



## DAFTAR PUSTAKA

- Amir, A., Morsy, E. M. and Sedik, M. Z. (2015) "Yeasts as a Promising Tool for Microbial Oil Production," *Middle East Journal of Agriculture Research*, 04(02), pp. 223–231.
- Antony, J. (2023) "A systematic methodology for design of experiments," in *Design of experiments for engineers and scientists*. Elsevier, pp. 33–50. doi: 10.1016/B978-0-443-15173-6.00002-0.
- Bevilacqua, A., Corbo, M. R., Mastromatteo, M. and Sinigaglia, M. (2008) "Combined effects of pH, yeast extract, carbohydrates and di-ammonium hydrogen citrate on the biomass production and acidifying ability of a probiotic *Lactobacillus plantarum* strain, isolated from table olives, in a batch system," *World journal of microbiology & biotechnology*, 24(9), pp. 1721–1729. doi: 10.1007/s11274-008-9666-x.
- Calvey, C. H., Su, Y.-K., Willis, L. B., McGee, M. and Jeffries, T. W. (2016) "Nitrogen limitation, oxygen limitation, and lipid accumulation in *Lipomyces starkeyi*," *Bioresource Technology*, 200, pp. 780–788. doi: 10.1016/j.biortech.2015.10.104.
- Casey, E., Mosier, N. S., Adamec, J., Stockdale, Z., Ho, N. and Sedlak, M. (2013) "Effect of salts on the Co-fermentation of glucose and xylose by a genetically engineered strain of *Saccharomyces cerevisiae*," *Biotechnology for Biofuels*, 6(1), p. 83. doi: 10.1186/1754-6834-6-83.
- Chang, F. H. (1986) "Effect of nutrient compositions in peat hydrolysate on protein and biomass yields of *Candida tropicalis*," *Biology and fertility of soils*, 2(4). doi: 10.1007/BF00260842.
- Chattopadhyay, A. and Maiti, M. K. (2021) "Lipid production by oleaginous yeasts.," *Advances in Applied Microbiology*, 116, pp. 1–98. doi: 10.1016/bs.aambs.2021.03.003.
- Chattopadhyay, A., Mitra, M. and Maiti, M. K. (2021) "Recent advances in lipid metabolic engineering of oleaginous yeasts.," *Biotechnology advances*, 53, p. 107722. doi: 10.1016/j.biotechadv.2021.107722.
- Cruz, S. H., Cilli, E. M. and Ernandes, J. R. (2002) "Structural complexity of the nitrogen source and influence on yeast growth and fermentation," *Journal of the Institute of Brewing*, 108(1), pp. 54–61. doi: 10.1002/j.2050-0416.2002.tb00124.x.
- Dombek, K. M. and Ingram, L. O. (1986) "Magnesium limitation and its role in apparent toxicity of ethanol during yeast fermentation.," *Applied and Environmental Microbiology*, 52(5), pp. 975–981. doi: 10.1128/aem.52.5.975-981.1986.
- Dzurendova, S., Zimmermann, B., Tafintseva, V., Kohler, A., Horn, S. J. and Shapaval, V. (2020) "Metal and Phosphate Ions Show Remarkable Influence on the Biomass Production and Lipid Accumulation in Oleaginous *Mucor circinelloides*," *Journal of fungi (Basel, Switzerland)*, 6(4). doi: 10.3390/jof6040260.
- Fontanille, P., Kumar, V., Christophe, G., Nouaille, R. and Larroche, C. (2012) "Bioconversion of volatile fatty acids into lipids by the oleaginous yeast *Yarrowia lipolytica*," *Bioresource Technology*, 114, pp. 443–449. doi: 10.1016/j.biortech.2012.02.091.



- Gao, D., Zeng, J., Zheng, Y., Yu, X. and Chen, S. (2013) "Microbial lipid production from xylose by *Mortierella isabellina*," *Bioresource Technology*, 133, pp. 315–321. doi: 10.1016/j.biortech.2013.01.132.
- Holdsworth, J. E., Veenhuis, M. and Ratledge, C. (1988) "Enzyme activities in oleaginous yeasts accumulating and utilizing exogenous or endogenous lipids," *Journal of general microbiology*, 134(11), pp. 2907–2915. doi: 10.1099/00221287-134-11-2907.
- Jiru, T. M., Abate, D., Kiggundu, N., Pohl, C. and Groenewald, M. (2016) "Oleaginous yeasts from Ethiopia," *AMB Express*, 6(1), p. 78. doi: 10.1186/s13568-016-0242-8.
- Juanssilfero, A. B., Kahar, P., Amza, R. L., Miyamoto, N., Otsuka, H., Matsumoto, H., Kihira, C., Thontowi, A., Yopi, Ogino, C., Prasetya, B. and Kondo, A. (2018) "Effect of inoculum size on single-cell oil production from glucose and xylose using oleaginous yeast *Lipomyces starkeyi*," *Journal of Bioscience and Bioengineering*, 125(6), pp. 695–702. doi: 10.1016/j.jbiosc.2017.12.020.
- Juanssilfero, A. B., Salsabila, P., Agustriana, E., Andriani, A., Fahrurrozi, Perwitasari, U. and Sutrisno, A. (2021) "Microbial lipid production by the yeast *Lipomyces starkeyi* InaCC Y604 grown on various carbon sources," *IOP Conference Series: Earth and Environmental Science*, 762(1), p. 012073. doi: 10.1088/1755-1315/762/1/012073.
- Julaeha, E., Rustiyaty, S., Fajri, N. N., Ramdani, F. and Tantra, R. (2016) "Pemanfaatan Tepung Gadung (*Dioscorea Hispida* Dennst.) Pada Produksi Amilase Menggunakan *Bacillus* sp.," *EDUFORTECH*.
- Kaur, M., Chauhan, K. K., Aggarwal, T., Bharadwaj, P., Vig, R., Ihianle, I. K., Joshi, G. and Owa, K. (2023) "Taguchi based Design of Sequential Convolution Neural Network for Classification of Defective Fasteners," in *Sentiment Analysis and Deep Learning: Proceedings of ICSADL 2022*. Singapore: Springer Nature Singapore, pp. 512–527.
- Liu, J.-X., Yue, Q.-Y., Gao, B.-Y., Wang, Y., Li, Q. and Zhang, P.-D. (2013) "Research on microbial lipid production from potato starch wastewater as culture medium by *Lipomyces starkeyi*," *Water Science and Technology*, 67(8), pp. 1802–1808. doi: 10.2166/wst.2013.059.
- Liu, L., Zong, M., Hu, Y., Li, N., Lou, W. and Wu, H. (2017) "Efficient microbial oil production on crude glycerol by *Lipomyces starkeyi* AS 2.1560 and its kinetics," *Process Biochemistry*, 58, pp. 230–238. doi: 10.1016/j.procbio.2017.03.024.
- Li, Q., Du, W. and Liu, D. (2008) "Perspectives of microbial oils for biodiesel production," *Applied Microbiology and Biotechnology*, 80(5), pp. 749–756. doi: 10.1007/s00253-008-1625-9.
- Li, R., Jin, M., Du, J., Li, M., Chen, S. and Yang, S. (2020) "The Magnesium Concentration in Yeast Extracts Is a Major Determinant Affecting Ethanol Fermentation Performance of *Zymomonas mobilis*," *Frontiers in bioengineering and biotechnology*, 8, p. 957. doi: 10.3389/fbioe.2020.00957.
- Li, Y., Liu, B., Zhao, Z. and Bai, F. (2006) "Optimization of Culture Conditions for Lipid Production by *Rhodosporidium toruloides*," *Chinese journal of biotechnology*, 22(4), pp. 650–656. doi: 10.1016/S1872-2075(06)60050-2.



- Mamatha, S. S. (2009) *Polyunsaturated Fatty Acids (Pufas) Of Mucor Sp. With Special Reference To Gamma Linolenic Acid (Gla)*. Undergraduate thesis. University of Mysore. Available at: <https://ir.cftri.res.in/9949/> (Accessed: August 8, 2024).
- Mar'atussholihah, H. T. (2023) *SKRINING PRIMER KHAMIR OLEAGINOUS GENUS Lipomyces KOLEKSI Indonesian Culture Collection DALAM MENGHASILKAN LIPID*. Undergraduate thesis.
- Meng, X., Yang, J., Xu, X., Zhang, L., Nie, Q. and Xian, M. (2009) "Biodiesel production from oleaginous microorganisms," *Renewable energy*, 34(1), pp. 1–5. doi: 10.1016/j.renene.2008.04.014.
- Morales-Palomo, S., Tomás-Pejó, E. and González-Fernández, C. (2023) "Phosphate limitation as crucial factor to enhance yeast lipid production from short-chain fatty acids," *Microbial biotechnology*, 16(2), pp. 372–380. doi: 10.1111/1751-7915.14197.
- Morphis, C., Shofner, C., Pugh, D., Berry, S. and Mendoza, E. (2017) "The Effect of High Amounts of Salt of Yeast's Respiration Rate," *Journal of Introductory Biology Investigations*.
- Niehus, X., Casas-Godoy, L., Vargas-Sánchez, M. and Sandoval, G. (2018) "A Fast and Simple Qualitative Method for Screening Oleaginous Yeasts on Agar," *Journal of lipids*, 2018(1).
- Oguri, E., Masaki, K., Naganuma, T. and Iefuji, H. (2012) "Phylogenetic and biochemical characterization of the oil-producing yeast *Lipomyces starkeyi*," *Antonie Van Leeuwenhoek*, 101(2), pp. 359–368. doi: 10.1007/s10482-011-9641-7.
- Osorio-González, C. S., Saini, R., Hegde, K., Brar, S. K., Lefebvre, A. and Avalos Ramirez, A. (2023) "Carbon/nitrogen ratio as a tool to enhance the lipid production in *Rhodosporidium toruloides*-1588 using C5 and C6 wood hydrolysates," *Journal of Cleaner Production*, 384, p. 135687. doi: 10.1016/j.jclepro.2022.135687.
- Papanikolaou, S., Galiotou-Panayotou, M., Chevalot, I., Komaitis, M., Marc, I. and Aggelis, G. (2006) "Influence of glucose and saturated free-fatty acid mixtures on citric acid and lipid production by *Yarrowia lipolytica*," *Current Microbiology*, 52(2), pp. 134–142. doi: 10.1007/s00284-005-0223-7.
- Ratledge, C. and Wynn, J. P. (2002) "The biochemistry and molecular biology of lipid accumulation in oleaginous microorganisms," *Advances in Applied Microbiology*, 51, pp. 1–51. doi: 10.1016/s0065-2164(02)51000-5.
- Ratledge, C. (2004) "Fatty acid biosynthesis in microorganisms being used for Single Cell Oil production," *Biochimie*, 86(11), pp. 807–815. doi: 10.1016/j.biochi.2004.09.017.
- Saenge, C., Cheirsilp, B., Suksaroge, T. T. and Bourtoom, T. (2011) "Potential use of oleaginous red yeast *Rhodotorula glutinis* for the bioconversion of crude glycerol from biodiesel plant to lipids and carotenoids," *Process Biochemistry*, 46(1), pp. 210–218. doi: 10.1016/j.procbio.2010.08.009.
- Stahle, L. and Wold, S. (1989) "Analysis of variance (ANOVA)," *Chemometrics and Intelligent Laboratory Systems*, 6(4), pp. 259–272. doi: 10.1016/0169-7439(89)80095-4.
- Stanbury, P. F., Whitaker, A. and Hall, S. J. (1995) *Principles of Fermentation Technology, Second Edition*. 2nd ed. Oxford, U.K: Pergamon, pp. 111–112.



- Starkey, R. L. (1946) "Lipid Production by a Soil Yeast," *Journal of Bacteriology*, 51(1), pp. 33–50. Available at: chrome-extension://efaidnbmnnibpcajpcglclefindmkaj/https://journals.asm.org/doi/pdf/10.1128/jb.51.1.33-5 (Accessed: August 8, 2024).
- Subramaniam, R., Dufreche, S., Zappi, M. and Bajpai, R. (2010) "Microbial lipids from renewable resources: production and characterization," *Journal of Industrial Microbiology & Biotechnology*, 37(12), pp. 1271–1287. doi: 10.1007/s10295-010-0884-5.
- Sutanto, S., Zullaikah, S., Tran-Nguyen, P. L., Ismadji, S. and Ju, Y.-H. (2018) "Lipomyces starkeyi: Its current status as a potential oil producer," *Fuel Processing Technology*, 177, pp. 39–55. doi: 10.1016/j.fuproc.2018.04.012.
- Suutari, M., Priha, P. and Laakso, S. (1993) "Temperature shifts in regulation of lipids accumulated by *Lipomyces starkeyi*," *Journal of the American Oil Chemists' Society*, 70(9), pp. 891–894. doi: 10.1007/BF02545349.
- Takaku, H., Matsuzawa, T., Yaoi, K. and Yamazaki, H. (2020) "Lipid metabolism of the oleaginous yeast *Lipomyces starkeyi*," *Applied Microbiology and Biotechnology*, 104(14), pp. 6141–6148. doi: 10.1007/s00253-020-10695-9.
- Tanaka, Y., Minamiki, T. and Kurita, R. (2024) "Digital Evaluation of Growth and Lipid Production in *Lipomyces starkeyi* from a Single Cell," *ACS Food Science & Technology*, 4(6), pp. 1544–1548. doi: 10.1021/acsfoodscitech.4c00164.
- Tesnière, C., Delobel, P., Pradal, M. and Blondin, B. (2013) "Impact of nutrient imbalance on wine alcoholic fermentations: nitrogen excess enhances yeast cell death in lipid-limited must," *Plos One*, 8(4), p. e61645. doi: 10.1371/journal.pone.0061645.
- Uzuka, Y., Naganuma, T., Tanaka, K. and Suzuki, K. (1985) "Relation between Neutral Lipid Accumulation and the Growth Phase in the Yeast, *Lipomyces starkeyi*, a Fat Producing Yeast," *Agricultural and biological chemistry*, 49(3), pp. 851–852. doi: 10.1080/00021369.1985.10866810.
- Vanaja, K. and Shobha Rani, R. H. (2007) "Design of experiments: concept and applications of plackett burman design," *Clinical research and regulatory affairs*, 24(1), pp. 1–23. doi: 10.1080/10601330701220520.
- VijayaKumar, S., Kumutha, K., Santhana Krishnan, P. and Gopal, H. (2010) "Effect of carbon sources on lipid and biomass production by oleaginous yeast cultures," *Management Analysis Journal*, 97(January March), pp. 62–64. doi: 10.29321/MAJ.10.100344.
- Yamazaki, H., Kobayashi, S., Ebina, S., Abe, S., Ara, S., Shida, Y., Ogasawara, W., Yaoi, K., Araki, H. and Takaku, H. (2019) "Highly selective isolation and characterization of *Lipomyces starkeyi* mutants with increased production of triacylglycerol," *Applied Microbiology and Biotechnology*, 103(15), pp. 6297–6308. doi: 10.1007/s00253-019-09936-3.
- Zhao, X., Kong, X., Hua, Y., Feng, B. and Zhao, Z. (Kent) (2008) "Medium optimization for lipid production through co-fermentation of glucose and xylose by the oleaginous yeast *Lipomyces starkeyi*," *European Journal of Lipid Science and Technology*, 110(5), pp. 405–412. doi: 10.1002/ejlt.200700224.
- Zhongfeng, G. (2010) "Effect of nitrogen sources on stress tolerance of yeast in very high gravity ethanol fermentation," *Chemical Industry and Engineering Progress*.