

DAFTAR PUSTAKA

- Afify, A. E. M. M., El-Beltagi, H. S., Abd El-Salam, S. M., & Omran, A. A. (2012). Protein solubility, digestibility and fractionation after germination of sorghum varieties. *Plos one*, 7(2), e31154.
- Akbar, K. H., Widiastuti, M. L., Azizah, E., & Samaullah, M. Y. (2024). Uji Mutu Fisiologis Benih pada Beberapa Varietas Sorgum (*Sorghum bicolor* L.) dengan Umur Simpan yang Berbeda. *Jurnal Agroplasma*, 11(1), 182-192.
- Al Banna, M. Z., & Arifuddin, W. (2024). Characterizing agronomic, morphological, nutritional, and phytochemical traits of local sorghum (*Sorghum bicolor* L.) in Indonesia. *Jurnal Ilmiah Pertanian*, 21(2), 151-165.
- Alamsyah, A., & Nofrida, R. (2025). Perbandingan Tepung Sorgum (*Sorghum Bicolor* (L.) Moench) Dengan Tepung Jagung (*Zea Mays* L.) Terhadap Mutu Kukis Non Gluten. *Jurnal Edukasi Pangan*, 3(4), 15-27.
- Apriliyanti, M. W., Nurdihati, A., & Ardiyansyah, M. (2020). Pendugaan Umur Simpan Jelly Kelor Instan Dengan Metode Accelerated Shelf Life Test (Aslt) Model Pendekatan Kadar Air Kritis. *Journal of Food Technology and Agroindustry*, 2(2), 54-63.
- Arashdeep Singh, A. S., Savita Sharma, S. S., & Baljit Singh, B. S. (2017). Effect of germination time and temperature on the functionality and protein solubility of sorghum flour.
- Aryani, N. F., Khatimah, K., Tajuddin, F. N., Khairunnisa, A. I., Magfira, N., & Aminuddin, N. W. (2022). Budidaya tanaman sorgum (*Sorghum bicolor* (L.) Moench).
- Avif, A. N., & TD, A. O. (2021). Analisis sifat kimia tepung dan pati sorgum dari varietas bioguma dan lokal di Provinsi Nusa Tenggara Timur, Indonesia. *Lantanida Journal*, 8(2), 178-188.

- Avif, A. N., & TD, A. O. (2021). Analisis sifat kimia tepung dan pati sorgum dari varietas bioguma dan lokal di Provinsi Nusa Tenggara Timur, Indonesia. *Lantanida Journal*, 8(2), 178-188.
- Badan Puast Statistik (2024). Data Impor Tepung Gandum 2024. <https://www.bps.go.id/id/exim>
- Borgonovi, S. M., Marzocchi, S., Pasini, F., Bordoni, A., Barbiroli, A., Marti, A., ... & Di Nunzio, M. (2025). Exploring Germination to Unlock the Nutritional Potential of Sorghum (*Sorghum bicolor*). *Molecules*, 30(17), 3622.
- Cahya, S. A., Wahyudi, V. A., & Warkoyo, W. (2025). Karakteristik Fisikokimia, Organoleptik dan Angka Kecukupan Gizi Snack Bar Berbahan Dasar Sorgum dengan Penambahan Sari Kurma dan Madu. *Food Technology and Halal Science Journal*, 8(1), 31-45.
- Célia, J. A., Resende, O., de Moura Silva, L. C., Ferreira, S. V., Correia, J. S., de Almeida, A. B., & Mabasso, G. A. (2024). Characterization and evaluation of grain sorghum flour (*Sorghum bicolor* (L.) Moench subjected to storage in different packaging. *Journal of Stored Products Research*, 105, 102256.
- Chiodetti, M., Tuccio, M. G., & Carini, E. (2024). Effect of water content on gelatinization functionality of flour from sprouted sorghum. *Current Research in Food Science*, 8, 100780.
- CIE. (2004). Vienna: International Commission on Illumination.
- de Oliveira, L. D. L., de Oliveira, G. T., de Alencar, E. R., Queiroz, V. A. V., & de Alencar Figueiredo, L. F. (2022). Physical, chemical, and antioxidant analysis of sorghum grain and flour from five hybrids to determine the drivers of liking of gluten-free sorghum breads. *LWT*, 153, 112407.
- Drywień, M. E., Hamulka, J., & Jezewska-Zychowicz, M. (2021). Perceived nutrition and health concerns: do they protect against unhealthy dietary patterns in Polish adults?. *Nutrients*, 13(1), 170.

- Elkhalifa, A. E. O., & Bernhardt, R. (2013). Some physicochemical properties of flour from germinated sorghum grain. *Journal of food science and technology*, 50(1), 186-190.
- Elkhalifa, A. E. O., Bernhardt, R., Cardone, G., Marti, A., Iametti, S., & Marengo, M. (2017). Physicochemical properties of sorghum flour are selectively modified by combined germination-fermentation. *Journal of food science and technology*, 54(10), 3307-3313.
- Faizal, K. R., Ilyas, S., Qadir, A., & Human, S. (2025). Determination of seed physiological maturity and storability of several sorghum varieties. *Indonesian Journal of Agronomy/Jurnal Agronomi Indonesia*, 53(2).
- Farrah, S. D., Emilia, E., Mutiara, E., Purba, R., Ingtyas, F. T., & Marhamah, M. (2022). Analisis kandungan gizi dan aktivitas antioksidan pada cookies substitusi tepung sorgum (*Sorghum bicolor*, L). *Sport and Nutrition Journal*, 4(1), 20-28.
- Fitri, H. R. (2025). INOVASI COOKIES TINGGI SERAT MELALUI SUBSTITUSI PARSIAL TEPUNG TERIGU DENGAN TEPUNG SORGUM. *Prosiding Pendidikan Teknik Boga Busana*, 20(1).
- Gazza, L., Menga, V., Taddei, F., Nocente, F., Galassi, E., Natale, C., ... & Fares, C. (2024). Nutritional traits, pasting properties and antioxidant profile of selected genotypes of sorghum, oat and maize eligible for gluten-free products. *Foods*, 13(7), 990.
- Gebre, W., Mekbib, F., Tirfessa, A., & Bekele, A. (2025). Phenotypic diversity of sorghum [*Sorghum bicolor* (L.) Moench] genotypes based on qualitative and quantitative traits. *Heliyon*, 11(3).
- Giuberti, G., Marti, A., Gallo, A., Grassi, S., & Spigno, G. (2019). Resistant starch from isolated white sorghum starch: Functional and physicochemical properties and resistant starch retention after cooking. A comparative study. *Starch-Stärke*, 71(7-8), 1800194.

- Hassan, S. M. (2023). Nutritional, functional and bioactive properties of sorghum (*Sorghum Bicolor* L. Moench) with its future outlooks: A review. *Open Journal of Nutrition and Food Sciences*, 5(1), 1030.
- Hassan, S., Imran, M., Ahmad, N., & Khan, M. K. (2017). Lipids characterization of ultrasound and microwave processed germinated sorghum. *Lipids in health and disease*, 16(1), 125.
- Hein, P. P., Khaing, K. K., Khaing, A. A., Yee, T. W., & Lin, M. (2025). Proximate Composition and Anti-Nutritional Factor of Different Sorghum (*Sorghum bicolor* L. Moench) Varieties. *Asian Research Journal of Current Science*, 7(1), 210-219.
- Hermiza, M. (2015). Pengaruh perbandingan tepung beras dan tepung tapioka terhadap penerimaan konsumen pada cendol. *Jurnal Teknologi Pertanian*, 4(1), 18-28.
- Juliano, B. O. (1998). Varietal impact on rice quality.
- Kayisoglu, C., Altikardes, E., Guzel, N., & Uzel, S. (2024). Germination: A powerful way to improve the nutritional, functional, and molecular properties of white- and red-colored sorghum grains. *Foods*, 13(5), 662.
- Krell, M., Cvancar, L., Poloczec, M., Hanschen, F. S., & Rohn, S. (2021). Determination of isothiocyanate-protein conjugates in a vegetable-enriched bread. *Foods*, 10(6), 1300.
- Lembong, E., Wulandari, E., Harlina, P. W., & Tsalitsu, S. (2025). Effect of Fermentation on the Physico and Functional Properties of Red Sorghum Flour (*Sorghum bicolor* L.). *Chimica et Natura Acta*, 13(2), 115-126.
- Lestari, E. G. (2025). Kandungan Nutrisi dan Gizi pada Sorgum untuk Mendukung Ketahanan Pangan. *Warta Agrostandar*, 1(3), 11-14.
- Lestari, T., Mustikarini, E. D., & Apriyadi, R. (2019). *Teknologi pengelolaan lahan pasca tambang timah*. Uwais Inspirasi Indonesia.

- Li, C., Jeong, D., Lee, J. H., & Chung, H. J. (2020). Influence of germination on physicochemical properties of flours from brown rice, oat, sorghum, and millet. *Food Science and Biotechnology*, 29(9), 1223.
- Li, Y., Li, M., Liu, J., Zheng, W., Zhang, Y., Xu, T., ... & Yu, L. (2021). Chemical composition profiling and biological activities of phenolic compounds in eleven red sorghums. *Journal of Agricultural and Food Chemistry*, 69(32), 9407-9418.
- Makmur, T., & Wardhana, M. Y. (2022). Daya terima konsumen terhadap produk olahan minuman serbuk dari limbah biji nangka (*Arthocarpus heterophilus*). *MAHATANI: Jurnal Agribisnis (Agribusiness and Agricultural Economics Journal)*, 5(1), 89-96.
- Matalanis, A. M., Campanella, O. H., & Hamaker, B. R. (2009). Storage retrogradation behavior of sorghum, maize and rice starch pastes related to amylopectin fine structure. *Journal of Cereal Science*, 50(1), 74-81.
- Miranda-Fuentes, P., García-Carneros, A. B., & Molinero-Ruiz, L. (2021). Updated characterization of races of *Plasmopara halstedii* and entomopathogenic fungi as endophytes of sunflower plants in axenic culture. *Agronomy*, 11(2), 268.
- Nurhamsia, Sri Wahyuni, A. (2023). Diterima tanggal 12 Maret 2023 Disetujui tanggal 07 Desember 2023. Karakteristik Tepung Umbi Talas Hasil Modifikasi, 1(2), 75–84.
- Olamiti, G., Takalani, T. K., Beswa, D., & Jideani, A. I. O. (2020). Effect of malting and fermentation on colour, thermal properties, functional groups and crystallinity level of flours from pearl millet (*Pennisetum glaucum*) and sorghum (*Sorghum bicolor*). *Heliyon*, 6(12).
- Owusu, V., Donkor, E., Owusu-Sekyere, E., Ogundeji, A., & Owusu Asante, B. (2023). Climate change, variability and sustainable food systems. *Frontiers in sustainable food systems*, 6, 912811.
- Rajeswari, N. K. I., Saputra, I. P. A., & Setyawan, E. I. (2023, November). Pemanfaatan sereal sorgum (*Sorghum bicolor* L.) sebagai imunonutrisi dalam

- upaya meningkatkan sistem imun tubuh. In *Prosiding Workshop dan Seminar Nasional Farmasi* (Vol. 2, pp. 557-568).
- Ratnavathi, C. V., & Patil, J. V. (2014). Sorghum utilization as food.
- Rooney, L. W., & Awika, J. M. (2005). Overview of products and health benefits of specialty sorghums¹. *Cereal Foods World*, 50(3), 109.
- Salvati, D., Paschoalinotto, B. H., Mandim, F., Ferreira, I. C., Steinmacher, N. C., Pereira, C., & Dias, M. I. (2024). Exploring the impacts of sorghum (*Sorghum bicolor* L. Moench) germination on the flour's nutritional, chemical, bioactive, and technological properties. *Foods*, 13(3), 491.
- Sari, H. P., Zudri, F., & Sari, W. P. (2024). Respon Perkecambahan Benih Padi (*Oryza sativa* L.) Varietas Lokal Kabupaten Padang Pariaman Hasil Iradiasi Sinar Gamma. *Ekasakti Jurnal Penelitian dan Pengabdian*, 4(1), 19-31.
- Sari, I. S. K., Atifah, Y., & Erlita, Y. (2023). Uji Kadar Abu Pakan Ternak Daerah Kabupaten Sijunjung Dengan Metode Gravimetri. In *Prosiding Seminar Nasional Biologi* (Vol. 3, No. 2, pp. 858-865).
- Septianto, Y. E., Tifauzah, N., Lestari, N. T., & Wirawan, S. (2022). Effect of Silk Taro Flour Substitution (*Colocasia esculenta* L. Schott) on Physical Properties, Organoleptic Properties, and Antioxidant Activity in Steamed Brownies. *Darussalam Nutrition Journal*, 6(1), 55. <https://doi.org/10.21111/dnj.v6i1.7361>
- Setiarto, R. H. B., Widhyastuti, N., & Setiadi, D. (2018). Peningkatan Pati Resisten Tepung Sorgum Termodifikasi Melalui Fermentasi dan Siklus Pemanasan Bertekanan-Pendinginan. *Jurnal Ilmu Pertanian Indonesia*, 23(1), 10-20.
- Sharma, Y., Francis, N., Blanchard, C., & Santhakumar, A. B. (2026). The Germination Paradox in Sorghum: A Review. *Foods*, 15(3), 569.
- Siregar, Z. A. (2021). Kajian sorgum: kajian potensi sebagai alternatif pangan. *Jurnal Penelitian Agrosamudra*, 5(2), 80-86.
- Sukarminah, E., Wulandari, E., Lanti, I., Mardawati, E., & Yusran, R. (2017). Karakteristik Sifat Fisik dan Kimia Tepung Sorgum Kultivar Lokal Bandung

- Terfermentasi Spontan dan Tidak Spontan Menggunakan Ragi Roti. In *Seminar Nasional PATPI Bandar Lampung, 1296* (Vol. 1345).
- Susilo, E., Pujiwati, H., & Rita, W. (2025). Perkecambahan Benih Dan Kandungan Flavonoid Ekstrak Sorgum Pada Berbagai Tingkat Cekaman Kekeringan.
- Swastika, A. D., & Juwitaningtyas, T. (2024). Pendugaan Umur Simpan Tepung Salak (*Salacca zalacca*) Menggunakan Metode Accelerated Shelf Life Test (ASLT) Pendekatan Kadar Air Kritis. *Journal of Tropical Agricultural Engineering and Biosystems-Jurnal Keteknikaan Pertanian Tropis dan Biosistem*, 12(1), 46-54.
- Taylor, J. R., & Emmambux, M. N. (2010). Developments in our understanding of sorghum polysaccharides and their health benefits. *Cereal chemistry*, 87(4), 263-271.
- Tester, R. F., Karkalas, J., & Qi, X. (2004). Starch—composition, fine structure and architecture. *Journal of cereal science*, 39(2), 151-165.
- Torbica, A., Belović, M., Popović, L., & Čakarević, J. (2021). Heat and hydrothermal treatments of non-wheat flours. *Food Chemistry*, 334, 127523.
- Usman, S., Suhartono, M. T., Purwani, E. Y., Sitanggang, A. B., & Trisnawati, W. (2024). Characteristics of sorghum flour modified with physical and enzymatic treatments. *Emirates Journal of Food and Agriculture*, 36, 1-9.
- Waniska, R. D., & Rooney, L. W. (2000). Structure and chemistry of the sorghum caryopsis. *Sorghum: Origin, history, technology, and production*, 2, 649-679.
- Winarti, C., Widayanti, S. M., Setyawan, N., Suryana, E. A., & Widowati, S. (2023). Nutrient composition of Indonesian specialty cereals: Rice, corn, and sorghum as alternatives to combat malnutrition. *Preventive Nutrition and Food Science*, 28(4), 471.
- Wulandari, E., Zaida, Z., & Ariska, D. (2022). Kajian daya cerna pati cookies kecambah sorgum (*Sorghum bicolor* [L.] Moench) dengan tersubstitusi tepung kacang tunggak (*Vigna unguiculata* L.). *COMPOSITE: Jurnal Ilmu Pertanian*, 4(1), 14-19.

- Xu, J., Wang, W., & Zhao, Y. (2021). Phenolic compounds in whole grain sorghum and their health benefits. *Foods*, 10(8), 1921.
- Yang, R., Wang, P., Elbaloula, M. F., & Gu, Z. (2016). Effect of germination on main physiology and biochemistry metabolism of sorghum seeds. *Biosci. j.(Online)*, 378-383.
- Yi CuiPing, Y. C., Li Yan, L. Y., & Ping JuNai, P. J. (2017). Germination of sorghum grain results in significant changes in paste and texture properties.
- Zega, A. J. B. F., & Kurnia, T. D. (2025). Uji Kualitas Perkecambahan Benih Sorgum (*Sorghum Bicolor* L. Moench) Berbagai Genotipe Lokal Dari Sumba Timur. *Agrotek: Jurnal Ilmiah Ilmu Pertanian*, 9(2), 193-201.
- Zhang, K., Ke, F., Zhou, H., Wang, J., Ma, Z., Zhang, F., ... & Zou, J. (2025). The correlation of starch composition, physicochemical and structural properties of different sorghum grains. *Frontiers in Plant Science*, 16, 1515022.