

DAFTAR PUSTAKA

- Abimantranahita, 2014, Sintesis 1,5-bis-(4'trifluorometilfenil)-penta-3-on dari *Starting Material* 1,5-bis-(4'trifluorometilfenil)-penta-1,4-dien-3-on melalui Reaksi Hidrogenasi dengan Katalis Paladium Karbon, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Agustina, Yekti., 2010, Pengaruh Pelarut Polar Aprotik pada Sintesis Tetrahidropentagamavunon-0 (THPGV-0) dan Uji Aktivitasnya sebagai Antijamur, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Aldrich, 1996, [Paladium and Paladium Compounds] In: Katalog, Handbunch, Feinchemikalien. Steinhem, Sigma-Aldrich Chemie GmbH, pp.1262-1266.
- Andhini, 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.
- Arora, R.; Basu, N. and Kapoor, V., 1971, Anti-inflammatory Studies on *Curcuma longa*. (turmeric J. indian): *Med. Res.*, 59: 1289-1295.
- Da'i, M., 1998, Pengaruh Gugus β -diketon terhadap Daya reduksi Kurkumin dan Turunannya pada Ion Ferri, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Da'i, M., Hanwar, D., Utami, W., 2006, Sintesis PGV-0 dengan Katalis Asam dan Pengembangan Analisis Kemurnian dengan HPLC (High Performance Liquid Chromatography), *J. Penelitian Sains dan Teknologi*, Vol. 7, No. 1, 2006: 33-41.
- Fatah, A. M., 2000, *Elusidasi Struktur dengan Metode Spektroskopik*, 10, 19-20, 85, Laboratorium KFA Instrumental Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Fessenden, R.J. & Fessenden J.S., 1986, Kimia Organik, Jilid 1, Edisi Ketiga, Penerbit Erlangga, Jakarta
- Gandjar, I.G., Rohman, A., 2007, Kimia Farmasi Analisis, Pustaka Pelajar, Yogyakarta.

- Hakim, L., Hakim, A. R., dan Nugroho, A. E., 2004, Profil Farmakokinetika PGV-0 Setelah Pemberian Kalium PGV-0 Peroral dan Intravena pada Tikus, Laporan Penelitian QUE Project, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Harborne, J. B. 1987, Metode Fitokimia : Penentuan cara modern menganalisis tumbuhan, terbitan ke-2, Diterjemahkan dari Bahasa Inggris oleh Kosasih Padmawinata dan Iwang Soediro, Penerbit ITB, Bandung.
- Hudlicky, M., 1996, Reductions in Organic Chemistry, Washington D.C., American Chemical Society, ISBN 0-8412-3344-6, 429
- Issac, N.S., 1998, *Physical Organic Chemistry*, 2nd ed., 193-207, 369-370, Logman Group, United Kingdom.
- 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, Julie S., 2009, Anti-inflammatory Properties of Curcumin, a Major Constituent of *Curcuma longa*: A review of Preclinical and Clinical Research, *Alternative Medicine Review* Volume 14, Number 2.
- Kawamori, T.; Lubet, R. and steele, VE., 1999, Chemopreventive effect of curcumin, a naturally occurring anti-inflammatory agent, during the promotion/progression stages of colon cancer. *Cancer Res*, 59: 597-601.
- LeFevre, J. M., 1997, Measuring the Melting Points of Compounds and Mixtures, *Chemical Education Resources TECH*, **701**, 1-11.
- Macomber, R. S., 1998, *A Complete Introduction to NMR Spectroscopy*, 1, 5, 8-9, 72-73, 114, John Wiley & Sons, USA.
- Matsuda, T., Isobe, J., Jitoe, A., and Nakatani, N., 1992, Antioxidative Curcuminoids from Rhizomes of *Curcuma xanthorrhiza* Roxb., *Phytochemistry*, **31** (10), 3645-3647
- Mazumber, A., Raghavan, k., Weinstein, J., Kohn, K. W., & Pommer, Y., 1995, Inhibition of Human Immunodeficiency Virus Type-1 Integrase by Curcumin, *Biochem. Pharmacol.*, 49, 1165-1170.
- Mintaryanti, B., 2010, Pengaruh Pelarut Polar Aprotik pada Sintesis THPGV-0 dan Uji Aktivitasnya sebagai Antibakteri, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Mulja, M., dan Suharman, 1995, *Analisis Instrumental*, Airlangga University Press, Surabaya.

- Nakamura, Y., 1998, Inhibitory effect and Tetrahydrocurcumioids on the Tumor Promoter Induced Reactive Oxygen Species Generation in Leucocyte, in vitro and in vivo, *Jap.J. Cancer Res.* 89, 361-370.
- Negi, PS.; Jayarakasha, CK.; Jagan Mohan Raol, and Sakariah, KK. , 1999, Antibacterail activity of turmeric oil a byproduct from curcumin manufacture . *J. Agric Food Chem.*, 47: 4297-4300.
- Negishi, E., 2002, *Handbook of Organopalladium Chemistry for Organic Synthesis*, John Wiley and Sons, Inc., New York, 2, pp. 2754-2760.
- Nurrochmad, A., 2001, Sintesis Kurkumin, Bisdemetoksikurkumin, Bisdemetoksidehidrosikurkumin dan Pentagamavunon-0 serta Uji Kesitotoksikannya Terhadap Sel Mieloma dan Sel Mononuklear Normal Secara In Vitro, *Tesis*, Program Pasca Sarjana Universitas Gadjah Mada Yogyakarta.
- Okada, K. ,Wangpoengtrakul, C., Tanaka, T., Toyokuni, S., Uchida, K., Osawa, T., 2001, Curcumin and Especially Tetrahydrocurcumin Ameliorate Oxidative Stress-Induced Renal Injury in Mice, *Journal of Nutrition*, 131, 2090-2095.
- Osawa, T., Sugiyama, Y., Inayoshi, M., Kawakishi, S., 1995, Antioxidative Activity of Tetrahydrocurcuminoids, *Biosci. Biotechnol. Biochem.*, 59, 1609-1612.
- Pan, MH., Huang TM., Lin JK., 1999, Biotransformation of Curcumin Through Reduction and Glucoronidation in Mice, *Drug Metab. Dispos.*, 27, 486-494.
- Park, EJ.; Jeon, CH.and Ko, G., 2000, Protective effect of curcumin in rat liver injury induced by carbon tetrachloride. *J. Pharm. Pharmacol.*, 52: 437-440.
- Pavia, D. L., Lampman, G. M., and Kriz Jr, G. S., 2001, *Introduction to Spectroscopy*, W.B. Saunders Company, Philadelphia, pp. 14-82, 102-137, 167-170, 390-428.
- Pine, Stanley H., 1988, *Kimia Organik 2*, Penerbit ITB, Bandung.
- Praditya, Ian., 2014, Sintesis Senyawa Tetrahidroheksagamavunon-7 melalui Reaksi Hidrogenasi Katalitik dengan Katalis Paladium/Karbon, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Ravindranath, V., dan Chandrasekhara, N., 1982, Metabolism of Curcumin studies with [3H] Curcumin, *Toxicology*, 22, 337-344.

- Rianto, R.K., 1998, Daya Tangkap Radikal Superoksid dari Senyawa Siklovalon dan Derivat Lingkar Lima dan Rantai Lurus dengan Variasi Gugus Metoksi pada Cincin Aromatik, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada.
- Ritmaleni, Sardjiman, Mintaryanti, B., Wulandari, E., dan Purwantini, I., 2013, Antibacterial Activity of Tetrahydropentagamavunon-0 (THPGV-0) and Tetrahydropentagamavunon-1 (THPGV-1), *Journal of Natural Sciences Research*, **3**(11), pp. 12-18.
- Ritmaleni dan Simbara, A., 2010, Sintesis Tetrahidro Pentagamavunon-0, *Majalah Farmasi Indonesia*, **21**, 3547-3549.
- SabinsaCorporation, 2000, Tetrahydrocurcuminoid, <http://www.sabinsa.com/2000april.htm>, diakses 8 Mei 2015.
- Sardjiman, S. S., Reksohadiprodjo, M. S., Hakim, L., Van der Goot, H., & Timmerman, H., 1997, 1, 5-Diphenyl-1, 4-pentadiene-3-ones and Cyclic Analogues as Antioxidative Agents, Synthesis and Structure Activity Relationship, *European Journal of Medicinal Chemistry*, **32**(7), 625-630.
- Sardjiman, 2000, Synthesis of Some New Series of Curcumin Analogues, Antioxidative, Antiinflammatory, Antibacterial Activities and Qualitative Structure-Activity Relationship, *Dissertation*, Gadjah Mada University, Yogyakarta, Indonesia.
- Sastrohamidjojo, H., 1992, *Spektroskopi Infra Merah*, Edisi I, Cetakan I, Penerbit Liberty, Yogyakarta, pp.13.
- Sastrohamidjojo, H., 2001, *Spektroskopi*, ed. II, pp:46-48, 71-72, 102-113, Penerbit Liberty, Yogyakarta.
- Sastrohamidjojo, H., Pranowo, H. D., 2009, *Sintesis Senyawa Organik*, Penerbit Erlangga, Jakarta, pp. 153.
- Sharp, J. T., Gosney, I., Rowley, A. G., 1989, *Practical Organic Chemistry*, Chapman, and Hall, London, New York, pp.86-88.
- Silverman, R. B., 1992, *The Organic Chemistry of Drug Design and Drug Action*, Academic Press, San Diego, pp. 19.
- Silverstein, R. M., & Webster, F. X., 1997, *Spectrometric Identification of Organic Compounds*, 6th ed., p:7-70, John Wiley & Soncs Inc., New York.
- Simbara, A., 2009, Sintesis dan Uji Aktivitas Antioksidan, Senyawa Tetrahidropentagamavunon-0, *Tesis*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.

- Smith, G.W. And Northeisz, F., 1999, *Heterogeneous Catalysis in Organic Chemistry*, Academic Press, San Diego.
- Solomons, T. W. G., and Frhyle, C. B., 2011, *Organic Chemistry*, 10th Edition, John Wiley&Sons, New York.
- Stahl, E., 1985, *Analisa Obat secara Kromatografi dan Mikroskopi*, hal.3-18, 190-191, Institut Teknologi Bandung.
- Stuart, B., 2004, *Infrared Spectroscopy : Fundamentals and Application*, 2-5, 71-79, John Wiley & Sons Ltd., Chichester.
- Sudjadi, 1983, *Penentuan Struktur Senyawa Organik*, 128-129, 134-136, 208-209, 213, Ghalia Indonesia, Jakarta.
- Sugiyama, Y., Kawakishi, S., Osawa, T. , 1996, Involvement of The β -diketone Moiety in the Antioksidative Mechanism of Tetrahidrocurcuminoids, *Biochem. Pharmacol.*, 52, 519-525.
- Suwanti, Ika Sri., 2015, Sintesis dan Uji Antioksidan Senyawa TetraHidroPentagamavunon-5 dengan Metode Penangkapan Radikal DPPH dan Reduksi Ion Feri, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Tim Molnas Fak. Farmasi UGM, 2001, *Buku III, Laporan Penelitian Bidang Farmakologi Proyek Molnas*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.
- Tsuji, J., 2003, *Palladium Reagents and Catalyst : New Perspectives for the 21st Century*, John Wiley and Sons, Inc., New York, pp.656.
- 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.
- Van der Goot H, 1997, The Chemistry and qualitative structure-activity relationships of curcumin, in *Recent Development in Curcumin Pharmacology*, Proceedings of The International Symposium on Curcumin Pharmacology (ISCP), August 29-31, 1995, edited by Suwijiyo Pramono, Aditya Media, Yogyakarta, Indonesia.
- Wibowo, H., 2013, Sintesis Tetrahidroheksagamavunon-5 dari *Starting Material* Heksagamavunon-5 dengan Katalis Paladium Karbon melalui Reaksi Hidrogenasi, *Skripsi*, Fakultas Farmasi Universitas Gadjah Mada, Yogyakarta.