DAFTAR PUSTAKA

Abdel-Kareem, M. S. M., El-Saied, A. A. F. 2021. Global Seaweeds Diversity. *Handbook Algal of Biofuels*, **2**(1): 39–55.

Abdulkadir, W. S., Harun, A. I., Tenda, P. E., Saksosno, R. Y., Fernandez, S., Wonga, T. M., Muntasir, Makkasau, Muliyadi. 2022. Antibiotik dan Resistensi Antibiotik. Rizmedia Pustaka Indonesia. Yogyakarta. 212 hal.

Agustianti, R., Nussifera, L., Angelianawati, L., Wahyudi, S. E. A., Nurlaila, Q., Pandriadi, Simarmata, N., Himawan, I. S., Palwan, E., Ikhram, F., Andriani, A. D., Ratnadewi, Hardika, I. R. 2022. Metode Penelitian Kuantitatif dan Kualitatif. CV. Tebar Media. Makassar. 244 hal.

Akin, D., Sonmez, C., Yucel, M., Oktem, H. A. 2023. Establishment of Stable Genetic Transformation Conditions for Novel Thermotolerant *Scenedesmus* sp. (Chlorophyta). *Turkish Journal of Fisheries and Aquatic Sciences*, ***23***, TRJFAS23044.

Altschul, S. F., Gish, W., Miller, W., Myers, E. W., Lipman, D. J. 1990. Basic Local Alignment Search Tool. *Journal of Molecular Biology*, **215**(3): 403–410.

Alvarez-Gomez, F., Korbee, N., Casas-Arrojo, V., Abdala-Diaz, R. T., Figueroa, F. L. 2019. UV Photoprotection, Cytotoxicity, and Immunology Capacity of Red Algae Extracts. *Molecules*, **24**(2): 1–16.

Amin, S., Nugraha, A. C., Maulidya, S. A. I. 2021. Skrining Virtual Senyawa Alkaloid Sebagai Inhibitor Main Protease untuk Kandidat Anti-SARS-CoV-2. Deepublish. Yogyakarta. 55 hal.

Andrews, R. M., Bollar, G. E., Giattina, A. S., Dalecki, A. G., Wallace, J. R., Frantz, L., Eschliman, K., Covarrubias-Zambrano, O., Keith, J. D., Duverger, A., Wagner, F., Wolschendorf, F., Bossmann, S. H., Birket, S. E., Kutsch, O. 2023. Repurposing Sunscreen as an Antibiotic: Zinc-Activated Avobenzone Inhibits Methicillin-Resistant *Staphylococcus aureus*. *Metallomics*, **15**(9): 1–14.

Anjali, K. P., Sangeetha, B. M., Devi, G., Raghunathan, R., Dutta, S. 2019. Bioprospecting of Seaweeds (*Ulva lactuca* and *Stoechospermum marginatum*): The Compound Characterization and Functional Applications in Medicine-a Comparative Study. *Journal of Photochemistry and Photobiology B: Biology*, ***200***, 111622.

Arrijani dan Kamaluddin. 2022. Buku Ajar Taksonomi Tumbuhan 1. CV. Sarnu Untung. Purwodadi. 125 hal.

Arsal, A. F., Fauzi, A. Z., Aditya, A., Permana, Noris, M., Rasmani, R., Putra, S.,

Al-Hakim, R. R., Pratiwi, R. H., Taufiqurrahman, M., Perdana, A. T., Junaedi. 2023. Bioteknologi. PT. Global Eksekutif Teknologi. Padang. 283 hal.

Astuti, R. T., Yufidasari, H. S., Perdana, A. W., Putra, I. P., A'yun, Q., Kusuma, G. 2022. Mikrobiologi: Konsep Dasar dan Teknik Laboratorium. UB Press. Malang. 184 hal.

Atallah, B. M., El-Mohsnawy, E., El-Shouny, W. A., Haroun, S. A. 2023. Identification and Characterization of Different Potentially Antibacterial Compounds From a Marine *Streptomyces* sp. Sp1. *Journal of Animal and Plant Sciences*, **33**(1): 166–173.

Aydogan, C. 2020. Liquid Chromatography - High Resolution Mass Spectrometry for the Analysis of Bioactive Natural Products. *Studies in Natural Products Chemistry*, **66**(1): 331–353.

Azizi, R., Motallebi, M. A. A., Nazemi, M., Sharif, R. M., Afshar, N. M. 2020. Isolation and Identification of Antibacterial Steroid Compounds from *Ulva fasciata* in The Persian Gulf. *Iranian Journal of Fisheries Sciences*, **19**(5): 2384–2393.

Bachoo, T. 2021. *Characterization of Ulva (Ulvaceae, Chlorophyta) Species Cultured in Commercial Abalone Farms in South Africa, and Comparison With Closely Related Wild Species, Using Morpho- Anatomical and Molecular Methods*. Fakulty of Science, University of Cape Town, South Africa. 119 p.

Baralemba, A. M. 2019. Cara Termudah Memahami, Melaksanakan, Serta Menulis Laporan dan Artikel Penelitian Tindakan Kelas. Deepublish. Yogyakarta. 168 hal.

Batubara, I. dan Wahyuni, W. T. 2022. Buku Ajar Analisis Bahan Hayati: Prinsip Analisis Kimia pada Bahan Hayati. IPB Press. Bandung. 182 hal.

Baweja, P., Kumar, S., Sahoo, D., Levine, I. 2016. Biology of Seaweeds. *Seaweed in Health and Disease Prevention*, **3**(1): 41–106.

Berardesca, E., Zuberbier, T., Sanchez Viera, M., Marinovich, M. 2019. Review of the Safety of Octocrylene used as an Ultraviolet Filter in Cosmetics. *Journal of the European Academy of Dermatology and Venereology*, **33**(57): 25–33.

Beric, T., Biocanin, M., Stankovic, S., Dimkic, I., Janakiev, T., Fira, D., Luzo, J. 2018. Identification and Antibiotic Resistance of *Bacillus* spp. Isolates from Natural Samples. *Arch Biol Sci*, **70**(3): 581–588.

Black, J. M. and Hawks, J. H. 2023. Keperawatan Medikal Bedah: Gangguan Sistem Kardiovasskular. Elsevier Health Sciences. Amsterdam. 313 hal.

Blikra, M. J., Lovdal, T., Vaka, M. R., Roiha, I. S., Lunestad, B. T., Lindseth, C., Skipnes, D. 2019. Assessment of Food Quality and Microbial Safety of Brown Macroalgae (*Alaria esculenta* and *Saccharina latissima*). *Journal of the Science of Food and Agriculture*, **99**(3): 1198–1206.

Booth, J. H., Benrimoj, S. I., Nimmo, G. R. 1994. In Vitro Interactions of Neomycin Sulfate, Bacitracin, and Polymyxin B Sulfate. *International Journal of Dermatology*, **33**(7): 517–520.

Bouzenad, N., Ammouchi, N., Chaib, N., Messaoudi, M., Bousabaa, W., Bensouici, C., Sawicka, B., Atanassova, M., Ahmad, S. F., Zahnit, W. 2024. Exploring Bioactive Components and Assessing Antioxidant and Antibacterial Activities in Five Seaweed Extracts from the Northeastern Coast of Algeria. *Marine Drugs*, **22**(6): 1-26.

Cadena-Aizaga, M. I., Montesdeoca-Esponda, S., Pino, Á. S. Del, Sosa-Ferrera, Z., Santana-Rodríguez, J. J. 2022. Assessment of Anthropogenic Pollution by UV filters using Macrophytes as Bioindicators. *Science of the Total Environment*, **832**, 155052.

Callow, R. and Taylor, D. 1952. The Cardio-active Glycosides of *Strophanthus sarmentosus* P. DC."Sarmentoside B" and its Relation to an Original Sarmentobioside. *Jounal of the Chemical Society*, **429**(1):2299-2304.

Choi, B. H., Ryoo, I. G., Kang, H. C., Kwak, M. K. 2014. The Sensitivity of Cancer Cells to Pheophorbide a-based Photodynamic Therapy is Enhanced by NRF2 Silencing. PLoS ONE, 9(9): 1–14.

Ciesielska, M., Bostrom, K. W., Ohlander, M. 2018. Observation Methods. *Qualitative Methodologies in Organization Studies*, **2**(1): 33–52.

Ciko, A. M., Jokic, S., Subaric, D., Jerkovic, I. 2018. Overview on the Application of Modern Methods for the Extraction of Bioactive Compounds from Marine Macroalgae. *Marine Drugs*, **16**(10): 1-20.

Crisafulli, E., Aredano, I., Valzano, I., Burgazzi, B., Andrani, F., Chetta, A. 2019. Pleuritis with Pleural Effusion due to a *Bacillus megaterium* Infection. *Respirology Case Reports*, **7**(1): 1–3.

Cruz, C., Vishwakarma, K., Choudhary, D. K., Varma, A. 2021. Soil Nitrogen Ecology. Springer International Publishing. Gewerbestrasse. 568 p.

Dajoh, T., Bara, R. A., Angkouw, E., Ompi, M., Lintang, R. A., Lumenta, C. 2020. Uji Antivitas Antibakteri dan Anti-UV *Phyllidiella nigra* dan Bakteri Simbiotiknya dari Perairan Tanjung Mandolang. *Jurnal Pesisir Dan Laut Tropis*, **8**(2): 61–71.

Daniel, F. A., Adeleye, A., Nwankwo, A., Adeniyi, B., Seku, F., Beukes, D. 2020. Antibacterial Activities of Selected Green Seaweeds from West African Coast. *Ec Pharmacology and Toxicology*, **8**(4): 84–92.

Davis, W. W. and Stout, T. R. 1971. Disc Plate Method of Microbiological Antibiotic Assay. *Applied Microbiology*, **22**(4): 666–670.

Dhargalkar, V. K. and Kavlekar, D. 2004. Seaweeds – A field Manual. National Institute of Oceanography. Dona Paula. 36 p.

Ding, Y. and Zhang, L. 2021. Practical Oncologic Molecular Pathology. Springer. Gewerbestrasse. 438 p.

Dixit, D., Balar, N., Trivedi, M., Suthar, P., Reddy, C. R. K., Gadhavi, D. 2021. Internal Transcribed Spacer (ITS) Region Targeted Molecular Characterization of Macroalgal Diversity Along the Overlooked Expanse of Gulf of Kachchh, India. *Proceedings of the National Academy of Sciences, India Section B: Biological Sciences*, **91**(1): 889–896.

Duraisamy, M. and Selvaraju, R. 2020. Analysis of Chemical Compounds By Using Gas Chromatography and Mass Spectrum Analysis, in Vitro Antioxidant and Antibacterial Activity of Methanolic Extracts of Seaweed *Ulva flexuosa* Wulfen (Green Algae). *Aegaeum*, **8**(10): 1437–1457.

Elsawy, Y., Abd-Elhady, H., Abou-Taleb, K., Ahmed, R. 2024. Antibacterial Properties of some Medicinal Plant Extracts Against Pathogenic Bacteria Forming Biofilms: Bioactive Compounds Identification from Potential Extract and Cytotoxicity Activity. *Egyptian Journal of Chemistry*, **67**(9): 111–126.

Elya, B., Ariestanti, D. M., Forentrania, R. C., Fadhila, R. 2022. Penuntun Praktikum Fitokimia: Edisi 1. PT. Nas Media Indonesia. Yogyakarta. 106 hal.

Erdiandini, I., Chusniasih, D., Abidin, Z., Nurfitriani, A., Manalu, A. I., Istiadi, K. A., Suryanti, E., Junaedi, A. S., Marzuki. 2023. Mikrobiologi Perairan. Yayasan Kita Menulis. Medan. 138 hal.

Ethica, S. N. 2019. Pengantar Bioinformatika untuk Mahasiswa Laboratorium Medis. Deepublish. Yogyakarta. 181 hal.

Fabanyo, R. A. 2022. Ilmu Keperawatan Komunitas. Nasya Expanding Management. Pekalongan. 252 hal.

Fan, X., Xu, D., Wang, D., Wang, Y., Zhang, X., Ye, N. 2020. Nutrient Uptake and Transporter Gene Expression of Ammonium, Nitrate, and Phosphorus in *Ulva linza*: Adaption to Variable Concentrations and Temperatures.

Journal of Applied Phycology, **32**(2): 1311–1322.

Faradilla, F., Nikmah, F., Putri, A. D., Agustin, G. A., Nurkaromah, L., Febrianti, M. W., Budhiman, M. A., Salamah, U., Chasani, A. R. 2022. Macroalgae Diversity at Porok Beach, Gunungkidul, Yogyakarta, Indonesia. *Journal of Agriculture and Applied Biology*, **3**(1): 50–61.

Fathurrohim, M. F., Pratiwi, R. H., Setiawan, M. A., Yunus, R., Sari, P., Syamsi, N., Idris, S. A., Bahar, M., Asriyanto. 2022. Mikrobiologi Farmasi dan Parasitologi. PT. Global Eksekutif Teknologi. Padang. 177 hal.

Fikayuniar, L. 2022. Fitokimia. PT. Nasya Expanding Management. Pekalongan. 78 hal.

Firdaus, A. 2019. Pigmen Rumput Laut dan Manfaat Kesehatannya. UB Press. Malang. 120 hal.

Geraldes, V. and Pinto, E. 2021. Mycosporine-Like Amino Acids (Maas): Biology, Chemistry, and Identification Features. *Pharmaceuticals*, **14**(1): 1–17.

Gholap, A. D., Sayyad, S. F., Hatvate, N. T., Dhumal, V. V., Pardeshi, S. R., Chavda, V. P., Vora, L. K. 2023. Drug Delivery Strategies for Avobenzone: A Case Study of Photostabilization. *Pharmaceutics*, **15**(3): 1–37.

Ghosh, J. 2020. A Textbook of Pharmaceutical Chemistry. S. Chand and Company Limited. Uttar Pradesh. 360 p.

Goff, L. J. and Moon, D. A. 1993. PCR Amplification of Nuclear and Plastid Genes from Algal Herbarium Specimens and Algal Spores. *Journal of Phycology*, **29**(3): 381–384.

Goff, L. J., Moon, D. A., Coleman, A. W. 1994. Molecular Delineation of Species and Species Relationships in the Reg Algal Agarophytes *Gracilariopsis* and *Gracilaria* (Gracilariales). *Journal of Phycology*, **30**(3): 521–537.

Gowda, S. G. B., Fuda, H., Tsukui, T., Chiba, H., Hui, S. P. 2020. Discovery of Eicosapentaenoic Acid Esters of Hydroxy Fatty Acids as Potent Nrf2 Activators. *Antioxidants*, **9**(5): 1–11.

Hadisusanto, S., Dewi, S. C., Meilianda, A., Haryatfrehni, R., Sari, I. Z. R. 2015. Macroalgal Abundance in Intertidal Zone of Sarangan Beach, Gunungkidul, DIY. *KnE Life Sciences*, **2**(1): 518–521.

Hainil, S., Sammulia, S. F., Adella, A. 2022. Aktivitas Antibakteri *Staphylococcus aureus* dan *Salmonella typhi* Ekstrak Metanol Anggur Laut (*Caulerpa racemosa*). *Jurnal Surya Medika*, **7**(2): 86–95.

Halimah, N. 2021. Kimia Farmasi. ANDI. Yogyakarta. 180 hal.

Hall, T. A. 1999. BioEdit: a User-friendly Biological Sequence Alignment Editor and Analysis Program for Windows 95/98/NT. *Nucleic Acid Symposium Series*, **41**(41): 95–98.

Ham, S.-Y., Kim, H.-S., Eunji, C., Lim, T., Byun, Y., Park, H.-D. 2022. Raffinose Inhibits *Streptococcus mutans* Biofilm Formation by Targeting Glucosyltransferase. *Microbiology Spectrum*, **10**(3): 1–13.

Handayani, T. 2021. Mengenal Lebih Dekat Keragaman Jenis Rumput Laut di Indonesia. Webinar Tropical Seaweed Inovation Network (TSIN). Kementrian Kelautan dan Perikanan. Jakarta.

Hari, B. S. 2019. Mengenal Sifat Kimia dan Fisika Zat. Duta. Bandung. 52 hal.

Harmita dan Radji, M. 2008. Buku Ajar Analisis Hayati. Kedokteran EGC. Jakarta. 167 hal

Hasan, N. A. 2021. Laboratory Manual of Basic Molecular Biology Techniques. Zenodo Horizon. 99 p.

Hasanuddin. 2014. Botani Tumbuhan Tingkat Rendah. Syah Kuala University Press. Aceh. 185 hal.

Hasby, N., Wati, J., Adelia, R., Mauliza. 2019. Pemanfaatan Metabolit Sekunder dalam Berbagai Bidang. Lakaeisha. Klaten. 129 hal.

Holder, I. A. and Boyce, S. T. 1994. Agar Well Diffusion Assay Testing of Bacterial Susceptibility to Various Antimicrobials in Concentrations Non-toxic for Human Cells in Culture. *Burns*, **20**(5): 426–429.

Huang, B., Teng, L., Jiang, J., Ding, L. 2020. Phenotypic Plasticity and Taxonomy of *Cladophora gracilis* (Griffiths) Kützing (Cladophorales, Chlorophyta) in the Western Yellow Sea with the Implication of its DNA Barcode. *Acta Oceanologica Sinica*, **39**(10): 162–170.

Huang, X., Cai, X., Wang, T., Huang, M., Li, L., Lyu, Y. 2022. Phototoxicity of Pheophorbide A Extracted from *Gracilaria lemaneiformis* on Six Kinds of Cancer Cells. *Cancer Research on Prevention and Treatment*, **49**(8): 780–785.

Hubschmann, H.-J. 2015. Handbook of GC-MS: Fundamentals and Applications. Wiley. Weinheim. 880 p.

Hudzicki, J. 2009. Kirby-Bauer Disk Diffusion Susceptibility Test Protocol Author Information. *American Society for Microbiology*, **15**(1): 1–23.

Husni, A. dan Budhiyanti, S. A. 2021. Rumput Laut Sebagai Sumber Pangan, Kesehatan, dan Kosmetik. UGM Press. Yogyakarta. 146 hal.

Hwang, E. K. and Park, C. S. 2020. Seaweed Cultivation and Utilization of Korea. *Algae*, **35**(2): 107–121.

Ianniello, N. M., Andrade, D. C., Ivancic, S., Eckardt, P. A., Lemos Ramirez, J. C. 2019. Native Valve Infective Endocarditis due to *Micrococcus luteus* in a non-Hodgkin's Lymphoma Patient. *IDCases*, ***18***, e00657.

Idroes, R., Khairan, Nurisma, N. W., Mawaddah, N., Pradysta, R. G., Rofina. 2019. Skrining Aktivitass Tumbuhan yang Berpotensi sebagai Bahan Antimikroba di Kawasan Ie Brok (*Uplow Geothermal zone*) Aceh Besar. Syah Kuala University. Aceh. 137 hal.

Iha, C. 2018. *Phylogenomic Study and Organellar Genomic Characterization of Gracilarioids Seaweeds (Gracilariaceae , Rhodophyta)*. University of Sao Paulo, Sao Paulo, Brazil. 119 p.

Ismail, A., Ktari, L., Ben Redjem Romdhane, Y., Aoun, B., Sadok, S., Boudabous, A., Bour, E. M. 2018. Antimicrobial Fatty Acids from Green Alga *Ulva rigida* (Chlorophyta). *BioMed Research International*, **2018**(1): 1-12.

Ivanova, V., Rouseva, R., Kolarova, M., Serkedjieva, J., Rachev, R., Manolova, N. 1994. Isolation of a Polysaccharide with Antiviral Effect from *Ulva lactuca*. *Preparative Biochemistry*, **24**(2): 83–97.

Jauhani, M. A. 2020. Metode Alternatif Identifikasi Forensik: Estimasi Umur Melalui Metilasi DNA Pada Bercak Darah. Scopindo Media Pustaka. Surabaya. 70 hal.

Javitt, N. B. 1990. 26-Hydroxycholesterol: Synthesis, Metabolism, and Biologic Activities. *Journal of Lipid Research*, **31**(9): 1527–1533.

Johannes, E., Permatasari, N. U., Tuwo, M. 2022. Metabolit Sekunder Tumbuhan dan Aplikasinya: Bagian I. CV. Literasi Nusantara Abadi. Malang. 148 hal.

Juwarno, Nugroho, H., Hardiyati, T., Yuniaty, A. 2020. Molecular Profiles of Five Salinity-Resistant *Soybean* {glycine max (L.) merr.} Cultivars. *Molekul*, **15**(3): 184–190.

Kamagi, D. D. W., Nanlohy, F. N., Yalindua, A. 2023. Bioinformatika. CV. Bintang Semesta Media. Yogyakarta. 139 hal.

Kang, J. H., Jang, J. E., Kim, J. H., Byeon, S. Y., Kim, S., Choi, S. K., Kang, Y. H., Park, S. R., Lee, H. J. 2019. Species Composition, Diversity, and Distribution of the Genus *Ulva* Along the Coast of Jeju Island, Korea Based

on Molecular Phylogenetic Analysis. *PLoS ONE*, **14**(7): 1–17.

Karthick, P., Murthy, K. N., Ramesh, C., Narayana, S., Mohanraju, R. 2020. Molecular Authentication of Green Algae *Caulerpa* (Caulerpales, Chlorophyta) Based on ITS and tufA Genes from Andaman Islands, India. *Indian Journal of Experimental Biology*, **58**(2): 109–114.

Kasanah, N., Setyadi, Triyatno, Ismi, T. T. 2018. Rumput Laut Indonesia: Keanekaragaman Rumput Laut di Gunung Kidul, Yogyakarta. UGM Press. Yogyakarta. 103 hal.

Kasanah, N., Ulfah, M., Nugroho, A., Wijnana, A. P. A., Triyanto. 2020. Rumput Laut Indonesia: Keanekaragaman Rumput Laut Nusa Tenggara Timur. UGM Press. Yogyakarta. 100 hal.

Ketaren, S. 1986. Pengantar Teknologi Minyak dan Lemak Pangan. Universitas Indonesia Press. Jakarta. 315 hal.

Kim, H. S., Cha, E., Kim, Y. H., Jeon, Y. H., Olson, B. H., Byun, Y., Park, H. D. 2016. Raffinose, a Plant Galactoside, Inhibits *Pseudomonas aeruginosa* Biofilm Formation via Binding to LecA and Decreasing Cellular Cyclic Diguanylate Levels. *Scientific Reports*, **6**(1): 1–10.

Kristiandi, K., Lusiana, S. A., A'yunin, N. A. Q., Ramdhini, R. N., Marzuki, I., Rezeki, S., Erdhiandi, I., Yunianto, A. E., Lestari, S. D., Ifadah, R. A., Kushargina, R., Yuniarti, T., Pasanda, O. S. 2021. Teknologi Fermentasi. Yayasan Kita Menulis. Medan. 238 hal.

Kumar, S., Stecher, G., Li, M., Knyaz, C., Tamura, K. 2018. MEGA X: Molecular Evolutionary Genetics Analysis Across Computing Platforms. *Molecular Biology and Evolution*, **35**(6): 1547–1549.

Kumar, V., Abbas, A. K., Aster, J. 2019. Buku Ajar Patologi Robbins. Elsevier Health Science. Amsterdam. 912 hal.

Kurniawan, R., Nurjanah, M. Jacoeb, A., Abdullah, A., Pertiwi, R. M. 2019. Functional Salt Characteristics from Green Seaweed *Ulva lactuca*. *Jurnal Pengolahan Hasil Perikanan Indonesia*, **22**(3): 573–580.

Kuslovic, A., Vanilssen, A., Nilstrem, R. 2020. Mikrobiologi Medis I: Patogen dan Mikrobioa Manusia. Cambridge Stanford Books. Cambridge. 1050 hal.

Kusnadi, J. dan Arumingtyas, E. L. 2020. Polymerase Chain Reaction (PCR): Teknik dan Fungsi. Universitas Brawijaya Press. Malang. 238 hal.

Laal-Kargar, N. and Dolatabadi, S. 2020. Antibacterial and Antibiofillm Effects of Synbiotics Against Multidrug-Resistant Bacteria: *Acinetobacter baumannii*

and *Enterococcus faecalis*. *Research Square*, **4**(1): 1–18.

Lawton, R. J., Sutherland, J. E., Glasson, C. R. K., Magnusson, M. E. 2021. Selection of Temperate *Ulva* Species and Cultivars for Land-Based Cultivation and Biomass Applications. *Algal Research*, **56**(4): 102320.

Lee, S. J., Choi, H. G., Kim, J. H., Lee, E.-Y., Lee, S.-R. 2023. Genetic Diversity of *Cladophora oligocladoidea* Forming a Bloom in the Coastal Area of Korea. *Phycological Research*, **71**(2): 77–80.

Leonard, S. A., Littlejohn, T. G., Baxevanis, A. D. 2006. Common File Formats. *Current Protocols in Bioinformatics*, **1**(1): 1–9.

Lewis, C. J. T., Niederer, R. O., Neupane, R., Gilbert, W. V. 2022. Optimized Protocol for Quantifying 5′ UTR-mediated Translation Initiation in *S. cerevisiae* Using Direct Analysis of Ribosome Targeting. *STAR Protocols*, **3**(4): 101862.

Li, Y., Yu, H. B., Zhang, Y., Leao, T., Glukhov, E., Pierce, M. L., Zhang, C., Kim, H., Mao, H. H., Fang, F., Cottrell, G. W., Murray, T. F., Gerwick, L., Guan, H., Gerwick, W. H. 2020. Pagoamide A, a Cyclic Depsipeptide Isolated from a Cultured Marine Chlorophyte, *Derbesia* sp., Using MS/MS-Based Molecular Networking. *Journal of Natural Products*, **83**(3): 617–625.

Liu, L. Y., Man, X. X., Yao, H. X., Tan, Y. Y. 2017. Effects of Pheophorbide a-Mediated Photodynamic Therapy on Proliferation and Metastasis of Human Prostate Cancer Cells. *European Review for Medical and Pharmacological Sciences*, **21**(24): 5571–5579.

Loiko, N., Kanunnikov, O., Gannesen, A., Kovalenko, V., Vishnyakova, A., Axelrod, V., Litti, Y. 2022. Brain Natriuretic Peptide (BNP) Affects Growth and Stress. *Biology*, **11**, 984.

Lopes, D., Moreira, A. S. P., Rey, F., da Costa, E., Melo, T., Maciel, E., Rego, A., Abreu, M. H., Domingues, P., Calado, R., Lillebø, A. I., Rosario Domingues, M. 2019. Lipidomic Signature of the Green Macroalgae *Ulva rigida* Farmed in a Sustainable Integrated Multi-Trophic Aquaculture. *Journal of Applied Phycology*, **31**(2): 1369–1381.

Lopes, D., Rey, F., Melo, T., Ana, A. S., Marques, F., Abreu, M. H., Domingues, P., Domingues, M. R. 2023. Mapping the Polar Lipidome of Macroalgae using LC-MS-Based Approaches for Add-Value Applications. *European Journal of Lipid Science and Technology*, **125**(6): 1–17.

Luesch, H., Chanda, S. K., Raya, R. M., DeJesus, P. D., Orth, A. P., Walker, J. R., Izpisúa Belmonte, J. C., Schultz, P. G. 2006. A Functional Genomics Approach to the Mode of Action of Apratoxin A. *Nature Chemical Biology*,

2(3): 158–167.

Mailani, F. 2023. Asuhan Keperawatan Pada Pasien Systemic Lupus Erythematous (SLE). CV. Aduna Abimata. Indramayu. 78 hal.

Makhlof, M. E. M., Albalwe, F. M., Al-Shaikh, T. M., El-Sheekh, M. M. 2022. Suppression Effect of *Ulva lactuca* Selenium Nanoparticles (USeNPs) on HepG2 Carcinoma Cells Resulting from Degradation of Epidermal Growth Factor Receptor (EGFR) with an Evaluation of Its Antiviral and Antioxidant Activities. *Applied Sciences (Switzerland)*, **12**(22): 1–18.

Maray, S. O., Abdel-Kareem, M. S. M., Mabrouk, M. E. M., El-Halmouch, Y., Makhlof, M. E. M. 2023. In Vitro Assessment of Antiviral, Antimicrobial, Antioxidant and Anticancer Activities of Ulvan Extracted from The Green Seaweed *Ulva lactuca*. *Thalassas*, **39**(1): 1–12.

Marfuah, I., Dewi, E. N., Rianingsih, L. 2018. Kajian Potensi Ekstrak Anggur Laut (*Caulerpa recemosa*) sebagai Antibakteri Terhadap Bakteri *Escherichia coli* dan *Staphylococcus aureus*. *Jurnal Pengolahan dan Bioteknologi Hasil Perikanan*, **7**(1): 7–14.

Maritha, V., Basy, L. L., Hermawatiningsih, O. D., Raising, R., Hariningsih, Y. 2023. Pengenalan Kimia Dasar untuk Farmasi. Uwais Inspirasi Indonesia. Ponorogo. 110 hal.

Marques, A. P. 2023. Search for Bioactive Compounds with Antioxidant and Antibacterial Activity in Seaweed Species from the Portuguese Coast. Universidade NOVA De Lisbon, Lisbon, Portugal. 121 p.

Marques, R., Moreira, A., Cruz, S., Calado, R., Cartaxana, P. 2022. Controlling Light to Optimize Growth and Added Value of the Green Macroalga *Codium tomentosum*. *Frontiers in Marine Science*, **9**(6): 1–11.

Masela, A. 2021. Kandungan Senyawa Fitokimia Ekstrak Kasar Rumput Laut *Ulva conglubata* Menggunakan N-heksan, Etil asetat dan Metanol. *Journal Sekolah Tinggi Ilmu Ekonomi Saumlaki*, **3**(1): 66–84.

Matias, M., Pinteus, S., Martins, A., Silva, J., Alves, C., Mouga, T., Gaspar, H., Pedrosa, R. 2022. Gelidiales are not Just Agar—Revealing the Antimicrobial Potential of *Gelidium corneum* for Skin Disorders. *Antibiotics*, **11**(4): 1-15.

Mayasari, U. 2022. Buku Ajar Mikrobiologi. Media Sains Indonesia. Bandung. 150 hal.

McMaster, M. C. 2005. LC-MS: Practical User's Guide. Wiley. Weinheim. 184 p.

Meinita, M. D. N., Akromah, N., Andriyani, N., Setijanto, Harwanto, D., Liu, T. 2021. Molecular Identification of *Gracilaria* Species (Gracilariales, rhodophyta) Obtained from the South Coast of Java Island, Indonesia. *Biodiversitas*, **22**(7): 3046–3056.

Melnikov, A. D., Tsentalovich, Y. P., Yanshole, V. V. 2020. Deep Learning for the Precise Peak Detection in High-Resolution LC-MS Data. *Analytical Chemistry*, **92**(1): 588–592.

Melton, J. T. and Lopez-Bautista, J. M. 2021. Diversity of the Green Macroalgal Genus *Ulva* (Ulvophyceae, Chlorophyta) from the East and Gulf Coast of the United States Based on Molecular Data. *Journal of Phycology*, **57**(2): 551–568.

Michałowicz, J. 2014. Bisphenol A - Sources, Toxicity, and Biotransformation. *Environmental Toxicology and Pharmacology*, **37**(2): 738–758.

Mofeed, J., Deyab, M., El, A., Sabry, N., Ward, F. 2021. In Vitro Anticancer Activity of Five Marine Seaweeds Extract From Egypt Against Human Breast and Colon Cancer Cell Lines. *Research Square*, **5**(1): 1–15.

Moreira, A., Cruz, S., Marques, R., Cartaxana, P. 2021. The Underexplored Potential of Green Macroalgae in Aquaculture. *Reviews in Aquaculture*, **14**(1): 5–26.

Mulyaningsih, T., Muspiah, A., Sukenti, K., Hidayati, K. 2021. Histokimia Tumbuhan. Nas Media Pustaka. Yogyakarta. 98 hal.

Munawar, M., Khan, M. K., Naeem, K., Hameed, M., Haq, I., Shahab, M., Khan, S., Latif, M., Ahmad, J., Bilal, H., Sajjad, W., Ail, M. Q., Arif, M. R., Pakistan, M. K. 2021. Antibiotic Susceptibility Profile of *Staphylococcus Aureus* and *Micrococcus luteus* Isolated from Tap Water of Hayatabad Medical Complex and Cantonment General Hospital Peshawar. *Annal of R.S.C.B*, **25**(7): 1724–1732.

Murray, C. J., Ikuta, K. S., Sharara, F., Swetschinski, L., Robles, A. G., Gray, A. 2022. Global Burden of Bacterial Antimicrobial Resistance in 2019: A Systematic Analysis. *The Lancet*, **399**(10325): 629–655.

Najib, A. 2018. Ekstraksi Senyawa Bahan Alam. Deepublish. Yogyakarta. 58 hal.

Nasronudin. 2019. Penyakit Infeksi di Indonesia: Solusi Kini dan Mendatang. Unair Press. Surabaya. 528 hal.

Nikmah, U. 2019. Mengenal Rumput Laut. ALPRIN. Semarang. 65 hal.

Ningsih, O. Y., Faizah, A., Achmad, V. S., Utama, Y. A., Sugiharno, R. T., Utama,

Y. A., Wasilah, H., Tondok, S. B., Rahmatillah, N., Suprapto. 2022. Keperawatan Medikal Bedah. PT. Global Eksekutif Teknologi. Padang. 243 hal.

Nugroho, E. D. dan Rahayu, A. 2018. Penuntun Praktikum Bioteknologi. Deepublish. Yogyakarta. 133 hal.

Nugroho, L. H. dan Hartini, Y. S. 2021. Farmakognosi Tumbuhan Obat: Kajian Spesifik Genus Piper. UGM Press. Yogyakarta. 236 hal.

Oroian, M., Dranca, F., Ursachi, F. 2020. Comparative Evaluation of Maceration, Microwave, and Ultrasonic-Assisted Extraction of Phenolic Compounds from Propolis. *Journal of Food Science and Technology*, **57**(1): 70–78.

Pacheco, D. M. 2022. *Seaweeds as Plant Health Promotors*. Universidade De Coimbra, Coimbra, Portugal. 98 p.

Palmiotto, M., Colombo, A., Davoli, E. 2013. A GC/MS-MS Versus GC/HRMS Dioxin Analysis Comparison: Some Critical Considerations for Low-Level Environmental Samples. *Comprehensive Analytical Chemistry*, **61**(1):455–469.

Panjaitan, R. S. dan Natalia, L. 2021. Ekstraksi Polisakarida Sulfat dari *Sargassum polycystum* dengan Metode Microwave Assisted Extraction dan Uji Toksisitasnya. *Jurnal Pascapanen dan Bioteknologi Kelautan dan Perikanan*, **16**(1): 23–32.

Payadna, I. P. A. A. dan Jayantika, I. G. A. N. T. 2018. Panduan Penelitian Eksperimen Beserta Analisis Statistik dengan SPSS. CV. Budi Utama. Yogyakarta. 175 hal.

Pelczar, M. J., Chan, E. C. S., Hadioetomo, R. S. 1998. Dasar-Dasar Mikrobiologi. Universitas Indonesia Press. Jakarta. 443 hal

Pelu, A. D. 2022. Mikrobiologi Aktivitas Antibakteri. CV. Literasi Nusantara Abadi. Malang. 52 hal.

Pokharkar, O., Anumolu, H., Zyryanov, G. V., Tsurkan, M. V. 2023. Natural Products from Red Algal Genus *Laurencia* as Potential Inhibitors of RdRp and nsp15 Enzymes of SARS-CoV-2: An In Silico Perspective. *Microbiology Research*, **14**(3): 1020–1048.

Prasasti, A., Oktafiani, D., Kasiyati, M., Widiyastuti, N. E., Kawitantri, O. H., Susilawati, N. M., Wulandari, E. Y., Warella, J. C., Bria, M., Apriyani. 2023. Mikrobiologi dan Parasitologi. PT. Sada Kurnia Pustaka. Serang. 146 hal.

Praeger, C., Vucko, M. J., Nys, R. de., Cole, A. 2019. Maximising the Productivity

of the Attached Cultivation of *Ulva tepida* in Land-based Systems. *Algal Research*, **40**(4): 1-7.

Prihanto, A. A. dan Jaziri, A. A. 2019. Bioteknologi Perikanan dan Kelautan. UB Press. Malang. 274 hal.

Pudjiastuti, P., Wafiroh, S., Fauzi, M. A. D. 2022. Inovasi Produk Cangkang Kapsul Berbasis Rumput Laut. Airlangga University Press. Surabaya. 126 hal.

Pujiasmanto, B., Sugiarti, R. dan Marwanti. 2022. Pengembangan Wisata Sehat dengan Pemanfaatan Biofarmaka: Tanaman Rempah dan Obat. Yayasan Kita Menulis. Yogyakarta. 122 hal

Purba, A. M. V, Khairani, M., Purba, D. H., Yesti, Y., Manalu, A. I., Puspita, R., Unsunnidal, L., Siagian, E., Erdiandini, I., Budiono. 2021. Mikrobiologi dan Parasitologi. Yayasan Kita Menulis. Medan. 172 hal.

Puspitaningrum, R., Adhiyanto, C., Solihin. 2018. Genetika Molekuler dan Aplikasinya. Depublish. Yogyakarta. 75 hal.

Radiena, M. S. Y., Moniharapon, T., Setha, D. B. 2019. Aktivitas Antibakteri Ekstrak Etil Asetat Alga Hijau Silpau (*Dictyosphaeria versluysii*) Terhadap Bakteri *Escherichia coli*, *Pseudomonas aeruginosa*, dan *Staphylococcus aureus*. *Majalah BIAM*, **15**(1): 41–49.

Radman, S., Cikos, A. M., Flanjak, I., Babic, S., Cizmek, L., Subaric, D., Coz-Rakovac, R., Jokic, S., Jerkovic, I. 2021. Less Polar Compounds and Targeted Antioxidant Potential (In Vitro and In Vivo) of *Codium adhaerens* c. agardh 1822. *Pharmaceuticals*, **14**(9): 1–23.

Rahayu, W. P., Nurjanah, S., Komalasari, E. 2018. *Escherichia coli*: Patogenitas, Analisis, dan Kajian Resiko. IPB Press. Malang. 136 hal.

Rengga, W. D. P. dan Putri, R. D. A. 2021. Kimia Organik 1: Gugus Fungsi dalam Monomer. Perkumpulan Rumah Cemerlang Indonesia. Tasikmalaya. 180 hal.

Rivers, A. R., Weber, K. C., Gardner, T. G., Liu, S., Armstrong, S. D. 2018. ITSxpress: Software to Rapidly Trim Internally Transcribed Spacer Sequences with Quality Scores for Marker Gene Analysis [version 1; peer review: 2 approved]. *F1000Research*, **7**(8): 1–9.

Riyanti, Balansa, W., Liu, Y., Sharma, A., Mihajlovic, S., Hartwig, C., Leis, B., Rieuwpassa, F. J., Ijong, F. G., Wägele, H., König, G. M., Schaberle, T. F. 2020. Selection of Sponge-Associated Bacteria with High Potential for the Production of Antibacterial Compounds. *Scientific Reports*, **10**(1): 1–14.

Rocha-santos, T. and Duarte, A. C. 2014. Introduction to the Analysis of Bioactive Compounds in Marine Samples. *Comprehensive Analytical Chemistry*, **65**(1): 1–13.

Rohman, A. 2020. Analisis Farmasi dengan Kromatografi Cair. Gadjah Mada University Press. Yogyakarta. 338 hal.

Rollando. 2019. Senyawa Antibakteri dari Fungi Endofit. CV. Seribu Bintang. Malang. 95 hal.

Romdoni, T. A., Ristiani, A., Meinita, M. D. N., Marhaeni, B., Setijanto. 2018. Seaweed Species Composition, Abundance and Diversity in Drini and Kondang Merak Beach, Java. *E3S Web of Conferences*, **47**, 03006.

Rumaseuw, F. S., Hamidah, M., Sari, D. R. T., Shafirany, M. Z., Zain, D. N., Tee, S. A., Fauziah, Y., Gianti, L., Safrida, Karmilah, Musdalipah. 2022. Farmakologi Bahan Alam. PT. Global Eksekutif Teknologi Padang. 197 hal.

Rusman, Rahmayani, R. F. I., Mukhlis. 2018. Kimia Larutan. Syah Kuala University Press. Aceh. 122 hal.

Safitri, E. A., Fatmawati, A., Emelda. 2021. Aktivitas Inhibisi Ekstrak Etanolik *Ulva lactuca* terhadap Bakteri *Staphylococcus aureus*. *Pharmaceutical Journal of Indonesia*, **7**(1): 43–48.

Sahin, S. and Kilic, O. 2021. Antioxidant and Antibacterial Activities of Essential Oils and Aromatic Waters of Some Plants Grown in the Highlands. *International Journal of Agriculture, Environment and Food Sciences*, **2**(4l): 133–139.

Saidi, N., Ginting, B., Murniana., Mustanir. 2018. Analisis Metabolis Sekunder. Syiah Kuala University Press. Aceh. 84 hal.

Sanger, F., Nicklen, S., 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.

Sanjeewa, K. K. A., Lee, W., Jeon, Y. 2018. Nutrients and Bioactive Potentials of Edible Green and Red Seaweed in Korea. *Fisheries and Aquatic Sciences*, **21**(19): 1–11.

Sari, B. L., Saptari, H. T., Triastinurmiatiningsih. 2020. Optimasi Metode Microwave-Assisted Extraction (MAE) untuk Menentukan Kadar Flavonoid Total Alga Coklat *Padina australis*. *ALCHEMY Jurnal Penelitian Kimia*, **16**(1): 37–48.

Sasongko, N. D., Samiyarsih, S., Juwarno. 2019. Genetic Variation Among the Scabies-Infested Sweet Potato Cutivars. *International Journal of Current Research*, **11**(7): 5115–5120.

Sathyanathan, C. V., Jyothirmayi, B., Sundaram, L. R., Abhinand, P. A., Eswaramoorthy, R., Gnanambal, K. M. E. 2016. Pheophytin A Isolated from the Seagrass *Syringodium isoetifolium* Plausibly Blocks umuC Proteins of Select Bacterial Pathogens, in Silico. *Journal of Applied Microbiology*, **121**(6): 1592–1602.

Scania, A. E. and Chasani, A. R. 2021. The Anti-bacterial Effect of Phenolic Compounds from Three Species of Marine Macroalgae. *Biodiversitas*, **22**(6): 3412–3417.

Schenk, J. J., Becklund, L. E., Carey, S. J., Fabre, P. P. 2023. What is the "modified" CTAB Protocol? Characterizing Modifications to the CTAB DNA Extraction Protocol. *Applications in Plant Sciences*, **11**(3): 1–11.

Selpia, D. S. dan Saiful, M. 2022. Evaluasi Antioksidan dari Lulur Body Scrub Ekstrak Rumput Laut Merah (*Gelidium* sp.). *Jurnal Ilmiah Pharmmacy*, **9**(4): 11–23.

Setyono, B. D. H., Leheng, S., Mujtahidah, T., Sari, Y. P., Wahyuni, I., Abidin, Z., Sukendar, W., Sulthoniyah, S. T. M., Burhani, A., Yusuf, M. A., Suci, A. N. N., Abdullah, A., Marda, Darmawati, Ode. 2023. Kiat Agribisnis Rumput Laut. CV. Tohar Abadi. Makassar. 282 hal.

Seyer, A., Mlynek, F., Himmelsbach, M., Buchberger, W., Klampfl, C. W. 2020. Investigations on the Uptake and Transformation of Sunscreen Ingredients in Duckweed (*Lemna gibba*) and *Cyperus alternifolius* using High-Performance Liquid Chromatography Drift-Tube Ion-Mobility Quadrupole Time-of-Flight Mass Spectrometry. *Journal of Chromatography A*, **1613**, 460673.

Shannon, P., Markiel, A., Ozier, O., Baliga, N. S., Wang, J. T., Ramage, D., Amin, N., Schwikowski, B., Ideker, T. 2003. Cytoscape: A Software Environment for Integrated Models. *Genome Research*, **13**(22): 2498–2505.

Shin, S. K., Lee, Y., Kwon, H., Rhee, J. S., Kim, J. K. 2021. Validation of Direct Boiling Method for Simple and Efficient Genomic DNA Extraction and PCR-based Macroalgal Species Determination. *Journal of Phycology*, **57**(4): 1368–1372.

Shpigel, M., Shauli, L., Odintsov, V., Ashkenazi, N., Ben-Ezra, D. 2018. Ulva lactuca Biofilter from a Land-based Integrated Multi Trophic Aquaculture (IMTA) System as a Sole Food Source for the Tropical Sea Urchin Tripneustes gratilla elatensis. *Aquaculture*, **496**(6): 221–231.

Siahaan, S., Herman, M. J., Fitri, N. 2022. Antimicrobial Resistance Situation in Indonesia: A Challenge of Multisector and Global Coordination. *Journal of Tropical Medicine*, 1–10.

Sidiq, A. M. and Ravindra, N. T. 2022. Assessment of In vitro Antioxidant Potential of the Polyphenols and the Sulphated Polysaccharides fractions of *Ulva lactuca* and *Turbinaria ornate*. *Journal of Pharmaceutical Research International*, **34**(9): 14–25.

Singh, A., Cizkova, M., Bisova, K.,Vitova, M. 2021. Exploring Mycosporine-Like Amino Acids (Maas) as Safe and Natural Protective Agents Against UV-Induced Skin Damage. *Antioxidants*, **10**(5): 1–23.

Sirbu, R., Stanciu, G., Tomescu, A., Ionescu, A. M., Cadar, E. 2019. Evaluation of Antioxidant and Antimicrobial Activity in Relation to Total Phenolic Content of Green Algae from Black Sea. *Revista de Chimie*, **70**(4): 1197–1203.

Sodiq, A. Q. dan Arisandi, A. 2020. Identifikasi dan Kelimpahan Makroalga di Pantai Selatan Gunungkidul. *Jurnal Ilmiah Kelautan dan Perikanan*, **1**(3): 325–330.

Soliman, M. S. and Tawfik, E. 2020. Identification and Assessment of Genetic Diversity Among *Sargassum* Species from Egypt. *Nucleus*, **64**(2): 229–234.

Stabili, L., Acquaviva, M. I., Angilé, F., Cavallo, R. A., Cecere, E., Del Coco, L., Fanizzi, F. P., Gerardi, C., Narracci, M., Petrocelli, A. 2019. Screening of *Chaetomorpha linum* Lipidic Extract as a New Potential Source of Bioactive Compounds. *Marine Drugs*, **17**(6): 1–20.

Stuart, K. A., Welsh, K., Walker, M. C. dan Edrada-Ebel, R. A. 2020. Metabolomic Tools Used in Marine Natural Product Drug Discovery. *Expert Opinion on Drug Discovery*, **15**(4): 499–522.

Suganya, M., Vikneshan, M., Kumar, R. S., Ravirajan, M., Kalavathy, G., Muthaszeer, M. 2021. Antimicrobial Activity of *Ulva lactuca*, Green Algae, against Common Oral Pathogens. *SBV Journal of Basic, Clinical and Applied Health Science*, **3**(4): 168–170.

Sukandar, T. K., Sinaga, I., Santikawati, S. 2022. Fraksi Aktif Rumput Laut Cokelat (*Sargassum cinereum*) sebagai Antioksidan dan Antibakteri. *Jurnal Penelitian Terapan Perikanan dan Kelautan*, **4**(2): 66–74.

Sukardiman, Agil, M., Prajogo, B., Rahman, A. 2020. Buku Ajar Farmakognosi. Airlangga University Press. Surabaya. 93 hal.

Sumbono, A. 2019. Biomolekul. Deepublish. Sleman. 353 hal.

Sympli, H. D. 2021. Estimation of Drug-Likeness Properties of GC–MS Separated Bioactive Compounds in Rare Medicinal *Pleione maculata* using Molecular Docking Technique and SwissADME in Silico Tools. *Network Modeling Analysis in Health Informatics and Bioinformatics*, **10**(1): 1–36.

Tamura, K., Stecher, G., Kumar, S. 2021. MEGA11: Molecular Evolutionary Genetics Analysis Version 11. *Molecular Biology and Evolution*, **38**(7): 3022–3027.

Tanaka, K., Ohno, M., Largo, D. B. 2020. An Update on the Seaweed Resources of Japan. *Botanica Marina*, **63**(1): 105–117.

Tanna, B., Choudhary, B., Mishra, A. 2018. Metabolite Profiling, Antioxidant, Scavenging and Anti-proliferative Activities of Selected Tropical Green Seaweeds Reveal the Nutraceutical Potential of *Caulerpa* spp.. *Algal Research*, **36**(1): 96–105.

Tapotubun, A. M. 2018. Komposisi Kimia Rumput Laut (*Caulerpa lentillifera*) dari Perairan Kei Maluku dengan Metode Pengeringan Berbeda. *Jurnal Pengolahan Hasil Perikanan Indonesia*, **21**(1): 13–23.

Tarigan, I. L. dan Muadifah. 2020. Senyawa Antibakteri Bahan Alam. Media Nusa Creative. Malang. 80 hal.

Thanigaivel, S., Vijayakumar, S., Mukherjee, A., Chandrasekaran, N., Thomas, J. 2014. Antioxidant and Antibacterial Activity of Chaetomorpha antennina Against Shrimp Pathogen *Vibrio parahaemolyticus*. *Aquaculture*, **433**(1): 467–475.

Verma, M. L. and Chandel, A. K. 2019. Biotechnological Production of Bioactive Compounds. Elsevier Science. Amsterdam. 508 p.

Villalobos, J. P. 2022. *Biogeographical and Phylogenetic Boundaries of the Specialised Metabolism of Pseudonocardia from Marine Origin*. University of Strathclyde, Glasgow, United Kingdom. 196 p.

Wahyuni, D. 2021. Buku Ajar Dasar Biomedik Lanjutan. Deepublish. Yogyakarta. 326 hal.

Wahyuni, Y. A. T., Puspawati, G. A. K. D, Putra, I. N. K. 2021. Pengaruh Jenis Pelarut pada Metode Microwave Assisted Extraction (MAE) terhadap Karakteristik Ekstrak Daun Singkong (*Manihot utilissima* Pohl.). *Jurnal Ilmu dan Teknologi Pangan (ITEPA)*, **10**(4): 566–578.

Wahyuningsih, S., Yunita, I., Sundari, U. Y., Pagalla, D. B., Kalalinggi, S. Y., Nurmalasalim, E., Suryandani, H., Nasrullah, M., Ramlah, Alpian. 2024. Ekstraksi Bahan Alam. CV. Gita Lentera. Padang. 100 hal.

Wang, M., Carver, J. J., Phelan, V. V., Sanchez, L. M., Garg, N., Peng, Y., Nguyen, D. D., Watrous, J., Kapono, C. A., Luzzatto-Knaan, T., Bandeira, N. 2016. Sharing and Community Curation of Mass Spectrometry Data with Global Natural Products Social Molecular Networking. *Nature Biotechnology*, **34**(8): 828–837.

Wang, Y., Zhou, L., Chen, M., Liu, Y., Yang, Y., Lu, T., Ban, F., Hu, X., Qian, Z., Hong, P., Zhang, Y. 2023. Mining Xanthine Oxidase Inhibitors from an Edible Seaweed *Pterocladiella capillacea* by Using In Vitro Bioassays, Affinity Ultrafiltration LC-MS/MS, Metabolomics Tools, and In Silico Prediction. *Marine Drugs*, **21**(10): 1–18.

Wibowo, J. T., Kellermann, M. Y., Versluis, D., Putra, M. Y., Murniasih, T., Mohr, K. I., Wink, J., Engelmann, M., Praditya, D. F., Steinmann, E., Schupp, P. J. 2019. Biotechnological Potential of Bacteria Isolated from the Sea Cucumber *Holothuria leucospilota* and *Stichopus vastus* from Lampung, Indonesia. *Marine Drugs*, **17**(11): 1–25.

Widodo, R. W., Subagiyo, S., Pramesti, R. 2019. Aktivitas Antibakteri Ekstrak Metanol Rumput Laut *Gracilaria verrucosa*, Greville, 1830 (Florideophyceae : Gracilariaceae) di Balai Besar Perikanan Budidaya Air Payau Jepara. *Journal of Marine Research*, **8**(3): 285–290.

Widyartini, D. S., Samiyarsih, S., Retno, T., Paindian, A., Kholilullah, I. 2021. Anatomical Structure of *Sargassum polycystum* Thallus from Menganti and Karimunjawa Beaches, Central Java Indonesia. *Journal of Hunan University (Natural Sciences)*, **48**(10): 265–274.

Wiegand, I., Hilpert, K., Hancock, R. E. W. 2008. Agar and Broth Dilution Methods to Determine the Minimal Inhibitory Concentration (MIC) of Antimicrobial Substances. *Nature Protocols*, **3**(2): 163–175.

Wirawan, I. G. P., Kadek, N., Sintha, E., Malida, M., Sasadara, V., Nengah, I. G., Sunyamurthi, A., Jawi, I. M., Wijaya, I. N., Ayu, I., Darmawati, P., Suada, I. K., Krisnandika, A. A. K. 2022. Phytochemical Analysis and Molecular Identification of Green Macroalgae *Caulerpa* spp. from Bali, Indonesia. *Molecules*, **27**(4879): 1–13.

Wong, T. S. and Tae, K. L. 2020. A Practical Guide to Protein Engineering. Springer. Sheffieeld. 202 p.

World Health Organization. 1991. Triphenyl Phosphate. Environmental Health Criteria 111; World Health Organization. Geneva. 80 p.

Wu, C. H. and Chu, J. 2021. Total Synthesis and Antimicrobial Evaluation of Pagoamide A. *Frontiers in Chemistry*, **9**(1): 1–6.

Yang, L., Dai, L., Qin, W., Wang, Y., Zhao, J., Pan, S., He, D. 2024. Chemical Constituent Characterization and Determination of *Quisqualis fructus* Based on UPLC-Q-TOF- MS and HPLC Combined with Fingerprint and Chemometric analysis. *Frontiers in Plant Science*, **15**, 1418480.

Yang, Y., Zhang, M., Alalawy, A. I., Almutairi, F. M., Al-Duais, M. A., Wang, J., Salama, E. S. 2021. Identification and Characterization of Marine Seaweeds for Biocompounds Production. *Environmental Technology and Innovation*, ***24***, 101848.

Yusuf, M. dan Daris, L. 2018. Analisis Data Penelitian: Teori dan Aplikasi dalam Bidang Perikanan. IPB Press. Bogor. 204 hal.

Zhang, C., Lu, J., Wu, J. dan Luo, Y. 2019. Phycoremediation of Coastal Waters Contaminated with Bisphenol A by Green Tidal Algae *Ulva prolifera*. *Science of the Total Environment*, **661**(1): 55–62.

Zhang, C., Yang, Y., Liu, F., Wang, Y., Chen, G. 2022. Recombinase Polymerase Amplification Combined with Lateral Flow Dipstick for the Rapid Detection of *Chattonella marina*. *Journal of Applied Phycology*, **34**: 1607–1620.

Zhang, R., Zhang, Y., Zhang, T., Xu, M., Wang, H., Zhang, S., Zhang, T., Zhou, W., Shi, G. 2022. Establishig a MALDI-TOF-TOF-MS Method for Rapid Identification of Three Common Gram-positive Bacteria (*Bacillus cereus*, *Listeria monocytogenes*, and *Micrococcus luteus*) Associated with Foodborne Diseases. *Food Science and Technology (Brazil)*, **42**: 1–9.

Zuccarello, G. C. and Paul, N. A. 2019. A Beginner's Guide to Molecular Identification of Seaweed. *Squalen Bulletin of Marine and Fisheries Postharvest and Biotechnology*, **14**(1): 43–53.