



DAFTAR PUSTAKA

- Adamovics, J.A., 1997, *Chromatographic Analysis of Pharmaceuticals: Second Edition*, Revised and Expanded, 61–62, Marcel Dekker, Inc., New York.
- Ahmad, H., Sehgal, S., Mishra, A., & Gupta, R., 2012, *Mimosa pudica L. (Laajvanti): An overview*, *Pharmacognosy Reviews*, 6 (12), 115–124.
- Alen, Y., Agresa, F. L., & Yuliandra, Y., 2017, Analisis Kromatografi Lapis Tipis (KLT) dan Aktivitas Antihiperurisemia Ekstrak Rebung *Schizostachyum brachycladum* Kurz (Kurz) pada Mencit Putih Jantan, *Jurnal Sains Farmasi & Klinis*, 3(2), 146 – 152.
- Al-Maliki, A. D. M., 2011, Isolation and Identification of Phenolic Compounds from *Elettaria cardamomum* Seeds and Study of Their Medicinal Activity Against Pathogenic Bacteria of Prostate Gland, *Journal of Missan Researches*, 8(15), 13–35.
- Amorati, R., & Valgimigli, L., 2018, Methods to Measure the Antioxidant Activity of Phytochemicals and Plant Extracts, *Journal of Agricultural and Food Chemistry*, 66(13) 3324–3329.
- Andersen, Ø. M., & Markham, K. R., 2006, Flavonoids: Chemistry, Biochemistry, and Applications, 11, CRC Press, New York.
- 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.
- Azmi, L., Singh, M. K., & Akhtar, A. K., 2011, Pharmacological and biological overview on *Mimosa pudica* Linn, *International Journal of Pharmacy & Life Science*, 2(11), 1226–1234.
- Bal, A., Pati, S. G., Panda, F., & Paital, B., 2021, Modification of The Time of Incubation in Colorimetric Method for Accurate Determination of The Total Antioxidants Capacity using 2,2-Diphenyl-1-Picrylhydrazyl Stable Free Radical, *Journal of Applied Biology and Biotechnology*, 9(4), 156–161.
- Banjarnahor, D.S., & Artanti, N., 2014, Antioxidant Properties of Flavonoids, *Medical Journal Indonesian*, 23(4), 239.
- Bele, A., 2011, An Overview on Thin Layer Chromatography, *International Journal of Pharmaceutical Sciences and Research*, 2 (2), 256–267.



- Blainski, A., Lopes, G. C., & De Mello, J. C. P., 2013, Application and Analysis of The Folin Ciocalteu Method for The Determination of The Total Phenolic Content from *limonium brasiliense* L., *Molecules*, 18(6), 6852–6865.
- Blois, M. S., 1958, Antioxidant Determinations by the Use of a Stable Free Radical, *Nature*, 181(4617), 1199–1200.
- Brieger, K., Schiavone, S., Miller, F. J., & Krause, K. H., 2012, Reactive oxygen species: From health to disease, *Swiss Medical Weekly*, 142, 1.
- Cadenas, E., & Packer, L., 2002, *Handbook of Antioxidant*, 279–303, Marcel Dekker Inc., New York.
- Cetkovic, M., Urosevic, M., Jankovic, S., Nikolic, D., & Ristic, D., 2003, Antimicrobial activity of extracts of wild-growing mushrooms from Montenegro, *Journal of Agricultural and Food Chemistry*, 51(26), 7616-7620.
- Shekhar, T. C., & Anju, G., 2014, Antioxidant Activity by DPPH Radical Scavenging Method of *Ageratum conyzoides* Linn. Leaves, *American Journal of Ethnomedicine*, 1 (4), 244–249.
- Chang, C., Yang, M., Wen, H., & Chern, J., 2002, Estimation of Total Flavonoid Content in Propolis by Two Complementary Colorimetric Methods, *Journal of Food and Drug Analysis*, 10(3), 178-182.
- Cheng, C. L., Shalabh, & Garg, G., 2014, Coefficient of Determination for Multiple Measurement Error Models, *Journal of Multivariate Analysis*, 126, 137–152.
- Chun, O.K., Kim, D.O. & Lee, C.Y., 2003, Superoxide Radical Scavenging Activity of The Major Polyphenols in Fresh Plums, *Journal of Agriculture and Food Chemistry*, 51, 8067-8072.
- Cimpoiou, C., & Hodisan, S., 2002, Quantitative Thin Layer Chromatography Analysis by Photodensitometry, *Reviews in Analytical Chemistry*, 21(1), 56.
- Day, R, 2013, *Pedoman Teknologi Formulasi Sediaan Berbasisi Ekstrak*, Volume 2, 10, Badan Pengawas Obat dan Makanan.
- De Caro C. A., & Haller C., 2015, *UV/VIS Spectrophotometry Fundamentals and Applications*, 4–50, Mettler-Toledo AG, Switzerland.
- Direktorat Jendral Pengawasan Obat dan Makanan (Ditjen POM), 2000, *Parameter Standar Umum Ekstrak Tumbuhan Obat*, Cetakan Pertama, 10–11, Departemen Kesehatan RI, Jakarta.
- Dröge, W., 2002, Free Radicals in The Physiological Control of Cell Function, *Physiological Reviews*, 82 (1), 47–95.



- Gandhiraja, N., Sriram, S., Meenaa, V., Srilakshmi, J. K., Sasikumar, C., & Rajeswari, R., 2009, Phytochemical Screening and Antimicrobial Activity of the Plant Extracts of *Mimosa pudica* L. Against Selected Microbes, *Ethnobotanical Leaflets Volume 13*, 24–618.
- Gülçin, I., 2012, Antioxidant Activity of Food Constituents: an Overview, *Archives of Toxicology*, 86(3), 345–391.
- Gunawardhana, C. B., Ranasinghe, S. J., & Waisundara, V. Y., 2015, Review: *Mimosa pudica* Linn.: The Garden Weed with Therapeutic Properties, *Israel Journal of Plant Sciences*, 62 (4), 234–241.
- Hani, R. C., & Milanda, T., 2016, Review: Manfaat Antioksidan pada Tanaman Buah di Indonesia, *Farmaka*, 14(1), 184–190.
- Harborne, J.B., 1987, Metode Fitokimia: Penuntun Cara Modern Menganalisis Tumbuhan, diterjemahkan oleh Kosasih Padmawinata dan Iwang Sudiro, Penerbit ITB, Bandung. pp.9-71.
- Heim, K. E., Tagliaferro, A. R., & Bobilya, D. J., 2002, Flavonoid Antioxidants: Chemistry, Metabolism and Structure-Activity Relationships, *Journal of Nutritional Biochemistry*, 13, 572–584.
- Hendayana, S., 2006, *Kimia Pemisahan Metode Kromatografi dan Elektroforesis Modern*, 31–37, PT Remaja Rosdakarya, Bandung.
- Hirose, Y., Fujita, T., Ishii, T., & Ueno, N., 2010, Antioxidative Properties and Flavonoid Composition of *Chenopodium quinoa* Seeds Cultivated in Japan, *Food Chemistry*, 119(4), 1300–1306.
- Irianti, T., Murti Y. B., Kanistri, D. N., Pratiwi, D. R., & Kusumaningtyas, R. A., 2016, Pengaruh Hidrolisis Asam-Basa Terhadap Aktivitas Penangkapan Radikal 2-2' Difenil-1-Pikril Hidrazil (DPPH) Fraksi Air dari Ekstrak Etanolik Buah Talok (*Muntingia calabura* L.), *Traditional Medicine Journal*, 21(1), 38–47.
- Irianti, T., Purnomo, H., Kuswandi, dan, Nuranto, S., Nitya Kanistri, D., Bayu Murti, Y., & Farida, S., 2019, Free Radical Scavenging Activity of 2,2-diphenyl-1-picrylhydrazil from Ethanolic Extract of Kecombrang (*Nicolaia speciosa* (Bl.) Horan) Flower and Talok (*Muntingia calabura* L.) Fruit, *Jurnal Tumbuhan Obat Indonesia*, 12(1), 41–53.
- Irianti, T., Puspitasari, A., & Suryani, E., 2011, The Activity of Radical Scavenging of 2,2-Diphenyl-1-Pycrilhydrazil by Ethanolic Extract of (*Tinospora crispa* (L.) Miers) Stem and its Fractions, *Majalah Obat Tradisional*, 16(3).



- Ito, N., Hirose, M., Fukushima, S., Tsuda, H., Shirai, T., & Tatematsu, M., 1986, Studies on Antioxidants: Their Carcinogenic and Modifying Effects on Chemical Carcinogenesis, *Food and Chemical Toxicology*, 24(10), 1071–1082.
- Javanmardi, J., Stushnoff, C., Locke, E., & Vivanco, J. M., 2003, Antioxidant Activity and Total Phenolic Content of Iranian *Ocimum* accessions. *Food Chemistry*, 83(4), 547–550.
- Joseph, B., George, J., & Mohan, J., 2013, Pharmacology and Traditional Uses of *Mimosa pudica*, *International Journal of Pharmaceutical Sciences and Drug Research*, 5 (2), 41–44.
- Karim, A., Azlan, A., Ismail, A., Hashim, P., Gani, S., Zainudin, B., & Abdullah, N., 2014, Phenolix Composition, Antioxidant, Anti-wrinkles, and Tyrosinase Inhibitory Activities of Cocoa Pod Extract, *BMC Complementary and Alternative Medicine*, (14) 381.
- Kedare, S. B., & Singh, R. P., 2011, Genesis and Development of DPPH Method of Antioxidant Assay, *Journal of Food Science and Technology*, 48 (4), 412–422.
- Khaira, K., 2010, Menangkal Radikal Bebas dengan Antioksidan, *Jurnal Saintek*, II (2), 183–187.
- Khan, M., Harun, N., Rehman, A. H. N. A., & Elhussein, S. A. A., 2013, In Vitro Antioxidant Evaluation of Extracts of Three Wild Malaysian Plants, *Procedia Engineering*, 53, 29–36.
- Kim, G. N., & Jang, H. D, 2010, Effect of Enzyme Treatment with β -glucosidase on Antioxidant Capacity of Mulberry (*Morus alba* L.) Leaf Extract, *Food Science and Biotechnology*, 19(5), 1341–1346.
- Koleva, I. I., van Beek, T. A., Linssen, J. P. H., de Groot, A., & Evstatieva, L. N., 2002, Screening of Plant Extracts for Antioxidant Activity: a Comparative Study on Three Testing Methods, *Phytochemical Analysis*, 13(1), 8–17.
- Kornienko, J.S., Smirnova, I.S., Pugovkina, N.A., Ivanova, J.S., Shilina, M.A., Grinchuk, T.M., Shatrova, A.N., Aksenov, N.D., Zenin, V.V., Nikolsky, N.N., & Lyublinskaya, O.G., 2019, High Doses of Synthetic Antioxidants Induce Premature Senescence in Cultivated Mesenchymal Stem Cells, *Scientific Reports*, 9, 1296.
- Kumar, S., & Pandey, A. K., 2013, Chemistry and Biological Activities of Flavonoids: an Overview, *The Scientific World Journal*, 5–9.



- Kumar, S., Mishra, A., & Pandey, A. K., 2013, Antioxidant Mediated Protective Effect of *Parthenium hysterophorus* Against Oxidative Damage Using In Vitro models, *BMC Complementary and Alternative Medicine*, 13(120), 2–8.
- Lakshmibai, R., & Amirtham D., 2018, Evaluation of Free Radical Scavenging Activity of *Mimosa pudica* Thorns, *Asian Journal of Pharmaceutical and Clinical Research*, 11(11), 153.
- Leopoldini, M., Russo, N., Chiodo, S., & Toscano, M., 2006, Iron Chelation by The Powerful Antioxidant Flavonoid Quercetin, *Journal of Agricultural and Food Chemistry*, 54(17), 6343–6351.
- Lobo, V., Patil, A., Phatak, A., & Chandra, N., 2010, Free Radicals, Antioxidants and Functional Foods: Impact on Human Health, *Pharmacognosy Reviews*, 4(8), 118–126.
- Lourenço SC, Moldão-Martins M, & Alves VD., 2019, Antioxidants of Natural Plant Origins: From Sources to Food Industry Applications, *Molecules*, 24(22), 4132.
- Mac Fhionnlaoich, N., Ibsen, S., Serrano, L. A., Taylor, A., Qi, R., & Guldin, S., 2018, A Toolkit to Quantify Target Compounds in Thin-Layer-Chromatography Experiments, *Journal of Chemical Education*, 95(12), 2191–2196.
- Mardina, P., Prathama, H. A., & Hayati, D. M., 2016, Pengaruh Waktu Hidrolisis dan Konsentrasi Katalisator Asam Sulfat Terhadap Sintesis Furfural dari Jerami Padi, *Konversi*, 3(2), 1.
- Markham, K.R., 1988, *Cara Mengidentifikasi Flavonoid*, Penerbit ITB, Bandung
- Mathesius, U., 2018, Flavonoid Functions in Plants and Their Interactions with Other Organisms, *Plants* (Basel), 7(2), 30.
- Medic-Šaric, M., Jasprica, I., Mornar, A., & Maleš, Ž. 2007, Application of TLC in the Isolation and Analysis of Flavonoids, 3, *Taylor & Francis Group*, New York
- Molyneux, P., 2004, The Use of Stable Free Radical Diphenylpicrylhydrazyl (DPPH) for Estimating Antioxidant Activity, *Journal of Science and Technology*, 26(2), 211—219.
- Moshawih, S., Cheema, M. S., Ahmad, Z., Zakaria, Z. A., & Hakim, M. N, 2017, A Comprehensive Review on *Cosmos caudatus* (Ulam Raja): Pharmacology, Ethnopharmacology, and Phytochemistry, *International Research Journal of Education and Sciences*, 1(1), 2550 - 2158.



- Mulja, M., & Suharman, 1995, *Analisis Instrumen*, Cetakan 1, 26-32, Airlangga University Press, Surabaya.
- Olugbami, J., Gbadegesin, M., & Odunola, O., 2015, In Vitro Free Radical Scavenging and Antioxidant Properties of Ethanol Extract of *Terminalia Glaucescens*, *Pharmacognosy Research*, 7(1), 49–56.
- Panche, A. N., Diwan, A. D., & Chandra, S. R., 2016, Flavonoids: an Overview, *Journal of Nutritional Science*, 5(47), 1.
- Parwata, M. O. A., 2016, *Bahan Ajar Antioksidan*, 1–54, Kimia Terapan Program Pascasarjana Universitas Udayana.
- Patel, K., Panchal, N., & Ingle, P., 2019, Review of Extraction Techniques, *International Journal of Advanced Research in Chemical Science*, 6(3), 6–21.
- Pisoschi A. M., Pop A., Cimpeanu C., & Predoi G., 2016, Antioxidant Capacity Determination in Plants and Plant-Derived Products: A Review, *Oxidative Medicine and Cellular Longevity*, 1–36.
- Prabawa, M. K., 2015, *Uji Efek Penurun Glukosa Darah Ekstrak Etanol 70% Akar dan Batang Putri Malu (*Mimosa pudica*) pada Tikus Putih Jantan Galur Wistar yang Diinduksi Aloksan*, Skripsi, Fakultas Kedokteran, Universitas Muhammadiyah Surakarta.
- Pramono, S., 2021, Kuliah Teknologi Bahan Alam, Universitas Gadjah Mada.
- Prior, R. L., Wu, X., & Schaich, K., 2005, Standardized Methods for The Determination of Antioxidant Capacity and Phenolics in Foods and Dietary Supplements, *Journal of Agricultural and Food Chemistry*, 53(10), 4290–4302.
- Putri, L. E., 2017, Penentuan Konsentrasi Senyawa Berwarna KMnO₄ dengan Metoda Spektroskopi UV Visible, *Natural Science Journal*, 3(1), 391–398.
- Putri, M. A., 2018, Increased Endogenous Antioxidants Triggered by Physical Exercise, *Jurnal Kedokteran Yarsi*, 26(3), 163–172.
- Rabbani, R. H., 2014, *Pengaruh Hidrolisis Asam dan Wajtu Hidrolisis terhadap Uji Penangkapan Radikal 2,2-Difenil-1Pikrilhidrazil (DPPH) pada Fraksi Air Ekstrak Etanolik Batang Brotowali (*Tinosa crispa* (L.) Miers.)*, Skripsi, Fakultas Farmasi Universitas Gadjah Mada.
- Rathnamali, A., 2019, A Review on *Mimosa pudica*, *International Journal of Advanced Research and Review*, 4(11), 20–27.



- Rivai, H., Wahyuni A. H., & Fadhilah, H., 2013, Pembuatan dan Karakterisasi Ekstrak Kering Simplesia Jati Belanda (*Guazuma ulmifolia* Lamk.), *Jurnal Farmasi Higea*, (5)1.
- Riwanti, P., Izazih F., & Amaliyah, 2020, Pengaruh Perbedaan Konsentrasi Etanol pada Kadar Flavonoid Total Ekstrak Etanol 50,70 dan 96% *Sargassum polycystum* dari Madura, *Journal of Pharmaceutical Care Anwar Medika*, 2654-8364.
- Rizwan, K., Majeed, I., Bilal,M., Rasheed, T., Shakeel, A., & Iqbal, S., 2022, Phytochemistry and Diverse Pharmacology of Genus *Mimosa*: A Review, *Biomolecules*, 12, 8.
- Robinson, T., 1995, *Kandungan Organik Tumbuhan Tinggi*, diterjemahkan oleh Kosasih Padmawinata, 5, ITB, Bandung.
- Rohdiana, D., 2001, Aktivitas Penangkapan Radikal Polifenol dalam Daun Teh, *Majalah Farmasi Indonesia* (1), 52–58.
- Rohman, A., Riyanto, S., & Hidayati, N. K., 2007, Aktivitas Antioksidan, Kandungan Fenolik Total, dan Flavonoid Total Daun Mengkudu (*Morinda citrifolia* L), *Agritech*, 27(4).
- Romadanu, R., Hanggita, S., & Lestari, S. D., 2014, Pengujian Aktivitas Antioksidan Ekstrak Bunga Lotus (*Nelumbo nucifera*), *Jurnal Fishtech*, 3(1), 1–7.
- Rosidah, & Tjitraresmi, Ami, 2018, Review: Potensi Tanaman Melastomataceae sebagai Antioksidan, *Farmaka*, 16 (1), 24–33.
- San Miguel-Chávez, R., 2017, Phenolic Antioxidant Capacity: A Review of the State of the Art, *InTech*, 1.
- Santosa, D. & Haresmita, P. P. (2015). Antioxidant Activity Determination *Garcinia dulcis* (Roxb.) Kurz, *Blumeamollis* (D. Don) Merr., *Siegesbeckia orientalis* L., and *Salvia riparia* H.B.K Which Collected from Taman Nasional Gunung Merapi Using DPPH (2,2-Diphenyl-1-Pikril-Hidrazil) and Thin Layer, *Traditional Medicine Journal*, 20, 28–36
- Schober, P., & Schwarte, L. A., 2018, Correlation Coefficients: Appropriate Use and Interpretation, *Anesthesia and Analgesia*, 126(5), 1763–1768.
- Simanjuntak, P., Parwati, T., Lenny, L. E., Tamat, S. R., & Murwani R., 2004, Isolasi dan Identifikasi Senyawa Antioksidan Benalu Teh (*Scurrula ooetiana* (Korth) Danser), *Jurnal Ilmu Kefarmasian Indonesia*, 2(1), 19–24.
- Snyder, L.R., Kirkland, J.J. & Glajch, J.L., 1997, *Practical HPLC Method Development*, 2nd Edition, 378–384, John Wiley & Sons, Inc., Hoboken.



- Stankovic, M. S., Niciforovic, N., Topuzovic, M., & Solujic, S., 2011, Total Phenolic Content, Flavonoid Concentrations and Antioxidant Activity, of The Whole Plant and Plant Parts Extracts from *Teucrium montanum* L. Var. *Montanum, f. Supinum* (L.) Reichenb, *Biotechnology and Biotechnological Equipment*, 25(1), 2222–2227.
- Sule, O. J., Arhoghro, E. M., & Erigbali, P., 2017, Biochemical Effects of Ethanol Leaf Extract of *Mimosa pudica* in Thioacetamide-induced Hepatic and Nephrotic Injury in Rats, *World Journal of Pharmaceutical and Medical Research*, 3(9), 08–13.
- Tresnani, G., Martini, R., & Pratama, I. S., 2022, *Mimosa pudica* L. Leaves Ethanol Extract In Vitro Analysis of Anthelmintic Activity to *Ascaridia galli*, *Samota Journal of Biological Sciences*, 1(1), 2.
- Ueno, H., Yamakura, S., Arastoo, R. S., Oshima, T., & Kokubo, K., 2014, Systematic Evaluation and Mechanistic Investigation of Antioxidant Activity of Fullerenols Using β-Carotene Bleaching Assay, *Journal of Nanomaterials*, 2.
- van Acker, S. A. B. E., van den Berg, D. J., Tromp, M. N. J. L., Griffioen, D. H., van Bennekom, W. P., Wim, J. F., van der Vijgh, J. F., & Bast, A., 1996, Structural Aspects of Antioxidant Activity of Flavonoids, *Original Contribution Free Radical Biology & Medicine*, 20(3), 331–342.
- Verdiana, M., Widarta, I. W. R., & Permana, I. D. G. M., 2018, Pengaruh Jenis Pelarut Pada Ekstraksi Menggunakan Gelombang Ultrasonik Terhadap Aktivitas Antioksidan Ekstrak Kulit Buah Melon (*Citrus limon* (Linn.) Burm F.), *Jurnal Ilmu dan Teknologi Pangan*, 7(4), 213–222.
- Wang, S. Y., Kuo, Y. H., Chang, H. N., Kang, P. L., Tsay, H. S., Lin, K. F., Yang, N. S., & Shyur, L. F., 2002, Profiling and Characterization Antioxidant Activities in *Anoectochilus formosanus* Hayata, *Journal of Agricultural and Food Chemistry*, 50(7), 1859–1865.
- Wang, T. Y., Li, Q., & Bi, K., 2018, Bioactive Flavonoids in Medicinal Plants: Structure, Activity and Biological Fate, *Asian Journal of Pharmaceutical Sciences*, 13(1), 12–23.
- Werdhasari, A., 2014, Peran Antioksidan bagi Kesehatan, *Jurnal Biotek Medisiana Indonesia*, 3 (2), 59–68.
- Winata, I. P., & Darma Putri, A., 2019, Biji Mahoni Sebagai Antioksidan, *Jurnal Penelitian Perawat Profesional*, 1(1), 89–94.



- Wulaisfan, R., Austin T., S., & Mala, F., 2019, The Tests of Ethanol Extract of a Signed Sea Star (*Protoreaster nodosus*) on The Growth of Bacteria *Staphylococcus aureus*, *Jurnal Warta Farmasi*, 8(2), 31 – 41.
- Young, I. S., & Woodside, J. V., 2001, Antioxidants in Health and Disease, *Journal of Clinical Pathology*, 54, 176–186.
- Zeb, A., 2020, Concept, Mechanism, and Applications of Phenolic Antioxidants in Foods, *Journal of Food Biochemistry*, 44(9), 1–22.
- Zhang, J., Yuan, K., Zhou, W. L., Zhou, J., & Yang, P., 2011, Studies on The Active Components and Antioxidant Activities of The Extracts of *Mimosa pudica* Linn. from Southern China, *Pharmacognosy Magazine*, 7(25), 35–39.
- Zhang, Q. W., Lin, L. G., & Ye, W. C., 2018, Techniques for Extraction and Isolation of Natural Products: A Comprehensive Review, *Chinese Medicine (United Kingdom)*, 13(1), 1–2.
- Zhang, Y., Cai, P., Cheng, G., & Zhang, Y., 2022, A Brief Review of Phenolic Compounds Identified from Plants: Their Extraction, Analysis, and Biological Activity, *In Natural Product Communications*, 17(1).
- Zou, Y., Lu, Y., & Wei, D., 2004, Antioxidant Activity of Flavonoid-rich Extract of *Hypericum perforatum* L In Vitro, *Journal of Agriculture and Food Chemistry*, 52, 5032–50.