

DAFTAR PUSTAKA

- Arshad, M. (Ed.). (2018). *Perspectives on water usage for biofuels production*. Springer International Publishing. <https://doi.org/10.1007/978-3-319-66408-8>
- Bajaj, I. B., & Singhal, R. S. (2010). Effect of aeration and agitation on synthesis of poly (γ -glutamic acid) in batch cultures of *Bacillus licheniformis* NCIM 2324. *Biotechnology and Bioprocess Engineering*, 15(4), 635–640. <https://doi.org/10.1007/s12257-009-0059-2>
- Bandaiphet, C., & Prasertsan, P. (2006). Effect of aeration and agitation rates and scale-up on oxygen transfer coefficient, k_La in exopolysaccharide production from *Enterobacter cloacae* WD7. *Carbohydrate Polymers*, 66(2), 216–228. <https://doi.org/10.1016/j.carbpol.2006.03.004>
- Beopoulos, A., Cescut, J., Haddouche, R., Uribelarrea, J.-L., Molina-Jouve, C., & Nicaud, J.-M. (2009). *Yarrowia lipolytica* as a model for bio-oil production. *Progress in Lipid Research*, 48(6), 375–387. <https://doi.org/10.1016/j.plipres.2009.08.005>
- Botha, A., & du Preez, J. C. (1999). MUCOR. In *Encyclopedia of food microbiology* (pp. 1493–1500). Elsevier. <https://doi.org/10.1006/rwfm.1999.1115>
- Cao, Y., Liu, W., Xu, X., Zhang, H., Wang, J., & Xian, M. (2014). Production of free monounsaturated fatty acids by metabolically engineered *Escherichia coli*. *Biotechnology for Biofuels*, 7, 59. <https://doi.org/10.1186/1754-6834-7-59>
- Covert, T., Greenstone, M., & Knittel, C. R. (2016). Will we ever stop using fossil fuels? *Journal of Economic Perspectives*, 30(1), 117–138. <https://doi.org/10.1257/jep.30.1.117>
- Dong, T., Knoshaug, E. P., Pienkos, P. T., & Laurens, L. M. L. (2016). Lipid recovery from wet oleaginous microbial biomass for biofuel production: A critical review. *Applied Energy*, 177, 879–895. <https://doi.org/10.1016/j.apenergy.2016.06.002>
- Fakas, S., Papanikolaou, S., Galiotou-Panayotou, M., Komaitis, M., & Aggelis, G. (2008). Organic nitrogen of tomato waste hydrolysate enhances glucose uptake and lipid accumulation in *Cunninghamella echinulata*. *Journal of Applied Microbiology*, 105(4), 1062–1070. <https://doi.org/10.1111/j.1365-2672.2008.03839.x>

- Fazili, A. B. A., Shah, A. M., Zan, X., Naz, T., Nosheen, S., Nazir, Y., Ullah, S., Zhang, H., & Song, Y. (2022). Mucor circinelloides: a model organism for oleaginous fungi and its potential applications in bioactive lipid production. *Microbial Cell Factories*, 21(1), 29. <https://doi.org/10.1186/s12934-022-01758-9>
- Germain, E., & Stephenson, T. (2005). Biomass characteristics, aeration and oxygen transfer in membrane bioreactors: their interrelations explained by a review of aerobic biological processes. *Reviews in Environmental Science and Bio/Technology*, 4(4), 223–233. <https://doi.org/10.1007/s11157-005-2097-3>
- Hoffmann, K., Pawłowska, J., Walther, G., Wrzosek, M., de Hoog, G. S., Benny, G. L., Kirk, P. M., & Voigt, K. (2013). The family structure of the Mucorales: a synoptic revision based on comprehensive multigene-genealogies. *Persoonia*, 30, 57–76. <https://doi.org/10.3767/003158513X666259>
- Huang, C., Chen, X., Xiong, L., Chen, X., Ma, L., & Chen, Y. (2013). Single cell oil production from low-cost substrates: the possibility and potential of its industrialization. *Biotechnology Advances*, 31(2), 129–139. <https://doi.org/10.1016/j.biotechadv.2012.08.010>
- Ibrahim, D., Welosamy, H., & Lim, S.-H. (2015). Effect of agitation speed on the morphology of *Aspergillus niger* HFD5A-1 hyphae and its pectinase production in submerged fermentation. *World Journal of Biological Chemistry*, 6(3), 265–271. <https://doi.org/10.4331/wjbc.v6.i3.265>
- Julaeha, E., Rustiyaty, S., Fajri, N. N., Ramdani, F., & Tantra, R. (2016). Pemanfaatan Tepung Gadung (*Dioscorea Hispida* Dennst.) Pada Produksi Amilase Menggunakan *Bacillus* sp. *EDUFORTECH*.
- Jüsten, P., Paul, G. C., Nienow, A. W., & Thomas, C. R. (1997). A mathematical model for agitation-induced fragmentation of *Penicillium chrysogenum*. *Bioprocess Engineering*, 18(1), 7–16. <https://doi.org/10.1007/PL00008975>
- Khanpanuek, S., Lunprom, S., Reungsang, A., & Salakkam, A. (2022). Repeated-batch simultaneous saccharification and fermentation of cassava pulp for ethanol production using amylases and *Saccharomyces cerevisiae* immobilized on bacterial cellulose. *Biochemical Engineering Journal*, 177, 108258. <https://doi.org/10.1016/j.bej.2021.108258>
- Lu, X., Liu, Z., Shen, Y., She, X., Lu, G., Zhan, P., Fu, M., Zhang, X., Ge, Y., & Liu, W. (2009). Primary cutaneous zygomycosis caused by *rhizomucor variabilis*: a new endemic zygomycosis? A case report and review of 6 cases reported from China. *Clinical Infectious Diseases*, 49(3), e39-43. <https://doi.org/10.1086/600817>

- Meng, X., Yang, J., Xu, X., Zhang, L., Nie, Q., & Xian, M. (2009). Biodiesel production from oleaginous microorganisms. *Renewable Energy*, *34*(1), 1–5. <https://doi.org/10.1016/j.renene.2008.04.014>
- Mhlongo, S. I., Ezeokoli, O. T., Roopnarain, A., Ndaba, B., Sekoai, P. T., Habimana, O., & Pohl, C. H. (2021). The Potential of Single-Cell Oils Derived From Filamentous Fungi as Alternative Feedstock Sources for Biodiesel Production. *Frontiers in Microbiology*, *12*, 637381. <https://doi.org/10.3389/fmicb.2021.637381>
- Miglio, R., Palmery, S., Salvalaggio, M., Carnelli, L., Capuano, F., & Borrelli, R. (2013). Microalgae triacylglycerols content by FT-IR spectroscopy. *Journal of Applied Phycology*, *25*(6), 1621–1631. <https://doi.org/10.1007/s10811-013-0007-6>
- Milkessa, T. (2018). *Oleaginous microorganisms, diversity, lipid biosynthesis pathway and strain improvement*.
- Palazzolo, M. A., & Garcia-Perez, M. (2022). Microbial lipid biosynthesis from lignocellulosic biomass pyrolysis products. *Biotechnology Advances*, *54*, 107791. <https://doi.org/10.1016/j.biotechadv.2021.107791>
- Papanikolaou, S., & Aggelis, G. (2011). Lipids of oleaginous yeasts. Part I: Biochemistry of single cell oil production. *European Journal of Lipid Science and Technology*, *113*(8), 1031–1051. <https://doi.org/10.1002/ejlt.201100014>
- Papanikolaou, S., Chevalot, I., Galiotou-Panayotou, M., Komaitis, M., Marc, I., & Aggelis, G. (2007). Industrial derivative of tallow: a promising renewable substrate for microbial lipid, single-cell protein and lipase production by *Yarrowia lipolytica*. *Electronic Journal of Biotechnology*.
- Patel, A., Karageorgou, D., Rova, E., Katapodis, P., Rova, U., Christakopoulos, P., & Matsakas, L. (2020). An Overview of Potential Oleaginous Microorganisms and Their Role in Biodiesel and Omega-3 Fatty Acid-Based Industries. *Microorganisms*, *8*(3). <https://doi.org/10.3390/microorganisms8030434>
- Pinasthika, N. P., Arbianti, R., Utami, T. S., & Hermansyah, H. (2018). Effect of medium and incubation time on production of AA, DHA and EPA from *Aspergillus oryzae* by solid state fermentation. *IOP Conference Series: Earth and Environmental Science*, *105*, 012104. <https://doi.org/10.1088/1755-1315/105/1/012104>
- Qiao, W., Tao, J., Luo, Y., Tang, T., Miao, J., & Yang, Q. (2018). Microbial oil production from solid-state fermentation by a newly isolated oleaginous fungus, *Mucor circinelloides* Q531 from mulberry branches. *Royal Society Open Science*, *5*(11), 180551. <https://doi.org/10.1098/rsos.180551>

- Rodmui, A., Kongkiattikajorn, J., & Dandusitapun, Y. (2008). Optimization of Agitation Conditions for Maximum Ethanol Production by Coculture. *Agriculture and Natural Resources*.
- Saad, N., Abdeshahian, P., Kalil, M. S., Yusoff, W. M. W., & Hamid, A. A. (2014). Optimization of aeration and agitation rate for lipid and gamma linolenic acid production by *Cunninghamella bairdii* 2A1 in submerged fermentation using response surface methodology. *TheScientificWorldJournal*, 2014, 280146. <https://doi.org/10.1155/2014/280146>
- Sitepu, I. R., Garay, L. A., Sestric, R., Levin, D., Block, D. E., German, J. B., & Boundy-Mills, K. L. (2014). Oleaginous yeasts for biodiesel: current and future trends in biology and production. *Biotechnology Advances*, 32(7), 1336–1360. <https://doi.org/10.1016/j.biotechadv.2014.08.003>
- Somashekar, D., Venkateshwaran, G., Sambaiah, K., & Lokesh, B. R. (2003). Effect of culture conditions on lipid and gamma-linolenic acid production by mucoraceous fungi. *Process Biochemistry*, 38(12), 1719–1724. [https://doi.org/10.1016/S0032-9592\(02\)00258-3](https://doi.org/10.1016/S0032-9592(02)00258-3)
- Song, Y. (Ed.). (2023). *Fungal Lipid Biochemistry*. Bentham Science Publishers.
- Veiter, L., Rajamanickam, V., & Herwig, C. (2018). The filamentous fungal pellet-relationship between morphology and productivity. *Applied Microbiology and Biotechnology*, 102(7), 2997–3006. <https://doi.org/10.1007/s00253-018-8818-7>
- Vendruscolo, F., Rossi, M. J., Schmidell, W., & Ninow, J. L. (2012). Determination of oxygen solubility in liquid media. *ISRN Chemical Engineering*, 2012, 1–5. <https://doi.org/10.5402/2012/601458>
- Vicente, G., Bautista, L. F., Rodríguez, R., Gutiérrez, F. J., Sádaba, I., Ruiz-Vázquez, R. M., Torres-Martínez, S., & Garre, V. (2009). Biodiesel production from biomass of an oleaginous fungus. *Biochemical Engineering Journal*, 48(1), 22–27. <https://doi.org/10.1016/j.bej.2009.07.014>
- Wang, Y., Yan, R., Tang, L., Zhu, L., Zhu, D., & Bai, F. (2019). Dimorphism of *Trichosporon cutaneum* and impact on its lipid production. *Biotechnology for Biofuels*, 12, 203. <https://doi.org/10.1186/s13068-019-1543-3>
- Wikandari, R., Tanugraha, D. R., Yastanto, A. J., Manikharda, Gmoser, R., & Teixeira, J. A. (2023). Development of Meat Substitutes from Filamentous Fungi Cultivated on Residual Water of Tempeh Factories. *Molecules (Basel, Switzerland)*, 28(3). <https://doi.org/10.3390/molecules28030997>
- Wu, W.-J., Zhang, A.-H., Peng, C., Ren, L.-J., Song, P., Yu, Y.-D., Huang, H., & Ji, X.-J. (2017). An efficient multi-stage fermentation strategy for the production of microbial oil rich in arachidonic acid in *Mortierella alpina*. *Bioresources and Bioprocessing*, 4(1), 8. <https://doi.org/10.1186/s40643-017-0138-8>



Xia, C., Zhang, J., Zhang, W., & Hu, B. (2011). A new cultivation method for microbial oil production: cell pelletization and lipid accumulation by *Mucor circinelloides*. *Biotechnology for Biofuels*, 4, 15. <https://doi.org/10.1186/1754-6834-4-15>

Xu, W., Peng, J., Li, D., Tsui, C. K. M., Long, Z., Wang, Q., Mei, H., & Liu, W. (2018). Transcriptional profile of the human skin pathogenic fungus *Mucor irregularis* in response to low oxygen. *Medical Mycology*, 56(5), 631–644. <https://doi.org/10.1093/mmy/myx081>