020). The Use of Three Species of Lactic Acid Bacteria in the Mocaf (Modified Cassava Flour) Production. *Industria: Jurnal Teknologi dan Manajemen Agroindustri*. 9(3): 163-172. doi: <https://doi.org/10.21776/ub.industria.2020.009.03.1>
- Simpson, P.J., Stanton, C., Fitzgerald, G.F., & Ross, R.P. (2002). Genomic Diversity within the Genus *Pediococcus* as Revealed by Randomly Amplified Polymorphic DNA PCR and Pulsed-Field Gel Electrophoresis. *Applied and Environmental Microbiology*. 68(2): 765–771. doi: [10.1128/AEM.68.2.765-771.2002](https://doi.org/10.1128/AEM.68.2.765-771.2002)
- Song, D.H., Lee, J.M., Chung, K.H., & An, J.H. (2018). Penicillin Binding Protein from *Pediococcus acidilactici* Isolated from Nuruk for Food Biopreservative. *Irian Journal of Public Health*. 47(11): 1653–1659
- Subagio, A. (2006). Pengembangan tepung ubikayu sebagai bahan industri pangan. *Seminar Rusnas Diversifikasi Pangan Pokok Industrialisasi Diversifikasi Pangan Berbasis Potensi Pangan Lokal*.
- Surachat K, Kantachote D, Deachamag P, Wonglapsuwan M (2021) Genomic insight into *Pediococcus acidilactici* HN9, a potential probiotic strain isolated from the traditional Thai-style fermented beef nhang. *Microorganisms* 9(1):50. <https://doi.org/10.3390/microorganisms9010050>
- Todorov, S.D., Dioso C.M., Liong, M.T., Nero, L.A., Khosravi-Darani, K., & Ivanova I.V. (2023). Beneficial features of *pediococcus*: from starter cultures and inhibitory activities to probiotic benefits. *World Journal of Microbiology and Biotechnology*. *World Journal of Microbiology and Biotechnology*. 39(4): 1-20. doi: <https://doi.org/10.1007/s11274-022-03419-w>
- Unayah, A., Estuti, B., & Kunaepah U. (2020). Use of Local Food Ingredients MOCAF (Modified Cassava Flour) and Rebon (Planktonic Shrimp) in Cookies as an Alternative Supplementary Food for Children. *International Journal of Innovation, Creativity and Change*, 1035-1050
- Wang, Y., Wu, J., Lv, M., Zhao, Z., Hungwe, M., Wang, J., ... , Geng, W. (2021). Metabolism Characteristics of Lactic Acid Bacteria and the Expanding Applications in Food Industry. *Frontiers in Bioengineering and Biotechnology*. 9:612285. doi: 10.3389/fbioe.2021.612285

Wobeto, C., Corrêa, A.D., de Abreu, C.M.P., dos Santos, C.D., & de Abreu, J.R. (2006). NUTRIENTS IN THE CASSAVA (*Manihot esculenta* Crantz) LEAF MEAL AT THREE AGES OF THE PLANT. *Ciênc. Tecnol. Aliment.*, Campinas, 26(4): 865-869

Zekarias, T., Basa, B. & Herago, T. (2019). Medical, Nutritional and Anti- Nutritional Properties of Cassava (*Manihot esculenta*): A Review. *Academic Journal of Nutrition*. 8 (3): 34-46. DOI: 10.5829/idosi.aj.n.2019.34.46