

REFERENCES

- Anggraini, L., Widiastuti, E.L. and Murwani, S., 2016. Pengaruh Pemberian Stress Osmotik Terhadap Kadar Total Lipid Mikroalga *Porphyridium sp.* dan *Isochrysis sp.* Pada Salinitas yang Berbeda. *Jurnal Ilmiah Biologi Eksperimen dan Keanekaragaman Hayati (J-BEKH)*, 3(1), pp.57-65.
- Afifah, A.S., 2021. Variation of Addition of Nutrients (Liquid NPK) in Microalgae Cultivation of *Chlorella Sp.* *Journal of Natural Resources and Environmental Management*, 11(1), pp.101-107.
- Afriza, Z., Diansyah, G., & Sunaryo, A. I. 2015. Pengaruh pemberian pupuk urea (CH₄N₂O) dengan dosis berbeda terhadap kepadatan sel dan laju pertumbuhan *Porphyridium sp.* pada kultur fitoplankton skala laboratorium. *Maspari Journal: Marine Science Research*, 7(2), 33-40.
- Arinta, R.P.R., 2012. *Pengaruh konsentrasi limbah cair tapioka terhadap pertumbuhan dan kadar lipid yang dihasilkan oleh Scenedesmus sp* (Doctoral dissertation, Universitas Islam Negeri Maulana Malik Ibrahim).
- Asia, N., Idris, M., Rahman, A., Kurnia, A., & Effendy, I. J. 2018. Identifikasi Jenis dan Kepadatan Bentik Mikroalga dari *Enhalus acoroides* dan *Gracillaria arcuata* yang Dikultur pada Bak Sistem IMTA (Integrated Multi Trophic Aquaculture). *Media Akuatika*, 3(1): 581-589.
- Aslam, A., Rasul, S., Bahadar, A., Hossain, N., Saleem, M., Hussain, S., Rasool, L., & Manzoor, H. 2021. Effect of Micronutrient and Hormone on Microalgae Growth Assessment for Biofuel Feedstock. *Sustainability*, 13(9), 5035.
- Bombo, G., Cristofoli, N.L., Santos, T.F., Schüler, L., Maia, I.B., Pereira, H., Barreira, L. and Varela, J., 2023. *Dunaliella viridis* TAV01: A Halotolerant, Protein-Rich Microalga from the Algarve Coast. *Applied Sciences*, 13(4), p.2146.
- Borowitzka, M.A., 1988. Algal growth media and sources of algal cultures. In *Microalgal biotechnology* (pp. 456-465). Cambridge University Press.
- Casas-Arrojo, V., Decara, J., de los Ángeles Arrojo-Agudo, M., Pérez-Manríquez, C. and Abdala-Díaz, R.T., 2021. Immunomodulatory, antioxidant activity and cytotoxic effect of sulfated polysaccharides from *Porphyridium cruentum*.(sf Gray) Nägeli. *Biomolecules*, 11(4), p.488.
- Chai, M. K., Tan, Y. H., & Wong, L. S. 2020. Macronutrient effect on biomass of Microalgae in biofuel production: A review. *Indian Journal of Science and Technology*, 13(22), 2245-2263.
- Chowdury, K. H., Nahar, N., & Deb, U. K. 2020. The growth factors involved in microalgae cultivation for biofuel production: a review. *Computational Water, Energy, and Environmental Engineering*, 9(4), 185-215.
- Djunaedi, A., Suryono, C. A. & Sardjito., 2017. Kandungan Pigmen Polar dan Biomassa pada Mikroalga *Dunaliella salina* dengan Salinitas Berbeda. *Jurnal Kelautan Tropis*, 20(1), pp. 1-6.
- Dolganyuk, V., Belova, D., Babich, O., Prosekov, A., Ivanova, S., Katserov, D. & Sukhikh, S. 2020. Microalgae: A promising source of valuable bioproducts. *Biomolecules*, 10(8), 1153.

- Dufossé, L., Galaup, P., Yaron, A., Arad, S.M., Blanc, P., Murthy, K.N.C. and Ravishankar, G.A., 2005. Microorganisms and microalgae as sources of pigments for food use: a scientific oddity or an industrial reality?. *Trends in Food Science & Technology*, 16(9), pp.389-406.
- Edhy, W., Pribadi, A. J. & Kurniawan, 2003. *Plankton di Lingkungan PT. Central Pertiwi Bahari : Suatu Pendekatan Biologi dan Manajemen Plankton dalam Budidaya Udang*. Lampung: Central Pertiwi Bahari.
- Ferreira, A. S., Mendonça, I., Pova, I., Carvalho, H., Correia, A., Vilanova, M. & Nunes, C. (2021). Impact of growth medium salinity on galactoxylan exopolysaccharides of *Porphyridium purpureum*. *Algal Research*, 59, 102439.
- Guihéneuf, F., & Stengel, D. B. 2015. Towards the biorefinery concept: Interaction of light, temperature and nitrogen for optimizing the co-production of high-value compounds in *Porphyridium purpureum*. *Algal research*, 10, 152-163.
- Gujar, A., Cui, H., Ji, C., Kubar, M.S. and Li, R., 2020. Optimizing Culture System to Promote Cell Growth and Polysaccharides Contents of *Porphyridium cruentum*. *Fresenius Environmental Bulletin*. 29(8), pp.6738-6747.
- Hadiyanto, H. and Nur, M.A., 2012. *Mikroalga: Sumber Pangan & Energi Masa Depan*.
- Hasanah, H., Setyaningsih, I. and Uju, U., 2016. Harvesting and separation technique of *Porphyridium cruentum* polysaccharide using ultrafiltration membrane. *Jurnal Pengolahan Hasil Perikanan Indonesia*, 19(2), pp.110-120.
- Herawati, V.E., Hutabarat, J. and Radjasa, O.K., 2014. Nutritional Content of *Artemia* sp. Fed with *Chaetoceros calcitrans* and *Skeletonema costatum*. *HAYATI Journal of Biosciences*, 21(4), pp.166-172.
- Iba, W., Utami, C., & Balubi, A. M. 2019. The Growth of *Chlorella vulgaris* Cultured in Liquid Organic Fertilizer of Water Hyacinth (Eichhornia crassipes) at Different Salinities. *Aquacultura Indonesiana*, 20(2).
- Isnansetyo, A. & Kurniastuty, I., 1995. *Teknik Kultur Phytoplankton dan Zooplankton*. Yogyakarta: Kanisius.
- Istirokhatun, T., Aulia, M. and Utomo, S., 2017. Potensi *Chlorella* sp. untuk menyisihkan COD dan nitrat dalam limbah cair tahu. *Jurnal Presipitasi: Media Komunikasi dan Pengembangan Teknik Lingkungan*, 14(2), pp.88-96.
- Juneja, A., Ceballos, R.M. and Murthy, G.S., 2013. Effects of environmental factors and nutrient availability on the biochemical composition of algae for biofuels production: a review. *Energies*, 6(9), pp.4607-4638.
- Lee, E., Jalalizadeh, M., & Zhang, Q. 2015. Growth kinetic models for microalgae cultivation: A review. *Algal research*, 12, 497-512.
- Lu, X., Nan, F., Feng, J., Lv, J., Liu, Q., Liu, X., & Xie, S. 2020. Effects of different environmental factors on the growth and bioactive substance accumulation of *Porphyridium purpureum*. *International Journal of Environmental Research and Public Health*, 17(7), 2221.
- Maltsev, Y., Maltseva, K., Kulikovskiy, M., & Maltseva, S. 2021. Influence of light conditions on microalgae growth and content of lipids, carotenoids, and fatty acid composition. *Biology*, 10(10), 1060.

- Manan, A. and Sari, I.P., 2012. Pola Pertumbuhan *Nannochloropsis oculata* pada Kultur Skala Laboratorium, Intermediet, dan Massal [Patterns Growth of *Nannochloropsis oculata* In Culture Scale Laboratory, Intermediate, and Bulk]. *None*, 4(2), pp.123-127.
- Moreno-Garcia, L., Gariépy, Y., Barnabé, S., & Raghavan, G. S. V. 2019. Effect of environmental factors on the biomass and lipid production of microalgae grown in wastewaters. *Algal Research*, 41, 101521.
- Mutia, S., Nedi, S. and Elizal, E., 2021. Effect of Nitrate and Phospate Concentration on *Spirulina platensis* with Indoor Scale. *Asian Journal of Aquatic Sciences*, 4(1), pp.29-35.
- Mutmainnah, N., Risjani, Y., & Hertika, A. M. S. (2018). Growth rate and chemical composition of secondary metabolite extracellular polysaccharide (EPS) in microalga porphyridium cruentum. *The Journal of Experimental Life Science*, 8(2), 97-102.
- Noerdjito, D.R., 2017. Perkembangan, Produksi, dan Peran Kultur Mikroalga Laut dalam Industri. *OSEANA*, 42(1), pp.18-27.
- Nurmalasari, N., Rusyani, E., Chandra, I., Anwar, S., & Fitriyanti, R. (2020). Laju Pertumbuhan Spesifik Diaphanosoma SP. Dengan Pakan Chaetoceros SP., Nannochloropsis SP., Porphyridium SP., Dan Tetraselmis SP. *Jurnal Ilmu-ilmu Perikanan dan Budidaya Perairan*, 15(1), 21-27.
- Ochthreeani, A.M. and Soedarsono, P., 2014. Pengaruh perbedaan jenis pupuk terhadap pertumbuhan *Nannochloropsis* sp. dilihat dari kepadatan sel dan klorofil α pada skala semi massal. *Management of Aquatic Resources Journal (MAQUARES)*, 3(2), pp.102-108.
- Oktovianus, S.G. 2018. Mikroalga: Sumber Energi Terbaru Masa Depan. *Jurnal Kelautan*, 11(1): 95-103.
- Pacheco, D., Rocha, A. C., Pereira, L., & Verdelhos, T. 2020. Microalgae water bioremediation: trends and hot topics. *Applied Sciences*, 10(5), 1886.
- Pandit, P.R., Fulekar, M.H. and 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, pp.13437-13451.
- Price, K. and Farag, I.H., 2013. Resources conservation in microalgae biodiesel production. *International Journal of Engineering and Technical Research*, 1(8), pp.49-56
- Rafaelina, M., 2015. Pertumbuhan dan Aktivitas Antioksidan Dari Mikroalga *Porphyridium cruentum* dan *Chlorella* sp (Doctoral dissertation, Universitas Negeri Jakarta).
- Raja, R., Shanmugam, H., Ganesan, V. and Carvalho, I.S., 2014. Biomass from microalgae: an overview. *Oceanography*, 2(1), pp.1-7.
- Rasool S, Hameed A, Azooz MM, Siddiqi TO, Ahmad P. 2012. Salt stress: cause, types and responses of plants. In: Ahmad P, Azooz MM, Prasad MNV (eds) *Ecophysiology and responses of plants under salt stress*. Springer, London, pp 1–24.

- Richmond, A. ed., 2004. *Handbook of microalgal culture: biotechnology and applied phycology* (Vol. 577). Oxford: Blackwell science.
- Rinawati, M., Sari, L.A. and Pursetyo, K.T., 2020. Chlorophyll and carotenoids analysis spectrophotometer using method on microalgae. In *IOP Conference Series: Earth and Environmental Science* (Vol. 441, No. 1, p. 012056). IOP Publishing.
- Safi, C., Charton, M., Pignolet, O., Pontalier, P.Y. and Vaca-Garcia, C., 2013. Evaluation of the protein quality of *Porphyridium cruentum*. *Journal of applied phycology*, 25, pp.497-501.
- Sanep, J. V., Kemer, K., Mantiri, D. M., Paulus, J. J., Mamujaja, J. M., & Tombokan, J. L. 2023. Effect Of Lead Acetate (Pb (Ch3coo) 2) On The Growth Of Marine Microalgae *Porphyridium cruentum*. *Jurnal Ilmiah PLATAX*, 11(1), 253-258.
- Sartika, I. D., Mohaemin, M. & Maharani, H. W., 2013. Kandngan Protein Total (*Crude Protein*) *Brachionus Plicatilis* dengan Pemberian Pakan *Nannochloropsis* sp. pad Kondisi Stress Lingkungan Mikro (Micro Environmental Stress). *Jurnal Rekayasa dan Teknologi Budidaya Perairan*, 1(2), pp. 211-216.
- Sudarmadji, S., & Haryono, B. Suhardi. 1996. Analisa Bahan Makanan dan Pertanian. *Liberty. Yogyakarta*.
- Tambaru, R., Burhanuddin, A. I., Massinai, A., & Amran, M. A. 2021. Detection of marine microalgae (phytoplankton) quality to support seafood health: A case study on the west coast of South Sulawesi, Indonesia. *Biodiversitas Journal of Biological Diversity*, 22(11).
- Wang, Y., Tibbetts, S. M., & McGinn, P. J. 2021. Microalgae as sources of high-quality protein for human food and protein supplements. *Foods*, 10(12), 3002.
- Yousuf, A., 2020. Fundamentals of microalgae cultivation. In *Microalgae cultivation for biofuels production* (pp. 1-9). Academic Press.
- Zhuang, L.L., Yu, D., Zhang, J., Liu, F.F., Wu, Y.H., Zhang, T.Y., Dao, G.H. and Hu, H.Y., 2018. The characteristics and influencing factors of the attached microalgae cultivation: A review. *Renewable and Sustainable Energy Reviews*, 94, pp.1110-1119.