

## DAFTAR PUSTAKA

- Ak, T. dan Gülçin, İ., 2008, Antioxidant and radical scavenging properties of curcumin. *Chemico-Biological Interactions*, **174**: 27–37.
- Alagumanivasagam, G., Pasupathy, R., Kottaimuthu, A., dan Manavalan, R., 2012, A Review on In-vitro Antioxidant Methods, *Int. J. of Pharm. Chem. and Scie.*, **1**(2):662-674.
- Anonim, 2013, Data dan Informasi Kesehatan Profil Kesehatan Indonesia, Kementerian Kesehatan Republik Indonesia, Jakarta.
- Anonim, 2013, Cyclohexanon, <http://www.sciencelab.com>, 18 Oktober 2018.
- Anonim, 2014, Kondisi Penyakit Tidak Menular di Indonesia, [www.perdhaki.org](http://www.perdhaki.org), 10 Oktober 2018.
- Anonim, 2016, Data dan Informasi Kesehatan Profil Kesehatan Indonesia, Kementerian Kesehatan Republik Indonesia, Jakarta.
- Anonim, 2018, 3-Bromo-4'-methoxybenzaldehyde, <https://www.alfa.com>, 18 Oktober 2018.
- Allen, E., 1942, The Melting Point of Impure Organic Compounds, *J. of Chem. Edu.*, **19**:278-281.
- Ashok, B.T. dan Ali, R., 1999, The aging paradox: free radical theory of aging, *Experimental Gerontology*, **34**: 293–303.
- Bayomi, S.M., El-Kashef, H.A., El-Ashmawy, M.B., Nasr, M.N.A., El-Sherbeny, M.A., Abdel-Aziz, N.I., dkk., 2015, Synthesis and biological evaluation of new curcumin analogues as antioxidant and antitumor agents: Molecular modeling study, *Eur. J. of Med. Chem.*, **101**: 584–594.
- Bele, A.A. dan Khale, A., 2010, An Overview on Thin Layer Chromatography, *Int. J. of Pharm. Scie. and Research*, **2**(2):256-267.
- Berawi, K.N. dan Agverianti, T., 2017, Efek Aktivitas Fisik pada Proses Pembentukan Radikal Bebas sebagai Faktor Risiko Aterosklerosis, *Majority*, **6**(2):85-90.
- Brigelius-Flohe dan Trabber, 1999, Vitamin E : function and metabolism, *FASEB*, **13**:45-55.
- Buck, D., 1991, Antioxidants, *J. Smith ed, Food Additive User's Handbook, Springer Science*, pp:1-2.

- Burton, G. W., 1994, Vitamin E : molecular and biological function. *Proceeding of Nutrition Society*, **53**:51-62.
- Carvalho, D. de M., Takeuchi, K.P., Geraldine, R.M., Moura, C.J. de, dan Torres, M.C.L., 2015, Production, solubility and antioxidant activity of curcumin nanosuspension, *Food Scie. and Tech. (Campinas)*, **35**:115–119.
- Cheeseman, K.H., 1993, Tissue Injury by Free Radicals, *Toxicology and Industrial Health*, **9**:39–51.
- Evans, J.L., Goldfine, I.D., Maddux, B.A., dan Grodsky, G.M., 2002, Oxidative Stress and Stress-Activated Signaling Pathways: A Unifying Hypothesis of Type 2 Diabetes, *Endocrine Reviews*, **23**: 599–622.
- Faraci F.M., 2003. Hyperhomocysteinemia A Million Ways to Lose Control & in Arteriosclerosis, *Trombosis and Vascular*, Biologi **23**:371-373.
- Gandjar, I.G. dan Rohman, A., 2007, Kimia Farmasi Analisis, *Pustaka Pelajar*, Yogyakarta.
- Goel, A., Kunnumakkara, A.B., dan Aggarwal, B.B., 2008, Curcumin as “Curecumin”: From kitchen to clinic, *Biochemical Pharmacology*, **75**:787–809.
- Grinberg, L.N., Shalev, O., Tønnesen, H.H., dan Rachmilewitz, E.A., 1996, Studies on curcumin and curcuminoids: XXVI. Antioxidant effects of curcumin on the red blood cell membrane, *Int. J. of Pharm.*, **132**: 251–257.
- Handajani, A., Roosihermatie, B., dan Maryani, H., 2009, Faktor-Faktor yang Berhubungan dengan Pola Kematian Penyakit Degeneratif di Indonesia, *Buletin Penelitian Sistem Kesehatan*, **13**: 12.
- Liu, T., Stern, A., Roberts, L.J., dan Morrow, J.D., 1999, The Isoprostanes: Novel Prostaglandin-Like Products of the Free Radical-Catalyzed Peroxidation of Arachidonic Acid, *J. Biomed. Sci.*, **6**:226-235.
- Lobo, V., Patil, A., Phatak, A., dan Chandra, N., 2010, Free radicals, antioxidants and functional foods: Impact on human health. *Pharmacognosy Reviews*, **4**(8):118-126.
- Macy, R., 1947, The history of a melting point, *J. of Chem. Edu.*, **24**: 222.
- Maslachah, L., Sugihartuti, R., dan Kurniasanti, R., 2008, Hambatan Produksi Reactive Oxygen Species Radikal Superoksida (O<sub>2</sub>·-) oleh Antioksidan Vitamin E (α- tocopherol ) pada Tikus Putih (*Rattus norvegicus*) yang Menerima Stressor Renjatan Listrik, *Media Kedokteran Hewan*, **24**:21-26.

- McMurry, 2004, Organic Chemistry, *Worth Publisher, Brooks Cole, Thomson Hearning, Inc.*, Singapura.
- Molyneux, P., 2004, The Use of the Stable Free Radical Diphenylpicryl- Hydrazyl (DPPH) for Estimating Antioxidant Activity, **26**(2):211-219.
- Nimse, S.. dan Pal, D., 2015, Free radicals, Natural Antioxidants, and Their Reaction Mechanisms, *The Royal Society of Chemistry*, **5**: 27986–28006.
- Pavia, D.L., Lampman, G.M., Kriz, G.S., dan Vyvyan, J.R., 2015, Introduction to Spectroscopy, Fifth Edition. ed. Cengage Learning, Washington.
- Pudjono, P., Sisindari, S., dan Widada, H., 2008, Sintesis 2,5-bis-(4'-hidroksi benzilidin) siklopentanon dan 2,5-bis-(4'-klorobenzilidin) siklopentanon serta uji antiproliferasinya terhadap sel HeLa, *Majalah Farmasi Indonesia*, **19**:48–55.
- Rahmawati, I., Rejeki, E.S., dan Sardjiman, S., 2010. Antioxidant Activity Test of 2,6-bis-(2'-furylidyn)-Cyclohexanone, ;2,5-bis-(2'-furylidyn) Cyclopentanone; 1,5-Difuryl-1,4-pentadien-3-one, *Indonesian Journal of Cancer Chemoprevention*, **1**:38.
- Ray, P.D., Huang, B.-W., dan Tsuji, Y., 2012, Reactive Oxygen Species (ROS) Homeostasis and Redox Regulation in Cellular Signaling, *Cellular Signalling*, **24**:981–990.
- Reddy, C.S.K., Khan, K.K.A., dan Nagaraja, C., 2016, A Review on the Determination of Melting Point Measurement System, *International Journal of Advanced Research in Electrical Electronics and Instrumentation Engineering*, **5**(2):975-979.
- Remacle dan Reusens, 2004, Functional Foods, Ageing and Degenerative Disease, *Woodhead Publishing Limited and CRC Press LLC*, New York.
- Ritmaleni dan Simbara, A., 2010, Sintesis Tetrahidro Pentagamavunon-0, *Majalah Farmasi Indonesia*, **21**: 100–105.
- Rosilia, R., 2014, Aktivitas Antioksidan Zat Ekstraktif Daun Mamgium (*Acacia mangium* Willd) Berdasarkan Uji Secara In Vivo dan In Vitro, *Skripsi*, Universitas Negeri Semarang, Semarang.
- Sardjiman, Reksohadiprodjo, M., Hakim, L., Van der Goot, H., dan Timmerman, H., 1997, 1,5-Diphenyl-1,4-pentadiene-3-ones and Cyclic Analogues as Antioxidative Agents: Synthesis and Structure-Activity Relationship, *Eur. J. Med. Chem.*, **32**: 625–630.

- Sardjiman, 2000, Synthesis of Some New Series of Curcumin Analogues, Antioxidative, Antiinflammatory, Antibacterial activities and qualitative-structure activity relationship, *Disertasi*, Universitas Gadjah Mada, Yogyakarta.
- Sari, D.N.C., 2015, Elusidasi Struktur 2,6-bis-(4'-metoksibenzil)-sikloheksanon (THA4) dengan Metode Spektrosopi IR, Masa,  $^1\text{H}$ -NMR dan  $^{13}\text{C}$ -NMR serta Uji Aktivitas Antioksidannya dengan Metode Daya Tangkap Radikal DPPH dan Daya Reduksi Terhadap Ion Ferri', *Skripsi*, Universitas Gadjah Mada, Yogyakarta.
- Shang, Y.-J., Jin, X.-L., Shang, X.-L., Tang, J.-J., Liu, G.-Y., Dai, F., dkk., 2010, Antioxidant Capacity of Curcumin-Directed Analogues: Structure–Activity Relationship and Influence of Microenvironment, *Food Chem.*, **119**: 1435–1442.
- Sharma, P., Jha, A.B., Dubey, R.S., dan Pessarakli, M., 2012, Reactive Oxygen Species, Oxidative Damage, and Antioxidative Defense Mechanism in Plants under Stressful Conditions, *Journal of Botany*, 1–26.
- Singh, U., Barik, A., Singh, B.G., dan Priyadarsini, K.I., 2011, Reactions of reactive oxygen species (ROS) with curcumin analogues: Structure–activity relationship, *Free Radical Research*, **45**: 317–325.
- Taniyama, Y. dan Griendling, K.K., 2003, Reactive Oxygen Species in the Vasculature: Molecular and Cellular Mechanisms, *Hypertension*, **42**: 1075–1081.
- Tennesen, H.H. dan Greenhill, J.V., 1992, Studies on Curcumin and Curcuminoids. XXII: Curcumin as a Reducing Agent and as a Radical Scavenger, *Int. J. of Pharm.*, **87**: 79–87.
- Ungvari, Z., Csiszar, A., Edwards, J.G., Kaminski, P.M., Wolin, M.S., Kaley, G., dkk., 2003, Increased Superoxide Production in Coronary Arteries in Hyperhomocysteinemia: Role of Tumor Necrosis Factor- $\alpha$ , NAD(P)H Oxidase, and Inducible Nitric Oxide Synthase, *Arteriosclerosis, Thrombosis, and Vascular Biology*, **23**: 418–424.
- Viswanad, V., Aleykutty, N.A., Zacharia, S.M., dan Thomas, L., 2011, Evaluation of Antioxidant and Free Radical Scavenging Activity of Samadera Indica Using In vitro Models, *Pharmacognosy Journal*, **3**: 85–90.
- Vogel, A.I., Furniss, B.S., dan Vogel, A.I., 1989, *Vogel's Textbook of Practical Organic Chemistry*, 5th ed. ed. Longman Scientific & Technical ; Wiley, London : New York.

- Wangensteen, H., Samuelsen, A.B., dan Malterud, K.E., 2004, Antioxidant activity in extracts from coriander, *Food Chemistry*, **88**: 293–297.
- Warono, D. dan Syamsudin, 2013, Unjuk Kerja Spektrofotometer untuk Analisa Zat Aktif Ketoprofen, *Universitas Muhammadiyah Jakarta*, **2**: 57-65.
- Warsi, W., Sardjiman, S., dan Riyanto, S., 2018, Synthesis and Antioxidant Activity of Curcumin Analogues, *Journal of Chemical and Pharmaceutical Research*, **10**(4):1-9.
- Werdhasari, A., 2014, Peran Antioksidan Bagi Kesehatan. *Pusat Biomedis dan Teknologi Dasar Kesehatan Balitbangkes, Kemenkes RI*, **3**(2):59-68.
- Widyaningtyas, F., 2015, Sintesis dan Uji Aktivitas Antioksidan Senyawa 2,6-bis-(3'-Klorobenzil)-sikloheksanon (THA10) dan Tetrahidrogamavuton-5 (THGVT-5)', *Skripsi*, Universitas Gadjah Mada, Yogyakarta.
- Widayati, E., 2012, Oksidasi Biologi, Radikal Bebas, dan Antioxidant, *Majalah Ilmu Sultan Agung*, **50**:26-32.
- Wijayanto, B., 2018, Wawancara atau komunikasi pribadi dengan penulis, 17 Oktober 2018.
- Young, I.S. dan Woodside, J.V., 2000, Antioxidants in health and disease, *Journal of Clinical Phatology*, **54**:176-186.