

DAFTAR PUSTAKA

- Abimantranahita, 2014, Sintesis 1,5-Bis-(4'-triflorometilfenil)-pentan-3-on dari Starting Material 1,5-Bis-(4'-triflorometilfenil)-penta-1,4-dien-3-on Melalui Reaksi Hidrogenasi dengan Katalis Paladium Karbon, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Al-temimi, A., and Choudhary, R., 2013, Determination of Antioxidant Activity in Different Kinds of Plants In Vivo and In Vitro by Using Diverse Technical Methods, *J. Nutr. Food. Sci.*, **3**, 184.
- Amic', D. D., Beslo, D., and Trinajstic, N., 2003, Structure-Radikal Scavenging Activity Relationship of Flavonoids, *Croat, Chem ACTA*, **76** (1), 55-61.
- Andini, J. D., 2012, Sintesis Tetrahidropentagamavunon-1 melalui Reaksi Hidrogenasi, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Apisariyakul, A., Vanittanakom, N., and Buddhassukh, D., 1995, Antifungal Activity of Turmeric Oil Extracted from *Curcuma longa* (Zingiberaceae), *J. Ethanopharmacol*, **49**, 163-169.
- Asouri, M., Ramin, A., Ali, A. A., Abdolhossein, A., and Masoumeh, R. M., 2013, Antioxidant and Free Radical Scavenging Activities of Curcumin, *Asian J. Chem.*, **13** (25), 7593-7595.
- Atun, S., 2006, Aktivitas Oligoresveratrol dari Kulit Batang *Hopea mengarawan* (Dipterocarpaceae) sebagai Penangkap Radikal Hidroksil, *Hayati*, **2** (13), 65-68.
- Benzie, I. F. F., and Strain J. J., 1996, The ferric reducing ability of plasma as a measure of "antioxidant power" The FRAP assay, *Analytical Biochemical*, **239**, 70-76.
- Brigelius-Flohe, and Trabber, M. G., 1999, Vitamin E: function and metabolism, *FASEB*, **13**, 45-55.
- Burton, G. W., 1994, Vitamin E: molecular and biological function, *Proceedings of the Nutrition Society*, **53**, 51-62.
- Cholisoh, Z., dan Wahyu, U., 2008, Aktivitas Penangkap Radikal Ekstrak Ekstrak Etanol 70% Biji Jengkol (*Archidendron jiringa*), *Pharmacon*, **9** (1), 33-40.

- Cook, N. C., and Samman S., 1996, Flavonoids and Chemistry, Metabolism, Cardioprotective Effect, and Dietary Sources, *Journal of Nutritional Biochemistry*, **7**, 66-67.
- Da'i, M., 1998, Pengaruh Gugus β -diketon terhadap Daya reduksi Kurkumin dan Senyawa turunannya pada Ion Ferri, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Dianawati, S., dan Sugiarto, R. D., 2013, Studi Gangguan Ag(I) dalam Analisa Besi dengan Pengompleks *o*-fenantrolin pada pH 4,5 secara Spektrofotometri UV-Vis, *Jurnal Sains dan Seni Pomits*, **2** (2), 2337-3520
- Erlina, R., Atmasari, dan Yanwirasti, 2007, Efek anti inflamasi ekstrak etanol kunyit (*curcuma domestika val.*) pada tikus putih jantan galur wistar, *Jurnal Sains dan Teknologi Farmasi*, **2** (12),112-115.
- Farkas, O., Jakus, J., and Heberger, K., 2004, Quantitative Structure-Activity Relationship of Flavonoid Compounds, *Molecules*, **2004** (9), 1079-1088.
- Finkel, T., and Holbrook, N. J., 2000, Oxidant, Oxidative and the Biology of Aging, *Nature*, 239-247.
- Goel, A., Kunnumakkara A. B., and Aggarwal B. B., 2008, Curcumin as "Curecumin": from kitchen to clinic, *Biochem Pharmacol*, **75**, 787-809.
- Hakim, L., Hakim, A. R., dan Nugroho, A. E., 2006, Profil farmakokinetika pentagamavunon-0 setelah pemberian kalium pentagamavunon-0 secara oral pada tikus, *Majalah Farmasi Indonesia*, **17** (4), 204-211.
- Halliwell, B., and Whiteman, M., 2004, Measuring reactive species and oxidative damage in vivo and in cell culture: how should you do it and what do the results mean?, *British Journal of Pharmacology*, **142** (2), 231-255.
- Heide, R. F. V. D., 1966, Reagents for the detection of antioxidants on thin layers of silica, *J. Chromalog*, **24**, 239-243.
- Indrayanto, G., 2006, Prospek (Kimia) Bahan Alam untuk Penemuan Obat Baru, Seminar Umum Pendidikan Program Studi, Universitas Mulawarman.
- Itokawa, H., Shi, Q., Akiyama, T., Morris-Natschke, S. L., and Lee, K., 2008, Recent Advances in The Investigation of Curcuminoids, Review, *Chin. Med.*, **3** (11), 1-13.

- Itthipanichpong, C., Ruangrunsi, N., Kemsri, W., and Sawasipanich, A., 2003, Antispasmodic effect of curcuminoids on isolated guinea pig ileum and rat uterus, *Med. Assoc. Thai.*, **86**, 299-309.
- Jurenka, J. S., 2009, Anti-inflammatory Properties of Curcumin, a Major Constituent of *Curcuma longa*: A Review of Preclinical and Clinical Research, *Alternative Med. Review*, **14** (2), 141-153.
- Kawamori, T., Lubet, R., and Steele, V. E., 1999, Chemopreventive effect of curcumin, a naturally occurring anti-inflammatory agent, during the promotion/progression stages of colon cancer, *Cancer Res*, **59**, 597-601.
- Klein, E., Luker, V., and Cibulkova, Z., 2005, On the Energetic of Phenol Antioxidants Activity, *Pet. Coal*, **47** (1), 33-39.
- Kuswanto, 2001, Perbandingan Pereaksi Pengompleks Kalium Thiosianat (KSCN) dan 1,1- Fenantrolin pada Penentuan Kadar Besi (Fe) Total dalam Biji Gandum (*Triticum Sativum*) secara Spektrofotometri UV-Vis, *Tugas Akhir*, Jurusan Kimia, Institut Teknologi Sepuluh Nopember, Surabaya.
- Lazic, D., and Skundric, B. J., 2010, Stability of Tris-1,10- Phenantroline Iron (II) Complex in Different Composites, *CI&CEQ*, **16** (2), 193-198.
- Liang, N., and David, D. K., 2014, Antioxidant Property of Coffee Components: Assessment of Methods that Define Mechanisms of Action, *Molecules*, **19**, 19180-19208.
- Malik, A. K., 2000, Spectrophotometric Determination of Ferbam Iron (III) Dymethyldithiocarbamat in Commercial Sample and Wheat Grains after Extraction of its Bathophenanthroline Tetraphenilborate Complex into Molten Naphtalen, *Journal of Agricultural and Food Chemistry*, **48** (9), 4044-4047.
- Mazumber, A., Raghavan, K., Weinstein, J., Kohn, K. W., and Pommer, Y., 1995, Inhibition of Human Immunodeficiency Virus Type-1 Integrase by Curcumin, *Biochem. Pharmacol*, **49**, 1165-1170.
- Meiyanto, E., Agustina, D., Suparjan, A.M., & Da'I, M., 2007, PGV-0 Induces Apoptosis on T47D Breast Cancer Cells Line Through Caspase-3 Activation, *Jurnal Kedokteran Yarsi*, **15** (2), 75-79.
- Mintaryanti, B., 2010, Pengaruh Pelarut Polar Aprotik pada Sintesis THPGV-0 dan Uji Aktivasnya sebagai Antibakteri, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.

- Mohamada, H., Abasa, F., Permana, D., Lajisa, N. H., Alib, A. M., Sukaric, M. A., Ali, A. M., Hin, T. Y., Kikuzaki, H., and Nakatani, N., 2004, DPPH Free Radical Scavenger Components from the Fruits of *Alpinia rafflesiana* Well. Ex. Bak. (Zingiberaceae), *Z. Naturforsch*, **59**, 811-815.
- Molyneux, P., 2004, The Use of Stable Free Radical Diphenilpicrylhydrazyl (DPPH) for Estimating Antioxidant Activity, *J. Sci. Technol.*, **26** (2), 211-219.
- Negi, P. S., Jayarakasha, C. K., Jagan, M. R., and Sakariah, K. K., 1999, Antibacterail activity of turmeric oil a byproduct from curcumin manufacture, *J. Agric Food Chem.*, **47**, 4297-4300.
- Nordmann, R., 1993, Free Radicals, Oxidative Stress, and Antioxidant Vitamins, *CR Sciences Soc. Biol. Fil.*, 277-285.
- Park, E. J., Jeon, C. H., and Ko, G., 2000, Protective effect of curcumin in rat liver injury induced by carbon tetrachloride, *J. Pharm. Pharmacol.*, **52**, 437-440.
- Praditya, I., 2014, Sintesis Senyawa Tetrahidroheksagamavunon-7 melalui Reaksi Hidrogenasi Katalitik dengan Katalis Paladium/Karbon, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Prakash, A., 2001, Antioxidant Activity, Analytical Progress, *Medallion Laboratories*.
- Rahman, K., 2003, Garlic and aging: new insights into an old remedy, *Ageing Res. Rev.*, **2**, 39-56.
- Rahman, K., 2007, Studies on Free Radicals, Antioxidants, and Co-factors, *Clinical Interventions in Aging*, **2** (2), 219-236.
- Ravindranath, V., and Chandrasekhara, N., 1982, Metabolism of Curcumin studies with [³H] Curcumin, *Toxicology*, **22**, 337-344.
- Riley, P.A., 1994, Free radicals in biology: oxidative stress and effects of ionizing radiation, *Int. J. Rad. Biol.*, **65**, 27-33.
- Ritmaleni, dan Simbara, A., 2010, Sintesis Tetrahidropentagamavunon-0, *Majalah Farmasi Indonesia*, **21**, 3547-3549.
- Sardjiman, 2000, Syntesis of Some New Series of Curcumin Analogue, Antioxidative, Antiinflammatory, Antibacterial Activities, Qualitative Structure-Activity Relationship, *Disertation*, Gadjah Mada University, Yogyakarta.

- Sardjiman, Reksohadiprodjo, M. S., Hakim, L., van, der, Goot, H., and 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, Reksohadiprodjo, M. S., Timmerman, H., 2003, Derivatives of Benzilidine Cyclohexanone, Benzilidine Cyclopentanone, Benzilidine Acetone, and Their Synthesis, *US Patent*.
- Sardjiman, Reksohadiprodjo, M. S., Timmerman, H., Margono, S. A., Martono, S., Sugiyanto, Hakim, L. R., Nurlaila, Hakim, A. R., Puspitasari, I., Nurrochmad, A., Purwatiningsih, Oetari, Yuwono, T., 2004, Derivatives of Benzilidine Cyclohexanone, Benzilidine Cyclopentanone, Benzilidine Acetone, and Therapeutic Uses Thereof, *US Patent*.
- Simbara, A., 2009, Sintesis dan Uji Aktivitas Antioksidan, Senyawa Tetrahidropentagamavunon-0, *Tesis*, Fakultas Farmasi UGM, Yogyakarta.
- Suryohudoyo, P., 1993, Oksidan, Antioksidan, dan Radikal Bebas, *Laboratorium Biokimia Fakultas Kedokteran Unair*, 1-11.
- Utama, D. G. A., 2012, Uji Daya Tangkap Radikal 2,2-difenil-1-pikrilhidrazil dan Daya Reduksi Senyawa Tetrahidropentagamavunon-1 (THPGV-1), *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Velkov, Z. A., Kolev, M., and Tadjer, A. V., 2007, Modeling and Statistical Analysis of DPPH Scavenging Activity of Phenolics, *Collect. Czech. Chem. Commun.*, **72**, 1461-1471.
- Venkatesan, P., and Rao, M. N., 2000, Structure-activity Relationships for The Inhibition of Lipid Peroxidation and The Scavenging of Free Radicals by Synthetic Symmetrical Curcumin Analogues, *J. Pharm. Pharmacol.*, **52** (9), 1123-1128.
- Vogel, 1985, *Buku Teks Analisa Anorganik Kualitatif Makro dan Semimikro*, diterjemahan oleh Setiono L., Pudjaatmaka A.H., Edisi Kelima, PT. Kalman Media Pustaka, Jakarta.
- Wahyudi, A., 2006, Pengaruh Penambahan Kurkumin Dari Rimpang Temu Giring Pada Aktifitas Antioksidan Asam Askorbat Dengan Metode FTC, *Akta Kimindo*, **2** (1), 37-40.
- Wibowo, H., 2013, Sintesis Tetrahidroheksagamavunon-5 dari Starting Material Heksangamavunon-5 dengan Katalis Paladium Karbon melalui Reaksi

Hidrogenasi, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.

Wuryantoko, J., dan Supardjan, A. M., 1997, Daya Reduksi Kurkumin dan Senyawa turunannya (4-alkil-kurkumin) terhadap Ion Feri yang diuji dengan Metode Ortho-fenantrolin Kompleks, *Majalah Farmasi Indonesia*, **8** (4), 171-178.

Zhang, H. Y., Sun, Y. M., and Wang, X. L., 2003, Substituent Effects on O–H Proton Dissociation Enthalpies of Catecholic Cation Radicals: A DFT Study, *Internet Electron. J. Mol. Des.*, **2** (4), 262-273.