

DAFTAR PUSTAKA

- Aldridge, D.C. & Turner, W.B. 1970. 9-Hydroxyrehelminthosporol, a metabolite of *Cochliobolus (Helminthosporium) sativus*. *J Chem Soc C*, 686-688.
- Arai, M., Sobou, M., Vilcheze, C., Baughn, A., Hashizume, H., Pruksakorn, P., Ishida, S., Matsumoto, M., Jacobs, W.R., & Kobayashi, M. 2008. Halicyclamine A, a marine spongean alkaloid as a lead for antituberculosis agent. *Bioorganic & Medical Chemistry*, 16, 6731-6736.
- Arora, D.S. dan Bhardwaj. 1997. Antibacterial activity of some medicinal plants. *Geo. Bios*, 24, 127-131.
- Ashok, P., Ganguly, S., & Murugesan S. 2014. Manzamine alkaloids: isolation, cytotoxicity, antimalarial activity and SAR studies. *Drug Discovr*, 19, 1781-1791.
- Aulia, Hilyatul., Wildan, R., Hermansah., & Amirah, D. 2015. Kajian senyawa anti tuberkulosis dari jamur *Candida sp* asal spon laut *Haliclona fascigera* (Laporan Penelitian Pekan Kreatifitas Mahasiswa 2015). Padang: Fakultas Farmasi Universitas Andalas.
- Azanti, R.A., Hasnah, S.Y., Nur, A., Asri, H. 2016. Potensi bioaktif senyawa anti-MRSA (*Methicillin Resistant Staphylococcus aureus*) dari jamur HF12 yang bersimbiosis pada spon laut asal perairan pulau Setan Sumatera Barat (Laporan Penelitian Pekan Kreatifitas Mahasiswa 2016). Padang: Fakultas Farmasi Universitas Andalas.
- Azizi, K. 2016. Senyawa anti-*Methicillin Resistant Staphylococcus aureus* (MRSA) dari jamur *Penicillium sp.* (WR9) yang bersimbiosis dengan spon laut *Haliclona fascigera* asal Pesisir Selatan Sumatera Barat. (Skripsi Penelitian). Padang: Universitas Andalas.
- Barbee, M.L., Pirseyedi, M., & Hubbard, S. 1999. *Cochliobolus* phylogenetics and the origin of known, highly virulent pathogens, inferred from ITS and glyceraldehyde-3-phosphate dehydrogenase gene sequences. *Mycologia*, 91, 964-977.
- Bartlett J.G., Gilbert D.N., & Spellberg, B. 2013. Seven ways to preserve the miracle of antibiotics. *Clin Infect Dis*, 56(10), 1445-1450.
- Blackburn, C.L., & Faulkner, D.J. 2000. Adociasulfate 10 a new merohexaprenoid sulfate from the sponge *Haliclona* (aka *Adocia*) sp. *Tetrahedron*, 56, 8429-8432.

- Blunt, J.W., Copp, B.R., Munro, M.H., Northcote, P.T., & Prinsep, M.R. 2005. Marine Natural Products. *Nat. Prod. Rep.* 22, 15-61.
- Blunt, J.W., Copp, B.R., Munro, M.H., Northcote, P.T., & Prinsep, M.R. 2006. Marine Natural Products. *Nat. Prod. Rep.* 23, 26-78.
- Blunt, J.W., Copp, B.R., Munro, M.H., Northcote, P.T., & Prinsep, M. R. 2009. Marine Natural Products. *Nat. Prod. Rep.* 26, 170-244.
- Capon, R.J., Skene, C., Lacey, E., Gill, J.H., Wadsworth, D. & Friedel, T. 1999. Geodin a magnesium salt: a novel nematocide from a southern Australian marine sponge, *Geodia*. *J. Nat. Prod.* 62, 1256-1259.
- CDC. 2013. *Antibiotic resistance threats in the United States*. Diakses pada 15 November 2016 dari <http://www.cdc.gov/drugresistance/threat-report-2013>.
- Choma, I.M., Grzelak, E.M. 2010. Bioautographic detection in thin-layer chromatography. *Journal Of Chromatography A. Poland* : Elsevier.
- Choma, I., 2005. *The use of Thin-Layer Chromatography with direct bioautography for antimicrobial analysis*. Diakses pada 5 Januari 2016 dari <http://www.chromatographyonline.com>.
- Chomcheon, P., Wiyakrutta S., Aree, T., Sriubolmas, N., Ngamrojanavanich, N., Mahidol, C., Ruchirawat, S., & Kittakoop, P. 2010. Curvularides A-E: antifungal hybrid peptide-polyketidas from the endophytic fungus *Curvularia geniculata*. *Chem Eur J.* 16, 11178-11185.
- Colegate, M. S., Russell, J. M. 2008. *Bioactive natural products: detection, isolation, and structural determination* (2nd ed). New York: CRC Press.
- Combe, R.G., Jacobs, J.J., dan Watson, T.R. 1968. Constituents of some *Curvularia* species. *Australian Journal of Chemistry*, 21,783-788.
- Crew, P., J, Rodriguez, & M, Jaspars. 1998. *Organic structure analysis*. New York: Oxford University Press.
- Dachriyanus. 2004. *Analisis struktur senyawa organik secara spektrofotometri* (Ed.I). Padang: CV. Trianda Anugrah Pratama.
- De Almeida Leone, P., Redburn, J., Hooper, J.N. & Quinn, R.J. 2000. Polyoxygenated dysidea sterols that inhibit the binding of [1125] IL-8 to the human recombinant IL-8 receptor type A. *J. Nat. Prod.* 63, 694-697.
- Derakhshan, A., Rabindra, R.J., Ramanujam, B., & Rahimi, M. Evaluation of different media and methods of cultivation on the production and viability of entomopathogenic fungi, *Verticillium lecanii* (Zimm.) Viages. *Pakistan Journal of Biological Sciences*, 11, 1506-1509.

- Dessaux, Y., Elmerich, C., & Faure, D. 2004. Violacein: a molecule biological interest originating from soil-borne bacterium. *Rev Medi Intern*, 25, 659-662.
- De Silva, E.D. & Scheuer, P.J. 1980. Monoalide, an antibiotic sesterterpenoid from the marine sponge *Luffariella variabilis* (polejaeff). *Tetrahedron. Lett.* 21, 1611-1614.
- Dimuthu, S.M., Lei, C., Ali, H., Bahkali, E.C., & Kevin, D.H., 2011. *Cochliobolus*: an overview and current status of species. *Research gate*, 51, 3-42.
- Djamal, R. 2010. *Kimia bahan alam: prinsip-prinsip dasar isolasi dan identifikasi*. Padang: Universitas Baiturrahmah.
- Donia, M., & Hamann, M.T., 2003. Marine natural products and their potential applications as anti-infective agents. *Lancet Infect. Dis*, 3, 338-348.
- Ebada, S. S., Wray, V., de Voogd, N. J., Deng, Z., Lin, W., & Proksch, P. 2009. Two new jaspamide derivatives from the marine sponge *Jaspis splendens*. *Mar. Drugs*, 7, 435-444.
- Ely, R., Supriya, T., & Naik, C.G. 2004. Antimicrobial activity of marine organism collected of the Coast of South East India. *Elsivier Sciences*, 309, 121-127.
- Fardiaz. 1998. *Panduan Pengolahan Pangan Yang Baik Bagi Industri Rumah Tangga*. Jakarta: Badan Pengawas Obat dan Makanan Deput Bidang Pengawas Keamanan Pangan dan Bahan Berbahaya.
- Fleming, A. 1929. On the antibacterial action of cultures of a penicillium, with special reference to their use in the isolation of *B. Influenza*. *Br. J. Exp. Pathol*, 10, 226-236.
- Gandjar, I.G, A. 2013. *Analisis obat secara spektrofotometri dan kromatografi*. Yogyakarta: Pustaka Pelajar.
- Gandjar, I. G., & Rohman, A. 2007. *Kimia farmasi analisis*. Yogyakarta: Pustaka Pelajar.
- Ghosh, R. R., Ray, R., Ghosh, T. K., & Ghosh, A. P. 2014. Clinico-mycological profil of dermatophytosis in a tertiary care hospital in West Bengal-an Indian scenario. *International Journal of Current Microbiology and Applied Sciences*, 3, 2319-7706.
- Gritter, R. J., Bobbit. M & Schwarting, A.E. 1991. *Pengantar kromatografi*. (Edisi Kedua). Diterjemahkan oleh K. Padmawinata. Bandung: Penerbit ITB.
- Gritter, Roy., J, Bobbit., James, M., & Schwarting, A. E. 1985. *Introduction to Chromatography*. USA: Holden-Day.

- Gross M. 2013. Antibiotics in crisis. *Curr Biol*, 23(24), R1063-R1065.
- Hagström, Å., Pommier, T., Rohwer, F., Simu, K., Stolte, W., Svensson, D., & Zweifel, U. L. 2002. Use of 16S ribosomal DNA for delineation of marine bacterioplankton species. *App Environ Microbiol*, 68, 5085-5092.
- Harborne, J. B. 1987. *Metode fitokimia*. Bandung: Penerbit ITB.
- Harwood, M. H., & Woody, C. J. 1989. *Experimental organic Cchemistry*. London: Blackwell Scientific Publication.
- Hill, R. T., Hermann, M., Peraud, O. And Kasanah, N. 2005. Manzamine producing actinomycetes. Inventors: United States patent US 20050244938 A1: University of Maryland Biotechnology Institute.
- Hoog, G.S. 2000. *Atlas of clinical fungi*.Utrech: CBS.
- Hooper, J.N.A. & Van Soest, R.W.M. 2002. *In systema porifera: A guide to the classification of sponges*. New York: Kluwer/Plenum.
- Jung, H.J., Lee, H.B., Lim, C.H., Kim, C.J., & Kwon, H.J. 2003. Cochlioquinone A1, a new anti-angiogenic agent from *Bipolaris zeicola*. *Bioorg Med Chem*, 11, 4743-4747.
- Katzung, Bertram G. 2007. *Farmakologi Dasar & Klinik*. Jakarta: Penerbit EGC.
- Kelly, L., & Jacobs, M.R., Appelbaum, P.C. 1999. *Microbiol. Clin, J*, 37, 3296.
- Kjer, J., Debbab, A., Aly, A.H., & Proksch, P. 2010. Methods for isolation of marine derived endophytic fungi and their bioactive secondary products. *Nature Protocols*, 5(3), 479-490.
- Kobayashi, M., Chen, Y.J., Aoki, Y., Ishida, T., & Kitagawa, I. 1995. For new and carboline alkaloids isolated from two Okinawa marine sponges of *Xestospongia* sp. and *Haliclona* sp. *Tetrahedron*, 51(13), 3727-3736.
- Kusumaningtyas, E., Astuti, E., & Darmono. 2008. Sensitivitas metode bioautografi kontak dan agar overlay dalam penentuan senyawa anti kapang. *Jurnal Ilmu Kefarmasian Indonesia*, 6(2), 75-79.
- Lokabharathi., Tresa, R.A., Thomas., Devanand, P., Kavlekar, & Ponnapanan. 2010. Marine drugs from sponge-microbe association-A riviev. *Mar Drugs*, 8, 1417-146.
- Mayer, A.M.S. & Jacobs, R.S. 1998. Manoalide: an anti-inflammatory and analgesic marine natural product. *Mem. Calif. Acad. Sci*, 13, 133.

- Mayers, P., Espinosa., Parr C.S., Jones., Hammond G.S., & Dewey T.A. 2008. *The animal diversity web*. Diakses pada 30 April 2016 dari <http://animaldiversity.org>.
- Meyer, M.S.A., Rodriguez A.D., Berlinck R.G.S., & Hamann M.T. 2007. 'Marine pharmacology in 2003 :Marine compounds with anthelmintic, antibacterial, anticoagulant, antifungal, anti-inflamantory, antimalarial, antiplatelet, antiprotozoal, antituberculosis, and antiviral activities, affecting the cardiovascular, immune and nervous systems, and other miscellaneous mechanism of action'. *Elsevier Sciences*, 145, 553-581.
- Michael C.A., Dominey-Howes D., Labbate, M., 2014. The antibiotic resistance crisis: cause, consequences, and management. *Front Public Health*, 2, 145.
- Miyamoto, S., Izumi, M., Hori, M., Kobayashi, M., Ozaki, H. & Karaki, H. 2000. Xestospongine C, a selective and membrane-permeable inhibitor of IP₃ receptor, attenuates the positive inotropic effect of α -adrenergic stimulation in guinea-pig papillary muscle. *Br. J. Pharmacol.* 130, 650-654.
- Molen, K. M. V., Raja, H. A., Elimat, T. E., & Oberlies, N. H. 2013. Evaluation of culture media for the production of secondary metabolites in a natural products screening program. *AMB Express*, 3(71).
- Narsinh, L., Thakur & Werner, E.G., Muller. 2004. Biotechnological potential of marine sponges. *Current Science*, 86(11), 1506-1512.
- Nelson, R.R. 1964. *The perfect stage of Curvularia geniculata*. *Mycologia*. 56(5), 777-779. Diakses pada tanggal 24 November 2016 dari <http://www.mycobank.org/BioloMICS.aspx?TableKey=14682616000000067&Rec=7291&Fields=All>.
- Nikolskaya, A. N., Pitkin, J.W., Schaeffer, H.J., Ahn, J.H., & Walton, J.D. 1998. EXG1p, a novel exo- β 1,3-glucanase from the fungus *Cochliobolus carbonum*, contains a repeated motif present in other proteins that interact with polysaccharides. *Biochimica et Biophysica Acta (BBA)*, 1425, 632-636.
- Nitsri, R. 2015. *Haliclona fascigera*. Diakses pada 12 Mei 2016 dari <http://www.alamy.com/stock-photo-purple-tube-or-blue-gray-tubesponge-haliclona-fascigera-chalinidae-89943381.html>.
- Paxton, J.D., & Hostettmann, K. 1991. *Methods in Plant Biochemistry-Assays for Bioactivity (Vol. 6: p33)*. London: Academic Press.
- Periyasamy, G., Shilpa, A.V., Akash, R.G., Prabhu, D.M., Amit, K & Sunil., K.D. 2014. Antiproliferative Activity of Hamigerone and Radicinol Isolated from *Bipolaris papendorfii*. *Biomed Research International*, 890904, 1-7.

- Phuwapraisirisan, P., Sawang, K., Siripong, P., & Tip-pyanga, S. 2007. Anhydrocochlioquinone A, a new antitumor compound from *Bipolaris oryzae*. *Tetrahedron Lett*, 48, 5193-5195.
- Paliany, A. S., Yasodha, S., Khalijah, A., Mohammed, R. I., Siti, A. A. 2014. Marine derived fungi of Peninsular Malaysia-a biochemical perspective. *Chiang Mai J. Sci.* 41(X):1-16.
- Piel, J. 2006. Bacterial symbionts: prospects for the sustainable production of invertebrate derived pharmaceuticals. *Curr. Med. Chem*, 13, 39-50.
- Pratiwi, S. 2008. *Mikrobiologi Farmasi*. Jakarta: Gelora Aksara Pratama.
- Proksch, P., Ebel, R., Edrada, R.A., Schuup, P., Lin, W.H., Sudarsono., Wray, V., Steube, K. 2003. Detection of pharmacologically active natural products using ecology. Selected examples from Indopacific marine invertebrates and sponge-derived fungi. *Pure and Appl Chem*, 75(2), 343-352.
- Rasyid, W. 2015. Penapisan Aktivitas Sitotoksik Ekstrak Etil Asetat Jamur Symbion dari Spon Laut *Haliclona fascigera* dengan Metode Brine Shimp Lethality Test (BSLT) (Skripsi). Padang: Fakultas Farmasi Universitas Andalas.
- Rice, L.B. 2006. Antimicrobial resistance in gram-positive bacteria. *Am. J. Infect. Control*, 34, S11-S19.
- Sakai, R., Higa, T., Jefford, C.W., & Bernardinelli, G. 1986. Manzamin A, a novel antitumor alkaloid from a sponge. *J. Am. Chem. Soc*, 108, 6404-6405.
- Sakayoroj, J., Preedanon, S., Supaphon, O., Jones, E.BG., & Phongpaichit, S. 2010. Phylogenetic diversity of endophyte assemblages associated with the tropical seagrass *Enhalus acoroides* in Thailand. *Fungal Divers*, 42, 27-45.
- Saleem, M., Ali, M.S., Hussain, S., Asharaf, M., & Lee, Y.S. 2007. Marine natural products of fungal origin. *J. Nat Prod Rep*, 24, 42-52.
- Sastroamidjojo, H. 1991. *Spektroskopi* (Edisi kedua). Yogyakarta: Penerbit Liberty.
- Schaschke, N. & Sommerhoff, P.C. 2010. Upgrading a natural product: inhibition of human β -tryptase by cyclotheonamide analogues. *Chem. Mws. Chem*, 5, 367-370.
- Scheffer, R.P. 1997. *The nature of disease in plants*. Cambridge: University Press.
- Sengupta, S., Chattopadhyay, M.K., Grossart., H.P. 2013. The multifaceted roles of antibiotics and antibiotic resistance in nature. *Front Microbiol*, 4, 47.

- Shang, Z., Li X. M., Li C. S., & Wang B-G. 2012. Diverse Secondary Metabolites Produced by Marine-Derived Fungus *Nigrospora* Sp. MA75 on Various Culture Media. *Chem Biodivers*, 9: 1338-1348.
- Shriner, R., C. Fuson., D. Curtin., & T.C Moril. 1981. *The Systematic identification of organic compound* (fourth edition). Singapore: John Willey and Sons.
- Silverstein, R., C. Fuson., D. Curtin., & T. C Moril. 1981. *The Systematic identification of organic compound* (Fourth Edition). Singapore: John Willey and Sons.
- Sipkema, D., Osinga, R., Schatton, W., Mendola, D., Tramper, J., & Wijffels, R.H. 2005. Large scale production of pharmaceuticals by marine sponges: sea, cell, or biosynthesis. *Biotechnol. Bioeng*, 90, 201-222.
- Sivanesan, A. 1987. Graminicolous species of *bipolaris*, *curvularia*, *drechslera*, *exserohilum* and their teleomorphs. *Mycol*, 158, 1-261.
- Spellberg, B., Gilbert D.N. 2014. The future of antibiotics and resistance: a tribute to a career of leadership by John Bartlett. *Clin Infect Dis*, 2, S71-S75.
- Steinegger, Ernst., Rudolf, Hansel. 1992. *Pharmakognosie*. Germany: Springer-Verlag Berlin Heidelberg. ISBN 3-540-55749-4.
- Sulistyaningsih. 2010. Uji kepekaan beberapa sediaan antiseptik terhadap bakteri *Staphylococcus aureus* dan *Staphylococcus aureus* resisten metisilin (MRSA) (Tesis). Bandung: Universitas Padjajaran.
- Thakur, N.L., & Muller, W.E.G. 2004. Biotechnological potential of marine sponges. *Current Science*, 11, 7500-7511.
- Tolstoy, V. P., I. V. Chernyshova., & V. A. Skryshevsky. 2003. *Handbook of infrared spectroscopy of ultrathin films*. USA: John Wiley and Sons Publication.
- Turk, T., Ambrožič Avguštin, J., Batista, U., Strugar, G., Kosmina, R., Čivovič, S., Janussen, D., Kauferstein, S., Mebs, D., & Sepčič, K. 2013. Biological activities of ethanolic extracts from deep-sea antarctic marine sponges. *Mar. Drugs*, 11, 1126-1139.
- Valgas, C., de Souza, S.M., Smania, E.F., Smania, A. 2007. Screening methode to determine antibacterial activity of natural product. *Brazilian Journal of Microbiology*, 34, 369-380.
- Van Soest, R.W.M. 1989. *The Indonesian sponges fauna: a status report*. *Ne&. J. Sea Res*, 23 (2), 223-30.

- Wakimoto, T., Maruyama, A., Matsunaga, S., Fusetani, N., Shinoda, K. & Murphy, P. T. 1999. Octa- and nonaprenylhydroquinone sulfates, inhibitors of α 1,3-fucosyltransferase VII, from an Australian marine sponge *Sarcotragus* sp. *Bioorg. Med. Chem. Lett*, 9, 727-730.
- Walter, S. 2005. *Drug discovery: a history*. p. 258. New York: Wiley.
- Wattanadilok, R., Sawangwong, P., Rodrigues, C., Cidade, H., Pinto, M., and Pinto, E. 2007. Antifungal activity evaluation of the constituent of *Haliclona baeri* and *Haliclona cymaeformis* collected from the gulf of Thailand. *Marine Drugs*, 5, 40-51.
- Weerdt, W.H & Van Soest, R.W.M. 2001. *Haliclona* (*Halichoelona*) *vanderlandi* spec. nov (Porifera: Demospongiae: Haplosclerida) from Indonesia. *Zool. Verh. Leiden*, 334, 189-194.
- World Health Organization (WHO). 2011. *Declaration on antimicrobial resistance*. Jaipur: WHO
- World Health Organization (WHO). 2013. *Genewa: World Health Statistic 2013*. Ganewa: WHO
- Wright, G.D. 2014. Something new: revisiting natural products in antibiotic drug discovery. *Can J Microbiol*, 60(3), 147-154.
- Yu, Hongsheng., Lei, Z., Lin, L., Chengjian, Z., Lei, G., & Wenchao, L. 2010. Recent developments and future prospects of antimicrobial metabolites produced by endophytes. *Elsevier*, 165, 437-449.
- Zabriskie, T.M., Klocke, J.A., Ireland, C.M., Marcus, A.H., Molinski, T. F., Faulkner, D. J., Xu, C. & Clardy, J.C. 1986. Jaspamide, a modified peptide from a Jaspis sponge, with insecticidal and anti-fungal antifungal activity. *J. Am. Chem. Soc*, 108, 3123-3124.
- Zheng, L., Chen, H., Han, X., Yan, X. 2005. Antimicrobial screening and active compound isolation from marine bacterium NJ6-3-1 associated with the sponge *Hymeniacidon parleve*. *World Journal of Microbial and Biotech*, 21, 201-206.