

DAFTAR PUSTAKA

- Adhityatama, S. 2015. Model jalur penyelaman situs usat liberty: studi pengelolaan sumber daya arkeologi bawah air. *Forum Arkeologi*. **28**(3): 165–176.
- Altschul, S. F., Gish, W., Miller, W., Myers, E. W., dan Lipman, D. J. 1990. Basic Local Alignment Search Tool. *Journal of Molecular Biology*. **215**(3): 403–410.
- Anteneh, Y. S., Yang, Q., Brown, M. H., dan Franco, C. M. M. 2021. Antimicrobial Activities of Marine Sponge-Associated Bacteria. *Microorganisms*. **9**(1): 1–19.
- Ayuningrum, D., Kristiana, R., dan Asagabaldan, M. A. 2020. Potensi Bakteri Asosiasi Tunikata Sebagai Penghasil Senyawa Antibakteri Guna Menghambat Pertumbuhan Bakteri Multidrug Resistant. *Jurnal Pasir Laut*. **4**(2): 102–107.
- Ayuningrum, D., Kristiana, R., Trianto, A., Radjasa, O. K., Sabdono, A., dan Sibero, M. T. 2019a. The Uncultured Gamma Proteobacterium and Culturable. *AIP Conference Proceedings*. **2120**(1): 10.
- Ayuningrum, D., Liu, Y., Riyanti, Sibero, M. T., Kristiana, R., Asagabaldan, M. A., Wuisan, Z. G., Trianto, A., Radjasa, O. K., Sabdono, A., dan Schäberle, T. F. 2019b. Tunicate-Associated Bacteria Show a Great Potential for the Discovery of Antimicrobial Compounds. *PLoS ONE*. **14**(3): 1–14.
- Azzami, F. M., Trianto, A., dan Sabdono, A. 2022. Penapisan Aktivitas Antibakteri dari Bakteri Asosiasi Spons Terhadap MRSA (*Methicilin-resistant Staphylococcus aureus*). *Journal of Marine Research*. **11**(2): 208–216.
- Balouiri, M., Sadiki, M., dan Ibensouda, S. K. 2016. Methods for in vitro evaluating antimicrobial activity: A review. *Journal of Pharmaceutical Analysis*. **6**(2): 71–79.
- Barreca, M., Spanò, V., Montalbano, A., Cueto, M., Díaz Marrero, A. R., Deniz, I., Erdoğan, A., Bilela, L. L., Moulin, C., Taffin-De-Givenchy, E., Spriano, F., Perale, G., Mehiri, M., Rotter, A., et al. 2020. Marine Anticancer Agents: An Overview with a Particular Focus on Their Chemical Classes. *Marine Drugs*. **18**(12): 2–28.
- Barzkar, N., Sukhikh, S., dan Babich, O. 2023. Study of Marine Microorganism Metabolites: New Resources for Bioactive Natural Products. *Frontiers in Microbiology*. **14**(January).
- Brdová, D., Ruml, T., dan Viktorová, J. 2024. Mechanism of *Staphylococcal* Resistance to Clinically Relevant Antibiotics. *Drug Resistance Updates*. **77**(August).
- Candra Susanto, P., Ulfah Arini, D., Yuntina, L., Panatap Soehaditama, J., dan Nuraeni, N. 2024. Konsep Penelitian Kuantitatif: Populasi, Sampel, dan Analisis Data (Sebuah Tinjauan Pustaka). *Jurnal Ilmu Multidisplin*. **3**(1): 1–12.
- Celandroni, F., Salvetti, S., Gueye, S. A., Mazzantini, D., Lupetti, A., Senesi, S., dan Ghelardi, E. 2016. Identification and Pathogenic Potential of Clinical *Bacillus* and *Paenibacillus* Isolates. *PLoS ONE*. **11**(3): 1–13.
- Chen, L., Hu, J. S., Xu, J. L., Shao, C. L., dan Wang, G. Y. 2018. Biological and chemical diversity of ascidian-associated microorganisms. *Marine Drugs*. **16**(10): 1–33.
- Cristianawati, O., Sibero, M. T., Ayuningrum, D., Nuryadi, H., Syafitri, E., Radjasa, O. K., dan Riniarsih, I. 2019. Screening of Antibacterial Activity of Seagrass-Associated Bacteria from the North Java Sea, Indonesia Against Multidrug-Resistant Bacteria. *AACL Bioflux*. **12**(4): 1054–1064.

- Diba, M. F., Amalia, E., Sabrina, T., Rivani, E., Zanaria, R., dan Nawawi, R. A. 2024. Pemberdayaan Kelompok Ibu Rumah Tangga sebagai Kader Bijak Antibiotik dalam Upaya Pengendalian Resistensi Antibiotik Tingkat Komunitas. *Jurnal Pengabdian Masyarakat: Humanity and Medicine*. **5**(2): 124–133.
- Edgar, G. J., Banks, S. A., Bessudo, S., Cortés, J., Guzmán, H. M., Henderson, S., Martinez, C., Rivera, F., Soler, G., Ruiz, D., dan Zapata, F. A. 2011. Variation in Reef Fish and Invertebrate Communities with Level of Protection from Fishing Across the Eastern Tropical Pacific Seascape. *Global Ecology and Biogeography*. **20**(5): 730–743.
- Efendi, F. S., Budiarti, S., dan Lestari, Y. 2025. Characterization of Antibacterial Compounds from Marine Sponge-associated *Streptomyces* spp. Against Some Pathogenic Bacteria. *HAYATI Journal of Biosciences*. **32**(1): 55–69.
- Hendrawati, A., Ayuningrum, D., Sabdaningsih, A., dan Amalia, R. 2024. Exploring The Antibacterial Potential of Tunicate-Associated Bacteria (Ascidiacea) at the Shipwreck Site of Menjangan Kecil Waters, Karimunjawa. *Asia-Pacific Journal of Molecular Biology and Biotechnology*. **32**(2): 127–136.
- Herawati, D., Nazwa Azzahra, D., Dian Farhah, H., Catleya Hadi, J., Theresia Sagala, J., Catharina Rosadi, N., Ishabela Romaulytua Rajagukguk, V., Putri Ramadhani, Z., Sopiah, P., dan Ridwan, H. 2023. Side Effects of Irrational Antibiotic Use in Respiratory Disorders Upper Respiratory Tract Infection. *Jurnal Ilmiah Keperawatan*. **9**(2): 464–471.
- Hong, H. A., Khaneja, R., Tam, N. M. K., Cazzato, A., Tan, S., Urdaci, M., Brisson, A., Gasbarrini, A., Barnes, I., dan Cutting, S. M. 2009. *Bacillus subtilis* Isolated from the Human Gastrointestinal Tract. *Research in Microbiology*. **160**(2): 134–143.
- Imara, F. 2020. *Salmonella typhi* Bakteri Penyebab Demam Tifoid. *Prosiding Seminar Nasional Biologi di Era Pandemi COVID-19*. **6**(1): 1–5.
- Ismet, M. S., Tera, Y., Sari, A. E. M., dan Aryani, A. F. 2022. Isolation and Characterization of Tunicates (Ascidian: *Phallusia* sp.) Associative Marine Bacteria in Agar Media with Pb Heavy Metal Addition. *IOP Conference Series: Earth and Environmental Science*. **1033**(1): 1755–1315.
- Jamaluddin, S. N., Fitriana, F., dan Amirah, S. 2024. Molecular Identification of Endophytic Fungi Isolated from Bidara Root (*Ziziphus mauritiana* Lam) Using Polymerase Chain Reaction (PCR). *Journal Microbiology Science*. **4**(1): 11–21.
- Jayanudin, Lestari, A. Z., dan Nurbayanti, F. 2014. Pengaruh Suhu dan Rasio Pelarut Ekstraksi Terhadap Rendemen dan Viskositas Natrium Alginate dari Rumput Laut Cokelat (*Sargassum* sp). *Jurnal Integrasi Proses*. **5**(1): 51–55.
- Julyantoro, P. G. S., Bossier, P., dan Defoirdt, T. 2024. Minireview on Sustainable Antivirulence Strategy for Aquaculture. *Jurnal Riset Akuakultur*. **19**(2): 157.
- Kumar, S., Stecher, G., Suleski, M., Sanderford, M., Sharma, S., dan Tamura, K. 2024. MEGA12 : Molecular Evolutionary Genetic Analysis Version 12 for Adaptive and Green Computing. *Molecular Biology and Evolution*. **41**(12): 1–9.
- Lambert, G., Shenkar, N., dan Swalla, B. J. 2010. First Pacific record of the north Atlantic ascidian *Molgula citrina* - Bioinvasion or circumpolar distribution. *Aquatic Invasions*. **5**(4): 369–378.

- Liempapas, A. G., Lolo, W. A., dan Yamlean, P. 2019. Isolasi dan Uji Antibakteri dari Isolat Bakteri yang Berasosiasi dengan Spons *Callyspongia aerizusa* serta Identifikasi secara Biokimia. *Pharmacon*. **8**(2): 380–387.
- Litaay, M., Piri, R., Jabir, N. B., Priosambodo, D., dan Putra, A. W. 2023. Diversity of Marine Tunicate from Waters of Pannikiang Island and Badi Island of South Sulawesi, Indonesia. *Biodiversitas*. **24**(3): 1431–1437.
- Manoppo, C. J., Yudistira, A., dan Wewengkang, D. S. 2019. Aktivitas Antimikroba Ekstrak dan Fraksi Tunikata (*Polycarpa aurata*) yang dikoleksi di Selat Lembeh, Bitung terhadap *Escherichia coli*, *Staphylococcus aureus* dan *Candida albicans*. *Pharmacon*. **8**(1): 243–251.
- Mihajlović, S. dan Đorđević, N. 2022. Sustainable Development and Natural Resources Exploitation: Brief Review. *Podzemni radovi*. **40**(40): 45–51.
- Neyfakh, A. A., Bidnenko, V. E., dan Chen, L. B. 1991. Efflux-mediated *Multidrug Resistance* in *Bacillus subtilis*: Similarities and Dissimilarities with the Mammalian System. *Proceedings of the National Academy of Sciences of the United States of America*. **88**(11): 4781–4785.
- Nova, B., Supri, E., dan Sartika, D. 2024. Bacterial Bioactive Metabolites : A Review on Antimicrobial Potential and Applications Metabolit. *Journal of Pharmaceutical and Sciences Electronic*. **7**(3): 399–410.
- Pana, Z. D. dan Zaoutis, T. 2018. Treatment of Extended-spectrum β -lactamase-Producing Enterobacteriaceae (ESBLs) Infections: What have we Learned Until Now?. *F1000Research*. **7**(0): 1–9.
- Paterson, D. L. dan Bonomo, R. A. 2005. Clinical Update Extended-Spectrum Beta-Lactamases : a Clinical Update. *Clinical Microbiology Reviews*. **18**(4): 657–686.
- Pratama, G. I. P., Hendrawan, I. G., Karang, I. W. G. A., dan Chappuis, A. 2020. Karakteristik Vertikal Salinitas dan TDS di Perairan Amed dan Tulamben, Karangasem, Bali. *Journal of Marine Research and Technology*. **3**(1): 47.
- Pratiwi, R. H. 2017. Mekanisme Pertahanan Bakteri Patogen terhadap Antibiotik. *Jurnal Pro-Life*. **4**(3): 418–429.
- Putra, A. R. S., Effendi, M. H., Koesdarto, S., Suwarno, Tyasningsih, W., dan Estoepangestie, A. T. S. 2019. Identifikasi Bakteri *Escherichia coli* Penghasil Extended Spectrum β -Lactamase dari Swab Rectal Sapi Perah menggunakan Metode VITEK-2 di Kud Tani Wilis Sendang Kabupaten Tulungagung. *Journal of Basic Medical Veterinary*. **8**(2): 108–114.
- Ramesh, C., Tulasi, B. R., Raju, M., Thakur, N., dan Dufossé, L. 2021. Marine Natural Products from Tunicates and Their Associated Microbes. *Marine Drugs*. **19**(6): 1–21.
- Reza, A., Mark Sutton, J., dan Rahman, K. M. 2019. Effectiveness of Efflux Pump Inhibitors as Biofilm Disruptors and Resistance Breakers in Gram-negative (ESKAPEE) Bacteria. *Antibiotics*. **8**(4).
- Risky, Y. T., Agrijanti, A., dan Inayati, N. 2019. Uji Screening Methicillin-resistant *Staphylococcus Aureus* (MRSA) Menggunakan Antibiotik Cefoxitin (fox) 30 μ g Pada Pasien Penderita Abses Gigi di Klinik BPJS Mataram. *Jurnal Analisis Medika Biosains (JAMBS)*. **6**(2): 98.

- Riyanti, Balansa, W., Liu, Y., Sharma, A., Mihajlovic, S., Hartwig, C., Leis, B., Rieuwpassa, F. J., Ijong, F. G., Wägele, H., König, G. M., dan Schäberle, T. F. 2020. Selection of Sponge-Associated Bacteria with High Potential for the Production of Antibacterial Compounds. *Scientific Reports*. **10**(1): 1-14.
- Romero-González, L. E., Rojas-Vargas, J., Muriel-Millán, L. F., Bustos-Martínez, J., Bustamante, V. H., dan Pardo-López, L. 2023. Genomic and Phenotypic Characterization of *Pseudomonas* sp. GOM7, a Novel Marine Bacterial Species with Antimicrobial Activity Against Multidrug-resistant *Staphylococcus aureus*. *PLoS ONE*. **18**(7 July): 1-22.
- Sanger, F., Nicklen, S., dan Coulson, A. R. 1977. DNA sequencing with chain-terminating inhibitors. *Proceedings of the National Academy of Sciences of the United States of America*. **74**(12): 5463-5467.
- Saputri, N. M. P. M., Putra, I. D. N. N., dan Karim, W. 2018. Kelimpahan dan Keanekaragaman Tunikata (Ascidacea) di Perairan Jemeluk dan Penuktukan, Bali. *Journal of Marine and Aquatic Sciences*. **5**(1): 11.
- Sari, N. A. P., Putra, I. D. N. N., dan Dirgayusa, I. G. N. P. 2017a. Kajian Kesesuaian Wisata Selam dan Snorkeling di Perairan Tulamben, Karangasem, Bali. *Journal of Marine and Aquatic Sciences*. **3**(1): 99.
- Sari, N. A. P., Putra, I., dan Dirgayusa, I. 2017b. Kajian Kesesuaian Wisata Selam dan Snorkeling di Perairan Tulamben Karangasem Bali. *Journal of Marine and Aquatic Sciences*. **3**(1): 99-114.
- Sari, F., Widyorini, N., Sabdaningsih, A., Akuatik, D. S., Perikanan, F., Kelautan, I., Diponegoro, U., dan Soedarto, J. 2021. Isolation and Identification with 16S rRNA Gene from Bacteria Associations of Sponges Class Demospongiae in the Waters of Tulamben Bali. *Jurnal Pasir Laut*. **5**(2): 110-118.
- Setiyorini, A., Pringgenies, D., dan Ridlo, A. 2023. Isolasi dan Karakterisasi Bakteri Asosiasi Daun *Cymodocea serrulata* di Perairan Pulau Panjang, Jepara. *Journal of Marine Research*. **12**(4): 663-669.
- Setyaningsih, D., Musdaniaty, D., dan Muna, N. 2019. Produksi Bubuk Sinbiotik dari Hidrolisa *Eucheuma cottonii* menggunakan Spray Drying. *Jurnal Teknologi Industri Pertanian*. **29**(3): 233-239.
- Sibero, M. T., Trianto, A., Frederick, E. H., Wijaya, A. P., Ansori, A. N. M., dan Igarashi, Y. 2022a. Biological Activities and Metabolite Profiling of *Polycarpa aurata* (Tunicate, Ascidian) from Barrang Caddi, Spermonde Archipelago, Indonesia. *Jordan Journal of Biological Sciences*. **15**(1): 15-20.
- Sibero, M. T., Trianto, A., Frederick, E. H., Wijaya, A. P., Ansori, A. N. M., dan Igarashi, Y. 2022b. Biological Activities and Metabolite Profiling of *Polycarpa aurata* (Tunicate, Ascidian) from Barrang Caddi, Spermonde Archipelago, Indonesia. *Jordan Journal of Biological Sciences*. **15**(1): 15-20.
- Sofwatillah, Risnita, Jailani, M. S., dan Saksitha, D. A. 2024. Teknik Analisis Data Kuantitatif dan Kualitatif dalam Penelitian Ilmiah. *Journal Genta Mulia*. **15**(2): 79-91.
- Srinivasan, R., Kannappan, A., Shi, C., dan Lin, X. 2021. Marine Bacterial Secondary Metabolites: A Treasure House for Structurally Unique and Effective Antimicrobial Compounds. *Marine Drugs*. **19**(10): 1-36.

- Subhan, B., Madduppa, H. H., Himawan, D. A. M. R., Pasaribu, H. C. R. R. A., Khairudi, A. B. D., dan Panggarbesi, M. I. 2015. Kehidupan Laut Tropis Tulamben, hal. 1-144, in *IPB Press*
- Syafira, D., Muhammad, E., Haykal, N., Susilo, I., dan Dharma, A. 2024. Peningkatan Kewaspadaan Resistensi Antibiotik pada Kader Surabaya Hebat (KSH) di Kecamatan Sukolilo. **8**(6).
- Thomson, K. S. 2010. Extended-spectrum- β -lactamase, AmpC, and Carbapenemase issues. *Journal of Clinical Microbiology*. **48**(4): 1019–1025.
- Toy, T. S. S., Lampus, B. S., dan Hutagalung, B. S. P. 2015. Uji Daya Hambat Ekstrak Rumput Laut *Gracilaria* Sp Terhadap Pertumbuhan Bakteri *Staphylococcus Aureus*. *e-GIGI*. **3**(1).
- Trianziani, S. 2020. View metadata, citation and similar papers at core.ac.uk. **4**(November): 274–282.
- Ugboko, H. dan De, N. 2017. Mechanisms of Antibiotic Resistance in *Salmonella typhi*. *International Journal of Current Microbiology and Applied Sciences*. **3**(12): 461–476.
- Wang, Y., Haqmal, M. A., Liang, Y. dong, Muhammad, I., Zhao, X. O., Elken, E. M., Gao, Y. H., Jia, Y., He, C. guang, Wang, Y. M., Kong, L. C., dan Ma, H. X. 2022. Antibacterial Activity and Cytotoxicity of a Novel Bacteriocin Isolated from *Pseudomonas* sp. strain 166. *Microbial Biotechnology*. **15**(9): 2337–2350.

