



DAFTAR PUSTAKA

1. Al-Jbory, M.J., Al-Mayaly, I.K.A. 2019. Evaluation of the activity of the Diatom *Navicula incerta* cultivated in different environments against several species of pathogenic bacteria. *Iraqi Journal of Science*. 60(3): 486-493.
2. Amin, S.A., Parker, M.S., Armbrust, E.V. 2012. Interactions between Diatoms and Bacteria. *Microbiology and Molecular Biology Reviews*. 76(3): 667-684.
3. Angelis, S., Novak, A.C., Sydney, E.B., Soccol, V.T., Carvalho, J.C., Pandey, A., Noseda, M.D., Tholozan, J.L., Lorquin, J., Soccol, C.R. 2012. Co-culture of Microalgae, Cyanobacteria, and Macromycetes for exopolysaccharides production: process preliminary optimization and partial characterization. *Applied Biochemistry and Biotechnology*. 167: 1092-1106.
4. Babiak, W., Krzeminska, I. 2021. Extracellular Polymeric Substances (EPS) as Microalgal Bioproducts: A Review of Factors Affecting EPS Synthesis and Application in Flocculation Processes. *Energies*. 14: 4007.
5. Baridreddy, A.R., Chellam, S., Gassman, P.L., Engelhard, M.H., Lea, A.S., Rosso, K.M. 2010. Role of extracellular polymeric substances in bioflocculation of activated sludge microorganisms under glucose-controlled conditions. *Water Research*. 44(2010): 4505-4516.
6. Barranguet, C., Veuger, B., Van Beusekom, S.A.M., Marvan, P., Sinke, J.J., Admiraal, W. 2005. Divergent composition of algal-bacterial biofilms developing under various external factors. *European Journal of Phycology*. 40(1): 1-8.
7. Bhosle, N.B., Sawant, S.S, Garg, A., Wagh, A.B. 1995. Isolation and Partial Chemical Analysis of Exopolysaccharides from the marine Fouling Diatom *Navicula subinflata*. *Botanica Marina*. 38(2): 103-110.
8. Bligh, E.G., Dyer, W.J. 1959. A rapid method of total lipid extraction and purification. *Canadian Journal of Biochemistry and Physiology*. 37(8): 911-917.
9. Bold, H.C. 1949. The Morphology of *Chlamydomonas chlamydogama*, Sp. Nov. *Bulletin of the Torrey Botanical Club*. 76(2): 101–108.



10. Breil, C., Vian, M.A., Zemb, T., Kunz, W., Chemat, F. 2017. "Bligh and Dyer" and Folch methods for solid-liquid-liquid extraction of lipids from microorganisms. comprehension of solvation mechanisms and towards substitution with alternative solvents. *International Journal of Molecular Sciences*. 18(708).
11. Brouwer, J.F.C., Stal, L.J. 2001. Short-term dynamics in microphytobenthos distribution and associated extracellular carbohydrates in surface sediments of an intertidal mudflat. *Marine Ecology Progress Series*. 218: 33-44.
12. Chen, L.Z., Li, D.H., Song, L.R., Hu, C.X., Wang, G.H., Liu, Y.D. 2006. Effects of salt stress on carbohydrate metabolism in desert soil alga *Microcoleus vaginatus*. *Journal of Integrative Plant Biology*. 48(8): 914-919
13. Cheng, Y.S., Zheng, Y., Labavitch, J.M., VanderGheynst, J.S. 2011. The impact of cell wall carbohydrate composition on the chitosan flocculation of *Chlorella*. *Process Biochemistry*. 46: 1927-1933.
14. Congestri, R., and Albertano, P. 2011. Benthic Diatoms in Biofilm Culture. In. Seckbach, J., and Kociolek, J.P. (eds). 2011. *The Diatom World*. Springer. New York. pp 227-243.
15. Cruz, D., Vasconcelos, V., Pierre, G., Michaud, P., Delattre, C. 2020. Exopolysaccharides from Cyanobacteria: Strategies for bioprocess development. *Applied Sciences*. 10:3763.
16. Delattre, C., Pierre, G., Laroche, C., Michaud, P. 2016. Production, extraction and characterization of microalgal and cyanobacterial exopolysaccharides. *Biotechnology Advances*. 34(7): 1159-1179.
17. Deng, X., Li, Y., Fei, X. 2009. Microalgae: a promising feedstock for biodiesel. *African Journal of Microbiology Research*. 3(13): 1008-1014.
18. Di Pippo, F., Ellwood, N.T.W., Gismondi, A., Bruno, L., Rossi, F., Magni, P., Philippis, R.D. 2012. Characterisation of exopolysaccharides produced by seven biofilm-forming cyanobacteria strains for biotechnological applications. *Journal of Applied Phycology*. 25: 1697-1708.
19. DuBois, M., Gilles, K.A., Hamilton, J.K., Rebers, P.A., Smith, F. 1956. Colorimetric method for determination of sugars and related substances. *Analytical Chemistry*. 28(3): 350-356.



20. Fuentes, J.L., Garbayo, I., Cuaresma, M., Montero, Z., Gonzales-del-Valle, M., Vilchez, C. 2016. Impact of microalgae-bacteria interactions on the production of algal biomass and associated compounds. *Marine Drugs*. 14(100).
21. Giordano, M., and Wang, Q. 2018. Microalgae for Industrial Purposes. In Vaz J, S. *Biomass and Green Chemistry*. P: 133-167.
22. Gomez-Ramirez, A.L., Enriquez-Ocaña, L.F., Miranda-Baeza, A., Esquivel, B.C., López-Elías, J.A., Martínez-Córdova, L.R. 2019. Biofilm-forming capacity of two benthic microalgae, *Navicula incerta* and *Navicula* sp., on three substrates (Naviculales: Naviculaceae). *Revista de Biología Tropical*. 67(3): 599-607.
23. Guillard, R. R. L. 1975. Culture of phytoplankton for feeding marine invertebrates. In: Smith, W. L., and Chanley, M. H., (eds). *Culture of Marine Invertebrate Animals*. Plenum Press. New York. pp. 26–60.
24. Guillard, R.R.L., Sieracki, M.S. 2005. Counting Cells in Cultures with the Light Microscope. In Andersen, R.A. (eds). *Algal Culturing Techniques*. Elsevier Academic Press. pp: 239-252.
25. Gupta, G.N., Tiwari, S.K., Lawrence, K., Lawrence, R.S. 2011. Effect of silicon on growth and biodiesel production in fresh water diatoms. *Plant Archives*. 11(2): 673-676.
26. Govindan, N., Maniam, G.P., Rahim, M.H.A., Sulaiman, A.Z., Ajit, A., Chatsungnoen, T., Chisti, Y. 2021. Production of renewable lipids by the Diatom *Amphora copulata*. *Fermentation*. 7(1): 37.
27. Helliwell, K.E., Kleiner, F.H., Hardstaff, H., Chrachri, A., Gaikwad, T., Salmon, D., Smirnoff, N., Wheeler, G.L., Brownlee, C. 2021. Spatiotemporal patterns of intracellular Ca²⁺ signalling govern hypo-osmotic stress resilience in marine diatoms. *New Phytologist*. 230(1): 2021.
28. Hess, S.K., Lepetit, B., Kroth, P.G., Mecking, S. 2018. Production of chemicals from microalgae lipids - status and perspectives. *European Journal of Lipid Science and Technology*. 120(2018).
29. Jiménez-Ordaz, F.J., Cadena-Roa, M.A., Pacheco-Vega, J.M., Rojas-Contreras, M., Tovar-Ramírez, D., Arce-Amezquita, P.M. 2021. Microalgae



and probiotic bacteria as biofloc inducers in hyper-intensive pacific white shrimp (*Penaeus vannamei*) culture. *Latin American Journal of Aquatic Research.* 49(1): 2021.

30. Jindal, N., Singh, D.P., Khattar, J.I.S. 2011. Kinetics and physio-chemical characterization of exopolysaccharides produced by the cyanobacterium *Oscillatoria formosa*. *World Journal of Microbiology and Biotechnology.* 27: 2139-2146.
31. Kapoore, R.V., Padmaperuma, G., Maneein, S., Vaidyanathan, S. 2021. Co-culturing microbial consortia: approaches for applications in biomanufacturing and bioprocessing. *Critical Reviews in Biotechnology.* 1(1): 1-27.
32. Khatoon, H., Banerjee, S., Yusoff, F.M., Shariff, M. 2010. Effects of salinity on the growth and proximate composition of selected tropical marine periphytic diatoms and cyanobacteria. *Agriculture Research.* 41(9): 1348-1355.
33. Klock, J.H., Wieland, A., Seifert, R., Michaelis, W. 2007. Extracellular polymeric substances (EPS) from cyanobacterial mats: characterisation and isolation method optimisation. *Marine Biology.* 152:1077-1085.
34. Kumar, D., Kastanek, P., Adhikary, S.P. 2018. Exopolysaccharides from cyanobacteria and microalgae and their commercial application. *Current Science.* 115(2): 234-241.
35. Li, P., Harding, S.E., Liu, Z. 2001. Cyanobacterial exopolysaccharides: their nature and potential biotechnological applications. *Biotechnology and Genetic Engineering Reviews.* 18(1): 375-404.
36. Li, Y., Xu, Y., Song, R., Tian, C., Liu, L. Zheng, T., Wang, H. 2018. Flocculation characteristics of a bioflocculant produced by the actinomycete *Streptomyces* sp. Hsn06 on microalgae biomass. *BMC Biotechnology* 18:58.
37. Lutfi, M., Nugroho, W.A., Fridayetsu, W.P., Susilo, B., Pulmar, C., Sandra, S. 2019. Bioflocculation of two species of microalgae by exopolysaccharide of *Bacillus subtilis*. *Nature Environment and Pollution Technology.* 18(1): 167-173.



38. Majid, M., Shafqat, S., Inam, H., Hashmi, U., Kazi, A.G. 2014. Production of Algal Biomass. In Hakeem, K.R. Jawaaid, M., Rashid, U. *Biomass and Bioenergy: Processing and Properties*. P: 207-224.
39. Matter, I.A., Bui, V.K.H., Jung, M., Seo, J.Y., Kim, Y.E., Lee, Y.C., Oh, Y.K. 2019. Flocculation harvesting techniques for microalgae: a review. *Applied Sciences*. 9(15):3069.
40. Mishra, A., Jha, B. 2009. Isolation and characterization of extracellular polymeric substances from micro-algae *Dunaliella salina* under salt stress. *Bioresource Biotechnology*. 100(13): 3382-3386.
41. Moheimani, N.R., Borowitzka, M.A., Isdepsky, A., Sing, S.F. 2013. Standard Methods for Measuring Growth of Algae and Their Composition. In. Borowitzka, M.A., Moheimani, N.R. (eds). *Algae for Biofuel and Energy*. Springer. pp: 265-284.
42. Nagasathya, A., Thajuddin, N. 2008. Diatom diversity in hypersaline environment. *Journal of Fisheries and Aquatic Science*. 3: 328-333.
43. Noerdjito, D.R. 2017. Perkembangan, produksi, dan peran kultur mikroalga laut dalam industri. *Oseana*. 42(1): 18-27.
44. Nouha, K., Kumar, R.S., Balasubramanian, S., Tyagi, R.D. 2017. Critical review of EPS production, synthesis, and composition for sludge flocculation. *Journal of Environmetal Sciences*. 66: 225-245.
45. Novaryatiin, S., B. Priyanto, A. Masduki. Isolasi dan karakterisasi potensi biodiesel mikroalga air tawar yang dikoleksi dari beberapa perairan umum sekitar Tangerang dan Bogor. *Jurnal Surya Medika*. 1 (1): 23- 30.
46. Ozturk, S., and Aslim, B. 2010. Modification of exopolysaccharide composition and production by three cyanobacterial isolates under salt stress. *Environmental Science and Pollution Research*. 17: 595-602.
47. Pandit, P.R., Fulekar, M.H., Karuna, M.S.L. 2017. Effect of salinity stress on growth, lipid productivity, fatty acid composition, and biodiesel properties in *Acutodesmus obliquus* and *Chlorella vulgaris*. *Environmental Science and Pollution Research*. 24(15): 13437-13451.



48. Peng, J., Yuang, J.P., Wu, C.F., Wang, J.H. 2011. Fucoxanthin, a marine carotenoid present in brown seaweeds and diatoms: metabolism and bioactivities relevant to human health. *Marine Drugs*. 9(10): 1806-1828.
49. Priyadarshani, I., and Rath, B. 2012. Commercial and industrial applications of micro algae. - a review. *Journal of Algal Biomass Utilization*. 3(4): 89-100.
50. Rahman, K.M. 2020. Food and High Value Products from Microalgae: Market Opportunities and Challenges. In Alam, M.D., Xu, J.L., and Wang, Z. *Microalgae Biotechnology for Food, Health and High Value Products*. 1st ed. Springer. pp. 3-27.
51. Rahmawati, A. 2020. Bioflokulasi konsorsium glagah dengan *Anabaena* sp.. *Thesis*. Yogyakarta: Universitas Gadjah Mada.
52. Rahmawati, B., Ilmi, M., Budiman, A., Suyono, E.A. 2020. Screening of IAA production on the interaction of microalgae and bacteria in the Glagah Consortium. *Biosciences Biotechnology Research Asia*. 17(1): 45-52.
53. Ravindran, B., Gupta, S.K., Cho, W.M., Kim, J.K., Lee, S.R., Jeong, K.H., Lee, D.J., Choi, H.C. 2016. Microalgae potential and multiples roles- current progress and future prospects- an overview. *Sustainability*. 8 (12): 1215.
54. Sabu, S., Singh, I.S.B., Joseph, V. 2019. Improved lipid production in oleaginous brackish diatom *Navicula phyllepta* MACC8 using two-stage cultivation approach. *3 Biotech*. 9(12): 437.
55. Sadaatkhah, A., Sobhanian, H., Zoufan, P., Amini, F., Soltani, N. 2020. Interaction of nitrogen and silicate fluctuations with salt stress on growth, and lipid production in *Navicula* sp. *Iranian Journal of Fisheries Sciences*. 19(6): 3310-3326.
56. Sahoo K., Sahoo R.K., Gaur M., Subudhi E. 2019. Algal-Bacterial System: A Novel Low-Cost Biotechnological Initiative in Wastewater Treatment. In: Sukla L., Subudhi E., Pradhan D. (eds) *The Role of Microalgae in Wastewater Treatment*. Springer. Singapore. pp 115-127.
57. Salim, S., Bosma, R., Vermue, M.H., Wijffels, R.H. 2011. Harvesting of microalgae by bio-flocculation. *Journal of Applied Phycology*. 23(95): 849-855.



58. Salim, S., Vermue, M.H., Wijffels, R.H. 2012. Ratio between autoflocculating and target microalgae affects the energy-efficient harvesting by bio-flocculation. *Bioresource Technology*. 118(2012): 49-55.
59. Seckbach, J., and Kociolek, J.P. (eds). 2011. *The Diatom World*. Springer. New York. p: xi.
60. Shniukova, E.J., Zolotareva, E.K. 2015. Diatom Exopolysaccharides: a Review. *International Journal on Algae*. 17(1): 50-67.
61. Singh, A., Nigam, P.S., Murphy, J.D. 2011. Mechanism and challenges in commercialisation of algal biofuels. *Bioresource Technology*. 102:26-34.
62. Singh, G., Patidar, S.K. 2018. Microalgae harvesting techniques: a review. *Journal of Environmental Management*. 217: 499-508.
63. Spilling, K., Seppala, J., Tamminen, T. 2010. Inducing autoflocculation in the diatom *Phaeodactylum tricornutum* through CO₂ regulation. *Journal of Applied Phycology*. 23: 959-966.
64. Steele, D.J., Franklin, D.J., Underwood, G.J.C. 2014. Protection of cells from salinity stress by extracellular polymeric substances in diatom biofilms. *Biofouling*. 30(8): 987-998.
65. Sudibyo, H., Pradana, Y.S., Samudra, T.T., Budiman, A., Indarto, I., Suyono, E.A. 2017. Study of cultivation under different colors of light and growth kinetic study of *Chlorella zofingiensis* Donz for biofuel production. *Energy Procedia*. 105: 270-276.
66. Suyono, E.A., Haryadi, W., Zusron, M., Nuhamunada, M., Rahayu, S., Nugroho, A.P. 2015. The effect of salinity on growth, dry weight and lipid content of the mixed microalgae culture isolated from Glagah as biodiesel substrate. *Journal of Life Sciences*. 9(2015): 229-233.
67. Suyono, E.A., Fahrunnida, F., Nopitasari, S., Utama, I.V. 2016. Identification of microalgae species and lipid profiling of Glagah consortium for biodiesel development from local marine resource. *Asian Research Publishing Network (ARPN)*. 11(16): 9970-9973.
68. Suyono, E.A., Retnaningrum, E., Ajijah, N. 2018. Bacterial symbionts isolated from mixed microalgae culture of Glagah strains. *International Journal of Agriculture and Biology*. 20: 33-36.



69. Underwood, G.J.C., Boulcott, M., Raines, C.A., Waldron, K. 2004. Environmental effects on exopolymer production by marine benthic diatoms: dynamics, changes in composition, and pathways of production. *Journal of Phycology*. 40: 293-304.
70. Van de Vijver, B., Zidarova, R., Sterken, M., Verleyen, E., de Haan, M., Vyverman, W., Hinz, F., Sabbe, K. 2011. Revision of genus *Navicula* s.s. (Bacillariophyceae) in inland waters of the Sub-Antarctic and Antarctic with the description of five new species. *Phycologia*. 50(3): 281-297.
71. Wang, J.K., Seibert, M. 2017. Prospects for commercial production of diatoms. *Biotechnology for Biofuels*. 10:16.