

DAFTAR PUSTAKA

1. Suwanto S. Penyakit Tropik dan Infeksi pada Abad 21 : Apakah Masih Relevan? Jurnal Penyakit Dalam Indonesia. 2014;1:77–8.
2. Kurniawati A.F, Satyabakti P., Arbianti N. Risk Difference of Multidrug Resistance Organisms (MDROs) According to Risk Factor and Hand Hygiene Compliance. Jurnal Berkala Epidemiologi. 2015;3:277–89.
3. Mierza V., Suryanto D., Nasution M.P. Skrining Fitokimia dan Uji Efek Antibakteri Ekstrak Etanol Umbi Bawang Sabrang (*Eleutherine Palmifolia* Merr.). In: Prosiding Seminar Nasional Biologi- Meningkatkan peran biologi dalam mewujudkan National Achievement with Global Reach. Medan; 2011. p. 340–53.
4. Syamsudin A. Peraturan Menteri Kesehatan Republik Indonesia Nomor 2406/Menkes/Per/XII/2011. Jakarta: Menteri Kesehatan Republik Indonesia; 2011.
5. Noviendri D. Teknik Isolasi Senyawa Bioaktif dari Kapang yang Berasal dari Lingkungan Laut. Squalen. 2008;3:70–8.
6. Murniasih T. Metabolit Sekunder dari Spons Sebagai Bahan Obat-Obatan. Jurnal Oseana. 2003;XXVIII(3):27–33.
7. Chasanah E., Noor N. Mahmudah, Risjani Y., Dewi A.S. Antioxidant and Antibacterial Activity of *Streptomyces* sp. and *Exserohilum rostratum* Extract Cultivated in Three Different Growth Media. JPB Perikanan. 2012;7(1):39–48.
8. Erlina M.D., Yusuf R., Istiana. Strategi Pengembangan Industri Farmasetika dan Nutrasetika dari Biota Laut di Indonesia Seri Kajian Khusus. 2013.
9. Setyowati E.P., Jenie U.A., Kardono B., Rahmat R., Meiyanto E. Isolation of Cytotoxic Substance from *Kaliopsis* sponge. Majalah Farmasi Indonesia. 2007;18(4):183–9.
10. Jyoti K., Bala M., Arya V. Endophytic Fungus : A Potential Source of Biologically Synthesized Nanoparticle. Basic Research Journal of Microbiology. 2013;1(1):1–7.
11. Murniasih T. Potensi Mikroorganisme Sebagai Sumber Bahan Obat-Obatan Dari Laut Yang Dapat Dibudidayakan. Oseana. 2004;XXIX(1):1–7.
12. Handayani D., Artasasta M.A. Antibacterial and Cytotoxic Activities Screening of Symbiotic Fungi Extract Isolated From Marine Sponge *Neopetrosia Chaliniformis* AR-01. Journal of Applied Pharmaceutical Science. 2017;7(5):66–9.
13. Radjasa O.K., Sabdono A., Junaidi, Zocchi E. Richness of Secondary

- Metabolite-Producing Marine Bacteria Associated with Sponge *Haliclona* sp . International Journal of Pharmacology. 2007;3(March):275–9.
14. Thomas T.R.A., Kavlekar D.P., Lokabharathi P.A. Marine Drugs from Sponge-Microbe Association — A Review. Marine Drugs. 2010;8:1417–68.
 15. Prompanya C., Fernandes C., Cravo S., Pinto M.M.M., Dethoup T., Silva A.M.S. A New Cyclic Hexapeptide and A New Isocoumarin Derivative From The Marine Sponge-Associated Fungus *Aspergillus similanensis* KUFA 0013. Marine Drugs. 2015;13(3):1432–50.
 16. Bobzin S.C., Faulkner D.J. Diterpenes From The Pohnpeian Marin Sponge *Chelonaplysilla* sp. Journal of Natural Products. 1991;54(1):225–32.
 17. Bobzin, Steven C., Faulkner D.J. Aromatic Alkaloid Morpholine. Journal of Organic Chemistry. 1991;56(1):4403–7.
 18. Suparno. Kajian Bioaktif Spons Laut (Porifera: Demospongiae) Suatu Peluang Alternatif Pemanfaatan Ekosistem Karang Indonesia Dalam Bidang Farmasi. Makalah Pribadi Falsafah Sains (PPs 7002). 2005.
 19. Susilowati F. Uji Brine Shrimp Lethality Test (BSLT) Ekstrak Etil Asetat Spons *Calthropella* sp . Asal Zona Intertidal Pantai Krakal. Pharmasipha. 2017;1(1).
 20. Amir I., Budiyanto A. Mengenal Spons Laut(Demospongiae) Secara Umum. Oseana. 1996;XXI(2):15–31.
 21. Haedar, Sadarun B., Palupi R.D. Potensi Keanekaragaman Jenis dan Sebaran Spons Di Perairan Pulau Saponda Laut Kabupaten Konawe. Sapa laut. 2016;1(1):1–9.
 22. Jeon Y.J., Sim C.J. A New Species of The Genus *Chelonaplysilla* (Demospongiae: Dendroceratida: Darwinellidae) From Korea. Animal Cells and Systems. 2008;12(4):245–8.
 23. Tsurnamal M. *Chelonaplysilla Erecta* n.sp. (demospongiae, keratosa) From Mediterranean Coast of Israel. Israel Journal of Zoology. 1967;16(2):96–100.
 24. Gonzalez M.A. Spongiane Diterpenoids. Current Bioactive Compounds. 2007;3(1):1–36.
 25. Simarmata R., Lekatompessy S., Sukiman H. Isolasi Mikroba Endofitik dari Tanaman Obat Sambung Nyawa (*Gynura procumbens*) dan Analisis Potensinya Sebagai Antimikroba. Journal of Biological Researches. 2007;13(1):85–90.
 26. Reha W., Noor A., Ahmad A., Nafie N., Salama D. Characterization of Active Protein from Sponges and Its Microsymbions As Initial Efforts Towards Immunostimulant Agents. Marina Chimica Acta. 2013;14(1).

27. Amarendra V., Jana S., Gandhi A., Chakraborty S., Sen K.K., Basu S.K. Sponges: A Reservoir for Microorganism-Derived Bioactive Metabolites. In: Kim S-K, editor. *Marine Microbiology: Bioactive Compounds and Biotechnological Applications*. Singapore: WILEY -VCH; 2013. p. 379–91.
28. Radji M. Peranan Bioteknologi dan Mikroba Endofit dalam Pengembangan Obat Herbal. *Majalah Ilmu Kefarmasian*. 2005;II(Desember):113–26.
29. Handayani D., Sririta M., Mukhtar M.H. Isolasi Senyawa Antimikroba Dari Spon Laut *Pseudoceratina purpurea* Carter. *Jurnal Sains dan Teknologi Farmasi*. 2010;15(1):1–9.
30. Artasasta M.A., Djamaan A., Handayani D. Cytotoxic Activity Screening of Ethyl Acetate Fungal Extracts Derived From The Marine Sponge *Neopetrosia chaliniformis* AR-01. *Journal of Applied Pharmaceutical Science*. 2017;7(12):174–8.
31. Widyaningsih S., Trianto A., Radjasa O., Wittriansyah K. Antibacterial Activity Symbiotic Fungi of Marine Sponge *Axinella* sp., *Aspergillus sydowii* on Four Growth Medium. *IOP Conference Series: Earth Environmental Science*. 2018;(116012084).
32. Harborne J. *Metode Fitokimia Penuntun Cara Modern Menganalisis Tumbuhan*. Bandung: Penerbit ITB; 1987.
33. Handa S.S., Khanuja S.P.S., Longo G., Rakesh D.D. An Overview of Extraction Techniques for Medicinal and Aromatic Plants. In: *Extraction Technologies for Medicinal and Aromatic Plant*. International Centre For Science And High Technology; 2008. p. 1–29.
34. Zhang Q.W., Lin L.G., Ye W.C. Techniques for Extraction and Isolation of Natural Products: A Comprehensive Review. *Chinese Medicine*. 2018;13(1):1–26.
35. Hanani E. *Analisis Fitokimia*. Hadinata TVD, Hanif A, editors. Jakarta: EGC; 2016.
36. Trusheva B., Trunkova D., Bankova V. Different Extraction Methods of Biologically Active Components From Propolis; A Preliminary Study. *Chemistry Central Journal*. 2007;1(1):1–4.
37. Hidayat N., Meitiniarti I., Yuliana N. *Mikroorganisme dan Pemanfaatannya*. Malang: UB Press; 2018.
38. Vincent S. Origin of the Names of Species of *Candida*. *Medical mycology*. 1992;(1):1–2.
39. Mutiawati V.K. Pemeriksaan Mikrobiologi Pada *Candida albicans*. *Jurnal Kedokteran Syiah Kuala*. 2016;16(1):57–62.
40. Garrity G.M., Bell J.A., Lilburn T.G. *Taxonomic Outline of The Prokaryotes* Bergey's Manual of Systematic Bacteriology. 2nd ed. Vol. 217. New York:

Springer; 2004. 1-399 p.

41. Radji M. Buku Ajar Mikrobiologi: Panduan Mahasiswa Farmasi dan Kedokteran. Jakarta: Penerbit Buku Kedokteran EGC; 2010.
42. Pelczar M.J., Chan E. Dasar-Dasar Mikrobiologi. Hadiutomo R.S., Ratnasari, editors. Jakarta: Penerbit Universitas Indonesia; 2006.
43. Pratiwi S.T. Mikrobiologi Farmasi. Astikawati R., Safitri A., editors. Jakarta: Erlangga; 2008.
44. Zhou G., Shi Q., Huang X., Xie X. The Three Bacterial Lines of Defense against Antimicrobial Agents. *International Journal of Molecular Sciences*. 2015;16:21711–33.
45. Leekha S., Terrell C.L., Edson R.S. General Principles Of Antimicrobial Therapy Antibiotic Regimen. *Mayo Clinic Proceedings*. 2011;86(2):156–67.
46. Maartens M.M.J., Swart C.W., Pohl C.H., Kock L.J.F. Antimicrobials , Chemotherapeutics or Antibiotics? *Academic Journal : Scientific Research and Essays*. 2011;6(19):3927–9.
47. Radji M. Mekanisme Aksi Molekuler : Antibiotik dan Kemoterapi. Nirwanto MR, Afifah hafshah N., editors. Jakarta: EGC; 2016.
48. Gilman A.G. Goodman & Gilman's The Pharmacological Basis of Therapeutics. 10th ed. Aisyah C., Elviana E., Syarief W.R., Hanif A., Manurung J., editors. Jakarta: EGC; 2012.
49. Kjer J., Debbab A., Aly A.H., Proksch P. Methods For Isolation of Marine-Derived Endophytic Fungi And Their Bioactive Secondary Products. *Nature Protocols*. 2010;5(3):479–90.
50. Kasi Y.A., Posangi J., Wowor P.M., Bara R. Uji Efek Antibakteri Jamur Endofit Daun Mangrove *Avicennia marina* Terhadap Bakteri Uji *Staphylococcus aureus* dan *Shigella dysenteriae*, *Jurnal e-Biomedik (eBm)*. 2015;3:112–7.
51. Balouri M., Sadiki M., Koraichi S. Methods for In Vitro Evaluating Antimicrobial Activity : A review. *Journal of Pharmaceutical Analysis - ELSEVIER*. 2015;136(1):29–31.
52. Noverita, Fitria D., Sinaga E. Isolasi dan Uji Aktivitas Antibakteri Jamur Endofit Dari Daun dan Rimpang *Zingiber ottensii* Val. *Jurnal Farmasi Indonesia*. 2014;4(July 2009):171–6.
53. Harborne J.B. Phytochemical Methods : A Guide to Modern Techniques of Plant Analysis. London: Fakenham Press Limited; 1973. 188 p.
54. Rizal R., Jubahar J., Rahim F. Isolasi Flavonoid Total Kulit Buah Naga (*Hylocereus undatus* (Haw.) Britt.) dan Uji Daya Tabir Surya dalam Krim Rosiana. *Scientia*. 2017;7(2):120–8.

55. Simes J.J.H., Tracey J.G., Webb L.J., Dunstan W.J. An Australian Phytochemical Survey III. Saponins in Eastern Australian Flowering Plants. Commonwealth Scientific and Industrial Research Organization Bulletin No 281. 1959;
56. Hamidu L., Ahmad A.R., Najib A. Qualitative and Quantitative Test of Total Flavonoid Buni Fruit (*Antidesma bunius* (L .) Spreng) with UV-Vis Spectrophotometry Method. Pharmacognosy Journal. 2018;10(1):60–3.
57. Departemen Kesehatan Republik Indonesia. Materia Medika Indonesia. 5th ed. Jakarta: Direktorat Jenderal Pengawasan Obat dan Makanan; 1989. 552 p.
58. Cita Y.P., Radjasa O.K., Sudharmono P. Antibacterial Activity of Isolates of Bacteria X2 Associated with Sponge *Xestospongia testudinaria* from Pasir Putih Beach Situbondo Against *Pseudomonas aeruginosa*. Jurnal Ilmu Kefarmasian. 2016;14(2):206–11.
59. Scognamiglio T., Zinchuk R., Gumpeni P., Larone D.H. Comparison of Inhibitory Mold Agar to Sabouraud Dextrose Agar as a Primary Medium for Isolation of Fungi. Journal of Clinical Microbiology. 2010;48(5):1924–5.
60. Basu S., Bose C., Ojha N., Das N., Das J., Pal M. Evolution of Bacterial and Fungal Growth Media. Biomedical Informatics. 2015;11(4):2–4.
61. Djamaan A., Handayani D., Rendowaty A. Optimal Cultivation Time and Antibacterial Activity from Ethyl Acetate Extracts of Symbiont Fungi *Aspergillus unguis* (WR8) with *Haliclona fascigera*. Jurnal Sains Farmasi dan Klinis. 2017;4(May):49–54.
62. Rowe R.C., Sheskey P.J., Quinn M.E. Handbook of Pharmaceutical Excipients. 6th ed. Washington DC: Pharmaceutical Press and American Pharmacist Association; 2009. 253 p.
63. Maryati, Sutrisna E. Cytotoxic Effects of *Physalis angulata* Plant On HeLa Cell Line. Pharmacon Vol 8. 2007;1–6.
64. Davis W.W., Stout T.R. Disc Plate Method of Microbiological Antibiotic Assay. Applied Microbiology. 1971;22(4):659–65.
65. Fitri G.D., Tistiana H., Radiati L.E. Review Study On Antibacterial Activity of Cherry Leaf (*Muntingia calabura*) Against *Staphylococcus* spp . and *Salmonella* spp . The Most Causing Disease In Livestock. Jurnal Ilmu-Ilmu Peternakan. 2017;27(2):63–73.
66. Septiani, Nurcahya E., Wijayanti I. Antibacterial Activities of Seagrass Extracts (*Cymodocea rotundata*) Against *Staphylococcus aureus* and *Escherichia coli*. Indonesian Journal of Fisheries Science and Technology. 2017;13(1):1–6.
67. Putri A.U. Uji Potensi Antifungi Ekstrak Berbagai Jenis Lamun Terhadap

Fungi *Candida albicans*. Makassar; 2013.

68. Hasanah K. Uswatun. Uji Daya Antifungi Propolis Terhadap *Candida albicans* dan *Pityrosporum ovale*. 2012.
69. Handayani D., Deapati M., Marlina, Meilan. Skrining Aktivitas Antibakteri Beberapa Biota Laut dari Perairan Pantai Painan, Sumatera Barat. Padang: Farmasi Universitas Andalas; 2009.
70. Handayani D., Rivai H., Hutabarat M., Rasyid R. Antibacterial Activity of Endophytic Fungi Isolated from Mangrove Plant *Sonneratia griffithii* Kurz. Journal of Applied Pharmaceutical Sciences. 2017;7(04):209–12.
71. Darsana I.G.O., Besung I.N.K., Mahatmi H. Potensi Daun Binahong (*Anredera cordifolia* (Tenore) Steenis) dalam Menghambat Pertumbuhan Bakteri *Escherichia coli* secara In Vitro. Indonesian Medicus Veterinus. 2012;1(3):337–51.
72. Karou D., Savadogo A., Canini A., Yameogo S., Montesano C., Simpore J. Antibacterial Activity of Alkaloids From *Sida acuta*. African Journal of Biotechnology. 2006;5(January):195–200.
73. Lestary S., Fatimawati, Geraldine W. Uji Daya Hambat Ekstrak Daun Sukun (*Artocarpus altilis*) Terhadap Pertumbuhan Bakteri *Streptococcus mutans*. Pharmacon Jurnal Ilmiah Farmasi. 2016;5(4):1–9.
74. Hendra R., Ahmad S., Sukari A., Shukor M.Y. Flavonoid Analyses and Antimicrobial Activity of Various Parts of *Phaleria macrocarpa* (Scheff .) Boerl Fruit. International Journal of Molecular Sciences. 2011;12:3422–31.
75. Cushnie T.P.T., Lamb A.J. Antimicrobial Activity of Flavonoids. International Journal of Antimicrobial Agents. 2005;26:343–56.
76. Cowan M.M. Plant Products as Antimicrobial Agents. Clinical Microbiology Reviews. 1999;12(4):564–82.
77. Wahdaningsih S., Untari E.K., Fauziah Y. Antibakteri Fraksi n -Heksana Kulit *Hylocereus polyrhizus* Terhadap *Staphylococcus epidermidis* dan *Propionibacterium acnes*. Pharmaceutical Sciences Research. 2014;1:180–93.
78. Yanti N., Samingan, Mudatsir. Uji Aktivitas Antifungi Ekstrak Etanol Gal Manjakani (*Quercus infectoria*) Terhadap *Candida albicans*. Jurnal Ilmiah Mahasiswa Pendidikan Biologi. 2016;1(1):1–9.
79. Sherma J, Fried B. Handbook of Thin-Layer Chromatography. 3rd ed. New York: Marcel Dekker INC; 2003. 251 p.
80. Dinata D.I. Bioteknologi Pemanfaatan Mikroorganisme & Teknologi Bioproses. Jakarta: EGC; 2011.
81. Habibi M. Identifikasi Biodeteriogen Sebagai Langkah Awal Konservasi

- Benda Cagar Budaya. Jurnal Konservasi Cagar Budaya Borobudur. 2016;10:23–30.
82. Purnamasari M.I., Prihatna C., Gunawan A.W., Suwanto A. Isolation and Molecular Identification of *Ganoderma* spp . Associated with Basal Stem Rot Disease in Oil Palm. Jurnal Fitopatologi Indonesia. 2012;8:9–15.
 83. Yusuf Z.K. Polymerase Chain Reaction (PCR). Saintek. 2010;5(6).
 84. Joshi M., Deshpande J. Polymerase Chain Reaction : Methods, Principles and Application. International Journal of Biomedical Research. 2011;1:81–97.
 85. Luongo L., Santori A., Riccioni L., Belisario A. *Phomopsis* sp . Associated With Post-Harvest Fruit Rot of Kiwifruit in Italy. Journal of Plant Pathology. 2011;93:205–9.
 86. Avasthi S., Ak G., Bhadauria R. First Report of *Phomopsis* sp . on *Aloe vera* in India. Plant Pathology and Quarantine. 2016;6(November):176–9.
 87. Huang W.Y., Cai Y.Z., Surveswaran, Hyde K.D., Corke H., Sun M. Molecular Phylogenetic Identification of Endophytic Fungi Isolated From Three *Artemisia* Species. Fungal Diversity. 2009;(May):69–88.
 88. Singh S.K., Strobel G.A., Knighton B., Geary B., Sears J., Ezra D. An Endophytic *Phomopsis* sp . Possessing Bioactivity and Fuel Potential with its Volatile Organic Compounds. Microb Ecol. 2011;61:729–39.
 89. Jouda J., Tamokou J., Mbazoa C.D., Douala-meli C., Sarkar P., Bag P.K. Antibacterial and Cytotoxic Cytochalasins from The Endophytic Fungus *Phomopsis* sp. Harbored in *Garcinia kola* (Heckel) nut. BMC Complementary and Alternative Medicine. 2016;16:1–9.
 90. Rukachaisirikul V., Sommart U., Phongpaichit S., Sakayaroj J., Kirtikara K. Metabolites from the endophytic fungus *Phomopsis* sp. PSU-D15. Phytochemistry - Elsevier. 2008;69:783–7.
 91. Huang Z., Cai X., Shao C., She Z., Xia X. Chemistry and weak antimicrobial activities of phomopsins produced by mangrove endophytic fungus *Phomopsis* sp . ZSU-H76. Phytochemistry - Elsevier. 2008;69:1604–8.
 92. Ding B., Wang Z., Xia G., Huang X., Xu F. Three New Chromone Derivatives Produced by *Phomopsis* sp . HNY29-2B from *Acanthus ilicifolius* Linn . Chinese Journal of Chemistry - Wiley. 2017;XX:1–5.
 93. Pitt J.I., D H.A. Fungi and Food Spoilage. London: Springer Science & Business Media; 2012.
 94. Tzean S.S., Chiu S.C., Chen J.L., Hseu S.H., Lin G.H. *Penicillium* and Related Teleomorphs from Taiwan. Mycological Monograph of The Food Industry Research and Development Institute. 1994;9:1–157.

95. Hayashi H. Bioactive Alkaloids of Fungal Origin. Studies in Natural Product Chemistry - Elsevier. 2005;32:549–609.
96. Li H., Xu R., Li X., Yang S., Meng L., Wang B. Simpterpenoid A, a Meroterpenoid with a Highly Functionalized Cyclohexadiene Moiety Featuring gem -Propane-1,2-dione and Methylformate Groups, from the Mangrove-Derived *Penicillium simplicissimum* MA-332. Organic Letters. 2018;20:1465–8.
97. Robert V., Stegehuis G., Stalpers J. The MycoBank Engine and Related Databases. <http://www.mycobank.org>. 2005.
98. Christensen M., Raper K.B. Synoptic Key to *Aspergillus* Nidulans Group Species and Related *Emericella* Species. Transactions of the British Mycological Society. 1978;71(2):177–91.

