

DAFTAR PUSTAKA

- Andersen, A., 2006, Final report on the safety assessment of benzaldehyde, *Int J. Toxicol.*, **25** (1), 11–27.
- Anonim, 2013, Material Safety Data Sheet 3-Hydroxybenzaldehyde, www.sciencelab.com/msds.php?msdsId=9924305, diakses pada 28 Mei 2017.
- ATCC, 2017, ATCC Product Sheet, <https://www.atcc.org/~ps/>, diakses pada 10 April 2018.
- Barry, J., Fritz, M., Brender, J., Smith, P., Lee, D. & Ramamoorthy, A., 2009, Determining the effects of lipophilic drugs on membrane structure by solid state NMR spectroscopy: the case of antioxidant curcumin, *J. Amer. Chem. Soc.*, **131**, 4490–4498.
- Brooks, G., Carroll, K., Butel, J. & Morse, S., 2012, *Jawetz, Melnick & Adelbergs Medical Microbiology*, 26th Ed., 200-223, McGraw-Hill Education, New York.
- Cao, G., Sofic, E. & Prior, R.L., 1997, Antioxidant and Prooxidant Behavior of Flavonoids: Structure-Activity Relationships, *Free radical biology & medicine*, **22** (5), 749–60.
- Capriotti, K. & Capriotti, J.A., 2012, Dimethyl Sulfoxide, *J. Clin. Aesthet. Dermatol.*, **5** (9), 24-26.
- Char, C.D., Guerrero, S.N. & Alzamora, S.M., 2010, Mild thermal process combined with vanillin plus citral to help shorten the inactivation time for *Listeria innocua* in orange juice, *Food Bioprocess Technol.*, **3**, 752-761 cit.
- Wu, Y., Bai, J., Zhong, K., Huang, Y., Qi, H., Jiang, G., & Gao, H., 2016, Antibacterial activity and membran-disruptive mechanism of 3-p-trans-coumaroyl-2-hydroxyquinic acid, a novel phenolic compound from pine needles of *Cedrus deodara*, against *Staphylococcus aureus*, *Molecules*, **21**, 1084-1092.
- Chhibber, S., Bansal, S. & Kaur, S., 2015, Disrupting the mixed-species biofilm of *Klebsiella pneumoniae* B5055 and *Pseudomonas aeruginosa* PAO using bacteriophages alone or in combination with xylitol, *Microbiology*, **161** (7), 1369–1377.
- CLSI, 2012, *Methods for Dilution Antimicrobial Susceptibility Tests for Bacteria That Grow Aerobically: Approved Standard — Ninth Edition*, 18-20, Clinical and Laboratory Standards Institute, Wayne.
- Cortes, G., Borrle, N., de Astorza, B., Gomez, C., Sauleda, J. & Alberti, S., 2002, Molecular Analysis of the Contribution of the Capsular Polysaccharide and the Lipopolysaccharide O Side Chain to the Virulence of *Klebsiella pneumoniae* in a Murine Model of Pneumonia, *Infect. Immun.*, **70** (5), 2583–2590.
- Cos, P., Vlietinck, A., Berghem, D. & Maes, L., 2006, Anti-Infective Potential of Natural Products: How to Develop a Stronger In Vitro 'Proof-of-concept', *Journal of Ethnopharmacolog*, **106**, 290-302.

- Fessenden, R.J. & Fessenden, J.S., 1986, *Organic Chemistry*, 3rd Ed., 854-868, John Wiley & Sons, Inc., New York.
- Forrester, P.I. & Gaucher, G.M., 1972, m-Hydroxybenzyl Alcohol Dehydrogenase from *Penicillium urticae*, *Biochemistry*, **11** (6), 1108–14.
- Friedman, M., Henika, P.R. & Mandrell, R.E., 2003, Antibacterial Activities of Phenolic Benzaldehydes and Benzoic Acids against *Campylobacter jejuni*, *Escherichia coli*, *Listeria monocytogenes*, and *Salmonella enterica*, *J. Food Prot.*, **66** (10), 1811–1821.
- Fulmer, G.R., Miller, A.J., Sherden, N.H., Gotlieb, H.E., Nudelman, A., Stoltz, B.M., Bercaw, J.E. & Goldberg, K.I., 2010, NMR chemical shifts of trace impurities: common laboratory solvents, organics, and gases in deuterated solvents relevant to the organometallic chemist, *Organometallics*, **29**, 2176-2179.
- Furniss, B.S., Hannaford, A.J., Smith, P.W. & Tatchell, A.R., 1989, *Vogel's Textbook of Practical Organic Chemistry*, 5th Ed., 1032, John Wiley & Sons, Inc., New York.
- Gandjar, I.G., & Rohman, A., 2014, *Kimia Farmasi Analisis*, 353, Pustaka Pelajar, Yogyakarta.
- Gibbons, H.S. dkk., 2011, Genomic Signatures of Strain Selection and Enhancement in *Bacillus atrophaeus* var. *Globigii*, a Historical Biowarfare Simulant, *PLoS ONE*, **6** (3).
- Gilmore, M., 2002, The Enterococci: Pathogenesis, Molecular Biology, and Antibiotic Resistance, *American Society for Microbiology Press*, Washington DC.
- Goldman, E. & Green, L., 2008, *Practical Handbook of Microbiology*, 2nd Ed., CRC Press, New York.
- Gupta, S., dkk., 2011, Multitargeting by curcumin as revealed by molecular interaction studies, *Nat. Prod. Rep.*, **28**, 1937–1955.
- Haas, G.W. & Gross, M.L., 1996, Gas-phase base-catalyzed *Claisen-Schmidt* reactions of the acetone enolate anion with various para-substituted benzaldehydes, *American Society for Mass Spectrometry*, **7**, 82-92.
- Hahn, F., 1979, *Mechanism of Action of Antibacterial Agents*, 1st Ed., Springer-Verlag Berlin Heidelberg, Berlin.
- Handayani, S., Sunarto & Kristianingrum, S., 2005, Kromatografi Lapis Tipis Untuk Penentuan Kadar Hesperidin dalam Kulit Buah Jeruk, *Jurnal Penelitian Saintek*, **10** (1), 53-68.
- Hugo, W.B. & Russels, A.D., 1998, *Pharmaceutical Microbiology*, 6th Ed., Blackwell Science, Oxford.
- Ingolfsson, H., Koeppe, R. & Andersen, O., 2007, Curcumin is a modulator of bilayer material properties, *Biochemistry*, **46**, 10384–10391.
- Jenie, U.A., 2015, *Prinsip-prinsip Reaksi Fragmentasi pada Spektrometer Massa*, Catatan Kuliah, Spektrometri Massa, Universitas Gadjah Mada, diakses pada 25 Februari 2018.

- Jork, H.H., Funk, W. Fischer, W. & Wimmer, H., 1990, *Thin-Layer Chromatography Reagents and Detection Methods*, VHC, Jerman.
- Kaur, S.P., Rao, R., & Nanda, S., 2011, Amoxicillin: A Broad Spectrum Antibiotic, *International Journal of Pharmacy and Pharmaceutical*, **3**(3), 30-37.
- Kenna, S.M. & Davies, K.J., 1988, The inhibition of bacterial growth by hypochlorous acid. Possible role in bactericidal activity of phagocytes, *Biochem. J.*, **254** (3), 685-692.
- Kolarević, S., Milovanović, D., Avdović, M., Oalde, M., Kostić, J., Sunjog, K., Nikolić, B., Knežević-Vukcević, J. & Vuković-Gaćić, B., 2016, Optimisation of the microdilution method for detection of minimum inhibitory concentration values in selected bacteria, *Bot. Serbica*, **40** (1), 29–36.
- Kong, B.S., Im, S.J., Lee, Y.J., Cho, Y.H., Do, Y.R., Byun, J.W., Ku, C.R. & Lee, E.J., 2016, Vasculoprotective effects of 3-hydroxybenzaldehyde against VSMCs proliferation and ECs inflammation, *PLoS One*, **11** (3), 1–17.
- Marselos, M. & Lindahl, R., 1988, Substrate Preference of a Cytosolic Aldehyde Dehydrogenase Inducible in Rat Liver by Treatment with 3-Methylcholanthrene, *Toxicol. Appl. Pharmacol.*, **95** (2), 339–45.
- Maza, D. la, Luis, M., Marrie, T. & Janet, T., 2004. *Color Atlas of Medical Bacteriology*, American Society for Microbiology Press, Washington DC.
- McDonnell, G. & Russell, A.D., 1999, Antiseptics and disinfectants: activity, action, and resistance, *Clin. Microbiol. Rev.*, **12** (1), 147-179.
- McMurry, J., 2004, *Organic Chemistry*, 6th Ed., Brooks/Cole, USA.
- Musser, M.T., 2005, *Cyclohexanol and Cyclohexanone in Ullmann's Encyclopedia of Industrial Chemistry*, Wiley-VCH, Weinheim.
- Nafisi, S., Adelzadeh, M., Norouzi, Z. & Sarbolouki, M., 2009, Curcumin binding to DNA and RNA, *DNA Cell Biol.*, **28**, 201–208.
- Nanninga, N., 1998, Morphogenesis of *Escherichia coli*, *Microbiol. Mol. Biol. Rev.*, **62**, 110–129.
- Pavia, D.L., Lampman, G.M. & Jr. George, S.K., 1979, *Introduction to Spectroscopy: A Guide for Students of Organic Chemistry*, 26-53, W. B. Saunders Company, Philadelphia.
- Pudjono, Sismindari, & Widada, H., 2008, Sintesis 2,5-bis-(4'-hidroksibenziliden)-siklopentanon dan 2,5-bis-(4'-klorobenziliden)-sikloheksanon serta uji antiproliferatifnya terhadap sel HeLa, *Majalah Farmasi Indonesia*, **19** (1), 48-55.
- Reksohadiprodjo, M., Timmerman, H., Sardjiman, Margono, S.A., Martono, S., Nurrochmad, A., Purwantinihsih, Oetari & Yuwono, T., 2004, Derivates of Benzilidene Cyclohexanone, Benzylidene Cyclopentanone, and Benzylidene Acetone, and Therapeutic Uses Thereof, *United States Patent*, No. Paten: US 6,777,447 B2, tanggal paten: 17 Agustus 2004.
- Ritmaleni, 2016, Synthesis of curcumin analogs, *Int. J. Pharm. Sci. Rev.*, **37** (1), 236-241.
- Ritmaleni, 2017, *Hasil Diskusi atau Komunikasi Pribadi dengan Peneliti*, 23

Oktober 2017.

- Sardjiman, 1993, Sintesis 2,6-bis(3,5-dimetil-4-hidroksibenziliden)sikloheksanon, 2,5-bis(3,5-dimetil-4-hidroksibenziliden)siklopentanon dan 1,5-bis(3,5-dimetil-4-hidroksifenil)-1,4-pentadien-3-on dan daya antioksidasinya, *DPP/SPP Fak. Farmasi UGM 1992/1993*, Universitas Gadjah Mada, Yogyakarta.
- Sardjiman, 1995, Aktivitas antibakteri senyawa turunan benziliden sikloheksanon, siklopentanon dan 1,4-pentadien-3-on, *Proyek Bantuan Pelaksanaan Penelitian, Proyek Operasi dan Perawatan Fasilitas UGM*, Universitas Gadjah Mada, Yogyakarta.
- Sardjiman, 1996, Sintesis dan daya antibakteri senyawa kloro analog 1,5-difenil-1,4-pentadien-3-on dan siklisnya, *Proyek DPP/SPP Fak. Farmasi UGM*, Universitas Gadjah Mada, Yogyakarta.
- 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, *Eur. J. of Med. Chem.*, **32**, 625-630.
- Sardjiman, 2000, Synthesis of Some New Series of Curcumin Analogues, Anti – oxidative, Anti-inflammatory, Anti-bacterial Activities and Qualitative Structure-Activity-relationship, *Disertasi*, Universitas Gadjah Mada, Yogyakarta.
- Sardjiman, Reksohadiprodjo, M.S. & Timmerman, H., 2003, Derivates of Benzilidene Cyclohexanone, Benzylidene Cyclopentanone, and Benzylidene Acetone, and Their Synthesis, *United States Patent*, No. Paten: US 6,541,672 B1, tanggal paten: 1 April 2003.
- Sari, N.R., Wardana, P.W. & Indrayani, A.W., 2015, Uji zona hambat ekstrak daun putri malu (*Mimosa pudica*) terhadap bakteri *Staphylococcus aureus* dan *Methicillin-resistant Staphylococcus aureus* (MRSA) secara in vitro, *Jurnal Medika Udayana*, **4** (4).
- Schaechter, M., Ingraham, J. & Neidhardt, F., 2006, *Microbe*, ASM Press, Washington DC.
- Schleifer, K., 1983, *The Cell Envelope in Staphylococci and Staphylococcal Infections*, 2nd Ed., Academic Press, Inc., London.
- Schwalbe, R., dkk., 2007, *Antimicrobial Susceptibility Testing Protocols*, CRC Press, New York.
- Sharp, J.T., Gosney, I., & Rowley, A.G., 1989, *Practical Organic Chemistry*, 86, Chapman & Hall, London.
- Silverstein, R. M., Webster, F.X. & Kiemle, D.J., 2005, *Spectrometric Identification of Organic Compounds*, 7th Ed., 14-15, 142, John Wiley & Sons, Inc., New York.
- Sinko, P.J. & Singh, Y., 2011, *Martin's Physical Pharmacy and Pharmaceutical Sciences*, 6th Ed., 22, Lippincott Williams & Wilkins, Philadelphia.
- Sykes, P., 1977, *A Guidebook to Mechanism Organic Chemistry*, Longman, Great

Britain.

- Treangen, T.J., Maybank, R.A., Enke, S., Friss, M.B., Diviak, L.F., Karaolis, D.K., Koren, S., Ondov, B., Phillippy, A.D., Bergman, N.H. & Rosovitz, M.J., 2014, Complete genome sequence of the quality control strain *Staphylococcus aureus* subsp. *aureus* ATCC 25923, *Genome Announc.*, 2(6), 1110-1114.
- Wadhvani, T., Desai, K., Patel, D., Lawani, D., Bahaley, P., Joshi, P. & Kothari, V., 2009, Effect of various solvents on bacterial growth in context of determining MIC of various antimicrobials, *The Internet Journal of Microbiology*, 7 (1).
- Wang, R.S., Nakajima, T., Kawamoto, T. & Honma, T., 2002, Effects of Aldehyde Dehydrogenase-2 Genetic Polymorphisms on Metabolism of Structurally Different Aldehydes in Human Liver, *Drug Metab. Dispos.*, 30 (1), 69–73.
- WHO, 2012, *Global Report for Research on Infectious Diseases of Poverty*, World Health Organization, Switzerland.
- WHO, 2017, Antimicrobial Resistance, <http://www.who.int/mediacentre/factsheets/fs194/en/>, diakses pada 25 Oktober 2017.
- Yi, L., Chen, C. Y., Jin, X., Zhang, T., Zhou, Y., Zhang, Q. Y., dkk., 2012, Differential Suppression of Intracellular Reactive Oxygen Species-Mediated Signaling Pathway in Vascular Endothelial Cells by Several Subclasses of Flavonoids, *Biochimie*, 94 (9), 2035–44.
- Zhao, X. & Drlica, K., 2001, Restricting the selection of antibiotic-resistant mutants: a general strategy derived from fluoroquinolone studies, *Clinical Infectious Diseases*, 33, 147-156.