

DAFTAR PUSTAKA

- Abdulaziz Bardi, D., Halabi, M. F., Abdullah, N. A., Rouhollahi, E., Hajrezaie, M., & Abdulla, M. A. (2013). *In Vivo* Evaluation of Ethanolic Extract of *Zingiber officinale* Rhizomes for Its Protective Effect against Liver Cirrhosis. *BioMed Research International*, 2013, 1–10.
<https://doi.org/10.1155/2013/918460>
- Akbarini, D. (2016). *KEBERLANJUTAN TAMAN KEANEKARAGAMAN HAYATI NAMANG ±BANGKA TENGAH*.
- Arabsorkhi, B., Pourabdollah, E., & Mashadi, M. (2023). Investigating the effect of replacing the antioxidants Ascorbyl palmitate and tocopherol instead of TBHQ on the shelf life of sunflower oil using temperature accelerated method. *Food Chemistry Advances*, 2, 100246.
<https://doi.org/10.1016/j.focha.2023.100246>
- Araújo, Y. M. D., Medeiros, G. D. R., Nascimento, J. H. O. D., & Tinôco, J. D. (2024). Functionalized graphene oxide as an adsorbent material for endocrine disruptor 4-octylphenol. *Desalination and Water Treatment*, 318, 100346. <https://doi.org/10.1016/j.dwt.2024.100346>
- Ayimbila, F., Siriwong, S., Chaiyama, V., Srihanant, N., & Keawsompong, S. (2023). Comparative study of bio-functional profile and bioactivities of polysaccharides from *Ganoderma lucidum* and *Ganoderma neo-japonicum*. *Biocatalysis and Agricultural Biotechnology*, 53, 102875.
<https://doi.org/10.1016/j.bcab.2023.102875>
- Azahar, N. I., Swan, S. Y., Mohd Mokhtar, N., Abd Aziz, M. A., & Arifin, M. A. (2023). Evaluation of antioxidant, antibacterial and anticancer activities of

Ganoderma lucidum extracts. *Materials Today: Proceedings*,
S2214785323042827. <https://doi.org/10.1016/j.matpr.2023.08.030>

Baker, C. J., Smith, J., & Rice, C. (2020). Apoplast redox metabolism: Effect of acetovanillone (apocynin) and acetosyringone, on their co-oxidation and redox properties. *Physiological and Molecular Plant Pathology*, 110, 101481. <https://doi.org/10.1016/j.pmpp.2020.101481>

Bryant, J. M., Bouchard, M., & Haque, A. (2017). Anticancer Activity of Ganoderic Acid DM: Current Status and Future Perspective. *Journal of Clinical & Cellular Immunology*, 08(06). <https://doi.org/10.4172/2155-9899.1000535>

Celik, G. (2014). In vitro Antimicrobial and Antioxidant Properties of Ganoderma lucidum Extracts Grown in Turkey. *European Journal of Medicinal Plants*, 4(6), 709–722. <https://doi.org/10.9734/EJMP/2014/8546>

Chan, A. T., & Detering, E. (Eds.). (2013). *Prospects for Chemoprevention of Colorectal Neoplasia: Emerging Role of Anti-Inflammatory Drugs* (Vol. 191). Springer Berlin Heidelberg. <https://doi.org/10.1007/978-3-642-30331-9>

Dai, L., Wang, B., Fan, W., Qian, W., Zhang, J., Wang, B., Zhang, B., & Zhang, M. (2024). Effects of dietary propyl gallate and *Lactobacillus plantarum* addition on growth, intestinal morphology, antioxidant capacity, and immune functions of Pekin ducks. *Animal*, 101324. <https://doi.org/10.1016/j.animal.2024.101324>

Dai, X., Wei, Q., Guo, X., Ding, Y., Yang, X., Zhang, Y., Xu, X., Li, C., & Chen, Y. (2023). Ferulic acid, ligustrazine, and tetrahydropalmatine display the anti-

proliferative effect in endometriosis through regulating Notch pathway. *Life Sciences*, 328, 121921. <https://doi.org/10.1016/j.lfs.2023.121921>

De La Torre, R., Corella, D., Castañer, O., Martínez-González, M. A., Salas-Salvador, J., Vila, J., Estruch, R., Sorli, J. V., Arós, F., Fiol, M., Ros, E., Serra-Majem, L., Pintó, X., Gómez-Gracia, E., Lapetra, J., Ruiz-Canela, M., Basora, J., Asensio, E. M., Covas, M. I., & Fitó, M. (2017). Protective effect of homovanillyl alcohol on cardiovascular disease and total mortality: Virgin olive oil, wine, and catechol-methylthion. *The American Journal of Clinical Nutrition*, 105(6), 1297–1304. <https://doi.org/10.3945/ajcn.116.145813>

Dinesh, R. (2021). The role of antioxidants and ROS scavenging machinery in wild mushrooms. In *New and Future Developments in Microbial Biotechnology and Bioengineering* (pp. 245–251). Elsevier. <https://doi.org/10.1016/B978-0-12-821005-5.00018-1>

Erkan, N., Cetin, H., & Ayranci, E. (2011). Antioxidant activities of *Sideritis congesta* Davis et Huber-Morath and *Sideritis arguta* Boiss et Heldr: Identification of free flavonoids and cinnamic acid derivatives. *Food Research International*, 44(1), 297–303. <https://doi.org/10.1016/j.foodres.2010.10.016>

Farghadani, R., & Naidu, R. (2023). The anticancer mechanism of action of selected polyphenols in triple-negative breast cancer (TNBC). *Biomedicine & Pharmacotherapy*, 165, 115170. <https://doi.org/10.1016/j.biopha.2023.115170>

- Flórez, N., Conde, E., & Domínguez, H. (2015a). Microwave assisted water extraction of plant compounds. *Journal of Chemical Technology & Biotechnology*, *90*(4), 590–607. <https://doi.org/10.1002/jctb.4519>
- Flórez, N., Conde, E., & Domínguez, H. (2015b). Microwave assisted water extraction of plant compounds. *Journal of Chemical Technology & Biotechnology*, *90*(4), 590–607. <https://doi.org/10.1002/jctb.4519>
- Formica, J. V., & Regelson, W. (1995). Review of the biology of quercetin and related bioflavonoids. *Food and Chemical Toxicology*, *33*(12), 1061–1080. [https://doi.org/10.1016/0278-6915\(95\)00077-1](https://doi.org/10.1016/0278-6915(95)00077-1)
- Gargano, M. L., Van Griensven, L. J. L. D., Isikhuemhen, O. S., Lindequist, U., Venturella, G., Wasser, S. P., & Zervakis, G. I. (2017). Medicinal mushrooms: Valuable biological resources of high exploitation potential. *Plant Biosystems - An International Journal Dealing with All Aspects of Plant Biology*, *151*(3), 548–565. <https://doi.org/10.1080/11263504.2017.1301590>
- Gąsecka, M., Siwulski, M., & Mleczek, M. (2018). Evaluation of bioactive compounds content and antioxidant properties of soil-growing and wood-growing edible mushrooms. *Journal of Food Processing and Preservation*, *42*(1), e13386. <https://doi.org/10.1111/jfpp.13386>
- Halling, R. E., Fechner, N., Nuhn, M., Osmundson, T., Soyong, K., Arora, D., Binder, M., & Hibbett, D. (2015). Evolutionary relationships of *Heimioporus* and *Boletellus* (Boletales), with an emphasis on Australian taxa including new species and new combinations in *Aureoboletus*,

Hemileccinum and Xerocomus. *Australian Systematic Botany*, 28(1), 1.
<https://doi.org/10.1071/SB14049>

Halling, R. E., Osmundson, T. W., & Neves, M.-A. (2008). Pacific boletes: Implications for biogeographic relationships. *Mycological Research*, 112(4), 437–447. <https://doi.org/10.1016/j.mycres.2007.11.021>

Hamza, A., Ghanekar, S., & Santhosh Kumar, D. (2023). Current trends in health-promoting potential and biomaterial applications of edible mushrooms for human wellness. *Food Bioscience*, 51, 102290. <https://doi.org/10.1016/j.fbio.2022.102290>

Heleno, S. A., Barros, L., Martins, A., Morales, P., Fernández-Ruiz, V., Glamoclija, J., Sokovic, M., & Ferreira, I. C. F. R. (2015). Nutritional value, bioactive compounds, antimicrobial activity and bioaccessibility studies with wild edible mushrooms. *LWT - Food Science and Technology*, 63(2), 799–806. <https://doi.org/10.1016/j.lwt.2015.04.028>

Henkel, T. W., Terborgh, J., & Vilgalys, R. J. (2002). Ectomycorrhizal fungi and their leguminous hosts in the Pakaraima Mountains of Guyana. *Mycological Research*, 106(5), 515–531. <https://doi.org/10.1017/S0953756202005919>

Henri, H., Hakim, L., & Batoro, J. (2018). Kearifan Lokal Masyarakat sebagai Upaya Konservasi Hutan Pelawan di Kabupaten Bangka Tengah, Bangka Belitung. *Jurnal Ilmu Lingkungan*, 16(1), 49. <https://doi.org/10.14710/jil.16.1.49-57>

Hong, K., Dunn, D. M., Shen, C., & Pence, B. C. (2004). Effects of *ganoderma lucidum* on apoptotic and anti-inflammatory function in HT-29 human

colonic carcinoma cells. *Phytotherapy Research*, 18(9), 768–770.

<https://doi.org/10.1002/ptr.1495>

Huang, B., Zhang, Z., Ding, N., Wang, B., Zhang, G., & Fei, P. (2021). Investigation of the pectin grafting with gallic acid and propyl gallate and their antioxidant activities, antibacterial activities and fresh keeping performance. *International Journal of Biological Macromolecules*, 190, 343–350. <https://doi.org/10.1016/j.ijbiomac.2021.08.219>

Ibrahim, A., Kareem, M., Al-Noor, T., Al-Muhimeed, T., AlObaid, A., Albukhaty, S., Sulaiman, G., Jabir, M., Taqi, Z., & Sahib, U. (2021). Pt(II)-Thiocarbohydrazone Complex as Cytotoxic Agent and Apoptosis Inducer in Caov-3 and HT-29 Cells through the P53 and Caspase-8 Pathways. *Pharmaceuticals*, 14(6), 509. <https://doi.org/10.3390/ph14060509>

Institut Pertanian Bogor, & Permana, I. (2020). The Potency of Some Wild Edible Mushrooms with Economic Value in Belitong Island, The Province of Bangka Belitung. *Jurnal Wasian*, 7(2), 121–135. <https://doi.org/10.20886/jwas.v7i2.6109>

Jaganathan, S. K. (2014). Role of pomegranate and citrus fruit juices in colon cancer prevention. *World Journal of Gastroenterology*, 20(16), 4618. <https://doi.org/10.3748/wjg.v20.i16.4618>

Jemal, A., Center, M. M., DeSantis, C., & Ward, E. M. (2010). Global Patterns of Cancer Incidence and Mortality Rates and Trends. *Cancer Epidemiology, Biomarkers & Prevention*, 19(8), 1893–1907. <https://doi.org/10.1158/1055-9965.EPI-10-0437>

Jiang, X., Yang, X., Shi, Y., Long, Y., Su, W., He, W., Wei, K., & Miao, J. (2023).

Maackiain inhibits proliferation and promotes apoptosis of nasopharyngeal carcinoma cells by inhibiting the MAPK/Ras signaling pathway. *Chinese Journal of Natural Medicines*, 21(3), 185–196.
[https://doi.org/10.1016/S1875-5364\(23\)60420-0](https://doi.org/10.1016/S1875-5364(23)60420-0)

Kaewnarin, K., Suwannarach, N., Kumla, J., & Lumyong, S. (2016). Phenolic profile of various wild edible mushroom extracts from Thailand and their antioxidant properties, anti-tyrosinase and hyperglycaemic inhibitory activities. *Journal of Functional Foods*, 27, 352–364.
<https://doi.org/10.1016/j.jff.2016.09.008>

Kehrer, J. P., & Klotz, L.-O. (2015). Free radicals and related reactive species as mediators of tissue injury and disease: Implications for Health. *Critical Reviews in Toxicology*, 45(9), 765–798.
<https://doi.org/10.3109/10408444.2015.1074159>

Khan, M. T., Mudhol, S., Manasa, V., Peddha, M. S., & Krishnaswamy, K. (2023). Preparation, characterization, and pharmacokinetics study of apocynin and vanillic acid via hydroxypropyl-beta-cyclodextrin encapsulation. *Carbohydrate Polymer Technologies and Applications*, 6, 100398.
<https://doi.org/10.1016/j.carpta.2023.100398>

Kimman, M., Norman, R., Jan, S., Kingston, D., & Woodward, M. (2012). The Burden of Cancer in Member Countries of the Association of Southeast Asian Nations (ASEAN). *Asian Pacific Journal of Cancer Prevention*, 13(2), 411–420. <https://doi.org/10.7314/APJCP.2012.13.2.411>

- Klaus, A., Kozarski, M., Niksic, M., Jakovljevic, D., Todorovic, N., Stefanoska, I., & Van Griensven, L. J. L. D. (2013). The edible mushroom *Laetiporus sulphureus* as potential source of natural antioxidants. *International Journal of Food Sciences and Nutrition*, 64(5), 599–610. <https://doi.org/10.3109/09637486.2012.759190>
- Kolniak-Ostek, J., Oszmiański, J., Szyjka, A., Moreira, H., & Barg, E. (2022). Anticancer and Antioxidant Activities in *Ganoderma lucidum* Wild Mushrooms in Poland, as Well as Their Phenolic and Triterpenoid Compounds. *International Journal of Molecular Sciences*, 23(16), 9359. <https://doi.org/10.3390/ijms23169359>
- Kosanić, M., Ranković, B., Rančić, A., & Stanojković, T. (2016). Evaluation of metal concentration and antioxidant, antimicrobial, and anticancer potentials of two edible mushrooms *Lactarius deliciosus* and *Macrolepiota procera*. *Journal of Food and Drug Analysis*, 24(3), 477–484. <https://doi.org/10.1016/j.jfda.2016.01.008>
- Kour, H., Kour, D., Kour, S., Singh, S., Jawad Hashmi, S. A., Yadav, A. N., Kumar, K., Sharma, Y. P., & Ahluwalia, A. S. (2022). Bioactive compounds from mushrooms: Emerging bioresources of food and nutraceuticals. *Food Bioscience*, 50, 102124. <https://doi.org/10.1016/j.fbio.2022.102124>
- Kozarski, M., Klaus, A., Van Griensven, L., Jakovljevic, D., Todorovic, N., Wan-Mohtar, W. A. A. Q. I., & Vunduk, J. (2023). Mushroom β -glucan and polyphenol formulations as natural immunity boosters and balancers: Nature of the application. *Food Science and Human Wellness*, 12(2), 378–396. <https://doi.org/10.1016/j.fshw.2022.07.040>

- Kundu, M., Chatterjee, S., Ghosh, N., Manna, P., Das, J., & Sil, P. C. (2020). Tumor targeted delivery of umbelliferone via a smart mesoporous silica nanoparticles controlled-release drug delivery system for increased anticancer efficiency. *Materials Science and Engineering: C*, *116*, 111239. <https://doi.org/10.1016/j.msec.2020.111239>
- Kusuma, G. F., Mahardika, R. G., & Sari, F. I. P. (2022). Ekstrak Batang Pelawan (*Tristaniopsis merguensis* Griff.) sebagai Antibakteri pada *Staphylococcus aureus* dan *Escherichia coli*. *Stannum : Jurnal Sains Dan Terapan Kimia*, *4*(2), 40–46. <https://doi.org/10.33019/jstk.v4i2.3063>
- Labianca, R., Nordlinger, B., Beretta, G. D., Brouquet, A., & Cervantes, A. (2010). Primary colon cancer: ESMO Clinical Practice Guidelines for diagnosis, adjuvant treatment and follow-up. *Annals of Oncology*, *21*, v70–v77. <https://doi.org/10.1093/annonc/mdq168>
- Lee, J.-E., Jayakody, J., Kim, J.-I., Jeong, J.-W., Choi, K.-M., Kim, T.-S., Seo, C., Azimi, I., Hyun, J., & Ryu, B. (2024). The Influence of Solvent Choice on the Extraction of Bioactive Compounds from Asteraceae: A Comparative Review. *Foods*, *13*(19), 3151. <https://doi.org/10.3390/foods13193151>
- Lestari, P. U., Hasyimuddin, H., & Nurindah, N. (2023). Ragam jenis jamur makroskopis di Kawasan Hutan Topidi dan Hutan Garassi Malino. *Filogeni: Jurnal Mahasiswa Biologi*, *3*(1), 27–32. <https://doi.org/10.24252/filogeni.v3i1.30257>
- Li, D., Rui, Y., Guo, S., Luan, F., Liu, R., & Zeng, N. (2021). Ferulic acid: A review of its pharmacology, pharmacokinetics and derivatives. *Life Sciences*, *284*, 119921. <https://doi.org/10.1016/j.lfs.2021.119921>

- Li, H.-J., Reinhardt, F., Herschman, H. R., & Weinberg, R. A. (2012). Cancer-Stimulated Mesenchymal Stem Cells Create a Carcinoma Stem Cell Niche via Prostaglandin E2 Signaling. *Cancer Discovery*, 2(9), 840–855. <https://doi.org/10.1158/2159-8290.CD-12-0101>
- Lin, S., Ching, L. T., Chen, J., & Cheung, P. C. K. (2015). Antioxidant and anti-angiogenic effects of mushroom phenolics-rich fractions. *Journal of Functional Foods*, 17, 802–815. <https://doi.org/10.1016/j.jff.2015.06.015>
- Liu, K., Wang, J., Zhao, L., & Wang, Q. (2013). Anticancer, antioxidant and antibiotic activities of mushroom *Ramaria flava*. *Food and Chemical Toxicology*, 58, 375–380. <https://doi.org/10.1016/j.fct.2013.05.001>
- Luzi, F., Puglia, D., Dominici, F., Fortunati, E., Giovanale, G., Balestra, G. M., & Torre, L. (2018). Effect of gallic acid and umbelliferone on thermal, mechanical, antioxidant and antimicrobial properties of poly (vinyl alcohol-co-ethylene) films. *Polymer Degradation and Stability*, 152, 162–176. <https://doi.org/10.1016/j.polymdegradstab.2018.04.015>
- Lv, R., Dong, Y., Bao, Z., Zhang, S., Lin, S., & Sun, N. (2022). Advances in the activity evaluation and cellular regulation pathways of food-derived antioxidant peptides. *Trends in Food Science & Technology*, 122, 171–186. <https://doi.org/10.1016/j.tifs.2022.02.026>
- Mahajna, J., Dotan, N., Zaidman, B.-Z., Petrova, R., & Wasser, S. (2009). Pharmacological Values of Medicinal Mushrooms for Prostate Cancer Therapy: The Case of *Ganoderma Lucidum*. *Nutrition and Cancer*, 61(1), 16–26. <https://doi.org/10.1080/01635580802379323>

- Ma-on, C., Sanpavat, A., Whongsiri, P., Suwannasin, S., Hirankarn, N., Tangkijvanich, P., & Boonla, C. (2017). Oxidative stress indicated by elevated expression of Nrf2 and 8-OHdG promotes hepatocellular carcinoma progression. *Medical Oncology*, 34(4), 57. <https://doi.org/10.1007/s12032-017-0914-5>
- Martemucci, G., Costagliola, C., Mariano, M., D'andrea, L., Napolitano, P., & D'Alessandro, A. G. (2022). Free Radical Properties, Source and Targets, Antioxidant Consumption and Health. *Oxygen*, 2(2), 48–78. <https://doi.org/10.3390/oxygen2020006>
- Martínez-Montemayor, M. M., Acevedo, R. R., Otero-Franqui, E., Cubano, Luis. A., & Dharmawardhane, S. F. (2011). Ganoderma lucidum (Reishi) Inhibits Cancer Cell Growth and Expression of Key Molecules in Inflammatory Breast Cancer. *Nutrition and Cancer*, 63(7), 1085–1094. <https://doi.org/10.1080/01635581.2011.601845>
- Martins, N., Barros, L., & Ferreira, I. C. F. R. (2016). In vivo antioxidant activity of phenolic compounds: Facts and gaps. *Trends in Food Science & Technology*, 48, 1–12. <https://doi.org/10.1016/j.tifs.2015.11.008>
- Mendis, W. R. H., Lim, J.-W., Jung, S.-J., & Kang, S. Y. (2024). Antiviral effects of umbelliferone against viral hemorrhagic septicemia virus in olive flounder (*Paralichthys olivaceus*). *Fish & Shellfish Immunology*, 152, 109767. <https://doi.org/10.1016/j.fsi.2024.109767>
- Meng, W., Sun, H., Mu, T., & Garcia-Vaquero, M. (2023). Extraction, purification, chemical characterization and antioxidant properties in vitro of polyphenols

from the brown macroalga *Ascophyllum nodosum*. *Algal Research*, 70, 102989. <https://doi.org/10.1016/j.algal.2023.102989>

Milovanovic, I., Stajic, M., Cilerdzic, J., Stanojkovic, T., Knezevic, A., & Vukojevic, J. (2014). Antioxidant, antifungal and anticancer activities of se-enriched *Pleurotus spp.* Mycelium extracts. *Archives of Biological Sciences*, 66(4), 1379–1388. <https://doi.org/10.2298/ABS1404379M>

Mwangi, R. W., Macharia, J. M., Wagara, I. N., & Bence, R. L. (2022). The antioxidant potential of different edible and medicinal mushrooms. *Biomedicine & Pharmacotherapy*, 147, 112621. <https://doi.org/10.1016/j.biopha.2022.112621>

Nakanishi, M., & Rosenberg, D. W. (2013). Multifaceted roles of PGE2 in inflammation and cancer. *Seminars in Immunopathology*, 35(2), 123–137. <https://doi.org/10.1007/s00281-012-0342-8>

Nekkaa, A., Benaissa, A., El Djalil Lalaouna, A., Dupire, F., Risler, A., Mutelet, F., & Canabady-Rochelle, L. (2023). Green and innovative extraction of polyphenols from *Rhamnus alaternus* using natural deep eutectic solvents and evaluation of their bioactivities. *Journal of Applied Research on Medicinal and Aromatic Plants*, 35, 100503. <https://doi.org/10.1016/j.jarmap.2023.100503>

Nowacka, N., Nowak, R., Drozd, M., Olech, M., Los, R., & Malm, A. (2014). Analysis of phenolic constituents, antiradical and antimicrobial activity of edible mushrooms growing wild in Poland. *LWT - Food Science and Technology*, 59(2), 689–694. <https://doi.org/10.1016/j.lwt.2014.05.041>

- Papoutsis, K., Grasso, S., Menon, A., Brunton, N. P., Lyng, J. G., Jacquier, J.-C., & Bhuyan, D. J. (2020). Recovery of ergosterol and vitamin D2 from mushroom waste—Potential valorization by food and pharmaceutical industries. *Trends in Food Science & Technology*, *99*, 351–366. <https://doi.org/10.1016/j.tifs.2020.03.005>
- Patel, K. B., Mukherjee, S., Bhatt, H., Rajani, D., Ahmad, I., Patel, H., & Kumari, P. (2023). Synthesis, docking, and biological investigations of new coumarin-piperazine hybrids as potential antibacterial and anticancer agents. *Journal of Molecular Structure*, *1276*, 134755. <https://doi.org/10.1016/j.molstruc.2022.134755>
- Paul, S., Chakrabarty, S., Ghosh, S., Nag, D., Das, A., Dastidar, D. G., Dasgupta, M., Dutta, N., Kumari, M., Pal, M., & Chakrabarti, G. (2020). Targeting cellular microtubule by phytochemical apocynin exhibits autophagy-mediated apoptosis to inhibit lung carcinoma progression and tumorigenesis. *Phytomedicine*, *67*, 153152. <https://doi.org/10.1016/j.phymed.2019.153152>
- Paul, V., Rai, N., Agarwal, A., Gautam, V., & Tripathi, A. D. (2023). Valorization of lignocellulosic waste (coconut coir) for bio-vanillin production having antioxidant and anticancer activity against human breast cancer cells (MCF-7). *Industrial Crops and Products*, *205*, 117502. <https://doi.org/10.1016/j.indcrop.2023.117502>
- Perez-Ternero, C., Werner, C. M., Nickel, A. G., Herrera, M. D., Motilva, M.-J., Böhm, M., Alvarez De Sotomayor, M., & Laufs, U. (2017). Ferulic acid, a bioactive component of rice bran, improves oxidative stress and

mitochondrial biogenesis and dynamics in mice and in human mononuclear cells. *The Journal of Nutritional Biochemistry*, 48, 51–61.
<https://doi.org/10.1016/j.jnutbio.2017.06.011>

Pisoschi, A. M., & Pop, A. (2015). The role of antioxidants in the chemistry of oxidative stress: A review. *European Journal of Medicinal Chemistry*, 97, 55–74. <https://doi.org/10.1016/j.ejmech.2015.04.040>

Prastya, M., Astuti, R., Batubara, I., & Wahyudi, A. (2018). *Bacillus sp.* SAB E-41-derived extract shows antiaging properties via ctt1-mediated oxidative stress tolerance response in yeast *Schizosaccharomyces pombe*. *Asian Pacific Journal of Tropical Biomedicine*, 8(11), 533.
<https://doi.org/10.4103/2221-1691.245958>

Raghuvar Gopal, D. V., Narkar, A. A., Badrinath, Y., Mishra, K. P., & Joshi, D. S. (2004). Protection of Ewing's sarcoma family tumor (ESFT) cell line SK-N-MC from betulinic acid induced apoptosis by α -dl-tocopherol. *Toxicology Letters*, 153(2), 201–212. <https://doi.org/10.1016/j.toxlet.2004.03.027>

Rashid, S., Wali, A. F., Rashid, S. M., Alsaffar, R. M., Ahmad, A., Jan, B. L., Paray, B. A., Alqahtani, S. M. A., Arafah, A., & Rehman, M. U. (2021). Zingerone Targets Status Epilepticus by Blocking Hippocampal Neurodegeneration via Regulation of Redox Imbalance, Inflammation and Apoptosis. *Pharmaceuticals*, 14(2), 146. <https://doi.org/10.3390/ph14020146>

Ren, L., Hemar, Y., Perera, C. O., Lewis, G., Krissansen, G. W., & Buchanan, P. K. (2014). Antibacterial and antioxidant activities of aqueous extracts of eight edible mushrooms. *Bioactive Carbohydrates and Dietary Fibre*, 3(2), 41–51. <https://doi.org/10.1016/j.bcdf.2014.01.003>

- Reyes, Y. M., Robinson, S. A., De Silva, A. O., Brinovcar, C., & Trudeau, V. L. (2022). Exposure to the synthetic phenolic antioxidant 4,4'-thiobis(6-*t*-butyl-*m*-cresol) disrupts early development in the frog *Silurana tropicalis*. *Chemosphere*, *291*, 132814. <https://doi.org/10.1016/j.chemosphere.2021.132814>
- Riaz, T., Abbasi, A., Aziz-Ur-Rehman, A., Shahzadi, T., Ajaib, M., & Khan, M. (2012). Phytochemical screening, free radical scavenging, antioxidant activity and phenolic content of *Dodonaea viscosa*. *Journal of the Serbian Chemical Society*, *77*(4), 423–435. <https://doi.org/10.2298/JSC110621183R>
- Rich, R. 2011. Kajian terhadap jamur pangan pelawan (*Boletus sp.*) khas Indonesia sebagai sumber potensial pangan fungsional. [skripsi]. Fakultas Teknologi Pertanian, Institut Pertanian Bogor. Bogor.
- Ríos, J. L., & Recio, M. C. (2005). Medicinal plants and antimicrobial activity. *Journal of Ethnopharmacology*, *100*(1–2), 80–84. <https://doi.org/10.1016/j.jep.2005.04.025>
- Rocchetti, G., Blasi, F., Montesano, D., Ghisoni, S., Marcotullio, M. C., Sabatini, S., Cossignani, L., & Lucini, L. (2019). Impact of conventional/non-conventional extraction methods on the untargeted phenolic profile of *Moringa oleifera* leaves. *Food Research International*, *115*, 319–327. <https://doi.org/10.1016/j.foodres.2018.11.046>
- Romadanu, R., Hanggita, S., & Lestari, S. D. (2014). PENGUJIAN AKTIVITAS ANTIOKSIDAN EKSTRAK BUNGA LOTUS (*Nelumbo nucifera*). *Jurnal Fishtech*, *3*(1), 1–7. <https://doi.org/10.36706/fishtech.v3i1.3523>

- Rosas, C., Sinning, M., Ferreira, A., Fuenzalida, M., & Lemus, D. (2014). Celecoxib decreases growth and angiogenesis and promotes apoptosis in a tumor cell line resistant to chemotherapy. *Biological Research*, 47(1), 27. <https://doi.org/10.1186/0717-6287-47-27>
- Setiawan, A. (2022). *Keanekaragaman Hayati Indonesia: Masalah dan Upaya Konservasinya*.
- Setiawati, A. (2017). Cytotoxic of *Ganoderma lucidum* in Colon Cancer through Cyclooxygenase 2 (COX-2) as Its Molecular Target. *Journal of Tropical Life Science*, 7(2), 177–183. <https://doi.org/10.11594/jtls.07.02.14>
- Shahidi, F., & Yeo, J. (2016). Insoluble-Bound Phenolics in Food. *Molecules*, 21(9), 1216. <https://doi.org/10.3390/molecules21091216>
- Shi, H., Hu, X., Zheng, H., Li, C., Sun, L., Guo, Z., Huang, W., Yu, R., Song, L., & Zhu, J. (2021). Two novel antioxidant peptides derived from *Arca subcrenata* against oxidative stress and extend lifespan in *Caenorhabditis elegans*. *Journal of Functional Foods*, 81, 104462. <https://doi.org/10.1016/j.jff.2021.104462>
- Sik, B., Buzás, H., Kapcsándi, V., Lakatos, E., Daróczi, F., & Székelyhidi, R. (2023). Antioxidant and polyphenol content of different milk and dairy products. *Journal of King Saud University - Science*, 35(7), 102839. <https://doi.org/10.1016/j.jksus.2023.102839>
- Singh, R. P., Chidambara Murthy, K. N., & Jayaprakasha, G. K. (2002). Studies on the Antioxidant Activity of Pomegranate (*Punica granatum*) Peel and Seed Extracts Using in Vitro Models. *Journal of Agricultural and Food Chemistry*, 50(1), 81–86. <https://doi.org/10.1021/jf010865b>

- Smolskaitė, L., Venskutonis, P. R., & Talou, T. (2015). Comprehensive evaluation of antioxidant and antimicrobial properties of different mushroom species. *LWT - Food Science and Technology*, 60(1), 462–471. <https://doi.org/10.1016/j.lwt.2014.08.007>
- Sobolewski, C., Cerella, C., Dicato, M., Ghibelli, L., & Diederich, M. (2010). The Role of Cyclooxygenase-2 in Cell Proliferation and Cell Death in Human Malignancies. *International Journal of Cell Biology*, 2010, 1–21. <https://doi.org/10.1155/2010/215158>
- Srikram, A., & Supapvanich, S. (2016). Proximate compositions and bioactive compounds of edible wild and cultivated mushrooms from Northeast Thailand. *Agriculture and Natural Resources*, 50(6), 432–436. <https://doi.org/10.1016/j.anres.2016.08.001>
- Sudheer, S., Yeoh, W. K., Manickam, S., & Ali, A. (2016). Effect of ozone gas as an elicitor to enhance the bioactive compounds in *Ganoderma lucidum*. *Postharvest Biology and Technology*, 117, 81–88. <https://doi.org/10.1016/j.postharvbio.2016.01.014>
- Sung, H., Ferlay, J., Siegel, R. L., Laversanne, M., Soerjomataram, I., Jemal, A., & Bray, F. (2021). Global Cancer Statistics 2020: GLOBOCAN Estimates of Incidence and Mortality Worldwide for 36 Cancers in 185 Countries. *CA: A Cancer Journal for Clinicians*, 71(3), 209–249. <https://doi.org/10.3322/caac.21660>
- Tasuruni, D. 2012. Analisis morfologi dan sekuens ITS rDNA jamur edibel ektomikoriza pelawan dan struktur ektomikorizanya. [tesis] Sekolah Pascasarjana, Institut Pertanian Bogor. Bogor.

- Thbayh, D. K., & Fiser, B. (2022). Computational study of synthetic and natural polymer additives—Antioxidant potential of BHA, TBHQ, BHT, and curcumin. *Polymer Degradation and Stability*, 201, 109979. <https://doi.org/10.1016/j.polymdegradstab.2022.109979>
- Torre, L. A., Bray, F., Siegel, R. L., Ferlay, J., Lortet-Tieulent, J., & Jemal, A. (2015). Global cancer statistics, 2012. *CA: A Cancer Journal for Clinicians*, 65(2), 87–108. <https://doi.org/10.3322/caac.21262>
- Tronina, T., Bartmańska, A., Popłoński, J., Rychlicka, M., Sordon, S., Filip-Psurska, B., Milczarek, M., Wietrzyk, J., & Huszcza, E. (2023). Prenylated Flavonoids with Selective Toxicity against Human Cancers. *International Journal of Molecular Sciences*, 24(8), 7408. <https://doi.org/10.3390/ijms24087408>
- Umaña, M., Eim, V., Garau, C., Rosselló, C., & Simal, S. (2020). Ultrasound-assisted extraction of ergosterol and antioxidant components from mushroom by-products and the attainment of a β -glucan rich residue. *Food Chemistry*, 332, 127390. <https://doi.org/10.1016/j.foodchem.2020.127390>
- Wang, X., Wang, J., Han, L., Liu, B., & Meng, X. (2024). Vanillin-crosslinked gelatin-polyvinyl alcohol aerogels: Improved physicochemical properties and antimicrobial activity. *Food Bioscience*, 62, 105084. <https://doi.org/10.1016/j.fbio.2024.105084>
- Weerapreeyakul, N., Nonpunya, A., Barusrux, S., Thitimetharoch, T., & Sripanidkulchai, B. (2012). Evaluation of the anticancer potential of six herbs against a hepatoma cell line. *Chinese Medicine*, 7(1), 15. <https://doi.org/10.1186/1749-8546-7-15>

Windarsih, A., Suratno, Warmiko, H. D., Indrianingsih, A. W., Rohman, A., & Ulumuddin, Y. I. (2022). Untargeted metabolomics and proteomics approach using liquid chromatography-Orbitrap high resolution mass spectrometry to detect pork adulteration in *Pangasius hypophthalmus* meat. *Food Chemistry*, 386, 132856. <https://doi.org/10.1016/j.foodchem.2022.132856>

Witasari, L. D., Wahyu, K. W., Anugrahani, B. J., Kurniawan, D. C., Haryanto, A., Nandika, D., Karlinasari, L., Arinana, A., Batubara, I., Santoso, D., Rachmayanti, Y., Firmansyah, D., Sudiana, I. K., & Hertanto, D. M. (2022). Antimicrobial activities of fungus comb extracts isolated from Indomalayan termite (*Macrotermes gilvus* Hagen) mound. *AMB Express*, 12(1), 14. <https://doi.org/10.1186/s13568-022-01359-0>

Wu, H., Bak, K. H., Goran, G. V., & Tatiyaborworntham, N. (2022). Inhibitory mechanisms of polyphenols on heme protein-mediated lipid oxidation in muscle food: New insights and advances. *Critical Reviews in Food Science and Nutrition*, 1–19. <https://doi.org/10.1080/10408398.2022.2146654>

Xiaokang, W., Lyng, J. G., Brunton, N. P., Cody, L., Jacquier, J.-C., Harrison, S. M., & Papoutsis, K. (2020). Monitoring the effect of different microwave extraction parameters on the recovery of polyphenols from shiitake mushrooms: Comparison with hot-water and organic-solvent extractions. *Biotechnology Reports*, 27, e00504. <https://doi.org/10.1016/j.btre.2020.e00504>

Yildiz, O., Can, Z., Laghari, A. Q., Şahin, H., & Malkoç, M. (2015). Wild Edible Mushrooms as a Natural Source of Phenolics and Antioxidants: Mushrooms

as a Natural Source of Antioxidants. *Journal of Food Biochemistry*, 39(2), 148–154. <https://doi.org/10.1111/jfbc.12107>

Yulianti, W., Ayuningtyas, G., Martini, R., & Resmeiliana, I. (2021). PENGARUH METODE EKSTRAKSI DAN POLARITAS PELARUT TERHADAP KADAR FENOLIK TOTAL DAUN KERSEN (*Muntingia calabura* L): Effect of Extraction Method and Solvent Polarity on Total Phenolic Content of Cherry Leaves (*Muntingia calabura* L). *Jurnal Sains Terapan*, 10(2), 41–49. <https://doi.org/10.29244/jstsv.10.2.41-49>

Zaidman, B.-Z., Yassin, M., Mahajna, J., & Wasser, S. P. (2005). Medicinal mushroom modulators of molecular targets as cancer therapeutics. *Applied Microbiology and Biotechnology*, 67(4), 453–468. <https://doi.org/10.1007/s00253-004-1787-z>

Zeng, N.-K., Chai, H., Liang, Z.-Q., Tang, L.-P., Xue, R., & Yang, Z. L. (2018). The genus *Heimioporus* in China. *Mycologia*, 110(6), 1110–1126. <https://doi.org/10.1080/00275514.2018.1512303>

Zhang, Q.-W., Lin, L.-G., & Ye, W.-C. (2018). Techniques for extraction and isolation of natural products: A comprehensive review. *Chinese Medicine*, 13(1), 20. <https://doi.org/10.1186/s13020-018-0177-x>