

DAFTAR PUSTAKA

- [1] E. R. Yuslianti, *Pengantar Radikal Bebas dan Antioksidan*. Deepublish, 2018. [Online]. Available: <https://books.google.co.id/books?id=QRxmDwAAQBAJ>
- [2] M. Widayani, M. Ulfa, and D. G. Wirasisya, “Efek Penghambatan Radikal Bebas Infusa dan Ekstrak Etanol Herba Pegagan (*Centella Asiatica* (L.) Urb) dengan Metode DPPH,” *J. Pijar MIPA*, vol. 14, no. 1, pp. 100–106, 2019, doi: 10.29303/jpm.v14.i1.1006.
- [3] N. Gupta, K. Verma, S. Nalla, A. Kulshreshtha, R. Lall, and S. Prasad, “Free Radicals as a Double-Edged Sword: The Cancer Preventive and Therapeutic Roles of Curcumin,” *Molecules*, vol. 25, no. 22, pp. 1–20, 2020, doi: 10.3390/MOLECULES25225390.
- [4] A. Anas *et al.*, “Antioxidant and Xanthine Oxidase Inhibitory Activity of *Euphorbia hirta* Leaves Crude Extract,” *Malaysian J. Anal. Sci.*, vol. 24, no. 4, pp. 503–510, 2020.
- [5] M. Katerji, M. Filippova, and P. Duerksen-Hughes, “Approaches and methods to measure oxidative

stress in clinical samples: Research applications in the cancer field,” *Oxid. Med. Cell. Longev.*, vol. 2019, 2019, doi: 10.1155/2019/1279250.

- [6] T. T. Irianti and S. Nuranto, *Antioksidan dan Kesehatan*. Gadjah Mada University Press, 2021. [Online]. Available: <https://books.google.co.id/books?id=ma1JEAAAQBAJ>
- [7] Z. Theafelicia and S. N. Wulan, “Comparison of Various Methods for Testing Antioxidant Activity (DPPH, ABTS, and FRAP) on Black Tea (*Camellia sinensis*) Zerlinda,” *J. Teknol. Pertan.*, vol. 24, no. 1, pp. 35–44, 2023.
- [8] F. V. M. Damanis, D. S. Wewengkang, and I. Antasionasti, “Uji Aktivitas Antioksidan Ekstrak Etanol Ascidian *Herdmania Momus* Dengan Metode DPPH (1,1-difenil-2-pikrilhidrazil),” *Pharmakon*, vol. 9, no. 3, p. 464, 2020, doi: 10.35799/pha.9.2020.30033.
- [9] B. Rioux, C. Peyrot, M. M. Mention, F. Brunissen, and F. Allais, “Sustainable synthesis of p-hydroxycinnamic diacids through proline-mediated Knoevenagel condensation in Ethanol: An access to potent phenolic UV filters and radical scavengers,”

- Antioxidants*, vol. 9, no. 4, 2020, doi: 10.3390/antiox9040331.
- [10] M. N. Islami, *Sintesis dan Uji Aktivitas Senyawa (E)-3-(3,4-dimetoksi fenil)-prop-2-enoat Sebagai Antioksidan*, Skripsi. Palembang: Universitas Islam Negeri Raden Fatah Palembang, 2021.
- [11] S. D. Rahmawati and I. Erwin, "Sintesis Senyawa APMS (Asam p-Metoksisinamat) dan Potensinya sebagai Antikolesterol," *J. Ilm. Farm.*, vol. 11, no. 3, pp. 15–21, 2022.
- [12] M. B. Smith and J. March, *March's Advanced Organic Chemistry*. 2006. doi: 10.1002/0470084960.
- [13] E. Agustina, *Sintesis dan Uji Aktivitas Senyawa Asam 3-(4-Metoksi Fenil)-Prop-2-Enoat Sebagai Sunscreen*, Skripsi. Palembang: Universitas Islam Negeri Raden Fatah Palembang, 2022.
- [14] K. Sunand, K. V. Kumar, K. Ashwini, P. S. Kumar, S. Vishnu, and A. Samala, "Synthesis characterization and antibacterial studies of 4-aminoantipyrine schiff's bases," *Int. J. Appl. Pharm. Sci. Res.*, vol. 2, no. 01, pp. 8–14, 2017, doi: 10.21477/ijapsr.v2i1.6908.
- [15] J. M. Murry, *Fundamentals Of Organic Chemistry*, Seventh Ed. Canada: Cengage Learning, 2011.

- [16] A. H. Prakosa and I. D. Pamungkas, "Pengaruh Waktu pada Penyulingan Minyak Biji dan Daun Adas dengan Metode Uap dan Air," *J. Teknol. Kim. dan Ind.*, vol. 2, no. 2, pp. 14–17, 2013, [Online]. Available:
<https://ejournal3.undip.ac.id/index.php/jtki/article/view/2598>
- [17] T. Vadivel and M. Dhamodaran, "Synthesis, characterization and antibacterial studies of ruthenium(III) complexes derived from chitosan schiff base," *Int. J. Biol. Macromol.*, vol. 90, pp. 44–52, 2016, doi:
<https://doi.org/10.1016/j.ijbiomac.2015.11.008>.
- [18] H. A. T. Pertiwi, "Sintesis N'-Benzilidensinamoilhidrazida Dan N'-(4-Metoksibenziliden)Sinamoilhidrazida Dari Bahan Awal Asam Sinamat Dengan Iradiasi Gelombang Mikro," *Adln-Perpustakaan Univ. Airlangga*, p. 136, 2016.
- [19] M. J. T. A.-T. T.- O'Neil, "The Merck index an encyclopedia of chemicals, drugs, and biologicals." Merck & Co. Whitehouse Station, N.J., Whitehouse Station, N.J., 2006. doi: LK -
<https://worldcat.org/title/938956417>.

- [20] I. W. H. A. Wiguna, A. Andini, F. Faturahman, M. Naufal, Rismawati, D. Sumiarsa, R. Maharani, "Sintesis Senyawa 5-(4'-Metoksibenzilidena)imidazolidina-2,4-dion Melalui Reaksi Kondensasi 4'-Metoksibenzaldehida dan Imidazolidina-2,4-dion dengan Katalis Amonium Asetat," *Chim. Nat. Acta*, vol. 9, no. 1, pp. 1–7, 2021, doi: 10.24198/cna.v9.n1.32727.
- [21] Harizal, Jumina, and T. D. Wahyuningsih, "C -4-metoksifenilkaliks [4] pirogalaril Dodekasinamat : Sintesis dan Uji Pendahuluan sebagai Bahan Aktif Tabir Surya Journal of Pharmaceutical and Health Research," *J. Pharm. Heal. Res.*, vol. 3, no. 3, pp. 95–101, 2022, doi: 10.47065/jharma.v3i3.2819.
- [22] D. P. Solihati, E. Fachriyah, and I. Ismiyanto, "Waktu Optimum pada Reaksi Veratraldehid dan Anilin," *J. Kim. Sains dan Apl.*, vol. 14, no. 3, pp. 69–71, 2011, doi: 10.14710/jksa.14.3.69-71.
- [23] L. Wade, *Organic Chemistry*. Inc: Pearson Education, 2016.
- [24] J. Julianus and E. Luckyvano, "Sintesis Asam Sinamat dari Benzaldehida dan Asam Malonat dengan Katalis Dietilamina," *J. Farm. Sains Dan Komunitas*, vol. 11, no. 1, pp. 1–6, 2014.

- [25] I. Guroo, A. Gull, S. M. Wani, S. A. Wani, A. A. Al-Huqail, and J. H. Alhaji, "Influence of different types of polysaccharide-based coatings on the storage stability of fresh-cut kiwi fruit: Assessing the physicochemical, antioxidant and phytochemical properties," *J. Food Process. Preserv.*, vol. 10, no. 11, 2021, doi: 10.3390/foods10112806.
- [26] S. N. Tverdomed, M. E. Hirschberg, R. Pajkert, and G.-V. Röschenhaler, "Base-mediated reactions of diethyl malonates derivatives with perfluorinated olefins: Novel synthetic routes to multifunctional ionomer precursors," *J. Fluor. Chem.*, vol. 250, p. 109864, 2021, doi: <https://doi.org/10.1016/j.jfluchem.2021.109864>.
- [27] P. S. S. Rajendran, "Corrosion Inhibition by Malonic Acid," *Int. J. Sci. Res.*, vol. 6, no. 6, pp. 2692–2696, 2017, [Online]. Available: <https://www.ijsr.net/archive/v6i6/ART20174819.pdf>
- [28] I. A. Damayanti, "Identifikasi Senyawa Turunan Asam Ferulat Dari Veratraldehid Sebagai Bahan Aktif Sunscreen," *J. Inov. Farm. Indones.*, vol. 4, no. 2, pp. 68–80, 2023.
- [29] I. Mon, Yerimadesi, and Hardeli, "Kimia Fisika

- (Kinetika Kimia).” p. 32, 2012. [Online]. Available: http://repository.unp.ac.id/26756/1/2012-Buku_kinetika_kimia_%28Yerimadesi%2C_dkk%29_1.pdf
- [30] L. Xie *et al.*, “Directed nickel-catalyzed regio- and diastereoselective arylation of unactivated alkenes,” *Nat. Commun.*, vol. 12, no. 1, pp. 1–10, 2021, doi: 10.1038/s41467-021-26527-x.
- [31] F. Tanaka, “Amines as Catalysts: Dynamic Features and Kinetic Control of Catalytic Asymmetric Chemical Transformations to Form C–C Bonds and Complex Molecules,” *Chem. Rec.*, vol. 202200207, pp. 1–15, 2022, doi: 10.1002/tcr.202200207.
- [32] H. Romadhani, “Validasi Metode Penetapan Kadar Tablet Floating Metformin Hidroklorida Dengan Spektrofotometri,” *Skripsi*, p. Purwokerto: Universitas Muhammadiyah Purwokerto, 2016.
- [33] U. Khasanah, Z. Ma sum, and S. Yuniningsih, “Rancang Alat Reaktor untuk Pembuatan Pabrik Cinnamaldehyd (C 9 H 8 O) Menggunakan Aldol Kondensasi dengan Kapasitas Produksi 20 . 000 Ton / Tahun Dengan meningkatnya pertumbuhan industri , maka permintaan bahan kimia juga berkembang pesat , baik itu ind,” *Pros. Semin. Nas. Teknol. i Ind. Lingkungan. dan Infrastruktur*, vol. 4, pp. 1–9, 2021.

- [34] J. M. Pratiwisari, “Validasi Metode Analisis Spektrofotometri UV-VIS dan Penetapan Kadar Flavonoid Ekstrak Etanol Biji Kakao (*Theobroma cacao L.*),” *Univ. dr.Soebandi Jember*, 2022.
- [35] L. Evans, “A brief background to spectrophotometr,” *J. Biochrom*, vol. 5, no. 1, pp. 6–12, 2017.
- [36] S. Fatimah and Yanlinastuti, “Pengaruh Konsentrasi Pelarut untuk Menentukan Paduan U-Zr dengan Menggunakan Metode Spektorfotometri Uv-Vis,” *Pus. Teknol. Bahan Nukl.*, vol. 9, no. 17, pp. 22–33, 2016.
- [37] H. Sastrohamidjojo, U. G. M. Press, and G. M. U. Press, *Dasar-dasar Spektroskopi*. UGM PRESS, 2018. [Online]. Available: <https://books.google.co.id/books?id=ARtbDwAAQBAJ>
- [38] S. A. A. Rohmah, A. Muadifah, and R. D. Martha, “Validasi Metode Penetapan Kadar Pengawet Natrium Benzoat pada Sari Kedelai di Beberapa Kecamatan di Kabupaten Tulungagung Menggunakan Spektrofotometer Uv-Vis,” *J. Sains dan Kesehat.*, vol. 3, no. 2, pp. 120–127, 2021, doi: 10.25026/jsk.v3i2.265.
- [39] S. I. M. Sibarani, A. Yudistira, and D. A. Mpila, “Uji

Aktivitas Antioksidan Sponss *Stylissa* sp. dengan Menggunakan Metode DPPH (1,1-difenil-2-pikrilhidrazil),” *Pharmacon*, vol. 9, no. 3, p. 419, 2020, doi: 10.35799/pha.9.2020.30027.

- [40] S. P. Santoso, N. Sanjaya, and A. Ayucitra, “Pemanfaatan kulit singkong sebagai bahan baku pembuatan Natrium Karbosimetil Selulosa,” *J. Tek. Kim. Indones.*, vol. 11, no. 3, p. 124, 2018, doi: 10.5614/jtki.2012.11.3.1.
- [41] R. Nur, Tamrin, and M. Z. Muhzakkar, “Sintesis Dan Karakterisasi Cmc (Carboxymethyl Cellulose) Yang Dihasilkan Dari Selulosa Jerami Padi,” *J. Sains dan Teknol. Pangan*, vol. 1, no. 3, pp. 222–231, 2016.
- [42] L. A. Br. Sagala, E. Aprilina, A. Sonip, M. Risanti, and Irzaman, “Penumbuhan Miselium Jamur Tiram Putih (*Pleurotus ostreatus*) Pada Media Sorgum dan Analisis Fourier Transform Infrared (FTIR),” *Semin. Nas. Fis.*, vol. 4, no. 6, pp. 51–56, 2015.
- [43] E. Hotmian, E. Suoth, Fatimawali, and T. Tallei, “GC-MS (Gas Chromatography - Mass Spectrometry) Analysis of Nut Grass Tuber (*Cyperus rotundus* L.) Methanolic Extract,” *Pharmacon*, vol. 10, no. 2, pp. 849–856, 2021.
- [44] M. L. Puspitasari, T. V. Wulansari, T. D.

- Widyaningsih, and J. Mahar, “Aktivitas Antioksidan Suplemen Herbal Daun Sirsak (*Annona muricata* L .) dan Kulit Manggis (*Garcinia mangostana* L .),” *Pangan Dan Agroindustri*, vol. 4, no. 1, pp. 283–290, 2016.
- [45] ahmad H. abbas, *Uji Aktivitas Antioksidan dan Antibakteri Ekstrak Etil Asetat Kapang Endofit dari Akar Tanaman Kayu Jawa (Lannea coromandelica (Houtt.) Merr.),* vol. 3, no. April. 2017.
- [46] S. M. N. P. Putri, “Identifikasi dan uji antioksidan senyawa betasianin dari ekstrak buah bit merah (*Beta vulgaris* L),” *Fmipa unnes, Semarang*, pp. 1–39, 2016.
- [47] J. Chen, J. Yang, L. Ma, J. Li, N. Shahzad, and C. K. Kim, “Author Correction: Structure-antioxidant activity relationship of methoxy, phenolic hydroxyl, and carboxylic acid groups of phenolic acids (Scientific Reports, (2020), 10, 1, (2611), 10.1038/s41598-020-59451-z),” *Sci. Rep.*, vol. 10, no. 1, pp. 1–9, 2020, doi: 10.1038/s41598-020-62493-y.
- [48] J. Al Julizan, Nur; Maemunah, Siti; Dwiyanti, Dina; Anshori, “Validasi Penentuan Aktifitas Antioksidan Dengan Metode Dpph,” *Kandaga– Media Publ. Ilm.*

Jab. Fungsional Tenaga Kependidikan, vol. 1, no. 1, 2019, doi: 10.24198/kandaga.v1i1.21473.

- [49] E. Prawirodihardjo, “Uji aktivitas antioksidan dan uji toksisitas ekstrak etanol 70% dan ekstrak air laut batang kayu jawa (*lannea coromandelica*),” *Fak. Kedokt. dan Ilmu Kesehatan. Uin Syarif Hidayatullah Jakarta*, p. 39, 2014.
- [50] T. A. Jani, A. Hakim, and Y. Juliantoni, “Formulation and Evaluation of Antioxidant Peel-Off Face Mask Containing Red Dragon Fruit Rind Extract (*Hylocereus polyrhizus* Haw.),” *J. Biol. Trop.*, vol. 20, no. 3, pp. 438–445, 2020, doi: 10.29303/jbt.v20i3.2157.
- [51] Abdullah, *Sintesis Senyawa Turunan Basa Schiff 1-(3,4-Dimetoksifenil)-N-(4-Metoksifenil) Metanamin Serta Uji Aktivitasnya Sebagai Sunscreen*, Skripsi. Palembang: Universitas Islam Negeri Raden Fatah Palembang, 2022.
- [52] E. D. Fitriana, “Synthesis of Three 4-Nitroindole-3-Carboxaldehyde Derivatives,” 2016.
- [53] I. Tahir, K. Wijaya, M. U. Yahya, and M. Yapin, “Quantitative Relationships Between Molecular Structure and Melting Point of Several Organic Compounds,” *Indones. J. Chem.*, vol. 2, no. 2, pp.

83–90, 2010, doi: 10.22146/ijc.21918.

- [54] I. Kristiana, *Sintesis Senyawa 2-Anilinbenzotriazol Dari Benzotriazol Dengan Anilin Melalui Reaksi Substitusi Nukleofilik*, Skripsi. Universitas Negeri Yogyakarta, 2011.
- [55] N. Failasufa, *Sintesis Senyawa 2-Fenolbenzotriazol dari Benzotriazol Dengan Fenol Melalui Reaksi Substitusi Nukleofilik*, Skripsi. Universitas Negeri Yogyakarta, 2011.
- [56] R. Enih, “Kromatografi Lapis Tipis Metode Sederhana Dalam Analisis Kimia Tumbuhan Berkayu,” *Mulawarman Univ. Press*, vol. 5, no. 2, pp. 40–51, 2019.
- [57] V. A. Kusumaningrum, *Sintesis, Karakterisasi dan Uji Aktivitas Antioksidan Senyawa Basa Schiff dari Vanilin dan p-Anisidina*, Skripsi. Universitas Islam Negeri Maulana Malik Ibrahim Malang, 2020.