DAFTAR PUSTAKA

Abdurrachman, O., Mutiara, M., & Buchori, L. (2013). Pengikatan Karbon Dioksida dengan mikroalga (Chlorella vulgaris, Chlamydomonas sp., Spirullina sp.) Dalam upaya untuk meningkatkan kemurnian biogas. *Jurnal Teknologi Kimia dan Industri, 2*(4), 212-216.

Adenan, N. S., Yusoff, F. M., & Shariff, M. (2013). Effect of salinity and temperature on the growth of diatoms and green algae. *Journal of Fisheries and Aquatic Science*, *8*(2), 397.

Afrianita, R., Tivany, E., & Aroiya, A. (2017). Analisis Intrusi Air Laut dengan Pengukuran Total Dissolved Solids (TDS) Air Sumur Gali di Kecamatan Padang Utara. *Jurnal Teknik Lingkungan UNAND*, 14(1), 62-72.

Ambrosius, W. T. (2007). *Topics in biostatistics*.

Audin, A. (2019, February 16). Tutorial Mengakses Turbidity Sensor atau Sensor Kekeruhan air. Retrieved August 2, 2023, from Nyebarilmu website: https://www.nyebarilmu.com/tutorial-mengakses-turbidity-sensor-atau-sensor-kekeruhan-air/

Benavides, M., Mailier, J., Hantson, A. L., Muñoz, G., Vargas, A., Van Impe, J., & Wouwer, A. V. (2015). Design and test of a low-cost RGB sensor for online measurement of microalgae concentration within a photo-bioreactor. *Sensors*, *15*(3), 4766-4780.

Bondarenko, O., Kininmonth, S., & Kingsford, M. (2007). Under Water Sensor Network, Oceanography and Plankton Assemblages. *Jurnal Institute of Electrical and Electronics Engineers*, 3(1), 657–662.

Budijanto, A., Winardi, S., & Susilo, D. K. E. (2021). Interfacing ESP32 (p. Hal 1- 5). Scopindo Media Pustaka : Surabaya.

Budiman, A., Suyono, E. A., Merdekawati, A., Pradana, Y.S., Sudibyo, H., Seniorita, L., Rahma, F. N., Prasakti, L., & Evasari E.R. (2023). *Mikroalga: Kultivasi, Pemanenan, Ekstraksi, dan Konversi Energi*. UGM PRESS.

Campbell, P. K., Beer, T., & Batten, D. (2011). Life cycle assessment of biodiesel production from microalgae in ponds. *Bioresource technology*, *102*(1), 50-56.

Chisti, Y. (2007). Biodiesel from microalgae. *Biotechnology advances*, *25*(3), 294-306.

Chiu, S. Y., Kao, C. Y., Tsai, M. T., Ong, S. C., Chen, C. H., & Lin, C. S. (2009). Lipid accumulation and CO2 utilization of Nannochloropsis oculata in response to CO2 aeration. *Bioresource technology*, *100*(2), 833-838.

Christwardana, M., Nur, M. M. A., & Hadiyanto, H. (2013). Spirulina platensis: Potensinya sebagai bahan pangan fungsional. *Jurnal Aplikasi Teknologi Pangan*, *2*(1).

Christwardana, M., Nur, M. M. A., & Hadiyanto, H. (2013). Spirulina platensis: Potensinya sebagai bahan pangan fungsional. *Jurnal Aplikasi Teknologi Pangan*, *2*(1).

Demirbas, M. F. (2011). Biofuels from algae for sustainable development. *Applied energy*, *88*(10), 3473-3480.

Depoinovasi.com. (2017, August 29). Sensor Konduktivitas / TDS / Kadar Garam. Retrieved August 2, 2023, from www.depoinovasi.com website: https://www.depoinovasi.com/produk-510-sensor-konduktivitas--tds--kadar-garam.html

Dewiani, Z. B., Hasanuddin, E. P., & GA, P. (2018, November). Christian.“Perancangan Pengukuran Kadar Kepadatan Terlarut, Kekeruhan dan pH Air dengan Menggunakan Arduino,”. In *Prosiding Seminar Ilmiah Nasional Sains dan Teknologi* (Vol. 4).

DFRobot. (2016, June 30). Gravity: UART Infrared Carbon Dioxide Sensor (0-50000 ppm). Retrieved August 4, 2023, from www.dfrobot.com website: https://www.dfrobot.com/product-1565.html

DFRobot. (2016, March 28). Turbidity_sensor_SKU__SEN0189-DFRobot. Retrieved August 2, 2023, from wiki.dfrobot.com website: https://wiki.dfrobot.com/Turbidity_sensor_SKU__SEN0189#target_2

Diharmi, A. (2001). Pengaruh pencahayaan terhadap kandungan pigmen bioaktif mikroalga Spirulina platensis strain local (INK). *Institut Pertanian Bogor, Bogor*.

Direnc.net. (2021, March 23). Buy Arduino pH Sensor Module at an affordable price - Direnc.net®. Retrieved August 2, 2023, from https://www.direnc.net/ website: https://www.direnc.net/arduino-ph-sensor-modulu-en

Ekawati, A. W. 2005. Diktat Kuliah Budidaya Pakan Alami. Fakultas Perikanan Universitas Brawijaya. Malang. Hal. 3 - 48.

Electronicscomp.com. (2018, June 20). DS18B20 Water Proof Temperature Sensor Probe buy online at Low Price in India - ElectronicsComp.com. Retrieved August 2, 2023,

from www.electronicscomp.com website: https://www.electronicscomp.com/ds18b20-water-proof-temperature-sensor-probe-india?search=ds18b20

Flores, G., Rodriguez-Mata, A. E., Amabilis-Sosa, L. E., Gonzalez-Huitron, V. A., Hernández-González, O., & Lopéz-Peréz, P. A. (2020). A turbidity sensor development based on NL-PI observers: Experimental application to the control of a Sinaloa's River Spirulina maxima cultivation. *Open Chemistry*, *18*(1), 1349-1361.

Ghozali, I. (2006). Aplikasi analisis multivariate dengan program SPSS. Badan Penerbit Universitas Diponegoro.

Ghozali, I. (2016). *Aplikasi Analisis Multivariete Dengan Program IBM*. Universitas Diponegoro Press.

Gikonyo, B. (2014). Ádvances in Bofuel Production: Algae and Aquatic Plants, *Apple Academic Press, Inc.: Kanada.* Hal. 1–3,5–8.

Gompertz, B. (1833, December). On the nature of the function expressive of the law of human mortality, and on a new mode of determining the value of life contingencies. In a letter to Francis Baily, Esq. FRS &c. By Benjamin Gompertz, Esq. FR S. In *Abstracts of the Papers Printed in the Philosophical Transactions of the Royal Society of London* (No. 2, pp. 252-253). London: The Royal Society.

Gonel, B. (2023, April 27). Aplikasi Blynk Mod APK: Inovatif dan Efektif dalam Mengontrol Internet of Things. Retrieved August 2, 2023, from Gonel.id website: https://www.gonel.id/blynk/

Halmi, M. I. E., Shukor, M. S., Johari, W. L. W., & Shukor, M. Y. (2014). Modeling the growth kinetics of Chlorella vulgaris cultivated in microfluidic devices. *Asian Journal of Plant Biology*, *2*(1), 7-10.

Hariyati, R. (2008). Pertumbuhan dan biomassa spirulina sp dalam skala laboratoris. *Bioma*, *10*(1), 19-22.

Hermadi, I., Setiadianto, I. R., Al Zahran, D. F. I., Simbolon, M. N., Saefurahman, G., Wibawa, D. S., & Arkeman, Y. (2021). Development of smart algae pond system for microalgae biomass production. In *IOP Conference Series: Earth and Environmental Science* (Vol. 749, No. 1, p. 012068). IOP Publishing.

Hindarti, F., & Ayuningtyas, E. (2020). The Development of *Spirulina* sp. Cultivation

Technique as A Renewable Energy Biomass Source in The Airlift Fotobioreactor. *Jurnal Energi dan Lingkungan*, 16, : 17–24.

Iskandar, H. R., Hermadani, H., Saputra, D. I., & Yuliana, H. (2019). Eksperimental Uji Kekeruhan air berbasis internet of things menggunakan sensor DFRobot SEN0189 dan MQTT cloud server. *Prosiding Semnastek*.

Isnansetyo, A & Kurniastuty. (1995). Teknik Kultur Phytoplankton Zooplankton Pakan Alam untuk Pembenihan Organism Laut. Kanisius. Yogyakarta.

Karastoglanni, S., Girousi, S., & Sotiropoulos, S. (2016). The Encyclopedia of Food and Health.(Tesis). Aristotle University of Thessaloniki.

Kawaroe, M., Oman, S., Hwangbo, J., & Agustine , D. (2015). Chemical Mutagenesis of Microalgae Nannochloropsis sp. Using EMS (Ethyl Methanesulfonate). *British Journal of Applied Science and Technology*, 8 (5), 1038-1045.

Kumar, Amit. Sarina Ergas, Xin Yuan, Ashis Sahu, Qiong Zhang, Jo Dewulf, F. Xavier Malcata, Herman van Langenhove (2010). *Trends in Biotechnology*. Vol.28 No 7:371-380.

Kumar, K., Dasgupta, C. N., Nayak, B., Lindblad, P., & Das, D. (2011). Development of suitable photobioreactors for CO2 sequestration addressing global warming using green algae and cyanobacteria. *Bioresource technology*, *102*(8), 4945-4953.

Kurnia, D., Asri, R., Dinata, D.I. & Nurachman, Z. (2018a). Analisis Asam Lemak Mikroalga Laut Chlorella sp. Pada Medium Modifikasi Dengan Kromatografi Gas Spektrometri Massa (KG-SM). *Journal of Pharmacopolium*. 1(1), 1-8.

Labelektronika.com. (2018, February 5). CARA PROGRAM I2C DISPLAY OLED 0.96 INCH 128x64 PIXEL MENGGUNAKAN ARDUINO. Retrieved August 2, 2023, from LAB ELEKTRONIKA website: http://www.labelektronika.com/2018/02/cara-program-display-oled-menggunakan-arduino.html

Laura, B dan Paolo G. 2006. Algae: Anatomy, Biochemistry, and Biotechnology. CRC Press, Boca Raton New York.

Meacci, D. (2016, April 6). Blynk presentation. Retrieved August 2, 2023, from www.slideshare.net website: https://www.slideshare.net/DavideMeacci1/blynk-presentation

Mouhammad, C. S., Allam, A., Abdel-Raouf, M., Shenouda, E., & Elsabrouty, M. (2019). BLE indoor localization based on improved RSSI and trilateration. In *2019 7th International Japan-Africa Conference on Electronics, Communications, and Computations,(JAC-ECC)* (pp. 17-21). IEEE.

Nguyen, B. T., & Rittmann, B. E. (2018). Low-cost optical sensor to automatically monitor and control biomass concentration in microalgal cultivation. *Algal research, 32*, 101-106.

Noraini, M. Y., Ong, H. C., Badrul, M. J., & Chong, W. T. (2014). A review on potential enzymatic reaction for biofuel production from algae. *Renewable and sustainable energy reviews*, *39*, 24-34.

Onny. (2019). Prinsip Kerja pH Meter,(Skripsi). Universitas Lampung.

Phang, S. M., Miah, M. S., Yeoh, B. G., & Hashim, M. A. (2000). Spirulina cultivation in digested sago starch factory wastewater. *Journal of Applied Phycology*, *12*, 395-400.

Phukoetphim, N., Salakkam, A., Laopaiboon, P., & Laopaiboon, L. (2017). Kinetic models for batch ethanol production from sweet sorghum juice under normal and high gravity fermentations: Logistic and modified Gompertz models. Journal of Biotechnology, 243, 69-75.

Prihantini, N. B., Damayanti, D., & Yuniati, R. (2010). Pengaruh konsentrasi medium ekstrak tauge (MET) terhadap pertumbuhan Scenedesmus isolat Subang. *Makara Journal of Science*.

Putera, G. A., & Christian, D. H. F. M. (2017). Perancangan alat ukur kadar padatan terlarut, kekeruhan dan ph air menggunakan arduino uno. *Skripsi Departemen Teknik Elektro Fakultas Teknik Unhas*.

Rahmat, A., Jaya, I., Hestirianoto, T., Jusadi, D., & Kawaroe, M. (2020). Evaluation of system performance for microalga cultivation in photobioreactor with IOTs (internet of things). *Int J Sci Basic Appl Res*, *49*, 95-107.

Richards, F. J. (1959). A flexible growth function for empirical use. Journal of experimental Botany, 10(2), 290-301

Ricker, W. R. (1979). Growth rates and models. In ‘Fish Physiology’.(Eds WS Hoar, DJ Randall and JR Brett.) pp. 677–743.

Rostika, R. N. (2015). Pengaruh Laju Alir dan Konsentrasi Gas CO2 Terhadap Produksi Biomassa Oleh Mikroalga Chlamydomonas sp. *Neo Teknika*, *1*(1).

Salim, M. A. (2022). Mikroalga dalam riset Biologi.

Santoso, A.D., Rahmania A, D., & Joko P, S. (2011). Mikro alga untuk penyerapan emisi CO2 dan pengolahan limbah cair di lokasi industri. *Jurnal Ilmu dan Teknologi Kelautan Tropis*, *3*(2), 62-70.

Setiawan, Y., Surachman, A., & Asthary, P. B. (2014). Pemanfaatan emisi gas CO2 untuk budidaya Spirulina platensis dalam upaya penurunan Gas Rumah Kaca (GRK). *Journal of Industrial Research (Jurnal Riset Industri)*, *8*(2).

SINAU_PROGRAMMING. (2020, December 20). MEGA+WiFi R3 ATmega2560+ESP8266, flash 32MB, USB-TTL CH340G, Micro-USB. Retrieved August 2, 2023, from SINAU PROGRAMMING website: https://www.sinauprogramming.com/2020/12/megawifi-r3-atmega2560esp8266-flash.html

Soedeomo, Moestikahadi (2001). Pencemaran Udara. Bandung: ITB Bandung.

Stewart, J. (2011). *Calculus*. Cengage Learning.

Store-usa.arduino.cc. (2020, September 29). Arduino Mega 2560 Rev3. Retrieved August 3, 2023, from Arduino Online Shop website: https://store-usa.arduino.cc/products/arduino-mega-2560-rev3?selectedStore=us

Sugiyono. (2005). Statistika Untuk Penelitian, Bandung: Alfabeta

Suminto, S. (2009). Penggunaan jenis media kultur teknis terhadap produksi dan kandungan nutrisi sel Spirulina platensis. *Saintek Perikanan: Indonesian Journal of Fisheries Science and Technology*, *4*(2), 53-61.

Sylvester, B., & dan Sudjiharno, D. N. (2002). Persyaratan Budidaya Fitoplankton Dalam Budidaya Fitoplankton dan Zooplankton. *Biologi Fitoplankton, Budidaya Fitoplankton dan Zooplankton, Balai Budidaya Laut Lampung Direktorat Jenderal Perikanan Budidaya Departemen Kelautan dan Perikanan. Makara, Teknologi*, *9*, 3-23.

Taqwa, M., & Taufik, A. (2019). Pengembangan Buku Statistika dengan Software R untuk Meningkatkan Motivasi Belajar dan Pemahaman. In *PROSIDING Seminar Nasional FKIP Universitas Muslim Maros* (Vol. 1, pp. 81-87).

Umarl, L., Setiadi, R. N., Hamzah, Y., & Linda, T. M. (2017). An arduino uno based biosensor for water pollution monitoring using immobilised algae chlorella vulgaris. *International Journal on Smart Sensing and Intelligent Systems*, *10*(4), 1-21.

Utomo, N. B. P., & Winarti, A. E. (2005). Pertumbuhan Spirulina platensis yang dikultur dengan pupuk inorganik (Urea, TSP dan ZA) dan kotoran ayam. *Jurnal Akuakultur Indonesia*, *4*(1), 41-48.

Widawati, D., Santosa, G. W., & Yudiati, E. (2022). Pengaruh Pertumbuhan Spirulina platensis terhadap Kandungan Pigmen beda Salinitias. *Journal of Marine Research*, *11*(1), 61-70.

Widawati, D., Santosa, G. W., & Yudiati, E. (2022). Pengaruh Pertumbuhan Spirulina platensis terhadap Kandungan Pigmen beda Salinitias. *Journal of Marine Research*, *11*(1), 61-70.

Widiyanto, A., Susilo, B., & Yulianingsih, R. (2014). Studi Kultur Semi-Massal Mikroalga Chlorella sp Pada Area Tambak Dengan Media Air Payau (Di Desa Rayunggumuk, Kec. Glagah, Kab. Lamongan). *Jurnal Bioproses Komoditas Tropis*, *2*(1), 1-7.

Widjaja, A. (2010). Lipid production from microalgae as a promising candidate for biodiesel production. *Makara Journal of Technology*, *13*(1), 9.

Zarkashie, M. F. (2021). *Rancang bangun sistem pengukuran kualitas air Untuk keperluan higiene sanitasi berbasis Arduino uno* (Bachelor's thesis, Fakultas Sains dan Teknologi UIN Syarif Hidayatullah Jakarta).

Zou, K. H., Tuncali, K., & Silverman, S. G. (2003). Correlation and simple linear regression. *Radiology*, *227*(3), 617-628.

Zwietering, M. H., Jongenburger, I., Rombouts, F. M., & Van't Riet, K. J. A. E. M. (1990). Modeling of the bacterial growth curve. Applied and environmental microbiology, 56(6), 1875-1881.