

DAFTAR PUSTAKA

- Abdulkadir, A. R. (2015). In Vitro Antioxidant Activity of Ethanolic Extract from Terminalia catappa (L.) Leaves and Fruits: Effect of Fruit Ripening. *International Journal of Science and Research*, 4(8), 1244–1249. Retrieved from https://www.ijsr.net/get_abstract.php?paper_id=SUB157564
- Adrianta, K. A. (2020). Aktivitas Antioksidan Daun Magenta (Peristrophe bivalvis (L.) Merr) sebagai Salah Satu Kandidat Pengobatan Bahan Berbasis Herbal serta Bioaktivitasnya sebagai Analgetik. *Jurnal Ilmiah Medicamento*, 6(1), 33–39. <https://doi.org/10.36733/medicamento.v6i1.745>
- Agustina, A., Hidayati, N., Susanti, P., Klaten, M., Jombor Indah, J., Klaten Tengah, K., ... Tengah, J. (2019). PENETAPAN KADAR β-KAROTEN PADA WORTEL (Daucus carota, L) MENTAH DAN WORTEL REBUS DENGAN SPEKTROFOTOMETRI VISIBEL. *Jurnal Farmasi Sains Dan Praktis*, 5(1), 7–13. <https://doi.org/10.31603/pharmacy.v5i1.2293>
- Akbarirad, H., Gohari Ardabili, A., Kazemeini, S. M., & Mousavi Khaneghah, A. (2016). An Overview on Some of Important Sources of Natural Antioxidants. *International Food Research Journal*, 23(3), 928–933.
- Anand, A. V., Divya, N., & Kotti, P. P. (2015). An Updated Review of Terminalia catappa. *Pharmacognosy Reviews*, 9(18), 93–98. <https://doi.org/10.4103/0973-7847.162103>
- Andersen, O. M., & Markham, K. R. (2005). *Flavonoids: Chemistry, Biochemistry, and Applications (1st ed.)*. CRC Press. <https://doi.org/10.1201>
- Arifin, B., & Ibrahim, S. (2018). Struktur, Bioaktivitas dan Antioksidan Flavonoid. *Jurnal Zarah*, 6(1), 21–29. <https://doi.org/10.31629/zarah.v6i1.313>
- Azizah, D. N., Kumolowati, E., & Faramayuda, F. (2014). Penetapan Kadar Flavonoid Metode ALCL3 pada Ekstrak Metanol Kulit Buah Kakao (*Theobroma cacao* L.). *Kartika: Jurnal Ilmiah Farmasi*, 2(2), 45–49. <https://doi.org/10.26874/kjif.v2i2.14>
- Azzahra, F., & Budiati, T. (2022). Pengaruh Metode Pengeringan dan Pelarut Ekstraksi terhadap Rendemen dan Kandungan Kimia Ekstrak Daun Alpukat (*Persea americana* Mill.). *Medical Sains*, 7(1), 67–78. <https://doi.org/10.37874/ms.v7i1.285>
- Babich, O., Dyshlyuk, L., Noskova, S., Prosekov, A., Ivanova, S., & Pavsky, V. (2020). The effectiveness of plant hydrocolloids at maintaining the quality

- characteristics of the encapsulated form of L-phenylalanine-ammonia-lyase. *Heliyon*, 6(1), 1–6. <https://doi.org/10.1016/j.heliyon.2019.e03096>
- Backer, C. A., & Bakhuizen, R. C. van den brink. (1968). *Flora of Java (Spermatophytes only)*. Groningen: Wolter-Noordhoff N.V.
- Bermana, I. (2006). Klasifikasi Geomorfologi untuk Pemetaan Geologi yang telah Dibakukan. *Bulletin of Scientific Contribution*, 4(2), 161–173. <https://doi.org/10.24198/bsc%20geology.v4i2.8125.g3701>
- Cahyono, E., Wijayati, N., Kusumawardhana, S. B., Mursiti, S., Alighiri, D., Prasetya, A. T., ... Kasmui, K. (2020). *Modul Digital Kimia Organik Fisik*.
- Campilan, J. R., Tumamac, M. C., & Dorado, E. L. (2019). Quantitative Ethnobotanical Study, Phytochemical Screening and Antibacterial Assay of Ethnomedicinal Plants of T'boli In Lemsnolon, T'boli, South Cotabato. *International Journal of Pharmacology, Phytochemistry and Ethnomedicine*, 13, 45–61. <https://doi.org/10.18052/www.scipress.com/ijppe.13.45>
- Chole, P., & Ravi, L. (2020). A Review on Medicinal Potential of Terminalia catappa. *International Journal of Green Pharmacy*, 14(3), 229–234. <https://doi.org/10.22377/ijgp.v14i03.2932>
- Christalina, I., Susanto, T. E., Ayucitra, A., & Setiyadi. (2013). Aktivitas Antioksidan dan Antibakteri Alami Ekstrak Fenolik Biji Pepaya. *Widya Teknik*, 12(2), 18–25. <https://doi.org/10.33508/wt.v12i2.1455>
- Divya, N., & Vijaya, A. A. (2015). In Vitro Antioxidant Activity of Ethanolic Extract of Terminalia Catappa Leaves. *Asian Journal of Pharmaceutical and Clinical Research*, 8(5), 244–246. Retrieved from <https://innovareacademics.in/journals/index.php/ajpcr/article/view/7523>
- Dwimayasantini, R. (2018). Rumput Laut: Antioksidan Alami Penangkal Radikal Bebas. *Oseana*, 43(2), 13–23. <https://doi.org/10.14203/oseana.2018.Vol.43No.2.17>
- Enterprise, J. (2018). *SPSS Komplet untuk Mahasiswa*. Jakarta: PT Elex Media Komputindo.
- Ergina, Nurhayati, S., & Pursitasari, I. D. (2014). Uji Kualitatif Senyawa Metabolit Sekunder pada Daun Palado (*Agave angustifolia*) yang Diekstraksi dengan Pelarut Air dan Etanol. *Jurnal Akademika Kimia*, 3(3), 165–172. Retrieved from <http://jurnal.untad.ac.id/jurnal/index.php/JAK/article/view/7797>

- Fajrin, F. I., & Susila, I. (2019). Uji Fitokimia Ekstrak Kulit Petai menggunakan Metode Maserasi. *Prosiding Seminar Nasional Teknologi Dan Sains (SNasTekS)*, 455–462. Retrieved from <https://journal.unusida.ac.id/index.php/snts/article/view/116/101>
- Hidayat, R. S., & Napitupulu, R. M. (2015). *Kitab Tumbuhan Obat*. Jakarta: Agriflo.
- Ilyas, A. (2013). *Kimia Organik Bahan Alam*. Makasar: Alauddin University Press.
- Jony, M., Al, F. A., & Kumar, B. R. (2013). A Comprehensive Review on Pharmacological Activity of Terminalia Catappa (Combretaceae)-An Update. *Asian Journal of Pharmaceutical*, 1(2), 65–70. Retrieved from <https://ajprd.com/index.php/journal/article/view/47>
- Karak, P. (2019). Biological Activities of Flavonoids: An Overview. *International Journal of Pharmaceutical Sciences and Research*, 10(4), 1567–1574. [https://doi.org/10.13040/IJPSR.0975-8232.10\(4\).1567-74](https://doi.org/10.13040/IJPSR.0975-8232.10(4).1567-74)
- Kementerian Kesehatan RI. (2019). *Laporan Nasional RISKESDAS 2018*. Jakarta: Lembaga Penerbit Badan Penelitian dan Pengembangan Kesehatan (LPB). Retrieved from http://labdata.litbang.kemkes.go.id/images/download/laporan/RKD/2018/Laporan_Nasion
- Kementerian Kesehatan RI. (2020). *Farmakope Indonesia Edisi VI 2020*. Jakarta: Kementerian Kesehatan RI.
- Kementerian Perdagangan Republik Indonesia. (2014). Obat Herbal Tradisional. *Warta Ekspor*, 1–20. Retrieved from https://djpen.kemendag.go.id/app_frontend/admin/docs/publication/4651421058307.pdf
- Kiromah, N. Z. W., Husein, S., & Rahayu, T. P. (2021). Uji Aktivitas Antioksidan Ekstrak Etanol Daun Ganitri (*Elaeocarpus ganitrus Roxb.*) dengan Metode DPPH (2,2 Difenil-1-Pikrilhidazil). *Jurnal Farmasi Indonesia*, 18(1), 60–67. Retrieved from <http://journals.ums.ac.id/index.php/pharmacon>
- Lallo, S., Lewerissa, A. C., Rafi'i, A., Usman, U., Ismail, I., & Tayeb, R. (2022). Pengaruh Ketinggian Tempat Tumbuh terhadap Aktivitas Antioksidan dan Sitotoksik Ekstrak Rimpang Lengkuas (*Alpinia Galanga L.*). *Majalah Farmasi Dan Farmakologi*, 23(3), 118–123. <https://doi.org/10.20956/mff.v23i3.9406>

- Li, A., Li, S., Wu, X., Zhang, J., He, A., Zhao, G., & Yang, X. (2016). Effect of Light Intensity on Leaf Photosynthetic Characteristics and Accumulation of Flavonoids in *Lithocarpus litseifolius* (Hance) Chun. (Fagaceae). *Open Journal of Forestry*, 6, 445–459. <https://doi.org/10.4236/ojf.2016.65034>
- 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>
- Mierziak, J., Kostyn, K., & Kulma, A. (2014). Flavonoids as Important Molecules of Plant Interactions with the Environment. *Molecules*, 19(10), 16240–16265. <https://doi.org/10.3390/molecules191016240>
- Moelyono, M. W., Rochjana, A. H. U., Diantini, A., Musfiroh, I., Sumiwi, S. A., Iskandar, Y., & Susilawati, Y. (2016). Aktivitas Antioksidan Daun Iler *Plectranthus scutellarioides* (L.) R. Br. *Jurnal Farmasi Indonesia*, 8(1), 271–276. <https://doi.org/10.35617/jfi.v8i1.416>
- Mukhriani, M., Rusdi, M., Arsul, M. I., Sugiarna, R., & Farhan, N. (2019). Kadar Fenolik dan Flavonoid Total Ekstrak Etanol Daun Anggur(*Vitis vinifera* L.). *Ad-Dawaa' J.Pharm.Sci.*, 2(2), 95–102. <https://doi.org/10.24252/djps.v2i2.11503>
- Munira, M. M., Rasidah, R. R., Melani, E. M., Zakiah, N. Z., & Nasir, M. N. (2018). Uji Aktivitas Antibakteri Ekstrak Etanol Daun Ketapang (*Terminalia catappa* L.) Warna Hijau dan Warna Merah serta Kombinasinya. *Indonesian Journal of Pharmacy and Natural Product*, 1(2), 8–13. <https://doi.org/10.35473/ijpnp.v1i2.92>
- Najib, A. (2018). *Ekstraksi Senyawa Bahan Alami*. Yogyakarta: Deepublish.
- Nduru, R. E., Situmorang, M., & Tarigan, G. (2014). Analisa Faktor-Faktor yang Mempengaruhi Hasil Produksi Padi di Deli Serdang. *Saintia Matematika*, 2(1), 71–83. Retrieved from <https://jurnal.usu.ac.id/index.php/smatematika/article/view/4582>
- Neldawati, N., Ratnawulan, R., & Gusnedi, G. (2013). Analisis Nilai Absorbansi dalam Penentuan Kadar Flavonoid untuk Berbagai Jenis Daun Tanaman Obat. *PILLAR OF PHYSICS*, 2, 76–83. <https://doi.org/10.24036/756171074>
- Ni'ma, A., & Lindawati, N. Y. (2022). Analysis of Total Flavanoid Levels of Fennel Leaves (*Foeniculum vulgare*) Ethanol Extract by Spectrophotometry Visibel.

- Jurnal Farmasi Sains Dan Praktis*, 8(1), 1–11. <https://doi.org/10.31603/pharmacy.v8i1.4972>
- Omenna, & Chukwuma, E. (2015). Antioxidative Activity of the Almond Leaves (*Terminalia catappa*). *International Journal of Nursing, Midwife and Health Related Cases*, 1(2), 29–40. <https://doi.org/10.37745/ijnmh.15>
- Papuc, C., Goran, G. V., Predescu, C. N., Nicorescu, V., & Stefan, G. (2017). Plant Polyphenols as Antioxidant and Antibacterial Agents for Shelf-Life Extension of Meat and Meat Products: Classification, Structures, Sources, and Action Mechanisms. *Comprehensive Reviews in Food Science and Food Safety*, 16(6), 1243–1268. <https://doi.org/10.1111/1541-4337.12298>
- Pasanda, O. S., Indriati, S., Amri, Ma'ruf, A. A., & Al Hayah, M. T. S. (2022). Uji Aktivitas Antioksidan Dan Kadar Polifenol Daun Ketapang (*Terminalia Catappa L.*). *Prosiding 6th Seminar Nasional Penelitian & Pengabdian Kepada Masyarakat 2022*, 64–74.
- Patria, W. D., & Soegiharjo, C. J. (2013). Uji Aktivitas Antioksidan menggunakan Radikal 1,1-Difenil-2-Pikrilhidrazil (DPPH) dan Penetapan Kandungan Fenolik Total Fraksi Etilasetat Ekstrak Etanolik Daun Benalu (*Dendrophthoe pentandra L. Miq.*) yang Tumbuh di Pohon Kepel (*Stelechocarpus burahol* (Bl.) Hook. f.). *Jurnal Farmasi Sains Dan Komunitas*, 10(1), 51–60. <https://doi.org/10.24071/jpsc.0090>
- Puspitasari, A. D., Anwar, F. F., & Faizah, N. G. A. (2019). AKTIVITAS ANTIOKSIDAN, PENETAPAN KADAR FENOLIK TOTAL DAN FLAVONOID TOTAL EKSTRAK ETANOL, ETIL ASETAT, DAN n-HEKSAN DAUN PETAI (*Parkia speciosa Hassk.*). *Jurnal Ilmiah Teknoscains*, 5(1), 1–8. <https://doi.org/10.26877/jitek.v5i1.3490>
- Putriani, K., Harmida, & Juswardi. (2022). Perbedaan dan Kelimpahan Metabolit Daun Kelor (*Moringa Oleifera Lam.*) Berdasarkan Ketinggian Tempat Di Sumatera Selatan. *Seminar Nasional Pendidikan Biologi Dan Saintek (SNPBS) Ke-VII*, 205–212.
- Raphaël, B., Rony, M. A., Célestine Nkounkou Loumpangou, Louis-Clément, O. E., Jacques, L., & Jean-Maurille, O. (2019). Phytochemical Study and Antioxidant Activities of *Terminalia catappa* L. and *Mitragyna ciliata* Aubrev and Pellegr Medicinal Plants of Gabon. *Journal of Medicinal Plants Studies*, 7(1), 33–38. Retrieved from <https://www.plantsjournal.com/archives/?year=2019&vol=7&issue=1&part=A&ArticleId=933>

- Risfianty, D. K., & Sanuriza, I. Il. (2021). Uji Antioksidan Ekstrak Etanol Buah Asam Jawa (*Tamarindus indica L.*) Tua dan Muda dengan Metode DPPH. *Jurnal Inovasi Pendidikan Dan Sains*, 2(2), 55–57. <https://doi.org/10.51673/jips.v2i2.769>
- Saidi, N., Ginting, B., Murniana, & Mustanir. (2018). *Analisis Metabolit Sekunder*. Banda Aceh: University Press Darussalam.
- Saifudin, A. (2014). *Senyawa Alam Metabolit Sekunder Teori, Konsep dan Teknik Pemurnian*. Yogyakarta: Deepublish.
- Salimi, Y. K., Kamarudin, J., Ischak, N. I., & Bialangi, N. (2022). Aktivitas Antioksidan Senyawa Metabolit Sekunder Ekstrak Metanol Daun Ketapang (*Terminalia catappa L.*). *Jambura Journal Of Chemistry*, 4(2), 12–21. <https://doi.org/10.34312/jambchem.v4i2.11618>
- Savenny, D. U., & Dilliarosta, S. (2020). Konservasi Alam Mengenai Pohon di Daerah Padang. *SEMESTA: Journal of Science Education and Teaching*, 3(1), 19–29. Retrieved from <http://semesta.ppj.unp.ac.id/index.php/semesta/article/view/71>
- Sayuti, K., & Yenrina, R. (2015). *Antioksidan Alami dan Sintetik*. Padang: Andalas University Press. Retrieved from <http://repo.unand.ac.id/id/eprint/38072>
- Sepahpour, S., Selamat, J., Manap, M. Y. A., Khatib, A., & Razis, A. F. A. (2018). Comparative Analysis of Chemical Composition, Antioxidant Activity and Quantitative Characterization of Some Phenolic Compounds in Selected Herbs and Spices in Different Solvent Extraction Systems. *Molecules*, 23(2). <https://doi.org/10.3390/molecules23020402>
- Silalahi, M. (2022). Ketapang (*Terminalia catappa L.*): Potential Utilization as Foodstuffs and Traditional Medicine. *Open Access Research Journal of Life Sciences*, 3(2), 035–041. <https://doi.org/10.53022/oarjls.2022.3.2.0041>
- Siswoyo, S., Batubara, I., & Aristyanti, D. (2016). Tempat Tumbuh dan Kandungan Flavonoid Total Daun Tabat Barito (*Ficus deltoidea Jack.*). *Proceeding of Mulawarman Pharmaceuticals Conferences*, 3(2), 78–86. <https://doi.org/10.25026/mpc.v3i2.91>
- Sudarwati, T. P. L., & Fernanda, M. A. H. F. (2019). *Aplikasi Pemanfaatan Daun Pepaya (Carica papaya) sebagai Biolarvasida terhadap Larva Aedes Aegypti*. Gresik: Graniti. Retrieved from www.penerbitgraniti.com

- Sudira, I. W., Merdana, I. M., & Qurani, S. N. (2019). Preliminary Phitochemical Analysis of Guava Leaves (*Psidium guajava L.*) as Antidiarrheal in Calves. *Advances in Tropical Biodiversity and Environmental Sciences*, 3(2), 21–24. <https://doi.org/10.24843/atbes.v03.i02.p01>
- Suhartati, T. (2017). *Dasar-dasar Spektrofotometri Uv-Vis dan Spektrometri Massa untuk Penentuan Struktur Senyawa Organik* (AURA). Bandar Lampung: AURA.
- Sulichantini, E. D. (2015). Produksi Metabolit Sekunder melalui Kultur Jaringan. *Proceeding of Mulawarman Pharmaceuticals Conferences*, 205–212. <https://doi.org/10.25026/mpc.v1i1.27>
- Susanty, Ridnugrah, N. A., Chaerrudin, A., & Yudistirani, S. A. (2019). Aktivitas Antioksidan Ekstrak Daun Kelor (*Moringa oleifera*) sebagai Zat Tambahan Pembuatan Moisturizer. *Seminar Nasional Sains Dan Teknologi*, 1–7. Jakarta: Fakultas Teknik Universitas Muhammadiyah Jakarta. Retrieved from <https://jurnal.umj.ac.id/index.php/semnastek/article/view/5197>
- Suyanto, H., Abriana, T. L., Rupiasih, N. N., & Widyatmika, P. (2011). Pengaruh Intensitas Cahaya Merah 680 Nm terhadap Laju Pertumbuhan dan Kadar Klorofil-a pada Fase Pembibitan Tanaman Tomat. *Seminar Nasional Fisika 2011*, 1–8.
- Tampemawa, P. V, Pelealu, J. J., & Kandou, F. E. F. (2016). Uji Efektivitas Ekstrak Daun Ketapang (*Terminalia catappa L.*) terhadap Bakteri *Bacillus amyloliquefaciens*. *PHARMACON*, 5(1), 308–320. <https://doi.org/10.35799/pha.5.2016.11324>
- Utomo, D. S., Kristiani, E. B., & Mahardika, A. (2020). Pengaruh Lokasi Tumbuh terhadap Kadar Flavonoid, Fenolik, Klorofil, Karotenoid dan Aktivitas Antioksidan pada Tumbuhan Pecut Kuda (*Stachytarpheta Jamaicensis*). *Bioma: Berkala Ilmiah Biologi*, 22(2), 143–149. <https://doi.org/10.14710/bioma.22.2.143-149>
- Verma, N., & Shukla, S. (2015). Impact of Various Factors Responsible for Fluctuation in Plant Secondary Metabolites. *Journal of Applied Research on Medicinal and Aromatic Plants*, 2(4), 105–113. <https://doi.org/10.1016/j.jarmp.2015.09.002>
- Wang, G., Cao, F., Chang, L., Guo, X., & Wang, J. (2014). Temperature has more effects than soil moisture on biosynthesis of flavonoids in Ginkgo (Ginkgo

- biloba L.) leaves. *New Forests*, 45(6), 797–812. <https://doi.org/10.1007/s11056-014-9437-5>
- Wang, T., Li, Q., & Bi, K. (2018). Bioactive Flavonoids in Medicinal Plants: Structure, Activity and Biological Fate. *Asian Journal of Pharmaceutical Sciences*, 13(1), 12–23. <https://doi.org/10.1016/j.ajps.2017.08.004>
- Werdhasari, A. (2014). Peran Antioksidan Bagi Kesehatan. *Jurnal Biotek Medisiana Indonesia*, 3(2), 59–68. <https://doi.org/10.22435/jbmi.v3i2.1659>
- Winahyu, D. A., Retnaningsih, A., & Aprillia, M. (2019). Penetapan Kadar Flavonoid pada Kulit Batang Kayu Raru (CotylelobiummelanoxylonP) dengan Metode Spektrofotometri Uv-Vis. *JURNAL ANALIS FARMASI*, 4(1), 29–36. <https://doi.org/10.33024/jaf.v4i1>
- World Health Organization. (2018). *Noncommunicable Diseases Country Profiles 2018*. Geneva: World Health Organization. Retrieved from <https://apps.who.int/iris/handle/10665/274512>
- Yuda, I. K. A., Anthara, M. S., & Dharmayudha, A. A. G. O. (2013). Identifikasi Golongan Senyawa Kimia Estrak Etanol Buah Pare (*Momordica charantia*) dan Pengaruhnya terhadap Penurunan Kadar Glukosa Darah Tikus Putih Jantan (*Rattus novergicus*) yang Diinduksi Aloksan. *Buletin Veteriner Udayana*, 5(2), 87–95. Retrieved from <https://ojs.unud.ac.id/index.php/buletinvet/article/view/7193>
- Yudono, B. (2017). *Spektrometri*. Palembang: SIMETRI.
- Yulia, Idris, M., & Rahmadina. (2022). Skrining Fitokimia dan Penentuan Kadar Flavonoid Daun Kelor (*Moringa oleifera* L.) Desa Dolok Sinumbah dan Raja Maligas Kecamatan Hutabaya Raja. *KLOROFIL : Jurnal Ilmu Biologi Dan Terapan*, 6(1), 49–56.