

## DAFTAR PUSTAKA

- Abubakar, A. R., & Haque, M. (2020). Preparation of Medicinal Plants: Basic Extraction and Fractionation Procedures for Experimental Purposes. *Journal of Pharmacy & Bioallied Sciences*, 12(1), 1–10. [https://doi.org/10.4103/jpbs.JPBS\\_175\\_19](https://doi.org/10.4103/jpbs.JPBS_175_19)
- Adam, O. A. O., Abadi, R. S. M., & Ayoub, S. M. H. (2019). The Effect of Extraction method and Solvents on yield and Antioxidant Activity of Certain Sudanese Medicinal Plant Extracts. *The Journal of Phytopharmacology*, 8(5), 248–252. <https://doi.org/10.31254/phyto.2019.8507>
- Adhikari, A., Darbar, S., Chatterjee, T., Das, M., Polley, N., Bhattacharyya, M., Bhattacharya, S., Pal, D., & Pal, S. K. (2018). Spectroscopic Studies on Dual Role of Natural Flavonoids in Detoxification of Lead Poisoning: Bench-to-Bedside Preclinical Trial. *ACS Omega*, 3(11), 15975–15987. <https://doi.org/10.1021/acsomega.8b02046>
- Ahmad, A. R., Bahria, B., & Widiastuti, H. (2022). The Effect of Extraction Method on Catechin Levels in Green Tea (*Camellia sinensis* L.) Extract by TLC-Densitometric. *Jurnal Fitofarmaka Indonesia*, 9(3), 25–30. <https://doi.org/10.33096/jffi.v9i3.915>
- Ahmed, S., & Othman, N. H. (2017). The anti-cancer effects of Tualang honey in modulating breast carcinogenesis: An experimental animal study. *BMC Complementary and Alternative Medicine*, 17(1), 208. <https://doi.org/10.1186/s12906-017-1721-4>
- Al Mamari, H. H. (2021). Phenolic Compounds: Classification, Chemistry, and Updated Techniques of Analysis and Synthesis. In Farid A. Badria (Ed.), *Phenolic Compounds* (p. Ch. 4). IntechOpen. <https://doi.org/10.5772/intechopen.98958>
- A.L, T., & A.L, R. (2012). 39. Phytochemical analysis of *Camellia sinensis* Leaves. *International Journal of Drug Development and Research*, 4(4), 311–316.
- Albaridi, N. A. (2019). Antibacterial Potency of Honey. *International Journal of Microbiology*, 2019, 2464507. <https://doi.org/10.1155/2019/2464507>
- Al-Kafaween, M. A., Alwahsh, M., Mohd Hilmi, A. B., & Abulebdah, D. H. (2023). Physicochemical Characteristics and Bioactive Compounds of Different Types of Honey and Their Biological and Therapeutic

- Properties: A Comprehensive Review. *Antibiotics (Basel, Switzerland)*, 12(2). <https://doi.org/10.3390/antibiotics12020337>
- Altemimi, A., Lakhssassi, N., Baharlouei, A., Watson, D. G., & Lightfoot, D. A. (2017). Phytochemicals: Extraction, Isolation, and Identification of Bioactive Compounds from Plant Extracts. *Plants (Basel, Switzerland)*, 6(4). <https://doi.org/10.3390/plants6040042>
- Araji, S., Grammer, T. A., Gertzen, R., Anderson, S. D., Mikulic-Petkovsek, M., Veberic, R., Phu, M. L., Solar, A., Leslie, C. A., Dandekar, A. M., & Escobar, M. A. (2014). Novel roles for the polyphenol oxidase enzyme in secondary metabolism and the regulation of cell death in walnut. *Plant Physiology*, 164(3), 1191–1203. <https://doi.org/10.1104/pp.113.228593>
- Aryal, S., Baniya, M. K., Danekhu, K., Kunwar, P., Gurung, R., & Koirala, N. (2019). Total Phenolic Content, Flavonoid Content and Antioxidant Potential of Wild Vegetables from Western Nepal. *Plants (Basel, Switzerland)*, 8(4). <https://doi.org/10.3390/plants8040096>
- Azwanida, N. (2015). A Review on the Extraction Methods Use in Medicinal Plants, Principle, Strength and Limitation. *Medicinal & Aromatic Plants*, 04(03). <https://doi.org/10.4172/2167-0412.1000196>
- Baliyan, S., Mukherjee, R., Priyadarshini, A., Vibhuti, A., Gupta, A., Pandey, R. P., & Chang, C.-M. (2022). Determination of Antioxidants by DPPH Radical Scavenging Activity and Quantitative Phytochemical Analysis of Ficus religiosa. *Molecules (Basel, Switzerland)*, 27(4), 1326. <https://doi.org/10.3390/molecules27041326>
- Baloš, M. M. Ž., Popov, N. S., Radulović, J. Z. P., Stojanov, I. M., & Jakšić, S. M. (2020). Sugar profile of different floral origin honeys from Serbia. *Journal of Apicultural Research*, 59(4), 398–405. <https://doi.org/10.1080/00218839.2020.1714193>
- Bastani, S., Vahedian, V., Rashidi, M., Mir, A., Mirzaei, S., Alipourfard, I., Pouremamali, F., Nejabati, H., Kadkhoda, J., Maroufi, N. F., & Akbarzadeh, M. (2022). An evaluation on potential anti-oxidant and anti-inflammatory effects of Crocin. *Biomedicine & Pharmacotherapy*, 153, 113297. <https://doi.org/10.1016/j.biopha.2022.113297>
- Bayani, F. (2021). Analysis of Total Phenol from Sentul Fruit Extraction (Sandoricum koetjape Merr.). *Lensa: Jurnal Kependidikan Fisika*, 9(1), 58. <https://doi.org/10.33394/j-lkf.v9i1.4263>
- Bayram, I. (2023). *Analysis of antioxidant synergism and its mechanisms in different food systems* [University of Massachusetts Amherst]. <https://doi.org/10.7275/35954953>

- Becerril-Sánchez, A. L., Quintero-Salazar, B., Dublán-García, O., & Escalona-Buendía, H. B. (2021). Phenolic Compounds in Honey and Their Relationship with Antioxidant Activity, Botanical Origin, and Color. *Antioxidants*, 10(11). <https://doi.org/10.3390/antiox10111700>
- Bhattacharjee, J. (2015). A Study on the Benefits of Tea. *International Journal of Humanities & Social Science Studies (IJHSSS)*, II(II), 109–121.
- Bitwell, C., Indra, S. S., Luke, C., & Kakoma, M. K. (2023). A review of modern and conventional extraction techniques and their applications for extracting phytochemicals from plants. *Scientific African*, 19, e01585. <https://doi.org/10.1016/j.sciaf.2023.e01585>
- Bodor, Z., Pergel, B., & Benedek, C. (2020). Impact of heat treatment and flavorings on the antioxidant capacity of black and green tea. *Progress in Agricultural Engineering Sciences*, 16(S2), 55–63. <https://doi.org/10.1556/446.2020.20007>
- Bortolini, D. G., Windson Isidoro Haminiuk, C., Cristina Pedro, A., de Andrade Arruda Fernandes, I., & Maria Maciel, G. (2021). Processing, chemical signature and food industry applications of *Camellia sinensis* teas: An overview. *Food Chemistry*: X, 12, 100160. <https://doi.org/10.1016/j.fochx.2021.100160>
- Borutinskait, V., & Kurtinaitien, B. (2018). Proteomic identification and enzymatic activity of buckwheat (*Fagopyrum esculentum*) honey based on different assays. *J. Food Nutr. Res.*, 57.
- Brimson, J. M., Prasanth, M. I., Kumaree, K. K., Thitilertdecha, P., Malar, D. S., Tencomnao, T., & Prasansuklab, A. (2023). Tea Plant (*Camellia sinensis*): A Current Update on Use in Diabetes, Obesity, and Cardiovascular Disease. *Nutrients*, 15(1). <https://doi.org/10.3390/nu15010037>
- Cerezo-Guisado, M. I., Zur, R., Lorenzo, M. J., Risco, A., Martín-Serrano, M. A., Alvarez-Barrientos, A., Cuenda, A., & Centeno, F. (2015). Implication of Akt, ERK1/2 and alternative p38MAPK signalling pathways in human colon cancer cell apoptosis induced by green tea EGCG. *Food and Chemical Toxicology*, 84, 125–132. <https://doi.org/10.1016/j.fct.2015.08.017>
- Chadijah, S., Musdalifah, Qaddafi, M., & Firnanelty. (2021). Optimalisasi Suhu dan Waktu Penyeduhan Daun Teh Hijau (*Camellia sinensis* L.) P+3 Terhadap Kandungan Antioksidan Kafein, Katekin dan Tanin. *Bencoolen Journal of Pharmacy*, 1(1), 59–65.
- Chatterjee, A., Das, T., Basu, A., Adak, K., Banerjee, S., & Ghosh, S. (2016). Adverse Effects of Tea Metabolites Extracted During Indian Household

- Tea Preparations on Digestive Enzymes and Iron. *International Journal of Advanced Research*, 4(9), 1179–1189. <https://doi.org/10.21474/IJAR01/1600>
- Chaves, N., Santiago, A., & Alías, J. C. (2020). Quantification of the Antioxidant Activity of Plant Extracts: Analysis of Sensitivity and Hierarchization Based on the Method Used. *Antioxidants (Basel, Switzerland)*, 9(1), 76. <https://doi.org/10.3390/antiox9010076>
- Cheng, Y., Xue, F., & Yang, Y. (2023). Hot Water Extraction of Antioxidants from Tea Leaves-Optimization of Brewing Conditions for Preparing Antioxidant-Rich Tea Drinks. *Molecules (Basel, Switzerland)*, 28(7), 3030. <https://doi.org/10.3390/molecules28073030>
- Christina, M., Purwayantie, S., & Priyono, S. (2022). Study of Brewing Temperature and Time on Antioxidant Activity in Kratom Leaf Powder (*Mitragyna speciosa* Korth.). *FoodTech: Jurnal Teknologi Pangan*, 5(2), 22–28.
- Christodoulou, M. C., Orellana Palacios, J. C., Hesami, G., Jafarzadeh, S., Lorenzo, J. M., Domínguez, R., Moreno, A., & Hadidi, M. (2022). Spectrophotometric Methods for Measurement of Antioxidant Activity in Food and Pharmaceuticals. *Antioxidants*, 11(11), 2213. <https://doi.org/10.3390/antiox11112213>
- Chua, L. S., Latiff, N. A., & Mohamad, M. (2016). Reflux extraction and cleanup process by column chromatography for high yield of andrographolide enriched extract. *Journal of Applied Research on Medicinal and Aromatic Plants*, 3(2), 64–70. <https://doi.org/10.1016/j.jarmap.2016.01.004>
- da Silva, P. M., Gauche, C., Gonzaga, L. V., Costa, A. C. O., & Fett, R. (2016). Honey: Chemical composition, stability and authenticity. *Food Chemistry*, 196, 309–323. <https://doi.org/10.1016/j.foodchem.2015.09.051>
- Departemen Kesehatan Republik Indonesia. (1995). *Farmakope Herbal Indonesia Edisi III*. Departemen Kesehatan Republik Indonesia. Jakarta.
- Departemen Kesehatan Republik Indonesia. (2000). *Parameter Standar Umum Ekstrak Tumbuhan Obat*. Departemen Kesehatan Republik Indonesia. Jakarta.
- Deineka, L., Zhakiyanova, A., Amrenova, Y., & Blinova, I. (2021). Tea Antioxidants. *BIO Web of Conferences*, 30, 02003. <https://doi.org/10.1051/bioconf/20213002003>

- Dias, M. C., Pinto, D. C. G. A., & Silva, A. M. S. (2021). Plant Flavonoids: Chemical Characteristics and Biological Activity. *Molecules (Basel, Switzerland)*, 26(17), 5377. <https://doi.org/10.3390/molecules26175377>
- Echegaray, N., Pateiro, M., Munekata, P. E. S., Lorenzo, J. M., Chabani, Z., Farag, M. A., & Domínguez, R. (2021). Measurement of Antioxidant Capacity of Meat and Meat Products: Methods and Applications. *Molecules*, 26(13), 3880. <https://doi.org/10.3390/molecules26133880>
- El Mannoubi, I. (2023). Impact of different solvents on extraction yield, phenolic composition, in vitro antioxidant and antibacterial activities of deseeded *Opuntia stricta* fruit. *Journal of Umm Al-Qura University for Applied Sciences*, 9(2), 176–184. <https://doi.org/10.1007/s43994-023-00031-y>
- Erejuwa, O., Sulaiman, S., & Wahab, M. (2014). Effects of Honey and Its Mechanisms of Action on the Development and Progression of Cancer. *Molecules*, 19(2), 2497–2522. <https://doi.org/10.3390/molecules19022497>
- Fajar, R. I., Wrasiati, L. P., & Suhendra, L. (2018). Kandungan Senyawa Flavonoid dan Aktivitas Antioksidan Ekstrak Teh Hijau Pada Perlakuan Suhu Awal dan Lama Penyeduhan. *Jurnal Rekayasa dan Manajemen Agroindustri*, 6(3), 196. <https://doi.org/10.24843/JRMA.2018.v06.i03.p02>
- Food and Agriculture Organization of the United Nations. (2022). *International tea market: Market situation, prospects and emerging issues*. Markets and Trade Division - Economic and Social Development Stream Food and Agriculture Organization of the United Nations. Roma.
- Fournier-Larente, J., Morin, M.-P., & Grenier, D. (2016). Green tea catechins potentiate the effect of antibiotics and modulate adherence and gene expression in *Porphyromonas gingivalis*. *Archives of Oral Biology*, 65, 35–43. <https://doi.org/10.1016/j.archoralbio.2016.01.014>
- Garg, A., Sharma, R., Dey, P., & Kumar, A. (2022). Chapter1.3—Food auto-oxidation: An overview. In S. M. Nabavi & A. S. Silva (Eds.), *Antioxidants Effects in Health* (pp. 43–68). Elsevier. <https://doi.org/10.1016/B978-0-12-819096-8.00013-6>
- Guimarães, R., Barros, L., Dueñas, M., Calhelha, R. C., Carvalho, A. M., Santos-Buelga, C., Queiroz, M. J. R. P., & Ferreira, I. C. F. R. (2013). Nutrients, phytochemicals and bioactivity of wild Roman chamomile: A comparison between the herb and its preparations. *Food Chemistry*, 136(2), 718–725. <https://doi.org/10.1016/j.foodchem.2012.08.025>
- Gulcin, İ., & Alwasel, S. H. (2023). DPPH Radical Scavenging Assay. *Processes*, 11(8), 2248. <https://doi.org/10.3390/pr11082248>

- Gürel, D. B., & Çağındı, Ö. (2019). Effects of adding honey at different temperatures to linden tea on antioxidant properties and hydroxymethylfurfural formation. *Quality Assurance and Safety of Crops & Foods*, 11(3), 251–255. <https://doi.org/10.3920/QAS2018.1313>
- Guttentag, A., Krishnakumar, K., Cokcetin, N., Hainsworth, S., Harry, E., & Carter, D. (2021). Inhibition of Dermatophyte Fungi by Australian Jarrah Honey. *Pathogens (Basel, Switzerland)*, 10(2). <https://doi.org/10.3390/pathogens10020194>
- Hait, M. (2019). *Extraction Techniques of Herbal Drugs* (pp. 17–33). <https://doi.org/10.22271/ed.book.415>
- Hanuni, H. (2020). Pengaruh Penambahan Madu Terhadap Aktivitas Antioksidan Teh Hijau Dan Teh Hitam Literature Review. *Skripsi*. Universitas Airlangga.
- Hasbullah, R., & Putra, N. S. (2022). Study on the Vacuum Pressure and Drying Time of Freeze-drying Method to Maintain the Quality of Strawberry (*Fragaria virginiana*). *Jurnal Teknik Pertanian Lampung (Journal of Agricultural Engineering)*, 11(2), 279. <https://doi.org/10.23960/jtep-1.v11i2.279-291>
- Hassanpour, S. H., & Doroudi, A. (2023). Review of the antioxidant potential of flavonoids as a subgroup of polyphenols and partial substitute for synthetic antioxidants. *Avicenna Journal of Phytomedicine*, 13(4), 354–376. <https://doi.org/10.22038/AJP.2023.21774>
- Hayat, K., Iqbal, H., Malik, U., Bilal, U., & Mushtaq, S. (2015). Tea and its consumption: Benefits and risks. *Critical Reviews in Food Science and Nutrition*, 55(7), 939–954. <https://doi.org/10.1080/10408398.2012.678949>
- Hsu, Y.-W., Tsai, C.-F., Ting, H.-C., Chen, W.-K., & Yen, C.-C. (2014). Green tea supplementation in mice mitigates senescence-induced changes in brain antioxidant abilities. *Journal of Functional Foods*, 7, 471–478. <https://doi.org/10.1016/j.jff.2014.01.009>
- Hung, Y.-L., Miyazaki, H., Fang, S.-H., Li, C.-Y., & Suzuki, K. (2018). The Structural Characteristics of Green Tea Polyphenols on Lipopolysaccharide-Stimulated RAW Cells. *Journal of Nutritional Biology*, 4(2), 151–157. <https://doi.org/10.18314/jnb.v4i1.1079>
- Ichsan, D. S., Hafidzah, T. S., Putri, S. B., Aurene, S. V., & Nurdin, I. (2022). Deteksi Madu Palsu Dan Kualitas Madu Dengan Enzim Diastase. *Poltekita : Jurnal Ilmu Kesehatan*, 16(3), 278–283. <https://doi.org/10.33860/jik.v16i3.1685>

- Iqbal, E., Salim, K. A., & Lim, L. B. L. (2015). Phytochemical screening, total phenolics and antioxidant activities of bark and leaf extracts of *Goniothalamus velutinus* (Airy Shaw) from Brunei Darussalam. *Journal of King Saud University - Science*, 27(3), 224–232. <https://doi.org/10.1016/j.jksus.2015.02.003>
- Jasicka-Misiak, I., Makowicz, E., & Stanek, N. (2018). Chromatographic fingerprint, antioxidant activity, and colour characteristic of polish goldenrod (*Solidago virgaurea* L.) honey and flower. *European Food Research and Technology*, 244(7), 1169–1184. <https://doi.org/10.1007/s00217-018-3034-3>
- Jiang, H., Zhang, M., Wang, D., Yu, F., Zhang, N., Song, C., & Granato, D. (2020). Analytical strategy coupled to chemometrics to differentiate *Camellia sinensis* tea types based on phenolic composition, alkaloids, and amino acids. *Journal of Food Science*, 85(10), 3253–3263. <https://doi.org/10.1111/1750-3841.15390>
- Jiang, X., Lin, A., Li, S., Shi, Y., Zhou, F., Felix Gomez, G. G., Gregory, R. L., Zhang, C., Chen, S., & Huang, R. (2022). Effects of artificial honey and epigallocatechin-3-gallate on streptococcus pyogenes. *BMC Microbiology*, 22(1), 207. <https://doi.org/10.1186/s12866-022-02611-0>
- Kaczorová, D., Karalija, E., Dahija, S., Bešta-Gajević, R., Parić, A., & Ćavar Zeljković, S. (2021). Influence of Extraction Solvent on the Phenolic Profile and Bioactivity of Two Achillea Species. *Molecules (Basel, Switzerland)*, 26(6). <https://doi.org/10.3390/molecules26061601>
- Kamaludin, N. H. I., Mun, L., & Sa'adi, R. (2016). Evaluation of antioxidant activity of some tropical fruit peel extracts: Extraction conditions optimization of rambutan peel extract. *ARPN Journal of Engineering and Applied Sciences*, 11(3), 1623–1631.
- Kamilatussaniah, Yuniastuti, A., & Iswari, R. (2015). Pengaruh Suplementasi Madu Kelengkeng Terhadap Kadar TSA dan MDA Tikus Putih yang Diinduksi Timbal (Pb). *Jurnal MIPA*, 38(2), 108–114.
- Kamtekar, S., Keer, V., & Patil, V. (2014). Estimation of Phenolic content, Flavonoid content, Antioxidant and Alpha amylase Inhibitory Activity of Marketed Polyherbal Formulation. *Journal of Applied Pharmaceutical Science*, 4(9), 61–65. <https://doi.org/10.7324/JAPS.2014.40911>
- Kataoka, H. (2019). Pharmaceutical Analysis | Sample Preparation☆. In P. Worsfold, C. Poole, A. Townshend, & M. Miró (Eds.), *Encyclopedia of Analytical Science (Third Edition)* (pp. 231–255). Academic Press. <https://doi.org/10.1016/B978-0-12-409547-2.14358-6>

- Kilel, E. C., Wanyoko, J. K., Faraj, A. K., & Ngoda, P. (2019). Effect of Citric Acid on the Total Monomeric Anthocyanins and Antioxidant Activity of Liquor Made from Unprocessed Purple Leafed TRFK 306 Kenyan Tea Clone. *Food and Nutrition Sciences*, 10(10), 1191–1201. <https://doi.org/10.4236/fns.2019.1010086>
- Krakowska-Sieprawska, A., Kielbasa, A., Rafińska, K., Ligor, M., & Buszewski, B. (2022). Modern Methods of Pre-Treatment of Plant Material for the Extraction of Bioactive Compounds. *Molecules (Basel, Switzerland)*, 27(3). <https://doi.org/10.3390/molecules27030730>
- Kurniawan, M. F., & Wardany, H. N. K. (2021). Hepatoprotective Activity of Ethanol Extract of Figs Leaves (*Ficus carica L.*) with SGOT & SGPT Parameters in Sprague Dawley Female Rats Induced by Paracetamol: Efek Hepatoprotektif Ekstrak Etanol Daun Tin (*Ficus carica L.*) dengan Parameter SGOT dan SGPT pada Tikus Betina Sprague Dawley yang Diinduksi Paracetamol. *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy) (e-Journal)*, 7(2), 110–119. <https://doi.org/10.22487/j24428744.2021.v7.i2.15443>
- Kusumawati, A., Farhamzah, F., Alkandahri, M., Sadino, A., Agustina, L., & Apriana, S. (2021). *Antioxidant Activity and Sun Protection Factor of Black Glutinous Rice (*Oryza sativa var. Glutinosa*)*.
- Lindawati, N. Y., & Anggraini, R. (2020). Pemanfaatan Ekstrak Etanol Teh Hijau (*Camellia sinensis L.*) sebagai Chelating Agent Logam Berat Cu dengan Metode SSA: Utilization of 96% Ethanol Extract of Green Tea (*Camellia sinensis L.*) as Chelating Agent For Heavy Metal of Cu With AAS Method. *Jurnal Farmasi Galenika (Galenika Journal of Pharmacy) (e-Journal)*, 6(2). <https://doi.org/10.22487/j24428744.2020.v6.i2.15198>
- Luo, K.-W., Ko, C.-H., Yue, G. G.-L., Lee, J. K.-M., Li, K.-K., Lee, M., Li, G., Fung, K.-P., Leung, P.-C., & Lau, C. B.-S. (2014). Green tea (*Camellia sinensis*) extract inhibits both the metastasis and osteolytic components of mammary cancer 4T1 lesions in mice. *The Journal of Nutritional Biochemistry*, 25(4), 395–403. <https://doi.org/10.1016/j.jnutbio.2013.11.013>
- Marpaung, M. P., & Romelan, R. (2018). Analisis Jenis dan Kadar Saponin Ekstrak Metanol Daun Kemangi (*Ocimum basilicum L.*) dengan Menggunakan Metode Gravimetri. *JFL : Jurnal Farmasi Lampung*, 7(2), 81–86. <https://doi.org/10.37090/jfl.v7i2.57>
- Martinez-Morales, F., Alonso-Castro, A. J., Zapata-Morales, J. R., Carranza-Alvarez, C., & Aragon-Martinez, O. H. (2020). Use of standardized units for a correct interpretation of IC<sub>50</sub> values obtained from the inhibition of

- the DPPH radical by natural antioxidants. *Chemical Papers*, 74(10), 3325–3334. <https://doi.org/10.1007/s11696-020-01161-x>
- Mehta, S. K., & Gowder, S. J. T. (2015). Members of Antioxidant Machinery and Their Functions. In S. J. T. Gowder (Ed.), *Basic Principles and Clinical Significance of Oxidative Stress*. IntechOpen. <https://doi.org/10.5772/61884>
- Mhatre, S., Srivastava, T., Naik, S., & Patravale, V. (2021). Antiviral activity of green tea and black tea polyphenols in prophylaxis and treatment of COVID-19: A review. *Phytomedicine: International Journal of Phytotherapy and Phytopharmacology*, 85, 153286. <https://doi.org/10.1016/j.phymed.2020.153286>
- Milani, J. M., Amuzadeh, A., & Moetamedzadegan, A. (2020). Effect of different additives on antioxidant capacity of black tea. *Journal of Culinary Science & Technology*, 18(2), 67–76. <https://doi.org/10.1080/15428052.2018.1502114>
- Mir, S., Ahangar, A. A., & Bhat, A. S. (2013). Spectrophotometric assays for flavonoids diosmin, quercetin, rutin and morin with copper, molybdenum, lead and tungsten. *International Journal of PharmTech Research*, 5, 383–390.
- Moharram, H. A., & Youssef, M. M. (2014). Methods for Determining the Antioxidant Activity: A Review. *Alexandria Journal of Food Science and Technology*, 11(1), 31–42. <https://doi.org/10.12816/0025348>
- Moniruzzaman, M., Sulaiman, S. A., Khalil, M. I., & Gan, S. H. (2013). Evaluation of physicochemical and antioxidant properties of sourwood and other Malaysian honeys: A comparison with manuka honey. *Chemistry Central Journal*, 7(1), 138. <https://doi.org/10.1186/1752-153X-7-138>
- Mukhriani, Sugiarna, R., Rusdi, M., Farhan, N., & Arsul, M. I. (2019). Kadar Fenolik dan Flavonoid Total Ekstrak Etanol Daun Anggur (*Vitis vinifera L.*). *ad-Dawaa' Journal of Pharmaceutical Sciences*, 2(2), 95–102. <https://doi.org/10.24252/djps.v2i2.11503>
- Muktisari, R. D., & Hartati, F. K. (2018). Analisis Aktivitas Antioksidan Pada Beras Hitam dan Tepung Beras Hitam (*Oryza sativa L.indica*). *Food Science and Technology Journal*, 1(1), 20–27. <https://doi.org/10.25139/fst.v1i1.1002>
- Munteanu, I. G., & Apetrei, C. (2021). Analytical Methods Used in Determining Antioxidant Activity: A Review. *International Journal of Molecular Sciences*, 22(7), 3380. <https://doi.org/10.3390/ijms22073380>

- Murtiningsih, T. M., Supriningrum, R., & Nurhasnawati, H. (2023). Identification and Determination of Saponin Content from Extract of Embelia borneensis Bark. *Al Ulum: Jurnal Sains Dan Teknologi*, 9(3), 117. <https://doi.org/10.31602/jst.v9i3.12499>
- Mussatto, S. I. (2015). Chapter 11—Generating Biomedical Polyphenolic Compounds from Spent Coffee or Silverskin. In V. R. Preedy (Ed.), *Coffee in Health and Disease Prevention* (pp. 93–106). Academic Press. <https://doi.org/10.1016/B978-0-12-409517-5.00011-5>
- Muzolf-Panek, M., Kaczmarek, A., & Gliszczyńska-Świgło, A. (2021). A predictive approach to the antioxidant capacity assessment of green and black tea infusions. *Journal of Food Measurement and Characterization*, 15(2), 1422–1436. <https://doi.org/10.1007/s11694-020-00727-3>
- Nain, C. W., Mignolet, E., Herent, M.-F., Quetin-Leclercq, J., Debier, C., Page, M. M., & Larondelle, Y. (2022). The Catechins Profile of Green Tea Extracts Affects the Antioxidant Activity and Degradation of Catechins in DHA-Rich Oil. *Antioxidants (Basel, Switzerland)*, 11(9). <https://doi.org/10.3390/antiox11091844>
- Nistor, O.-V., Seremet (Ceclu), L., Andronoiu, D. G., Rudi, L., & Botez, E. (2017). Influence of different drying methods on the physicochemical properties of red beetroot (*Beta vulgaris* L. var. *Cylindra*). *Food Chemistry*, 236, 59–67. <https://doi.org/10.1016/j.foodchem.2017.04.129>
- Nugraha, N. S., Listyani, T. A., & Septiarini, A. D. (2022). The Antioxidant Test And Determination Of Phenolic Content In Packaged Green Tea Using The FRAP Method. *Science and Community Pharmacy Journal*, 1(2), 59–68.
- Nuraini, & Purwanto, H. (2021). Morphology, morphometrics, and molecular characteristics of *Apis cerana* and *Apis nigrocincta* from Central Sulawesi, Indonesia. *Jurnal Biologi Tropis*, 21(2), 368–382. <https://doi.org/10.29303/jbt.v21i2.2614>
- Nurzaman, F., Djajadisastra, J., & Elya, B. (2018). Identifikasi Kandungan Saponin dalam Ekstrak Kamboja Merah (*Plumeria rubra* L.) dan Daya Surfaktan dalam Sediaan Kosmetik. *Jurnal Kefarmasian Indonesia*, 8(2), 85–93. <https://doi.org/10.22435/jki.v8i2.325>
- Orak, H., Yagar, H., selen isbilir, S., Demirci, A., & Gumus, T. (2013). Antioxidant and antimicrobial activities of white, green and black tea extracts. *Acta Alimentaria*, 42, 379–389. <https://doi.org/10.1556/AAlim.2013.2222>
- Ordoudi, S. A., & Tsimidou, M. Z. (2015). Measuring Antioxidant and Prooxidant Capacity Using the Crocin Bleaching Assay (CBA). In D. Armstrong

- (Ed.), *Advanced Protocols in Oxidative Stress III* (pp. 329–344). Springer New York. [https://doi.org/10.1007/978-1-4939-1441-8\\_24](https://doi.org/10.1007/978-1-4939-1441-8_24)
- Palupi, N. S., Hunaefi, D., & Susanto, N. (2021). Optimasi Ekstraksi Teh Hijau Berdasarkan Kandungan Polifenol, Aktivitas Antioksidan dan Profil Sensori. *Jurnal Tanaman Industri dan Penyegar*, 8(2), 87–98. <https://doi.org/10.21082/jtidp.v8n2.2021.p87-98>
- Panche, A. N., Diwan, A. D., & Chandra, S. R. (2016). Flavonoids: An overview. *Journal of Nutritional Science*, 5, e47. <https://doi.org/10.1017/jns.2016.41>
- Pandey, A., & Tripathi, S. (2014). Concept of standardization, extraction and pre phytochemical screening strategies for herbal drug. *Journal of Pharmacognosy and Phytochemistry*, 2(5), 115–119.
- Pham, T. N., Nguyen, T. V., Le, D. T., Diep, L. M., Nguyen, K. N., To, T. H., Le, T. H., & Nguyen, Q. V. (2022). Phenolic Profiles, Antioxidant, Antibacterial Activities and Nutritional Value of Vietnamese Honey from Different Botanical and Geographical Sources. *AgriEngineering*, 4(4), 1116–1138. <https://doi.org/10.3390/agriengineering4040069>
- Phaniendra, A., Jestadi, D. B., & Periyasamy, L. (2015). Free radicals: Properties, sources, targets, and their implication in various diseases. *Indian Journal of Clinical Biochemistry : IJCB*, 30(1), 11–26. <https://doi.org/10.1007/s12291-014-0446-0>
- Pizzino, G., Irrera, N., Cucinotta, M., Pallio, G., Mannino, F., Arcoraci, V., Squadrito, F., Altavilla, D., & Bitto, A. (2017). Oxidative Stress: Harms and Benefits for Human Health. *Oxidative Medicine and Cellular Longevity*, 2017, 8416763. <https://doi.org/10.1155/2017/8416763>
- Prieto, M. A., Vázquez, J. A., & Murado, M. A. (2015). Crocin bleaching antioxidant assay revisited: Application to microplate to analyse antioxidant and pro-oxidant activities. *Food Chemistry*, 167, 299–310. <https://doi.org/10.1016/j.foodchem.2014.06.114>
- Putra, Winkanda S. (2015). Kitab Herbal Nusantara : Aneka Resep & Ramuan Tanaman Obat untuk Berbagai Gangguan Kesehatan, Teh (*Camellia sinensis*), Jakarta.
- Raghunath, S., Budaraju, S., Gharibzahedi, S. M. T., Koubaa, M., Roohinejad, S., & Mallikarjunan, K. (2023). Processing Technologies for the Extraction of Value-Added Bioactive Compounds from Tea. *Food Engineering Reviews*, 15(2), 276–308. <https://doi.org/10.1007/s12393-023-09338-2>
- Ranneh, Y., Akim, A. M., Hamid, H. A., Khazaai, H., Fadel, A., & Mahmoud, A. M. (2019). Stingless bee honey protects against lipopolysaccharide

- induced-chronic subclinical systemic inflammation and oxidative stress by modulating Nrf2, NF-κB and p38 MAPK. *Nutrition & Metabolism*, 16, 15. <https://doi.org/10.1186/s12986-019-0341-z>
- Riveros, M. E., Ávila, A., Schruers, K., & Ezquer, F. (2022). Antioxidant Biomolecules and Their Potential for the Treatment of Difficult-to-Treat Depression and Conventional Treatment-Resistant Depression. *Antioxidants*, 11(3), 540. <https://doi.org/10.3390/antiox11030540>
- Rizki, A. F. (2022). *Sejarah Pertahan di Jawa Tengah (Mulai dari Perkebunan hingga Pabrik) Tahun 1942-2020* [IAIN Syekh Nurjati Cirebon]. <https://repository.syekhnurjati.ac.id/8230/>
- Romulo, A. (2020). The Principle of Some In vitro Antioxidant Activity Methods: Review. *IOP Conference Series: Earth and Environmental Science*, 426(1), 012177. <https://doi.org/10.1088/1755-1315/426/1/012177>
- Roshanak, S., Rahimmalek, M., & Goli, S. A. H. (2016). Evaluation of seven different drying treatments in respect to total flavonoid, phenolic, vitamin C content, chlorophyll, antioxidant activity and color of green tea (*Camellia sinensis* or *C. assamica*) leaves. *Journal of Food Science and Technology*, 53(1), 721–729. <https://doi.org/10.1007/s13197-015-2030-x>
- Roslan, A. S., Ismail, A., Ando, Y., & Azlan, A. (2020). Effect of drying methods and parameters on the antioxidant properties of tea (*Camellia sinensis*) leaves. *Food Production, Processing and Nutrition*, 2(1), 8. <https://doi.org/10.1186/s43014-020-00022-0>
- Sadeer, N. B., Montesano, D., Albrizio, S., Zengin, G., & Mahomoodally, M. F. (2020). The Versatility of Antioxidant Assays in Food Science and Safety—Chemistry, Applications, Strengths, and Limitations. *Antioxidants*, 9(8), 709. <https://doi.org/10.3390/antiox9080709>
- Saini, N., Gahlawat, S., & Lather, V. (2017). Flavonoids: A Nutraceutical and Its Role as Anti-inflammatory and Anticancer Agent. In *Plant Biotechnology: Recent Advancements and Developments* (pp. 255–270). Springer Nature Singapore Pte Ltd. 2017. [https://doi.org/10.1007/978-981-10-4732-9\\_13](https://doi.org/10.1007/978-981-10-4732-9_13)
- Samoticha, J., Wojdyło, A., & Lech, K. (2016). The influence of different the drying methods on chemical composition and antioxidant activity in chokeberries. *LWT - Food Science and Technology*, 66, 484–489. <https://doi.org/10.1016/j.lwt.2015.10.073>
- Sang, S. (2016). Tea: Chemistry and Processing. In B. Caballero, P. M. Finglas, & F. Toldrá (Eds.), *Encyclopedia of Food and Health* (pp. 268–272). Academic Press. <https://doi.org/10.1016/B978-0-12-384947-2.00685-1>

- Santos-Sánchez, N. F., Salas-Coronado, R., Villanueva-Cañongo, C., & Hernández-Carlos, B. (2019). Antioxidant Compounds and Their Antioxidant Mechanism. In E. Shalaby (Ed.), *Antioxidants* (p. Chapter 2). IntechOpen. <https://doi.org/10.5772/intechopen.85270>
- Saputri, A. D. (2017). Skrining Fitokimia dan Uji Aktivitas Antioksidan Ekstrak Teh Hijau, Teh Hitam, dan Teh Oolong (*Camellia sinensis*) secara In Vitro dengan Metode DPPH. Skripsi. Universitas Jember.
- Senduk, T. W., Montolalu, L. A. D. Y., & Dotulong, V. (2020). The rendement of boiled water extract of mature leaves of mangrove *Sonneratia alba*. *Jurnal Perikanan dan Kelautan Tropis*, 11(1), 9. <https://doi.org/10.35800/jpkt.11.1.2020.28659>
- Setyawaty, R., Aptuning B, R., Dewanto, & Fakultas Farmasi, Pharmacy Academy of Kusuma Husada, Purwokerto, Indonesia. (2020). Preliminary Studies on the Content of Phytochemical Compounds On Skin of Salak Fruit (*Salacca zalacca*). *Pharmaceutical Journal of Indonesia*, 6(1), 1–6. <https://doi.org/10.21776/ub.pji.2020.006.01.1>
- Shah, A. A., & Gupta, A. (2020). Antioxidants in Health and Disease with Their Capability to Defend Pathogens that Attack Apple Species of Kashmir. In H. M. Ekiert, K. G. Ramawat, & J. Arora (Eds.), *Plant Antioxidants and Health* (pp. 1–26). Springer International Publishing. [https://doi.org/10.1007/978-3-030-45299-5\\_13-1](https://doi.org/10.1007/978-3-030-45299-5_13-1)
- Shannon, E., Jaiswal, A. K., & Abu-Ghannam, N. (2017). Polyphenolic content and antioxidant capacity of white, green, black, and herbal teas: A kinetic study. *Food Research*, 2(1), 1–11. [https://doi.org/10.26656/fr.2017.2\(1\).117](https://doi.org/10.26656/fr.2017.2(1).117)
- Shraim, A. M., Ahmed, T. A., Rahman, M. M., & Hijji, Y. M. (2021). Determination of total flavonoid content by aluminum chloride assay: A critical evaluation. *LWT - Food Science and Technology*, 150, 1–11. <https://doi.org/10.1016/j.lwt.2021.111932>
- Shrestha, Y. K., & Shrestha, S. K. (2023). Fundamentals of Colorimetry. In Ashis Kumar Samanta (Ed.), *Advances in Colorimetry* (p. Ch. 2). IntechOpen. <https://doi.org/10.5772/intechopen.112344>
- Shrivastava, R. R., Pateriya, P., & Singh, M. (2018). Green tea—A short review. *International Journal of Indigenous Herbs and Drugs*, 12–21.
- Song, Y., Li, X., Gong, X., Zhao, X., Ma, Z., Xia, T., & Gu, X. (2019). Green tea polyphenols improve isoflurane-induced cognitive impairment via modulating oxidative stress. *The Journal of Nutritional Biochemistry*, 73, 108213. <https://doi.org/10.1016/j.jnutbio.2019.07.004>

- Subaryanti, Manalu, R. T., & Meianti, D. S. D. (2022). Potensi Antimikroba Ekstrak Etanol Daun Gatal (*Urticastrum decumanum* (Roxb.) Kuntze) Terhadap Pertumbuhan *Staphylococcus aureus* dan *Candida albicans*. *Saintech Farma*, 15(2), 93–102.
- Suhandy, D., Yulia, M., & Kusumiyati, K. (2020). Klasifikasi Madu Berdasarkan Jenis Lebah (*Apis dorsata* versus *Apis mellifera*) Menggunakan Spektroskopi Ultraviolet dan Kemometrika. *Jurnal Ilmu Pertanian Indonesia*, 25(4), 564–573. <https://doi.org/10.18343/jipi.25.4.564>
- Sukweenadhi, J., Yunita, O., Setiawan, F., Kartini, Siagian, M. T., Danduru, N. P., & Avanti, C. (2020). Antioxidant activity screening of seven Indonesian herbal extract. *Biodiversitas Journal of Biological Diversity*, 21(5), 2062–2067. <https://doi.org/10.13057/biodiv/d210532>
- Sulistyaningsih, Poernomo, A. T., & Primaharinastiti, R. (2022). Physicochemical Properties and Antioxidant Activity of Three Types of Monofloral Honey from Indonesia. *Jurnal Farmasi dan Ilmu Kefarmasian Indonesia*, 9(3), 290–297. <https://doi.org/10.20473/jfiki.v9i32022.290-297>
- Tanyıldız, A. O., Culhacı, E., & Yalçın, M. Y. (2021). Production Of Cold Green Tea With Natural Additives. *International Journal of Food Engineering Research*, 7(2), 55–68.
- Thiyam, B., Ravindra, S., Devi, M. P., Yeluri, G., & Gadiyar, A. (2015). *Green tea- A Healthy sip*. <https://api.semanticscholar.org/CorpusID:102217774>
- Toydemir, G., Capanoglu, E., Kamiloglu, S., Firatligil-Durmus, E., Sunay, A., Samancı, T., & Boyacioglu, D. (2015). Effects of Honey Addition on Antioxidative Properties of Different Herbal Teas. *Polish Journal of Food and Nutrition Sciences*, 65(2), 127–135. <https://doi.org/10.1515/pjfn-2015-0019>
- Uduwana, S., Abeynayake, N., & Wickramasinghe, I. (2023). Synergistic, antagonistic, and additive effects on the resultant antioxidant activity in infusions of green tea with bee honey and *Citrus limonum* extract as additives. *Journal of Agriculture and Food Research*, 12, 100571. <https://doi.org/10.1016/j.jafr.2023.100571>
- Ushie, O. A., Onen, A. I., Ugbogu, O. C., Neji, P. A., & Olumide, V. B. (2016). Phytochemical Screening and Antimicrobial Activities of Leaf Extracts of *Swietenia macrophylla*. *ChemSearch Journal*, 7(2), 64–69.
- Viteri, R., Zaconi, F., Montenegro, G., & Giordano, A. (2021). Bioactive compounds in *Apis mellifera* monofloral honeys. *Journal of Food Science*, 86(5), 1552–1582. <https://doi.org/10.1111/1750-3841.15706>

- Vona, R., Pallotta, L., Cappelletti, M., Severi, C., & Matarrese, P. (2021). The Impact of Oxidative Stress in Human Pathology: Focus on Gastrointestinal Disorders. *Antioxidants*, 10(2), 201. <https://doi.org/10.3390/antiox10020201>
- Wang, C., Han, J., Pu, Y., & Wang, X. (2022). Tea (*Camellia sinensis*): A Review of Nutritional Composition, Potential Applications, and Omics Research. *Applied Sciences*, 12(12), 5874. <https://doi.org/10.3390/app12125874>
- Wang, H., Shi, S., Bao, B., Li, X., & Wang, S. (2015). Structure characterization of an arabinogalactan from green tea and its anti-diabetic effect. *Carbohydrate Polymers*, 124, 98–108. <https://doi.org/10.1016/j.carbpol.2015.01.070>
- Wardaningrum, R. Y. (2019). Perbandingan Aktivitas Antioksidan Ekstrak Etanol Terpurifikasi Ubi Jalar Ungu (*Ipomoea Batatas*. L) Dengan Vitamin E. *Universitas Ngudi Waluyo*.
- Xu, B., & Wang, Z. (2014). Phenolic Profiles and Antioxidant Activities of Typical Teas Marketed in China as Affected by Steeping Time and Temperature. *International Journal of Sciences*, 3(7), 1–11.
- Yan, Y., Ren, Y., Li, X., Zhang, X., Guo, H., Han, Y., & Hu, J. (2018). A polysaccharide from green tea (*Camellia sinensis* L.) protects human retinal endothelial cells against hydrogen peroxide-induced oxidative injury and apoptosis. *International Journal of Biological Macromolecules*, 115, 600–607. <https://doi.org/10.1016/j.ijbiomac.2018.04.011>
- Yan, Z., Zhong, Y., Duan, Y., Chen, Q., & Li, F. (2020). Antioxidant mechanism of tea polyphenols and its impact on health benefits. *Animal Nutrition (Zhongguo Xu Mu Shou Yi Xue Hui)*, 6(2), 115–123. <https://doi.org/10.1016/j.aninu.2020.01.001>
- Yang, C. S., Chen, G., & Wu, Q. (2014). Recent Scientific Studies of a Traditional Chinese Medicine, Tea, on Prevention of Chronic Diseases. *Journal of Traditional and Complementary Medicine*, 4(1), 17–23. <https://doi.org/10.4103/2225-4110.124326>
- Yildiz, R., & Maskan, M. (2022). Optimization of a green tea beverage enriched with honey and bee pollen. *International Journal of Gastronomy and Food Science*, 30, 100597. <https://doi.org/10.1016/j.ijgfs.2022.100597>
- Yubin, J., Miao, Y., Bing, W., & Yao, Z. (2014). The extraction, separation and purification of alkaloids in the natural medicine. *Journal of Chemical and Pharmaceutical Research*, 6(1), 338–345.

- Yust, B. G., Wilkinson, F., & Rao, N. Z. (2023). Variables Affecting the Extraction of Antioxidants in Cold and Hot Brew Coffee: A Review. *Antioxidants* (Basel, Switzerland), 13(1). <https://doi.org/10.3390/antiox13010029>
- Zhao, T., Li, C., Wang, S., & Song, X. (2022). Green Tea (*Camellia sinensis*): A Review of Its Phytochemistry, Pharmacology, and Toxicology. *Molecules* (Basel, Switzerland), 27(12). <https://doi.org/10.3390/molecules27123909>