

DAFTAR PUSTAKA

- Ahmed, A. M., Al-Olayan, E. M., and Amoudy, M. A., 2008, Enhancing the humoral and melanization responses of *Aedes aegypti* mosquito: A step towards the utilization of immune system against dengue fever, *J. Entomol.* 5 : 305-321.
- Baker, D. D., Chu, M., Oza, U., and Rajgarhia, V., 2007, The Value of Natural Product to Future Pharmaceutical Discovery, *Nat. Prod. Rep.* 24: 1225-1244.
- Berdy, J., 2005, Bioactive Microbial Metabolites, *J. Antibiot.* 58(1): 1–26.
- Berridge, M. V., Tan, A. S., McCoy, K. D., and Wang, R., 1996, The Biochemical and Celular Basis of Cell Proliferation Assays That Use Tetrazolium Salts, *Biochem.* 4: 14-19.
- Bhatnagar, I and Kim, S.K., 2012, Pharmacologically prospective antibioticagents and their sources: a marine microbial perspective. *Envir. Toxicol. Pharmacol.* 34: 631-643.
- Burke, D.S. and Monath, T.P. Flaviviruses. In *Fields Virology* (eds. Knipe, D.M. & Howley, P.M.) 1043–1125 (Lippincott Williams & Wilkins, Philadelphia, Pennsylvania, USA, 2001).
- Canard, B., 2012, *Antiviral Research and Development Against Dengue Virus*, Full length Report of WHO.
- Clercq, E. D., 2002, Strategies in the Design of Antiviral Drugs, *Macmillan Magazines Ltd*, Nature Reviews (1) : 13-25.
- Dewick, P., 2002, *Medicinal Natural Products: A Biosynthetic Approach 2nd Ed.* Chichester, John Willey, UK.
- Edelman, R., 2007, Dengue Vaccine Approach the Finish Line. *CID* 2007:45 (Suppl 1).
- Farida, Y., Widada, J., and Meiyanto, E., 2007, Combination Mehods for Screening Marine Aktinomisetes Producing Potential Compounds as Anticancer, *I J Biotech* 12(2):988-997.
- Farida, Y., 2008, Metode Kombinasi Penapisan Aktinomisetes Laut Penghasil Senyawa Berpotensi Antikanker, *Tesis*, Universitas Gadjah Mada.

- Gandjar, I. G., and Rohman, A., 2007, *Kimia Farmasi Analisis*, 11-15, Pustaka Pelajar, Yogyakarta.
- Gerwick, W.H., and Fenner, A.M., 2013, Drug discovery from marine microbes, *Microb. Ecol.* 65: 800-806.
- Ghanbari, K., Aghajani, H., Golbabaee, M., Khah, E. N., Nabavi, S.H., and Koohian, A., 2011, Column Chromatography: A Facile and Inexpensive Procedure to Purify the Red Dopant DCJ Applied for OLEDs, *Adv. in Mat. Phy. and Chem.* 1: 91-93.
- Goodfellow, M., Williams, S. T., and Mordarski, M., 1968, *Actinomycetes in Biotechnology*, Academic Press Limited, Britain.
- Gubler, D. J., 1998, Dengue and Dengue Haemorrhagic Fever, *Clin. Microbiol. Rev.*, 11: 480-490.
- Guilarde, A. O., Turchi, M. D., Siqueira, Jr., J. B., Feres, V. C., Rocha, B., Levi, J. E., Souza, V. A., Boas, L. S., Pannuti, C. S., and Martelli, C. M., 2008, Dengue and dengue hemorrhagic fever among adults: clinical outcomes related to viremia, serotypes, and antibody response, *J. Infect. Dis.* 197 : 817-824.
- Guzman, M. G., Kouri, G., Valdes, L., Bravo, J., Valdes, L., Vazquez, S., and Halstead, S. B., 2002, Enhanced Severity of Secondary Dengue-2 Infections: Death Rates in 1981 and 1977 Cuban Outbreaks, *Rev. Panam. Salud Publica* 11:223-227.
- Guzman, M. G., Halstead, S. B., Artsob, H., Buchy, P., Farrar, J., Gubler, D. J., Hunsperger, E., Kroeger, A., Margolis, H. S., Martinez, E., Nathan, M. B., Pelegriño, J. L., Simmons, C., Yoksan, S., and Peeling, R. W., 2010. Dengue: A continuing global threat. *Nature Reviews Microbiology* 8, S7-S16.
- Harborne, J.B., 1973, *Metode Fitokimia Penuntun Cara Modern Menganalisis Tumbuhan*, diterjemahkan oleh Padmawinata, K. & Soediro, I., Terbitan Kedua, 4-8, Penerbit ITB, Bandung.
- Hartanto, S., 2012, Keragaman Gen NRPS pada Isolat-isolat Aktinomisetes Laut yang Berpotensi Menghasilkan Senyawa Antikanker, *Tesis*, Universitas Gadjah Mada.
- Imaniar, N. I., 2013, Aktivitas Antivirus Metabolit Sekunder Aktinomisetes Laut dan Tanah Terhadap Virus Dengue Serotipe-1, *Tesis*, Program Studi Bioteknologi UGM.

- Invitrogen, 2011, *SuperScript® III One-Step RT-PCR System with Platinum® Taq DNA Polymerase*, Life Technologies, California.
- Kroeger, A., and Nathan, M. B., 2006, Dengue: setting the global research agenda, *Lancet* (368): 2193-2195.
- Lam, K. S., 2006, Discovery of novel metabolites from marine aktinomisetes, *Current Opinion in Microbiology*, 9:245–251.
- Lamission, 2014, *Microbial Growth*, diperoleh secara online di <http://www.lamission.edu/> diakses pada tanggal 28 Juni 2014.
- Libraty, D. H., Young, P. R., Pickering, D., Emdy, T. P., Kalayanarooj, S., Green, S., Vaughn, D. W., Nisalak, A., Ennis, F. A., and Rothman, A. L., 2002, High circulating levels of the dengue virus non structural protein NS1 early in dengue illness correlate with the development of dengue hemorrhagic fever. *J. Infect. Dis.* 186: 1165-1168.
- Lim, S. P., Wang, Q. Y., Noble, C. G., Chen, Y. L., Dong, H., Zou, B., Yokokawa, F., Nilar, S., Smith, P., Beer, D., Lescar, J., and Shi, P., 2013, Ten years of dengue drug discovery: Progress and prospects. *Antivir. Res.*, 100, 500–519.
- Lindenbach, B.D. Thiel, H. J., and Rice, C.M. 2001, Flaviviridae: the viruses and their replication. In *Fields Virology* (eds. Knipe, D.M. & Howley, P.M.) 991–1041 (Lippincott Williams & Wilkins, Philadelphia, Pennsylvania, USA).
- Low, J. S. Y., Chen, K. C., Wu, K. X., Ng, M. M., and Chu, J. J. H., 2009, Antiviral activity of emetine dihydrochloride against dengue virus infection, *Journal of antiviral & antiretrovirals* 1(1):062-071.
- Low, J. S. Y., Wu, K. X., Chen, K. C., Ng, M. M., and Chu, J. J. H., 2011, Narasin, a novel antiviral compound that blocks dengue virus protein expression, *Antivir. Ther.*, 16:1203-1218.
- Mackenzie, J. S., Gubler, D. J., and Petersen, L. R., 2004, Emerging Flavivirus: the spread and resurgence of Japanese encephalitis, West Nile and dengue viruses. *Nature Med.* 10:98-109.
- Maghaddam, E., Teoh, B., Sam, S., Lani, R., Hassandarvish, P., Chik, Z., Yueh, A., Abubakar, S., and Zandi, K., 2014, Baicalin, a metabolite of baicalein with antiviral activity against dengue virus, *Scientific Reports*. 4 : 5452.
- Mahy, B. W. J. and Kangro, H. O., 1996, *Virology methods manual*, Academic Press, San Diego.

- Malewicz, B. and Jenkin, H. M., 1979, Development of dengue virus plaques under serum-free overlay medium, *J. of Clin. Mic.*, 9 (5): 609-614.
- Manivasagan, P., Venkatesan, J., Sivakumar, K., and Kim, S., 2013, Pharmaceutically active secondary metabolites of marine actinobacteria, *Microbiol. Res.*, <http://dx.doi.org/10.1016/j.micres.2013.07.014>.
- Mayer, A.M., Glaser, K.B., Cuevas, C., Jacobs, R.S, Kem, W., Little, R. D., McIntosh, J. M., Newman, D. J., Potts, B. C., and Shuster, D. E., 2010^a, The odyssey of marine pharmaceuticals: a current pipeline perspective. *Trends Pharmacol Sci.* 31: 255-265.
- Mayer, A. M. S., Rodriguez, A. D., Berlinck, R. G. S., and Fusetani, N., 2010^b, Marine pharmacology in 2007–8: Marine compounds with antibacterial, anticoagulant, antifungal, anti-inflammatory, antimalarial, antiprotozoal, antituberculosis, and antiviral activities; affecting the immune and nervous system, and other miscellaneous mechanisms of action, *Comp. Biochem. and Phy.*, Part C 153 (2011) 191–222.
- Muhammad, M., Kee, L. Y., Rahman, N. A., and Yusof, R., 2010, Antiviral actions of flavonoid-derived compounds on dengue virus type-2, *Int. J. of Biol. Sci.* 6(3):294-302.
- Pfeifer, B. A., Wang, C. C. C., Walsh, C. T., and Khosla, C., 2003, Biosynthesis of Yersinabaktin, a Complex Polyketide-Nonribosomal Peptide, Using *Eschericia coli* as a Heterologous Host, *Appl. and Envir. Micr.* 69(11):6698-6702.
- Praditya, D. F., 2013, Potensi Aktivitas Antiviral Ekstrak Etil Asetat dan Ekstrak Air Metabolit Sekunder Aktinomisetes terhadap Virus Dengue Serotipe-2 (DEN-2). *Thesis*: Universitas Gadjah Mada.
- Raveh, A., Delekta, P.C., Dobry, C. J., Peng, W., Schultz, P.J., Blakely, P. K., Tai, A. W., Maitinaho, T., Irani, D. N., Sherman, D. H., and Miller, D. J., . 2013. Discovery of Potent Broad Spectrum Antivirals Derived from Marine Actinobacteria. *PLoS ONE* 8(12):e82318.
- Recker, M., Blyuss, K. B., Simmons, C. P., Hien, T. T., Wills, B., Farrar, J., and Gupta, S., 2009, Immunological Serotype Interactions and Their Effect on the Epidemiological Pattern of Dengue, *Proc. Biol. Sci.* 276:2541-2548.
- Roche, 2011, *Cell Proliferation Reagent WST-1*, Roche Applied Science, Mannheim Germany.

- Rodenhuis-Zybert, I. A., Willschut, J., and Smit, J. M., 2010, Dengue Virus Life Cycle: Viral and Host Factors Modulating Infectivity, *Cell. Mol. Life. Sci.* 67: 2773-2786.
- Rowe, R. C., Sheskey, P. J., and Owen, S. C., 2006, *Handbook of Pharmaceutical Excipients*, Fifth Edition, Pharmaceutical Press, United Kingdom.
- Sadek, P. C., 2002, *The HPLC Solvent Guide*, Second Edition, John Willey and Sons. New York.
- Saxena, S. K., Mishra, N., and Saxena, R., 2009, Advances in antiviral drug discovery and development: Part 1: Advancements in antiviral drug discovery, *Future Virol.* (2009) 4 (2), 101-107.
- Scitable, 2014, *Dengue Viruses*, terdapat online di <http://www.nature.com/scitable/topicpage/dengue-viruses-22400925> diakses pada tanggal 19 Juli 2014.
- Shu, P., Chen, L., Chang, A., Su, C., Chien, L. J., Chin, C., Lin, T. H., and Huang, J. H., 2004, Dengue Virus Serotyping Based on Envelope and Membrane and Nonstructural Protein NS1 Serotype-Specific Capture Immunoglobulin M Enzyme-Linked Immunosorbent Assays, *JCM*.42.6.2489–2494.2004.
- Smith, J. E., 2009, *Biotechnology*, fifth edition, Cambridge University Press, New York.
- Stanbury, 2003, *Principles of Fermentation Technology*, second edition, Elsevier Science, Burlington.
- Still, W. C., Kahn, M., and Mitra, A., 1978, Rapid Chromatographic Technique for Preparative Separations with Moderate Resolution, *J. Org. Chem.*, Vol. 43, No. 14.
- Supardan, 2013, Potensi Antivirus Metabolit Sekunder Aktinomisetes Terhadap Virus Dengue Serotipe 3, *Tesis*: Universitas Gadjah Mada.
- Takada, A. and Kawaoka, Y., 2003, Antibody-dependent enhancement of viral infection: molecular mechanism and in vivo implications, *Rev. In Med. Vir.* (13) 6:387-398.
- Teixeira, R. R., Pereira, W. L., Oliveira, A. F. C. Da Silva, A. M., De Oliveira, A. S., Da Silva, M. L., Da Silva, C. C., and De Paula, S. O., 2014, Natural Products as Source of Potential Dengue Antivirals. *Molec.* 19, 8151-8176.

- Tomlinson, S.M.; Malmstrom, R.D.; Watowich, S.J., 2009, New approaches to structure-based discovery of dengue protease inhibitors. *Infect. Disord. Drug Targets*, 9, 327–343.
- Vignais, P. V., and Vignais, P. M., 2010, *Discovering Life, Manufacturing Life: How the Experimental Method Shaped Life Sciences*, Springer, Netherlands.
- Virocyt, 2013, *An Overview of Virus Quantification Techniques*, ViroCyt, United States.
- Wang, W. K., Chen, H. L., Yang, C. F., Hsieh, S. C., Juan, C. C., Chang, S. M., Yu, C. C., Lin, L. H., Huang, J. H., and King, C.C., 2006, Slower rates of clearance of viral load and virus-containing immune complexes in patients with dengue haemorrhagic fever, *Clin. Infect. Dis.* 43:1023-1030.
- WHO, 2009, *Dengue : Guidelines For Diagnosis, Treatment, Prevention, and Control*, new edition, Perancis : WHO.
- Widowati, E. W., 2010, Senyawa Toksik dalam Berbagai Macam Ekstrak Aktinomisetes GMY01 terhadap Sel Kanker Payudara T47D dan MCF7, *Tesis*, Universitas Gadjah Mada.
- Whitby, K., Pierson, T. C., Geiss, B., Lane, K., Engle, M., Zhou, Y., Doms, R. W., and Diamond, M. S., Castanospermin, a Potent inhibitor of dengue virus infection in vitro and in vivo, *Journal of Virology* 79(14):8698-8706.
- Wikan, N., Kuadkitkan, A., and Smith, D. R., 2009, The *Aedes aegypti* cell line CCL-125 is dengue virus permissive, *J. Virol. Methods.*, 157: 227-230.
- Yong, Y. K., Thayan, R., Chong, H. T., Tan, T. C., and Sekaran, S. D., 2007, Rapid Detection and Serotyping of dengue virus by multiplex RT-PCR and real-time SYBR green RT-PCR, *Singapore Med J* 2007 ,48 (7) : 662.
- Zandi, K., Teoh, B., Sam, S., Wong, P., Mustafa, M. R., and AbuBakar, S., 2011, Antiviral activity of four types of bioflavonoid against dengue virus type-2, *Virology Journal* 8: 560.