DAFTAR PUSTAKA

Abouo, V. N., Akmel, C. D., Kakou, E. K., Assidjou, E. N., Amani, G. N., & Yao, B. K. (2015). Modelling of Thin Layer Drying Kinetics of Cocoa Beans in A Microwave Oven and Sun. *Food and Environment Safety*, *14*(2), 127–137.

Agustin, A., Kesuma, S., Widayanti, E., & Ikayanti, R. (2022). Penetapan Kadar Fenol Total Ekstrak Etanol Berbagai Biji Buah Salak Bali (Salacca zalanca var. Ambonensis) Menggunakan Metode Folin Ciolcalteu. *NUTRITURE JOURNAL*, *1*(3), Article 3. https://doi.org/10.31290/nj.v1i3.3705

Agustina, R., Nurba, D., Antono, W., & Septiana, R. (2019, June). Pengaruh Suhu dan Lama Penyangraian terhadap Sifat Fisik-Kimia Kopi Arabika dan Kopi Robusta. *Prosiding Seminar Nasional*. Inovasi Teknologi Untuk Masyarakat, Banda Aceh.

Alamri, E., Rozan, M., & Bayomy, H. (2022). A study of chemical Composition, Antioxidants, and volatile compounds in roasted Arabic coffee. *Saudi Journal of Biological Sciences*, *29*(5), 3133–3139. https://doi.org/10.1016/j.sjbs.2022.03.025

Alqarni, M. H., Prawez, P., Salkini, M. A., & Abdel-Kader, M. S. (2018). *Roasting Effect On The Caffeine Contents And Antioxidant Potential Of Different Coffee Grades Available In The Saudi Market*. https://doi.org/10.5281/ZENODO.2505094

Andri, K. B. (2025). *Berita BSIP TRI - Tren 2025: Peluang dan Daya Saing Kopi Indonesia*. https://tanamanindustri.bsip.pertanian.go.id/berita/tren-2025-peluang-dan-daya-saing-kopi-indonesia

Anggraini, A. P., Damat, D., & Manshur, H. A. (2024). Studi Karakteristik Fisikokimia dan Organoleptik Bubuk Kopi dari Biji Cacat Hitam Kopi Robusta dengan Perbedaan Suhu Penyangraian. *Food Technology and Halal Science Journal*, *6*(2), 117–132. https://doi.org/10.22219/fths.v6i2.28307

Anindita, F., Bahri, S., & Hardi, J. (2016). Ekstraksi dan Karakterisasi Glukomanan Dari Tepung Biji Salak (Salacca edulis Reinw.). *KOVALEN*, *2*(2). https://doi.org/10.22487/j24775398.2016.v2.i2.6720

Apriyanti, I. (2022). Pengaruh Variasi Waktu Jemur dan Sangrai Terhadap Karakteristik Mutu Organoleptik Kopi Biji Salak (Salacca Zalacca) di Ud. Budi Jaya Desa Kramat Bangkalan. *Journal Locus Penelitian Dan Pengabdian*, *1*(5), 361–378. https://doi.org/10.36418/locus.v1i5.107

Arumsari, A. G., Surya, R., Irmasuryani, S., & Sapitri, W. (2021). Analisis Proses Roasting pada Kopi. *Jurnal Beta Kimia*, *1*(2), Article 2. https://doi.org/10.201185/jbk.v1i2.5586

Arziyah, D., Yusmita, L., & Wijayanti, R. (2022). Analisis Mutu Organoleptik Sirup Kayu Manis Dengan Modifikasi Perbandingan Konsentrasi Gula Aren Dan Gula Pasir. *Jurnal Penelitian Dan Pengkajian Ilmiah Eksakta*, *1*(2), 105–109. https://doi.org/10.47233/jppie.v1i2.602

Badan Pusat Statistik. (2021). *Statistika Hortikultura*. Badan Pusat Statistik.

Badan Pusat Statistik. (2022). *Produksi Tanaman Buah-buahan—Tabel Statistik*. https://www.bps.go.id/id/statistics-table/2/NjIjMg==/produksi-tanaman-buah-buahan.html

Bahrumi, P., Ratna, R., & Fadhil, R. (2022). Levelisasi Penyangraian Kopi: Suatu Kajian. *Jurnal Ilmiah Mahasiswa Pertanian*, *7*(1), 522–525.

Bastian, F., Hutabarat, O. S., Dirpan, A., Nainu, F., Harapan, H., Emran, T. B., & Simal-Gandara, J. (2021). From Plantation to Cup: Changes in Bioactive Compounds during Coffee Processing. *Foods*, *10*(11), 2827. https://doi.org/10.3390/foods10112827

Behera, G., Madhumita, M., Aishwarya, J., & Gayathri, V. (2021). Comparative Evaluation of Drying Kinetics of Carrot Slices in Hot air and Microwave Drying. *The Journal of Phytopharmacology*, *10*(4), 242–248. https://doi.org/10.31254/phyto.2021.10405

Bhumiratana, N., Adhikari, K., & Chambers, E. (2011). Evolution of sensory aroma attributes from coffee beans to brewed coffee. *LWT - Food Science and Technology*, *44*(10), 2185–2192. https://doi.org/10.1016/j.lwt.2011.07.001

Bobková, A., Hudáček, M., Jakabová, S., Belej, Ľ., Capcarová, M., Čurlej, J., Bobko, M., Árvay, J., Jakab, I., Čapla, J., & Demianová, A. (2020). The effect of roasting on the total polyphenols and antioxidant activity of coffee. *Journal of Environmental Science and Health, Part B*, *55*(5), 495–500. https://doi.org/10.1080/03601234.2020.1724660

Bogusz, R., Bryś, J., Onopiuk, A., Pobiega, K., Tomczak, A., Kowalczewski, P. Ł., Rybak, K., & Nowacka, M. (2024). The Impact of Drying Methods on the Quality of Blanched Yellow Mealworm (Tenebrio molitor L.) Larvae. *Molecules*, *29*(15), 3679. https://doi.org/10.3390/molecules29153679

Brahmi, F., Mateos-Aparicio, I., Mouhoubi, K., Guemouni, S., Sahki, T., Dahmoune, F., Belmehdi, F., Bessai, C., Madani, K., & Boulekbache-Makhlouf, L. (2023). Kinetic Modeling of Convective and Microwave Drying of Potato Peels and Their Effects on Antioxidant Content and Capacity. *Antioxidants*, *12*(3), 638. https://doi.org/10.3390/antiox12030638

Bressani, A. P. P., Martinez, S. J., Evangelista, S. R., Dias, D. R., & Schwan, R. F. (2018). Characteristics of fermented coffee inoculated with yeast starter cultures using different inoculation methods. *LWT*, *92*, 212–219. https://doi.org/10.1016/j.lwt.2018.02.029

Carvalho, F. M., Moksunova, V., & Spence, C. (2020). Cup texture influences taste and tactile judgments in the evaluation of specialty coffee. *Food Quality and Preference*, *81*, 103841. https://doi.org/10.1016/j.foodqual.2019.103841

Chan, H. Y., Rukayadi, Y., Azman, E. M., Ashari, R., & Lim, S. A. H. (2024). Physicochemical Properties and Sensory Acceptability of Fermented Roasted Robusta Coffee (Coffea canephora L.) Beans. *Journal of Engineering and Technological Sciences*, *56*(3), 389–403. https://doi.org/10.5614/j.eng.technol.sci.2024.56.3.7

Cho, A. R., Park, K. W., Kim, K. M., Kim, S. Y., & Han, J. (2014). Influence of Roasting Conditions on the Antioxidant Characteristics of Colombian Coffee (*Coffea arabica* L.) Beans: Roasting Condition Affects Antioxidant

Activity of Coffee Beans. *Journal of Food Biochemistry*, *38*(3), 271–280. https://doi.org/10.1111/jfbc.12045

Christie, C., & Lestari, N. A. (2020). Identifikasi Morfologi dan Kekerabatan Salak Di Jawa Timur. *VIABEL: Jurnal Ilmiah Ilmu-Ilmu Pertanian*, *14*(2), Article 2. https://doi.org/10.35457/viabel.v14i2.1228

Córdoba, N., Moreno, F. L., Osorio, C., Velásquez, S., Fernandez-Alduenda, M., & Ruiz-Pardo, Y. (2021). Specialty and regular coffee bean quality for cold and hot brewing: Evaluation of sensory profile and physicochemical characteristics. *LWT*, *145*, 111363. https://doi.org/10.1016/j.lwt.2021.111363

Cwiková, O., Komprda, T., Šottníková, V., Svoboda, Z., Simonová, J., Slováček, J., & Jůzl, M. (2022). Effects of Different Processing Methods of Coffee Arabica on Colour, Acrylamide, Caffeine, Chlorogenic Acid, and Polyphenol Content. *Foods*, *11*(20), 3295. https://doi.org/10.3390/foods11203295

Da Costa, D. S., Albuquerque, T. G., Costa, H. S., & Bragotto, A. P. A. (2023). Thermal Contaminants in Coffee Induced by Roasting: A Review. *International Journal of Environmental Research and Public Health*, *20*(8), 5586. https://doi.org/10.3390/ijerph20085586

De Araújo Cordeiro, A. R. R., De Medeiros, L. L., Bezerra, T. K. A., Pacheco, M. T. B., De Sousa Galvão, M., & Madruga, M. S. (2020). Effects of thermal processing on the flavor molecules of goat by-product hydrolysates. *Food Research International*, *138*, 109758. https://doi.org/10.1016/j.foodres.2020.109758

dePaula, J., & Farah, A. (2019). Caffeine Consumption through Coffee: Content in the Beverage, Metabolism, Health Benefits and Risks. *Beverages*, *5*(2), 37. https://doi.org/10.3390/beverages5020037

Diniyah, N., & Lee, S.-H. (2020). Komposisi Senyawa Fenol dan Potensi Antioksidan dari Kacang-Kacangan: REVIEW Phenolic Composition and Antioxidant Potential of Legumes – A Review. *Jurnal Agroteknologi*, *14*(1), 91–102.

Dong, W., Hu, R., Chu, Z., Zhao, J., & Tan, L. (2017). Effect of different drying techniques on bioactive components, fatty acid composition, and volatile profile of robusta coffee beans. *Food Chemistry*, *234*, 121–130. https://doi.org/10.1016/j.foodchem.2017.04.156

Eggleston, G., & Vercellotti, J. R. (2000). Degradation of Sucrose, Glucose and Fructose in Concentrated Aqueous Solutions Under Constant pH Conditions at Elevated Temperature. *Journal of Carbohydrate Chemistry*, *19*(9), 1305–1318. https://doi.org/10.1080/07328300008544153

ElGamal, R., Song, C., Rayan, A. M., Liu, C., Al-Rejaie, S., & ElMasry, G. (2023). Thermal Degradation of Bioactive Compounds during Drying Process of Horticultural and Agronomic Products: A Comprehensive Overview. *Agronomy*, *13*(6), 1580. https://doi.org/10.3390/agronomy13061580

Eröz Poyraz, İ., Öztürk, N., Kıyan, H. T., & Demirci, B. (2016). Volatile compounds of Coffea arabica L. green and roasted beans. *Anadolu*

University Journal Of Science And Technology –C Life Sciences and Biotechnology, *5*(1). https://doi.org/10.18036/btdc.13390

Eshetu, E. F., Tolassa, K., Mohammed, A., Berecha, G., & Garedew, W. (2022). Effect of processing and drying methods on biochemical composition of coffee (*Coffea arabica* L.) varieties in Jimma Zone, Southwestern Ethiopia. *Cogent Food & Agriculture*, *8*(1), 2121203. https://doi.org/10.1080/23311932.2022.2121203

Fadai, N. T., Melrose, J., Please, C. P., Schulman, A., & Van Gorder, R. A. (2017). A heat and mass transfer study of coffee bean roasting. *International Journal of Heat and Mass Transfer*, *104*, 787–799. https://doi.org/10.1016/j.ijheatmasstransfer.2016.08.083

Fatah, K. M. A. (2020). Analisis Unjuk Kerja Oven Pengering Hasil Modifikasi Dengan Variasi Kecepatan Aliran Udara Panas. *Infotekmesin*, *11*(2), 153–157. https://doi.org/10.35970/infotekmesin.v11i2.261

Fawwaz, M., Muflihunna, A., Pratama, M., Rahmawati, R., Razak, R., & Baits, M. (2022). Total phenolic and flavonoid compound of crude and purified extract of green tea leaves (Camellia sinensis) from Makassar-Indonesia. *Jurnal Fitofarmaka Indonesia*, *9*(3), 19–24. https://doi.org/10.33096/jffi.v9i3.916

Febrianto, N. A., & Zhu, F. (2023). Coffee bean processing: Emerging methods and their effects on chemical, biological and sensory properties. *Food Chemistry*, *412*, 135489. https://doi.org/10.1016/j.foodchem.2023.135489

Febrina, D., & Prabandari, R. (2021). Aktivitas Antioksidan Ekstrak Etanol Biji Salak Pondoh (Salacca zalacca) Kultivar Nglumut dengan Metode 1,1-Difenil-2-Pikrilhidrazil (DPPH). *Seminar Nasional Penelitian Dan Pengabdian Kepada Masyarakat (SNPPKM)*, 1524–1531.

Frankova, A., Manourova, A., Kotikova, Z., Vejvodova, K., Drabek, O., Riljakova, B., Famera, O., Ngula, M., Ndiyoi, M., Polesny, Z., Verner, V., & Tauchen, J. (2021). The Chemical Composition of Oils and Cakes of Ochna serrulata (Ochnaceae) and Other Underutilized Traditional Oil Trees from Western Zambia. *Molecules*, *26*(17), 5210. https://doi.org/10.3390/molecules26175210

Freitas, V. V., Borges, L. L. R., Castro, G. A. D., Almeida, L. F., Crepalde, L. T., Kobi, H. D. B., Vidigal, M. C. T. R., Dos Santos, M. H., Fernandes, S. A., Maitan-Alfenas, G. P., & Stringheta, P. C. (2024). Influence of roasting levels on chemical composition and sensory quality of Arabica and Robusta coffee: A comparative study. *Food Bioscience*, *59*, 104171. https://doi.org/10.1016/j.fbio.2024.104171

Fujiko, M., Maulidea, K., Mierza, V., & Sumardi, S. (2023). Penghambatan Pertumbuhan Bakteri *Dermacoccus nishinomiyaensis* dan *Micrococcus luteus* Dengan Ekstrak Biji Salak (*Salacca zalacca (Geartn.) Voss*). *Jambura Journal of Health Science and Research*, *5*(2), 533–540.

Girma, B., Gure, A., & Wedajo, F. (2020). Influence of Altitude on Caffeine, 5-Caffeoylquinic Acid, and Nicotinic Acid Contents of Arabica Coffee Varieties. *Journal of Chemistry*, *2020*, 1–7. https://doi.org/10.1155/2020/3904761

Grüneis, V., Schweiger, K., Galassi, C., Karl, C. M., Treml, J., Ley, J. P., König, J., Krammer, G. E., Somoza, V., & Lieder, B. (2021). Sweetness Perception is not Involved in the Regulation of Blood Glucose after Oral Application of Sucrose and Glucose Solutions in Healthy Male Subjects. *Molecular Nutrition & Food Research*, *65*(2), 2000472. https://doi.org/10.1002/mnfr.202000472

Grzelczyk, J., Fiurasek, P., Kakkar, A., & Budryn, G. (2022). Evaluation of the thermal stability of bioactive compounds in coffee beans and their fractions modified in the roasting process. *Food Chemistry*, *387*, 132888. https://doi.org/10.1016/j.foodchem.2022.132888

Hamid, Thakur, N. S., Thakur, A., & Kumar, P. (2020). Effect of different drying modes on phenolics and antioxidant potential of different parts of wild pomegranate fruits. *Scientia Horticulturae*, *274*, 109656. https://doi.org/10.1016/j.scienta.2020.109656

Hardina, H., Martadjaya, I. G. M. I. D., & Sudiarta, N. P. (2021). Inovasi Pengolahan Buah Salak Sebagai Produk Kuliner dan Oleh Oleh Khas di Desa Wisata Sibetan. *Jurnal Gastronomi Indonesia*, *9*(2), 86–96. https://doi.org/10.52352/jgi.v9i2.681

Herawati, D., Giriwono, P. E., Dewi, F. N. A., Kashiwagi, T., & Andarwulan, N. (2019). Critical roasting level determines bioactive content and antioxidant activity of Robusta coffee beans. *Food Science and Biotechnology*, *28*(1), 7–14. https://doi.org/10.1007/s10068-018-0442-x

Heriana, H., Sukainah, A., & Wijaya, M. (2023). Pengaruh Suhu dan Waktu Penyangraian Terhadap Kadar Kafein dan Mutu Sensori Kopi Liberika (Coffea liberica) Bantaeng. *PATANI*, *6*(1), 1–10.

Holschuh, A. (2025). *The Coffee and Coffee Shop Industries: What Consumers Want in Coffee*. https://www.mintel.com/insights/food-and-drink/the-coffee-and-coffee-shop-industries-what-consumers-want-in-coffee/

Horizon. (2024). *Global Specialty Coffee Market Size & Outlook, 2024-2030*. https://www.grandviewresearch.com/horizon/outlook/specialty-coffee-market-size/global

Hu, D., Liu, X., Qin, Y., Yan, J., Li, R., & Yang, Q. (2023). The impact of different drying methods on the physical properties, bioactive components, antioxidant capacity, volatile components and industrial application of coffee peel. *Food Chemistry: X*, *19*, 100807. https://doi.org/10.1016/j.fochx.2023.100807

Hurtta, M., Pitkänen, I., & Knuutinen, J. (2004). Melting behaviour of d-sucrose, d-glucose and d-fructose. *Carbohydrate Research*, *339*(13), 2267–2273. https://doi.org/10.1016/j.carres.2004.06.022

Ibroham, M. H., Jamilatun, S., & Kumalasari, I. D. (2022). A Review: Potensi Tumbuhan-Tumbuhan di Indonesia Sebagai Antioksidan Alami. *SEMINAR NASIONAL PENELITIAN*, 1–13.

Imarc. (2025). *Snake Fruit Processing Plant Project Report 2025: Industry Trends, Plant Setup, Machinery, Raw Materials, Investment Opportunities, Cost and Revenue*. https://www.imarcgroup.com/snake-fruit-processing-plant-project-report

Ismail, B. B., Huang, R., Liu, D., Ye, X., & Guo, M. (2022). Potential Valorisation of Baobab (*Adansonia digitata*) Seeds as a Coffee Substitute: Insights and Comparisons on The Effect Of Roasting on Quality, Sensory Profiles, and Characterisation of Volatile Aroma Compounds by HS-SPME/GC–MS. *Food Chemistry*, *394*, 133475. https://doi.org/10.1016/j.foodchem.2022.133475

Jeon, J.-S., Kim, H.-T., Jeong, I.-H., Hong, S.-R., Oh, M.-S., Yoon, M.-H., Shim, J.-H., Jeong, J. H., & Abd El-Aty, A. M. (2019). Contents of Chlorogenic Acids and Caffeine in Various Coffee-Related Products. *Journal of Advanced Research*, *17*, 85–94. https://doi.org/10.1016/j.jare.2019.01.002

Jiang, Z., Han, Z., Zhu, M., Wan, X., & Zhang, L. (2023). Effects of Thermal Processing on Transformation of Polyphenols and Flavor Quality. *Current Opinion in Food Science*, *51*, 101014. https://doi.org/10.1016/j.cofs.2023.101014

Joshua, J., & Sinuraya, R. K. (2018). Review Jurnal : Keanekaragaman Aktivitas Farmakologi Tanaman Salak (*Salacca zalacca*). *Farmaka*, *16*(1), 99–107.

Kadir, S., Darmadji, P., Hidayat, C., & Supriyadi. (2010). Fraksinasi dan Identifikasi Senyawa Volatil pada Asap Cair Tempurung Kelapa Hibrida. *Agritech*, *30*(2), 57–67.

Karta, I. W., Susila, L. A. N. K. E., Mastra, I. N., & Dikta, P. G. A. (2015). Kandungan Gizi Pada Kopi Biji Salak (*Salacca zalacca*) Produksi Kelompok Tani Abian Salak Desa Sibetan Yang Berpotensi sebagai Produk Pangan Lokal Berantioksidan dan Berdaya Saing. *Jurnal Virgin*, *1*(2), 123–133.

Kieu Tran, T. M., Kirkman, T., Nguyen, M., & Van Vuong, Q. (2020). Effects of Drying on Physical Properties, Phenolic Compounds and Antioxidant Capacity of Robusta Wet Coffee Pulp (*Coffea canephora*). *Heliyon*, *6*(7), e04498. https://doi.org/10.1016/j.heliyon.2020.e04498

Kim, I., Jung, S., Kim, E., Lee, J.-W., Kim, C.-Y., Ha, J.-H., & Jeong, Y. (2021). Physicochemical characteristics of Ethiopian Coffea arabica cv. Heirloom coffee extracts with various roasting conditions. *Food Science and Biotechnology*, *30*(2), 235–244. https://doi.org/10.1007/s10068-020-00865-w

Kitzberger, C. S. G., Pot, D., Marraccini, P., Filipe Protasio Pereira, L., Brígida Dos Santos Scholz, M., 1 IDR—Instituto de Desenvolvimento Rural do Paraná—IAPAR-EMATER, Rodovia Celso Garcia Cid, km 375, CEP 86047-902, Londrina, PR, Brazil, 2 CIRAD, UMR AGAP, F-34398 Montpellier, France, 3 UniversitéMontpellier, CIRAD, INRA, Montpellier SupAgro, Montpellier, France, 4 CIRAD, UMR IPME, F-34398 Montpellier, France, & 5 EMBRAPA Café—Empresa Brasileira de Pesquisa Agropecuária, CEP 70770-901, Brasília, DF, Brazil. (2020). Flavor precursors and sensory attributes of coffee submitted to different post-harvest processing. *AIMS Agriculture and Food*, *5*(4), 700–714. https://doi.org/10.3934/agrfood.2020.4.700

Kleinwächter, M., & Selmar, D. (2010). Influence of Drying on The Content of Sugars in Wet Processed Green Arabica Coffees. *Food Chemistry*, *119*(2), 500–504. https://doi.org/10.1016/j.foodchem.2009.06.048

Knopp, S., Bytof, G., & Selmar, D. (2006). Influence of processing on the content of sugars in green Arabica coffee beans. *European Food Research and Technology*, *223*(2), 195–201. https://doi.org/10.1007/s00217-005-0172-1

Korkmaz, A., Atasoy, A. F., & Hayaloglu, A. A. (2020). Changes in volatile compounds, sugars and organic acids of different spices of peppers (Capsicum annuum L.) during storage. *Food Chemistry*, *311*, 125910. https://doi.org/10.1016/j.foodchem.2019.125910

Król, K., Gantner, M., Tatarak, A., & Hallmann, E. (2020). The content of polyphenols in coffee beans as roasting, origin and storage effect. *European Food Research and Technology*, *246*(1), 33–39. https://doi.org/10.1007/s00217-019-03388-9

Kulapichitr, F., Borompichaichartkul, C., Fang, M., Suppavorasatit, I., & Cadwallader, K. R. (2022). Effect of post-harvest drying process on chlorogenic acids, antioxidant activities and CIE-Lab color of Thai Arabica green coffee beans. *Food Chemistry*, *366*, 130504. https://doi.org/10.1016/j.foodchem.2021.130504

Kulapichitr, F., Borompichaichartkul, C., Suppavorasatit, I., & Cadwallader, K. R. (2019). Impact of drying process on chemical composition and key aroma components of Arabica coffee. *Food Chemistry*, *291*, 49–58. https://doi.org/10.1016/j.foodchem.2019.03.152

Kumoro, A. C., Alhanif, M., & Wardhani, D. H. (2020). A Critical Review on Tropical Fruits Seeds as Prospective Sources of Nutritional and Bioactive Compounds for Functional Foods Development: A Case of Indonesian Exotic Fruits. *International Journal of Food Science*, *2020*, 1–15. https://doi.org/10.1155/2020/4051475

Kusmiyati, K., & Fudholi, A. (2022). Performance Analysis and Kinetic Modeling of Coffee Beans in Microwave Convective Dryer Integrated Photovoltaic System. *International Information and Engineering Technology Association*, *9*(4), 1089–1094. https://doi.org/10.18280/mmep.090427

Lestari, D., Kadirman, K., & Patang, P. (2017). Subtitusi Bubuk Biji Salak dan Bubuk Kopi Arabika dalam Pembuatan Bubuk Kopi. *Jurnal Pendidikan Teknologi Pertanian; Vol 3, No 1 (2017): Februari; 15-24 ; 2614-7858 ; 2476-8995*. https://ojs.unm.ac.id/ptp/article/view/5190

Li, M., Chen, Y., Wang, X., Cheng, S., Liu, F., & Huang, L. (2019). Determination of drying kinetics and quality changes of Panax quinquefolium L. dried in hot-blast air. *LWT*, *116*, 108563. https://doi.org/10.1016/j.lwt.2019.108563

Li, Z., Zhao, C., & Cao, C. (2023). Production and Inhibition of Acrylamide during Coffee Processing: A Literature Review. *Molecules*, *28*(8), 3476. https://doi.org/10.3390/molecules28083476

Liao, Y.-C., Kim, T., Silva, J. L., Hu, W.-Y., & Chen, B.-Y. (2022). Effects of roasting degrees on phenolic compounds and antioxidant activity in coffee beans from different geographic origins. *LWT*, *168*, 113965. https://doi.org/10.1016/j.lwt.2022.113965

LIczbiński, P., & Bukowska, B. (2022). Tea and coffee polyphenols and their biological properties based on the latest in vitro investigations. *Industrial Crops and Products*, *175*, 114265. https://doi.org/10.1016/j.indcrop.2021.114265

Linangsari, T., Sandri, D., Lestari, E., & Noorhidayah. (2022). Evaluasi Sensori Snack Bar Talipuk dengan Penambahan Tepung Pisang Kepok (Musa paradisiaca forma typica) pada Panelis Anak-anak dan Dewasa. *Jurnal Agroindustri Halal*, *8*(2), 213–221.

Liu, H., Liu, H., Liu, H., Zhang, X., Hong, Q., Chen, W., & Zeng, X. (2021). Microwave Drying Characteristics and Drying Quality Analysis of Corn in China. *Processes*, *9*(9), 1511. https://doi.org/10.3390/pr9091511

Liu, Y., Liao, Y., Guo, M., Zhang, W., Sang, Y., Wang, H., Cheng, S., & Chen, G. (2022). Comparative elucidation of bioactive and volatile components in dry mature jujube fruit (Ziziphus jujuba Mill.) subjected to different drying methods. *Food Chemistry: X*, *14*, 100311. https://doi.org/10.1016/j.fochx.2022.100311

Lokaria, E., & Susanti, I. (2018). Uji Organoleptik Kopi Biji Salak dengan Varian Waktu Penyangraian. *BIOEDUSAINS: Jurnal Pendidikan Biologi Dan Sains; Vol 1 No 1 (2018): BIOEDUSAINS:Jurnal Pendidikan Biologi Dan Sains; 34-42 ; 2598-7453 ; 2622-3929 ; 10.31539/Bioedusains.V1i1*. https://journal.ipm2kpe.or.id/index.php/BIOEDUSAINS/article/view/262

Mahardani, O. T., & Yuanita, L. (2021). Efek Metode Pengolahan dan Penyimpanan Terhadap Kadar Senyawa Fenolik dan Aktivitas Antioksidan. *UNESA Journal of Chemistry*, *10*(1), 64–78.

Makiso, M. U., Tola, Y. B., Ogah, O., & Endale, F. L. (2024). Bioactive compounds in coffee and their role in lowering the risk of major public health consequences: A review. *Food Science & Nutrition*, *12*(2), 734–764. https://doi.org/10.1002/fsn3.3848

Mangku, I. G. P., Suriati, L., Ardana, D. G. Y., & Putra, W. W. (2022). The Effects of Processing Methods on the Quality of Arabica Kintamani Green Beans. *International Journal of Food Studies*, *2*, 374–385. https://doi.org/10.7455/ijfs/11.2.2022.a9

Mardiah, M., Novidahlia, N., & Mashudi, M. (2012). Penentuan Metode Pengeringan (Cabinet Dryer dan Fluidized Bed Dryer) Terhadap Komponen dan Kapasitas Antioksidan Pada Rosela Kering (*Hibiscus sabdariffa L*). *Jurnal Pertanian*, *3*(2), 104–110.

Mazumdar, P., Pratama, H., Lau, S.-E., Teo, C. H., & Harikrishna, J. A. (2019). Biology, phytochemical profile and prospects for snake fruit: An antioxidant-rich fruit of South East Asia. *Trends in Food Science & Technology*, *91*, 147–158. https://doi.org/10.1016/j.tifs.2019.06.017

Mierza, V., Febriani, Y., Sumardi, S., Ramadhani, A. A., Julita, R., Telaumbanua, F. D., & Zuhra, E. (2023). Analisis Kromatografi Lapis Tipis dan Aktivitas Antimikroba Ekstrak N-Heksana, Etil Asetat dan Etanol Biji Salak (*Salacca zalacca (Gaertn.) Voss*). *Jambura Journal of Health Sciences and Research; Vol 5, No 2 (2023): April: Jambura Journal of Health Sciences*

and Research; 590-601 ; 2655-643X ; 2623-0674. https://ejurnal.ung.ac.id/index.php/jjhsr/article/view/18914

Mirhosseini, H., Amid, B. T., & Cheong, K. W. (2013). Effect of Different Drying Methods on Chemical and Molecular Structure of Heteropolysaccharide–Protein Gum From Durian Seed. *Food Hydrocolloids*, *31*(2), 210–219. https://doi.org/10.1016/j.foodhyd.2012.11.005

Muñoz-Neira, M. J., Roa-Ardila, M. F., & Correa-Celi, C. R. (2019). Comparative Analysis of Drying Coffee Beans Using Microwave and Conventional Oven. *Revista Facultad de Ingeniería Universidad de Antioquia*, *95*, 100–108. https://doi.org/10.17533/udea.redin.20191151

Murray, R. K., Granner, D. K., & Rodwell, V. W. (2009). *Biokimia Harper Edisi 27*. EGC.

Namora, J., Sihombing, M., & Rahardjo, M. (2020). Pengaruh Metode Pengeringan terhadap Senyawa Volatil pada Pembentukan Flavor Biji Kopi Robusta. *Prosiding Seminar Nasional Lahan Suboptimal Ke-8 Tahun 2020, Palembang 20 Oktober 2020 "Komoditas Sumber Pangan Untuk Meningkatkan Kualitas Kesehatan Di Era Pandemi Covid -19,"* 1028–1042.

Nhan, P. P., & Phu, N. T. (2012). Effect of Time and Water Temperature on Caffeine Extraction From Coffee. *Pakistan Journal of Nutrition*, *11*(2), 100–103.

Normilawati, Fadlilaturrahmah, Hadi, S., & Normaidah. (2019). Penetapan Kadar Air Dan Kadar Protein Pada Biskuit Yang Beredar Di Pasar Banjarbaru. *CERATA Jurnal Ilmu Farmasi*, *10*(2), 51–55. https://doi.org/10.61902/cerata.v10i2.77

Nugroho, Y. A., & Ningsih, E. M. N. (2022). Hubungan Morfologi Vegetatif dan Generatif Salak Pondoh (Salacca zalacca) di Sentra Salak Pondoh Kabupaten Malang. *Agrika: Jurnal Ilmu-Ilmu Pertanian*, *14*(2), 172–183.

Obando, A. M., & Figueroa, J. G. (2024). Effect of Roasting Level on the Development of Key Aroma-Active Compounds in Coffee. *Molecules*, *29*(19), 4723. https://doi.org/10.3390/molecules29194723

Octaviana, A. C., & Sandrasari, D. A. (2024). Identifikasi Komponen Bioaktif Minuman Bubuk Kopi Jahe Merah Menggunakan Gas Chromatography-Mass Spectrometry. *Jurnal Teknologi Pangan Kesehatan*, *6*(1), 12–21.

Oesman, R., & Ardiansyah. (2022). Budi Daya Pohon Salak di Tanah Karo. *All Fields of Science J-LAS*, *2*(2), 301–309.

Osorio Pérez, V., Matallana Pérez, L. G., Fernandez-Alduenda, M. R., Alvarez Barreto, C. I., Gallego Agudelo, C. P., & Montoya Restrepo, E. C. (2023). Chemical Composition and Sensory Quality of Coffee Fruits at Different Stages of Maturity. *Agronomy*, *13*(2), 341. https://doi.org/10.3390/agronomy13020341

Özcan, M. M., Uslu, N., & Lemiasheuski, V. (2023). The effect of roasting in microwave and oven on selected constituents, antioxidant activity, fatty acids, phenolic compounds and mineral contents of Chestnut (Cestanea

sativa Milles) kernels. *Food and Humanity*, *1*, 716–722. https://doi.org/10.1016/j.foohum.2023.07.014

Permaidi, M. R., Oktafa, H., & Agustianto, K. (2018). Peraancangan Sistem Uji Sensoris Makanan dengan Pengujian Peference Test (Hedonik dan Mutu Hedonik), Studi Kasus Roti Tawar, Menggunakan Algoritma Radial Basis Function Network. *Jurnal Mikrotik*, *8*(1), 29–42.

Portillo, O. R., & Arévalo, A. C. (2022). Coffee's carbohydrates. A critical review of scientific literature. *Bionatura*, *7*(3), 1–12. https://doi.org/10.21931/RB/2022.07.03.11

Porubcan, A. R., & Vickers, Z. M. (2005). Characterizing milk aftertaste: The effects of salivation rate, PROP taster status, or small changes in acidity, fat, or sucrose on acceptability of milk to milk dislikers. *Food Quality and Preference*, *16*(7), 608–620. https://doi.org/10.1016/j.foodqual.2005.01.007

Pratiwi H, A. R., Yusran, Isawati, & Artati. (2023). Analisis Kadar Antioksidan Pada Ekstrak Daun Binahong Hijau *Anredera cordifolia (Ten.) Steenis*. *Bioma : Jurnal Biologi Makassar*, *8*(2), 65–74.

Prayogo, K., Wulandari, W., & Suhartatik, N. (2016). Pembuatan Kopi Biji Salak (Salacca zalacca) dengan Variasi Lama Penyangraian dan Penambahan Bubuk Jahe. *Jurnal Teknologi Dan Industri Pangan*, *1*(2), 69–78.

Precoppe, M., Janjai, S., Mahayothee, B., & Müller, J. (2015). Batch uniformity and energy efficiency improvements on a cabinet dryer suitable for smallholder farmers. *Journal of Food Science and Technology*, *52*(8), 4819–4829. https://doi.org/10.1007/s13197-014-1544-y

Preinfalk, V., Schweiger, K., Hüller, L., Dunkel, A., Kimmeswenger, I., Deck, C. M., Rust, P., Somoza, V., Krammer, G. E., Ley, J. P., & Lieder, B. (2024). A high sucrose detection threshold is associated with increased energy intake and improved post-prandial glucose response independent of the sweetness intensity of isocaloric sucrose solutions. *Npj Metabolic Health and Disease*, *2*(1), 1. https://doi.org/10.1038/s44324-023-00003-0

Priadi, T., & Giyarto, G. T. (2019). *Profil Suhu dan Kadar Air Kayu dalam Pengeringan Oven Pemanas dan Gelombang Mikro*. *17*(2).

Purwanto, D., Bahri, S., & Ridhay, A. (2017). Uji Aktivitas Antioksidan Ekstrak Buah Purnajiwa (*Kopsia arborea Blume.*) dengan Berbagai Pelarut. *Kovalen*, *3*(1), 24. https://doi.org/10.22487/j24775398.2017.v3.i1.8230

Purwanto, N., Rismawati, E., & Sadiyah, Esti. R. (2015). Uji Sitotoksik Ekstrak Biji Salak (Salacca Zalacca (Gaert) Voss) dengan Menggunakan Metode Brine Shrimp Lethality Test (Bslt). *Prosiding Penelitian SPeSIA Unisba 2015*, *2*, 616–622.

Puspaningrum, D. H. D., & Sari, N. K. Y. (2020). Pengaruh Pengeringan dan Rasio Penyeduhan terhadap Sifat Fisik dan Kimia Teh Cascara Kopi Arabika (Coffea arabika L.). *Pro Food (Jurnal Ilmu Dan Teknologi Pangan)*, *6*(2), 710–718.

R. Portillo, O., & Arévalo, A. C. (2022). Coffee's Phenolic Compounds. A general overview of the coffee fruit's phenolic composition. *Bionatura*, *7*(3), 1–19. https://doi.org/10.21931/RB/2022.07.03.31

Rabani RS, I. G. A. Y., & Fitriani, P. P. E. (2022). Analisis Kadar Kafein dan Antioksidan Kopi Robusta (Coffea canephora) Terfermentasi Saccharomyces cerevisiae. *Jurnal Ilmu Dan Teknologi Pangan*, *11*(2), 373–381.

Rao, N. Z., Fuller, M., & Grim, M. D. (2020). Physiochemical Characteristics of Hot and Cold Brew Coffee Chemistry: The Effects of Roast Level and Brewing Temperature on Compound Extraction. *Foods*, *9*(7), 902. https://doi.org/10.3390/foods9070902

Rehman, S., & Rubab, S. (2022). Solar radiation impact on drying parameters of mint (Mentha spicata L.). *International Journal of Health Sciences*, 3235–3246. https://doi.org/10.53730/ijhs.v6nS6.10053

Ribeiro, L. S., Miguel, M. G. D. C. P., Evangelista, S. R., Martins, P. M. M., Van Mullem, J., Belizario, M. H., & Schwan, R. F. (2017). Behavior of yeast inoculated during semi-dry coffee fermentation and the effect on chemical and sensorial properties of the final beverage. *Food Research International*, *92*, 26–32. https://doi.org/10.1016/j.foodres.2016.12.011

Ridho, A., Wathoni, N., Subarnas, A., & Levita, J. (2019). Insights of phytoconstituents and pharmacology activities of Salacca plants. *Journal of Applied Pharmaceutical Science*, *9*(10), 120–124. https://doi.org/10.7324/JAPS.2019.91017

Ridwan, M., Sasongko, R. M., & Zaki, A. (2023). Perilaku dan Respon Konsumen Kopi Terhadap Inovasi Produk Kopi Biji Salak. *Journal of Economic, Business and Engineering (JEBE); Vol 4 No 2 (2023): April; 189-198 ; 2716-2583 ; 10.32500/Jebe.V4i2*. https://ojs.unsiq.ac.id/index.php/jebe/article/view/4314

Rodriguez, Y. F. B., Guzman, N. G., & Hernandez, J. G. (2020). Effect of The Postharvest Processing Method on The Biochemical Composition and Sensory Analysis of Arabica Coffee. *Engenharia Agrícola*, *40*(2), 177–183. https://doi.org/10.1590/1809-4430-eng.agric.v40n2p177-183/2020

Rosida, D. F., Dc, H., Ft, A., & N, H. (2018). Produksi Kopi Biji Salak Bangkalan dengan Mesin Pemecah Biji Efisiensi Tinggi. *Jurnal Teknologi Pangan*, *12*(1). https://doi.org/10.33005/jtp.v12i1.1111

Rune, C. J. B., Giacalone, D., Steen, I., Duelund, L., Münchow, M., & Clausen, M. P. (2023). Acids in brewed coffees: Chemical composition and sensory threshold. *Current Research in Food Science*, *6*, 100485. https://doi.org/10.1016/j.crfs.2023.100485

Saidi, I. A., Nurbaya, S. R., Azara, R., & Eviyanti. (2022). *Nutrisi dan Senyawa Bioaktif pada Sayuran Daun*. UMSIDA Press.

Sajjacholapunt, P., Supratak, A., & Tuarob, S. (2022). Automatic measurement of acidity from roasted coffee beans images using efficient deep learning. *Journal of Food Process Engineering*, *45*(11), e14147. https://doi.org/10.1111/jfpe.14147

Salamatullah, A. M., Alkaltham, M. S., & Hayat, K. (2022). Effect of microwave roasting on the chemical constituents and antioxidant potentials of coffee beans. *International Food Research Journal*, *29*(3), 552–560. https://doi.org/10.47836/ifrj.29.3.08

Saleh, M. S. M., Siddiqui, M. J., Mediani, A., Ismail, N. H., Ahmed, Q. U., So'ad, S. Z. M., & Besbes, S. S. (2018). Salacca zalacca: A short review of the palm botany, pharmacological uses and phytochemistry. *Asian Pacific Journal of Tropical Medicine*, *11*(12), 645–652. https://doi.org/10.4103/1995-7645.248321

Saloko, S., Sulastri, Y., Murad, & Rinjani, M. A. (2019). *The effects of temperature and roasting time on the quality of ground Robusta coffee (Coffea rabusta) using Gene Café roaster*. 060001. https://doi.org/10.1063/1.5141310

Santanatoglia, A., Angeloni, S., Bartolucci, D., Fioretti, L., Sagratini, G., Vittori, S., & Caprioli, G. (2023). Effect of Brewing Methods on Acrylamide Content and Antioxidant Activity: Studying Eight Different Filter Coffee Preparations. *Antioxidants*, *12*(10), 1888. https://doi.org/10.3390/antiox12101888

Santosa, K. M., Supriyadi, Anggrahini, S., & Rahmadian, Y. (2020). Sensory Analysis, Caffeine, Chlorogenic Acid and Non-Volatile Taste Compounds of Arabica Coffee (Coffea arabica) Fermented with Sugar Addition for Brew Taste. *Indonesian Food and Nutrition Progress*, *17*(2), 37–44. https://doi.org/10.22146/ifnp.58664

Saputra, A., & Widuri, N. (2022). Faktor-Faktor Yang Mempengaruhi Kegiatan Pemeliharaan Tanaman Salak Pondoh (*Salacca zalaca*) Di Desa Karang Jinawi Kecamatan Sepaku Kabupaten Penajam Paser Utara. *Jurnal Agribisnis dan Komunikasi Pertanian (Journal of Agribusiness and Agricultural Communication)*, *5*(1), 33. https://doi.org/10.35941/jakp.5.1.2022.7060.33-41

Saud, S., & Salamatullah, A. M. (2021). Relationship between the Chemical Composition and the Biological Functions of Coffee. *Molecules*, *26*(24), 7634. https://doi.org/10.3390/molecules26247634

Schouten, M. A., Tappi, S., & Romani, S. (2020). Acrylamide in coffee: Formation and possible mitigation strategies – a review. *Critical Reviews in Food Science and Nutrition*, *60*(22), 3807–3821. https://doi.org/10.1080/10408398.2019.1708264

Seninde, D. R., & Chambers, E. (2020). Coffee Flavor: A Review. *Beverages*, *6*(3), 44. https://doi.org/10.3390/beverages6030044

Silalahi, M. (2018). Senyawa Bioaktif Pada *Acorus calamus (L.)* dan Pemanfaatannya Sebagai Obat Kanker dan Antimikroba. *Jurnal Dinamika Pendidikan*, *11*(1), Article 1. https://doi.org/10.51212/jdp.v11i1.799

Siregar, D. A., & Sari, L. P. (2020). Analisis Komposisi Kimia Dan Antioksidan Serbuk Biji Salak Padangsidimpuan (*Salacca sumatrana Becc*). *Jurnal Education and Development; Vol 8 No 4 (2020): Vol.8.No.4.2020; 403 ; 2614-6061 ; 2527-4295 ; 10.37081/Ed.V8i4*. http://journal.ipts.ac.id/index.php/ED/article/view/2086

Siregar, Y. D. I., Rudiana, T., & Riyadi, W. (2018). Identifikasi Komposisi Kimia dan Uji Aktivitas Antioksidan dari Biji Kurma (*Phoenix dactylifera*). *Jurnal Kimia VALENSI: Jurnal Penelitian Dan Pengembangan Ilmu*, *4*(2), 182–189. http://10.15408/jkv.v4i2.8818

Sitohang, A., Sihombing, D. R., Daniela, C., & Situmorang, R. (2021). Pemanfaatan Biji Salak (*Salacca edulis*) dan Ekstrak Jahe Merah (*Zingiber officinale var. Rubrum rhizoma*) sebagai Minuman Alternatif Pengganti Kopi Robusta (*Coffea canephora*). *Jurnal Riset Teknologi Pangan Dan Hasil Pertanian (RETIPA); Volume 1 Nomor 2; 38-48 ; 2745-4096 ; 10.54367/Retipa.V1i2*. http://ejournal.ust.ac.id/index.php/retipa/article/view/1204

Soeswanto, B., Wahyuni, N. L. E., & Prihandini, G. (2021). The Development of Coffee Bean Drying Process Technology – A Review. *Proceedings of the 2nd International Seminar of Science and Applied Technology (ISSAT 2021)*, *207*, 164–170. http://creativecommons.org/licenses/by-nc/4.0/.

Somporn, C., Kamtuo, A., Theerakulpisut, P., & Siriamornpun, S. (2011). Effects of roasting degree on radical scavenging activity, phenolics and volatile compounds of Arabica coffee beans (*Coffea arabica L. cv. Catimor*): Roasting degree on radical-scavenging activity. *International Journal of Food Science & Technology*, *46*(11), 2287–2296. https://doi.org/10.1111/j.1365-2621.2011.02748.x

Song, J. L., Asare, T. S., Kang, M. Y., & Lee, S. C. (2018). Changes in Bioactive Compounds and Antioxidant Capacity of Coffee under Different Roasting Conditions. *Korean Journal of Plant Resources*, *31*(6), 704–713. https://doi.org/10.7732/KJPR.2018.31.6.704

Sun, X., Gu, D., Fu, Q., Gao, L., Shi, C., Zhang, R., & Qiao, X. (2019). Content variations in compositions and volatile component in jujube fruits during the blacking process. *Food Science & Nutrition*, *7*(4), 1387–1395. https://doi.org/10.1002/fsn3.973

Sunarharum, W. B., Williams, D. J., & Smyth, H. E. (2014). Complexity of coffee flavor: A compositional and sensory perspective. *Food Research International*, *62*, 315–325. https://doi.org/10.1016/j.foodres.2014.02.030

Supriyadi, Suhardi, Suzuki, M., Yoshida, K., Muto, T., Fujita, A., & Watanabe, N. (2002). Changes in the Volatile Compounds and in the Chemical and Physical Properties of Snake Fruit (*Salacca edulis* Reinw) Cv. *Pondoh* during Maturation. *Journal of Agricultural and Food Chemistry*, *50*(26), 7627–7633. https://doi.org/10.1021/jf020620e

Syukri, D., Sari, F. I. P., & Rini. (2023). Roasting conditions on metabolic profile of black honey arabica coffee (Coffea arabica). *IOP Conference Series: Earth and Environmental Science*, *1182*(1), 012048. https://doi.org/10.1088/1755-1315/1182/1/012048

Tarigan, E. B., Wardiana, E., Hilmi, Y. S., & Komarudin, N. A. (2022). The changes in chemical properties of coffee during roasting: A review. *IOP Conference Series Earth and Environmental Science*, *974*, 1–8. http://dx.doi.org/10.1088/1755-1315/974/1/012115

Tarwendah, I. P. (2017). Jurnal Review: Studi Komparasi Atribut Sensoris dan Kesadaran Merek Produk Pangan. *Jurnal Pangan Dan Agroindustri*, *5*(2), 66–73.

Thamkaew, G., Sjöholm, I., & Galindo, F. G. (2021). A review of drying methods for improving the quality of dried herbs. *Critical Reviews in Food Science*

and Nutrition, *61*(11), 1763–1786. https://doi.org/10.1080/10408398.2020.1765309

USDA Plants Database. (2023). https://plants.usda.gov/home

Usman, M., Tarigan, B. Y., Aprilia, M., Zalvi, A. P., Sari, F. I., Romauli, N. D. M., & Sinaga, H. (2023). Pengujian Daya Terima (Uji Hedonik) pada Empat Merek Produk Yoghurt yang Dijual pada Pasar Modern (Supermarket) di Kecamatan Medan Kota. *Jurnal Agroindustri Pangan*, *2*(2), 1–16.

Várady, M., Tauchen, J., Fraňková, A., Klouček, P., & Popelka, P. (2022). Effect of method of processing specialty coffee beans (natural, washed, honey, fermentation, maceration) on bioactive and volatile compounds. *LWT*, *172*, 114245. https://doi.org/10.1016/j.lwt.2022.114245

Vignoli, J. A., Viegas, M. C., Bassoli, D. G., & Benassi, M. D. T. (2014). Roasting process affects differently the bioactive compounds and the antioxidant activity of arabica and robusta coffees. *Food Research International*, *61*, 279–285. https://doi.org/10.1016/j.foodres.2013.06.006

Viji, P., Sai, K. S. S., Debbarma, J., Das, P. H. D., Rao, B. M., & Ravishankar, C. N. (2019). Evaluation of physicochemical characteristics of microwave vacuum dried mackerel and inhibition of oxidation by essential oils. *Journal of Food Science and Technology*, *56*(4), 1890–1898. https://doi.org/10.1007/s13197-019-03651-7

Wahyuni, L., Purwanti, L., & Syafnir, L. (2017). Uji Aktivitas Antibakteri Ekstrak Bertingkat Biji Salak (Salacca zalacca varietas zalacca (gaert.) Voss terhadap Stapylococcus aureus dan Eschericia coli. *Prosiding Farmasi*, *3*, 465–471.

Wailzer, B., Klocker, J., Wolschann, P., & Buchbauer, G. (2016). Structural Features for Furan-Derived Fruity and Meaty Aroma Impressions. *Natural Product Communications*, *11*(10), 1934578X1601101014. https://doi.org/10.1177/1934578X1601101014

Werdayani, S., Jumaryanto, P., & Khasanah, N. (2017). Antioxidant Activity of Ethanolic Extract and Fraction of Salak Fruit Seeds (Salacca zalacca (Gaertn.) Voss.) Using DPPH (2-2- diphenyl-1-picrylhydrazyl) Method. *Jurnal Ilmu-Ilmu MIPA*, 137–146.

Widayanti, S. M., Hoerudin, & Andes, I. (2021). Characteristics and postharvest life of snake fruit (Salacca edulis Reinw) during storage as influenced by application of activated nanostructured natural zeolites. *IOP Conference Series: Earth and Environmental Science*, *803*(1), 012029. https://doi.org/10.1088/1755-1315/803/1/012029

Winarno, F. G. W. & S. A. A. (2017). *Gastronomi Molekuler*. Gramedia Pustaka Utama.

Wu, H., Lu, P., Liu, Z., Sharifi-Rad, J., & Suleria, H. A. R. (2022). Impact of roasting on the phenolic and volatile compounds in coffee beans. *Food Science & Nutrition*, *10*(7), 2408–2425. https://doi.org/10.1002/fsn3.2849

Yeager, S. E., Batali, M. E., Guinard, J.-X., & Ristenpart, W. D. (2023). Acids in coffee: A review of sensory measurements and meta-analysis of chemical composition. *Critical Reviews in Food Science and Nutrition*, *63*(8), 1010–1036. https://doi.org/10.1080/10408398.2021.1957767

Yu, J.-M., Chu, M., Park, H., Park, J., & Lee, K.-G. (2021). Analysis of Volatile Compounds in Coffee Prepared by Various Brewing and Roasting Methods. *Foods*, *10*(6), 1347. https://doi.org/10.3390/foods10061347

Yusibani, E., Ikramullah, I., Yufita, E., Jalil, Z., & Suhendi, E. (2023). The Effect of Temperature and Roasting Time on The Physical Properties of Arabica and Robusta Gayo Coffee Bean. *Journal of Applied Agricultural Science and Technology*, *7*(2), 100–108. https://doi.org/10.55043/jaast.v7i2.75

Yusibani, E., Putra, R. I., Rahwanto, A., Surbakti, M. S., Rajibussalim, & Rahmi. (2022). Physical properties of Sidikalang robusta coffee beans medium roasted from various colors of coffee cherries. *Journal of Physics: Conference Series*, *2243*(1), 012046. https://doi.org/10.1088/1742-6596/2243/1/012046

Zakariyya, F., Puspitasari, N., & Nur'aini, F. (2024). Growth of cocoa seedlings affected by application of zeolite-cocopeat-manure mixture as soil conditioner enriched by Trichoderma sp. *Pelita Perkebunan (a Coffee and Cocoa Research Journal)*, *40*(1), 24–32. https://doi.org/10.22302/iccri.jur.pelitaperkebunan.v40i1.578

Zhai, H., Dong, W., Tang, Y., Hu, R., Yu, X., & Chen, X. (2024). Characterization of the volatile flavour compounds in Yunnan Arabica coffee prepared by different primary processing methods using HS-SPME/GC-MS and HS-GC-IMS. *LWT*, *192*, 115717. https://doi.org/10.1016/j.lwt.2023.115717

Zhang, K., Cheng, J., Hong, Q., Dong, W., Chen, X., Wu, G., & Zhang, Z. (2022). Identification of changes in the volatile compounds of robusta coffee beans during drying based on HS-SPME/GC-MS and E-nose analyses with the aid of chemometrics. *LWT*, *161*, 113317. https://doi.org/10.1016/j.lwt.2022.113317

Zhu, J., Zhou, L., Zhao, M., Wei, F., Fu, H., & Marchioni, E. (2023). Revealing the dynamic changes of lipids in coffee beans during roasting based on UHPLC-QE-HR-AM/MS/MS. *Food Research International*, *174*, 113507. https://doi.org/10.1016/j.foodres.2023.113507