

DAFTAR PUSTAKA

1. Bhattarai S, Sharma K, Subedi N, Ranabhat S, Baral MP. Burden of Serious Bacterial Infections and Multidrug- Resistant Organisms in an Adult Population of Nepal : A Comparative Analysis of Minimally Invasive Tissue Sampling Informed Mortality Surveillance of Community and Hospital Deaths. *Clin Infect Dis*. 2021;73(5):415–21.
2. Wen J, Okyere SK, Wang S, Wang J, Xie L, Ran Y, et al. Endophytic Fungi : An Effective Alternative Source of Plant-Derived Bioactive Compounds for Pharmacological Studies. *J Fungi*. 2022;8(205):1–45.
3. Gupta A, Meshram V, Gupta M, Goyal S, Qureshi KA, Jeremko M, et al. Fungal Endophytes : Microfactories of Novel Bioactive Compounds with Therapeutic Interventions ; A Comprehensive Review on the Biotechnological Developments in the Field of Fungal Endophytic Biology over the Last Decade. *Biomolecules*. 2023;13(1038):1–44.
4. Kusari S, Lamshöft M, Zühlke S, Spiteller M. An Endophytic Fungus *Hypericum perforatum* that Produces Hypericin. *J Nat Prod*. 2008;71(2):26–9.
5. Tatsis EC, Boeren S, Exarchou V, Troganis AN, Vervoort J, Gerothanassis IP. Identification of the Major Constituents of *Hypericum perforatum* by LC / SPE / NMR and / or LC / MS. *Phytochemistry*. 2007;68:383–93.
6. Song Z, Sun YJ, Xu S, Li G, Yuan C, Zhou K. Secondary Metabolites from the Endophytic Fungi *Fusarium decemcellulare* F25 and Their Antifungal Activities. *Frontiers (Boulder)*. 2023;53:1–10.
7. Kumari P, Singh A, Singh DK, Sharma VK, Kumar J, Kumar V, et al. Isolation and Purification of Bioactive Metabolites from an Endophytic Fungus *Penicillium citrinum* of *Azadirachta indica*. *South African J Bot*. 2021;139:449–57.
8. Ramos G da C, Silva-silva JV, Watanabe LA, Edson J, Siqueira DS, Almeida-souza F, et al. Phomoxanthone A , Compound of Endophytic Fungi *Paecilomyces* sp . and Its Potential Antimicrobial and Antiparasitic. *Antibiotics*. 2022;11(1332):1–14.
9. Handayani D, Hafiza H, Rustini R, Putra PP, Syafni N. Isolation of Endophytic Fungi With Antimicrobial Activity from Medicinal Plant *Rhodomyrtus tomentosa* (Aiton) Hassk. *J Appl Pharm Sci*. 2023;0(00):1–7.
10. Ningrum LRS. Isolasi Senyawa Antibakteri dari Jamur Endofit *Paecilomyces subglobosus* Asal Tumbuhan Karamunting (*Rhodomyrtus tomentosa* (Aiton) Hassk.). Universitas Andalas; 2023.
11. Sinaga E, Rahayu SE, Yenisbar. Potensi Medisinal Karamunting

- (*Rhodomyrtus tomentosa*). Arifiah A, editor. Jakarta: UNAS Press; 2019.
12. Ngoc T, Lai H, André C, Rogez H, Mignolet E, Bich T, et al. Nutritional Composition and Antioxidant Properties of the Sim Fruit (*Rhodomyrtus tomentosa*). *Food Chem.* 2015;168:410–6.
 13. Kamarudin E, Zainol H, Anuar TS, Hussain R. *Rhodomyrtus tomentosa* Leaves Phytochemistry and Biological Activities: an Update Review. *Malaysian J Med Heal Sci.* 2021;17:334–43.
 14. Csurhes S, Hankamer C. Ceylon Hill Cherry (Downy Rose Myrtle) *Rhodomyrtus tomentosa*. Brisbane: Queensland Government; 2016.
 15. Zhang Y, Zhou X, Wu L, Wang X, Yang M, Luo J, et al. Isolation, Structure Elucidation, and Absolute Configuration of Syncarpic Acid-Conjugated Terpenoids from *Rhodomyrtus tomentosa*. *J Nat Prod.* 2017;80:989–98.
 16. Zhang Y, Wen L, Zhang Z, Chen N. Two New Triterpenoids from the Roots of *Rhodomyrtus tomentosa*. *Chem Soc Japan.* 2016;45:368–70.
 17. Lim T. Edible Medicinal and Non Medicinal Plants. *Artocarpus Integer*. New York: Springer Dordrech Heidelberg; 2012.
 18. Vo TS, Ngo DH. The Health Beneficial Properties of *Rhodomyrtus tomentosa* as Potential Functional Food. *Biomolecules.* 2019;9(76):1–16.
 19. Bogas AC, Cruz FPN, Lacava PT, Sousa CP. Endophytic Fungi: An Overview On Biotechnological and Agronomic Potential. *Brazilian J Biol.* 2021;84:1–9.
 20. Putri ND, Muhibuddin A, Aini LQ. The Potential of Endophytic Fungi in Promoting Rice Plant Growth and Suppressing Blast Disease. *J Trop Plant Prot.* 2023;2(2):41–9.
 21. Rodriguez RJ, Jr JFW, Arnold AE, Redman RS. Fungal Endophytes: Diversity and Functional Roles. *New Phytol.* 2009;182:314–30.
 22. Brendon J, Adriana R, Lorenzi S, Mario H. Methods Used For the Study of Endophytic Fungi: A Review on Methodologies and Challenges, and Associated Tips. *Arch Microbiol.* 2022;204(11):1–30.
 23. Baron NC, Rigobelo EC. Endophytic fungi: A Tool for Plant Growth Promotion and Sustainable Agriculture. *Mycology.* 2022;13(1):39–55.
 24. Lugtenberg B, Caradus J, Johnson L. Fungal Endophytes for Sustainable Crop Production. 2016;1–37.
 25. Dhankhar S, Dhankhar S, Yadav JP. Investigating Antimicrobial Properties of Endophytic fungi Associated with *Salvadora oleoides* Decne. *Anti-Infective Agent.* 2013;11(1):48–58.

26. Moreno-gav A, Huertas V, Di F, Brenda S. *Paecilomyces* and Its Importance in the Biological Control of Agricultural Pests and Diseases. *Plants*. 2020;9(1746):1–28.
27. Malhadas C, Malheiro R, Pereira JA, Pinho PG de, Baptista P. Antimicrobial Activity of Endophytic Fungi from Olive Tree Leaves. *World J Microbiol Biotechnol*. 2017;33(46):1–12.
28. Sawada J, Misaki T, Yasui H, Okabe M, Hanada K, Okazaki T. Studies on the Amylases of *Paecilomyces subglobosus*. *Agric Biologica Chem*. 1968;32(5):646–52.
29. Schoch CL, Ciuffo S, Domrachev M, Hottel CL, Kannan R, O’Neill K, et al. NCBI Taxonomy: a Comprehensive Update on Curation, Research and Tools. NCBI Database, 2020.
30. Elbandy M, Shinde PB, Hong J, Bae KS, Kim MA, Lee SM, et al. α - Pyrones and Yellow Pigments from the Sponge-Derived Fungus *Paecilomyces lilacinus*. *Bull Korean Chem Soc*. 2009;30(1):188–92.
31. Isaka M, Palasarn S, Kocharin K, Hywel-jones NL. Comparison of the Bioactive Secondary Metabolites from the Scale Insect Pathogens , Anamorph *Paecilomyces cinnamomeus* , and Teleomorph *Torrubiella luteostrata*. *J Antibiot*. 2007;60(9):577–81.
32. Putri SP, Kinoshita H, Ihara F, Igarashi Y, Nihira T. Farinomalein , a Maleimide-Bearing Compound from the Entomopathogenic Fungus *Paecilomyces farinosus*. *J Nat Prod*. 2009;72:1544–6.
33. Jnf P, Wang H, Hong J, Yin J, Moon HR, Liu Y, et al. Dimeric Octaketide Spiroketal from the Jellyfish-Derived Fungus *Paecilomyces variotii* J08NF - 1. *J Nat Prod*. 2015;11:1–5.
34. Nilanonta C, Isaka M, Kittakoo P, Palittapongarnpim P, Kamchonwongpaisan S, Pittayakhajonwut D, et al. Antimycobacterial and Antiplasmodial Cyclodepsipeptides from the Insect Pathogenic Fungus *Paecilomyces tenuipes* BCC 1614. *Planta Med*. 2000;66:756–8.
35. Liu J, Li F, Kim E La, Li JL, Hong J, Bae KS, et al. Antibacterial Polyketides from the Jellyfish-Derived Fungus *Paecilomyces variotii*. *J Nat Prod*. 2011;74:1826–9.
36. Li X, Xu K, Liu X, Zhang P. A Systematic Review on Secondary Metabolites of *Paecilomyces* Species : Chemical Diversity and Biological Activity. *Thieme*. 2020;86:805–21.
37. Wang J, Huang Y, Fang M, Zhang Y. Brefeldin A , A Cytotoxin Produced by *Paecilomyces* sp . and *Aspergillus clavatus* Isolated from *Taxus mairei* and *Torreya grandis*. *Fed Eur Microbiol Soc*. 2002;34:51–7.
38. Xu L, Wu P, Xue J, Molnar I, Wei X. Antifungal and Cytotoxic β -

- Resorcylic Acid Lactones from a *Paecilomyces* Species. *J Nat Prod.* 2017;80:2215–23.
39. Rabel F, Sherma J. Studies on the Secondary Metabolites and Bioactivity of Mangrove Endophytic Fungus *Paecilomyces* sp. *Chem Res Appl.* 2009;21:198–202.
 40. Wang X, Mao Z, Song B, Chen C, Xiao W, Hu B, et al. Cytotoxicity of the Secondary Metabolites of Marine Mangrove Fungus *Paecilomyces* sp. Tree 1-7on Human Hepatoma Cell Line HepG2. *J China Three Gorges Univ.* 2010;32:101–5.
 41. Zhang P, Li X, Wang J, Li X, Wang B. Prenylated Indole Alkaloids from the Marine-Derived Fungus *Paecilomyces variotii*. *Chinese Chem Lett.* 2014;26:313–6.
 42. Effect A. Five Anticancer Anthraquinone Derivates from Mangrove Endophytic Fungus *Paecilomyces* sp. *J China Three Gorges Univ.* 2010;32:101–5.
 43. Petersen F, Fredenhagen A, Mett H, Lydon NB, Delmendorff R, Jenny H, et al. Paecilomides A, B, C, D, E and F: New Potent Inhibitors of Protein Tyrosine Kinases Produced by *Paecilomyces carneus*. *J Antibiot (Tokyo).* 2005;48(3):1991–5.
 44. Lu R, Liu X, Gao S, Zhang W, Peng F, Hu F, et al. New Tyrosinase Inhibitors from *Paecilomyces gunnii*. *J Agric Food Chem.* 2014;62(11):1917–1923.
 45. Paula A, Teles C, Takahashi JA. Paecilomide, A New Acetylcholinesterase Inhibitor from *Paecilomyces lilacinus*. *Microbiol Res.* 2013;168(4):204–10.
 46. Uchida R, Shiomi K, Sunazuka T, Inokoshi J. Kurasoin A and B, New Protein Tyrosinase Inhibitors. *J Antibiot (Tokyo).* 1996;3:886–9.
 47. Etebu E, Ariekpar I. Antibiotics: Classification and Mechanisms of Action with Emphasis on Molecular Perspectives. *Int J Appl Microbiol Biotechnol Res.* 2017;4:90–101.
 48. Pankey G, Sabath L. Clinical Relevance of Bacteriostatic versus Bactericidal Mechanisms of Action in the Treatment of Gram-Positive Bacterial Infections. *CID.* 2004;38:365–70.
 49. Abdulkadir WS. Buku Chapter Antibiotik dan Resistensi Antibiotik. Gorontalo: Rizmedia Pustaka Indonesia; 2022.
 50. Aghababa AA, Nadi M. Mechanisms of Antibiotic Resistance in Bacteria: A Review. *Med Pers J.* 2021;6(21):17–22.
 51. Balouiri M, Sadiki M, Ibsouda SK. Method for In Vitro Evaluating Antimicrobial Activity: A Review. *J Pharm Anal.* 2016;6:71–9.

52. Hudson JA, Programme FS, Zealand N. *Staphylococcus aureus*. Microbiol Saf Meat. 2014;2:376–81.
53. Idrees M, Sawant S, Karodia N, Rahman A. Staphylococcus aureus Biofilm : Morphology , Genetics , Pathogenesis and Treatment Strategies. Int J Environ Res Public Health. 2021;18:1–20.
54. Algammal A, Batiha GE. Methicillin-Resistant *Staphylococcus aureus* (MRSA): One Health Perspective Approach to the Bacterium Epidemiology , Virulence Factors , Antibiotic-Resistance , and Zoonotic Impact. Infect Drug Resist. 2020;1(3):3255–65.
55. Harkins CP, Pichon B, Doumith M, Parkhill J, Westh H, Tomasz A, et al. Methicillin - Resistant *Staphylococcus aureus* Emerged long Before the Introduction of Methicillin Into Clinical Practice. Genome Biol. 2017;18(130):1–11.
56. Percival SL, Williams DW. *Escherichia coli*. Cardiff: Elsevier; 2014.
57. Gritter RJ, Bobbit J, Schwarting A. Pengantar Kromatografi. In Bandung: Penerbit ITB; 1991.
58. Sireesha B, Shalini K, Janaki A, Sailaja A, Ishwarya G, Charan MS, et al. A Review on Coloumn Used in Chromatography. TJMDR. 2023;3(3):17–23.
59. Lade B, Earth F, Patil AS, Paikrao H. A Comprehensive Working , Principles and Applications of Thin Layer Chromatography. RJPBCS. 2014;5(4):486–503.
60. Kumar S, Jyotirmayee K, Sarangi M. Thin Layer Chromatography : A Tool of Biotechnology for Isolation of Bioactive Compounds from Medicinal Plants. Int J Pharm Sci Rev Res. 2013;18(1):126–32.
61. Wall PE. Thin-layer Chromatography A Modern Practical Approach. Chambridge: The Royal Society of Chemistry; 2005.
62. Sulman L. Isolation of the Piperine Compound from Black Pepper (*Piper nigrum*) in the Preparation of Standard Compounds for Practice and Research Activities. Pijar MIPA. 2021;16(5):683–7.
63. Pratiwi RA, Nandiyanto ABD. How to Read and Interpret UV-VIS Spectrophotometric Results in Determining the Structure of Chemical Compounds. Indones J Educ Res Technol. 2022;2(1):1–20.
64. Verma G, Mishra M. Development and Optimization of UV-Vis Spectroscopy - A Review. World J Pharm Res. 2018;7(11):1170–80.
65. Dachriyanus. Analisis Struktur Senyawa Organik Secara Spektroskopi. Padang: LPTIK Universitas Andalas; 2004.
66. Setiabudi A, Hardian R, Muzakir A. Karakterisasi Material : Prinsip dan

Aplikasinya dalam Penelitian Kimia. Bandung: UPI Press; 2012.

67. Syarpin, Permatasari S, Pujiyanto D. Analysis of Phytochemical Constituents and Antioxidant Activity from the Fractions of *Luvunga sarmentosa* Root Extract Using LCMS / MS. Biodiversitas. 2023;24(2):733–40.
68. Unlu A, Abusoglu S. Clinical Laboratory Use of Liquid Chromatography Mass Spectrometry. Turk J Biochem. 2022;47(5):548–56.
69. Shelke P, Tripathi A, Dewani A, Bakal R, Mohale D, Chandewar A. Liquid Chromatography in Conjunction with Mass Spectrometry (LC-MS). Int J Pharm Chem Sci. 2012;1(3):1183–9.
70. Handayani D, Dwinatrana K, Rustini R. Antibacterial Compound from Marine Sponge Derived Fungus *Aspergillus sydowii* DC08. Rasayan J Chem. 2022;15(4):2485–92.
71. Wulandari L. Kromatografi Lapis Tipis. Jember: Taman Kampus; 2011.
72. Smith BC. Fundamentals of Fourier Transform Infrared Spectroscopy. Boca Raton: CRC Press; 2011.
73. Martin S, Duncan E. Sterilisation Considerations for Implantable Sensor Systems. London: Woodhead Publishing Limited; 2013.
74. Dwinatrana K. Isolasi dan Elusidasi Struktur Senyawa Antibakteri dari Ekstrak Etil Asetat Jamur *Aspergillus sydowii* DC08 Asal Spons Laut *Dactylospongia* sp. Universitas Andalas; 2022.
75. Day RA, Underwood AL. Analisa Kimia Kuantitatif. Jakarta: Erlangga; 1994.
76. Nunez O, Lucci P. Advance in Chemical Research. Oxford: Nova Science Publishers; 2014.
77. Julianto TS. Fitokimia Tinjauan Metabolit Sekunder dan Skrining Fitokimia. Yogyakarta: Universitas Islam Indonesia; 2019.
78. Silverstein RM, Webster FX, Kiemle DJ. Spectrometric Identification of Organic Compounds. New York: John Wiley & Sons; 2005.
79. Zhang Z, Bo T, Bai Y, Ye M, An R, Cheng F. Quadrupole Time-of-Flight Mass Spectrometry as A Powerful Tool for Demystifying Traditional Chinese Medicine. Trends Anal Chem. 2015;109(2):1–17.
80. Caesar LK, Cech NB. Synergis and Antagonism in Natural Products Extracts: When 1+1 Does Not Equal 2. HHS Public Access. 2019;36(6):869–88.