DAFTAR PUSTAKA

Abdeli, F., G. Rigane, R.B. Salem, M. El Arbi, S. Aifa, and S. Cherif. 2019. Use of surfactants and biosurfactants in oil recovery processing and cellulose hydrolysis. Journal of Bacteriology and Mycology 6 (5).

Ahola, S., M. Osterberg, J. Laine, and O.J. Rojas. 2008. Enzymatic hydrolysis of native cellulose nanofibrils and other cellulose model films: effect of surface structure. Langmuir 24: 11592–11594.

Albert, R.A., N.E. Waas, S.C. Pavlons, J.L. Pearson, L. Ketelboeter, R. Rosselló-Móra, H.J. Busse. 2013. *Sphingobacterium psychroaquaticum* sp. nov., a psychrophilic bacterium isolated from Lake Michigan water. International Journal of Systematic and Evolutionary Microbiology 63: 952–958.

Anita, B.B., A.J. Thatheyus, and D. Ramya. 2013. Biodegradation of carboxymethyl cellulose using *Aspergillus flavus*. Science International 1: 85–91.

Arifiyanto, A., T. Surtiningsih, Ni'matuzahroh, Fatimah, D. Agustina, and N.A. Alami. 2020. Antimicrobial activity of biosurfactants produced by actinomycetes isolated from rhizosphere of Sidoarjo mud region. Biocatalysts and Agricultural Biotechnology 24: 101513.

Beaton, D., P. Pelletier, and R.R. Goulet. 2019. Microbial degradation of cellulosic material and gas generation: implications for the management of low- and intermediate- level radioactive waste. Frontiers in Microbiology 10 (204).

Béguin, P. and J. Aubert. 1994. The biological degradation of cellulose. FEMS Microbiology Reviews 13: 25–58.

Berlemont, R., S.D. Allison, C. Weihe, Y. Liu, E.L. Brodie, J.B.H. Martiny, and A.C. Martiny. 2014. Cellulolytic potential under environmental changes in microbial communities from grassland litter. Frontiers in Microbiology 5: 639.

Beveridge, T.J. 1999. Structures of Gram-negative cell walls and their derived membrane vesicles. Journal of Bacteriology 181: 4725–4733.

Beveridge, T.J. 2001. Use of Gram stain in microbiology. Biotechnic & Histochemistry 76: 111.

Briški, F. and M.V. Domanovac. 2017. Environmental microbiology. Physical Sciences Reviews 2.

Burgos-Díaz, C., R. Pons, M.J. Espuny, F.J. Aranda, J.A. Teruel, A. Manresa, A. Ortiz, and A.M. Marqués. 2011. Isolation and partial characterization of a biosurfactant mixture produced by *Sphingobacterium* sp. isolated from soil. Journal of Colloid and Interface Science 361: 195–204.

Busch, A. E.G.J. Danchin, and Y. Pauchet. 2019. Functional diversification of horizontally acquired glycoside hydrolase family 45 (GH45) proteins in Phytophaga beetles. BMC Evolutionary Biology 19: 100.

Cheng, J.F., J.X. Guo, Z.L. Chen, C.L. Li, X.D. Li, and Y.H. Li. 2019. *Sphingobacterium athyrii* sp. nov., a cellulose- and xylan- degrading bacterium isolated from a decaying fern (*Athyrium wallichianum* Ching). International Journal of Systematic and Evolutionary Microbiology 69: 752–760.

Clarridge, J.E. 2004. Impact of 16S rRNA gene sequence analysis for identification of bacteria on clinical microbiology and infectious diseases. Clinical Microbiology Reviews 17: 840–862.

Dantur, K.I., R. Enrique, B. Welin, and A.P. Castaganaro. 2015. Isolation of cellulolytic bacteria from the intestine of *Diatraea saccharalis* larvae and evaluation of their capacity to degrade sugarcane biomass. AMB Express 2015.

del Pulgar, E.M.G. and A. Saadeddin. 2013. The cellulolytic system of *Thermobifida fusca*. Critical Reviews in Microbiology, Early Online: 1–12.

Duan, J. J. Liang, W. Du, and D. Wang. 2014. Biodegradation of kraft lignin by a bacterial strain *Sphingobacterium* sp. HY-H. Advanced Materials Research 955–959: 548–553.

Frobose, N.J., S. Bjedov, F. Schuler, B.C. Kahl, S. Kampmeier, and F. Schaumburg. 2020. Gram staining: a comparison of two automated systems and manual staining. Journal of Clinical Microbiology 58: e01914-20.

Fu, Y., F. Hussain, N. Habib, I.U. Khan, X. Chu, Y. Duan, X. Zhi, X. Chen, and W. Li. 2017. *Sphingobacterium soli* sp. nov., isolated from soil. International Journal of Systematic and Evolutionary Biology 67: 2284–2288.

Georgiadou, D.N., P. Avramidis, E. Ioannou, and D.G. Hatzinikolaou. 2020. Microbial bioprospecting for lignocellulose degradation at a unique Greek environment. BioRxiv.

Grant, W.D. and P.E. Long. 1981. Environmental Microbiology. Blackie & Son Limited, Glasgow.

Gupta, P.K., S.S. Raghunath, D.V. Prasanna, P. Venkat, V. Shree, C. Chitananthan, S. Choudhary, K. Surender, and K. Geetha. 2019. An update on overview of cellulose, its structure and application. *In:* A.P. Pascual & M.E.E. Martin (Eds.), Cellulose. InTech Open, London, p: 59–80.

Gusakov, A.V., A.P. Sinitsyn, and A.A. Klyosov. 1985. Kinetics of the enzymatic hydrolysis of cellulose: 1. A mathematical model for a batch reactor process. Enzyme and Microbial Technology 7: 346–352.

Haft, R.J.F., J.G. Gardner, and D.H. Keating. 2012. Quantitative colorimetric measurement of cellulose degradation under microbial culture conditions. Applied Microbiology and Biotechnology 94: 223–229.

Haichar, F.Z., W. Achouak, R. Christien, T. Heulin, C. Marol, M.F. Marais, C. Mougel, L. Ranjard, J. Balesdent, and O. Berge. 2007. Identification of cellulolytic bacteria in soil by stable isotope probing. Environmental Microbiology 9: 625–634.

Handoko, L., A. Rifa'i, N. Yasufuku, and R. Ishikura. 2015. Physical properties and mineral content of Sidoarjo mud volcano. Procedia Engineering 125: 324–330.

Hankin, L. and S.L. Anagnostakis. 1975. The use of solid media for detection of enzyme production by fungi. Mycologia 67: 597–607.

Hidayati, D., B.S. Ismail, M. Shuhaimi-Othman, and N. Sulaiman. 2018. Chemical composition of a mud volcano Lusi and the health risk involved based on the air quality index that occurred as a result of disastrous gas exploration drilling activities in Sidoarjo, Indonesia. Sains Malaysiana 47: 1665–1674.

Holt, J.G., N.R. Krieg, H.A. Sneath, J.T. Staley, and S.T. William. 1994. Bergey's Manual of Determinative Bacteriology, 9th Edition. William & Wilkines, Baltimor.

Jagannadham, M.V., M.K. Chattopdhyay, C. Subbalakshmi, M. Vairamani, K. Narayanan, C.M. Rao, and S. Shivaji. 2000. Carotenoids of an Antarctic psychrotolerant bacterium, *Sphingobacterium antarcticus*, and a mesophilic bacterium, *Sphingobacterium multivorum*. Archives of Microbiology 173: 418–424.

Jayasekara, S. and R. Ratnayake. 2019. Microbial cellulases: an overview and applications. *In*: A.R. Pascual & M.E.E. Martin (Eds.), Cellulose. InTech Open, London.

Jiménez, D.J., F. Dini-Andreote, and J.D. van Elsas. Metataxonomic profiling and prediction of functional behaviour of wheat straw degrading microbial consortia. Biotechnology for Biofuels 7 (92).

Kämpfer, P., H.J. Busse, T. Kleinhaguer, J.A. McInroy, and S.P. Glaeser. 2016. *Sphingobacterium zeae* sp. nov., an endophyte of maize. International Journal of Systematic and Evolutionary Microbiology 66: 2643–2649.

Karlapudi, A.P., T.C. Venkateswarulu, J. Tammineedi, L. Kanumuri, B.K. Ravuru, V.R. Dirisala, and V.P. Kodali. 2018. Role of biosurfactants in bioremediation of oil-pollution-a review. Petroleum 1: 241–249.

Krueger, M. and A. Mazzini. 2018. Deep versus shallow origin of hydrocarbon degrading microorganisms in sediments from the active Lusi eruption site, Indonesia. Geophysical Research Abstracts, EGU General Assembly 2018.

Kumar, M., K. Revathi, and S. Khanna. 2015. Biodegradation of cellulosic and lignocellulosic waste by *Pseudoxanthomonas* sp. R-28. Carbohydrate Polymers 134: 761–766.

Lakhundi, S., R. Siddiqui, and N.A. Khan. 2015. Cellulose degradation: a therapeutic strategy in the improved treatment of *Acanthamoeba* infections. Parasites & Vectors 8: 23.

Li, D., L. Feng, K. Liu, Y. Cheng, N. Hou, and C. Li. 2016. Optimization of cold-active CMCase production by psychrotophic *Sphingobacterium* sp. FLX-7 from the cold region of China. Cellulose 23: 1335–1347.

Li, H., X. Chen, C. Wang, X. Chen, H. Guo, L. Xiong, H. Zhang, C. Huang, and X. Chen. 2021. Factors affecting the catalytic efficiency and synergism of xylanase and cellulase during enzymatic hydrolysis of birch wood. Applied Biochemistry and Biotechnology 2021.

Li, Z., J. Zhang, Z. Deng, F. Lu, and W. Qin. 2015. Screening, identification, and optimization of cellulase-producing strains. Biotechnology Bulletin 31: 1–6.

Liang, Y., Z. Zhang, M. Wu, and J. Feng. 2014. Isolation, screening, and identification of cellulolytic bacteria from natural reserves in the subtropical region of China and optimization of cellulase production by *Paenibacillus terrae* ME27-1. BioMed Research International 2014: 512497.

Liu, K., H. Du, T. Zheng, H. Liu, M. Zhang, R. Zhang, H. Li, H. Xie, X. Zhang, M. Ma, and C. Si. 2021. Recent advances in cellulose and its derivatives for oilfield applications. Carbohydrate Polymers 259: 11740.

Liu, R., H. Liu, C.X. Zhang, S.Y. Yang, X.H. Liu, K.Y. Zhang, and R. Lai. 2008. *Sphingobacterium siyangense* sp. nov., isolated from farm soil. International Journal of Systematic and Evolutionary Microbiology 58: 1458–1462.

López-Mondéjar, R., D. Zhülke, D. Becher, K. Riedel, and P. Baldrian. 2016. Cellulose and hemicellulose decomposition by forest soil bacteria proceeds by the action of structurally variable enzymatic systems. Scientific Reports 6: 25279.

Lynd, L.R., C.E. Wyman, and T.U. Gerngross. 1999. Biocommodity engineering. Biotechnology Progress 15: 777–793.

Lynd, L.R., P.J. Weimer, W.H. van Zyl, and I.S. Pretorius. 2002. Microbial cellulose utilization: fundamentals and biotechnology. Microbiology and Molecular Biology Reviews 66: 506–577.

Mazzini, A., F. Scholz, H. H. Svensen, C. Hensen, and S. Hadi. 2018. The geochemistry and origin of the hydrothermal water erupted at Lusi, Indonesia. Marine and Petroleum Geology 90: 52–66

Mazzini, A., H. Svensen, G.G. Akhmanov, G. Aloisi, S. Planke, A. Malthe-Sorenssen, and B. Istadi. 2007. Triggering and dynamic evolution of the Lusi mud volcano, Indonesia. Earth and Planetary Science Letters 261: 375–388.

McBirney, S.E., K. Trinh, A. Wong-Beringer, and A.M. Armani. 2016. Wavelength-normalized spectroscopic analysis of *Staphylococcus aureus* and *Pseudomonas aeruginosa* growth rates. Biomedical Optics Express 7: 4034–4042.

McDonald, J.E., D.J. Rooks, and A.J. McCarthy. 2012. Methods for the isolation of cellulose-degrading microorganisms. *In:* H.J. Gilbert (Ed.), Methods in Enzymology. Elsevier, Amsterdam, p: 349–374.

Mielenz, J.R. 2020. Small-scale approaches for evaluating biomass bioconversion for fuels and chemicals. *In*: A. Dahiya (Ed.), Bioenergy: Biomass to Biofuels and Waste to Energy. Elsevier, Amsterdam, p: 545–571.

Mishra, S. 2020. Cyanobacterial imprints in diversity and phylogeny. *In:* P.K. Singh, A. Kumar, V.K. Singh, and A.K. Shrivastava (Eds.), Advances in Cyanobacterial Biology. Academic Press, London, p: 1–15.

Neelkant, K.S., K. Shankar, S.K. Jayalakshmi, and K. Sreeramulu. 2019. Optimization of conditions for the production of lignocellulolytic enzymes by *Sphingobacterium* sp.

KSN-11 utilizing agro-wastes under submerged condition. Preparative Biochemistry and Biotechnology 49: 927–934.

Niemann, H. 2018. Mud volcano biogeochemistry. *In*: H. Wilkes (Ed.), Hydrocarbons, Oils, and Lipids: Diversity, Origin, Chemistry, and Fate (Handbook of Hydrocarbons and Lipid Microbiology). Springer, Geneva, p: 1–12.

Photphisutthiphong, Y. and S. Vatanyoopaisarn. 2019. *Dyadobacter* and *Sphingobacterium* isolated from herbivore manure in Thailand and their cellulolytic activity in various organic waste substrates. Agriculture and Natural Resources 53: 89–98.

Pinheiro, G.L., R.F. Correa, R.S. Cunha, A.M. Cardoso, C. Chaia, M.M. Clementino, E.S. Garcia, W. de Souza, and S. Frasés. 2015. Isolation of aerobic cultivable cellulolytic bacteria from different regions of the gastrointestinal tract of giant land snail *Achatina fulica*. Frontiers in Microbiology 6: 860.

Puentes-Téllez, P.E. and J.F. Salles. 2020. Dynamics of abundant and rare bacteria during degradation of lignocellulose from sugarcane biomass. Environmental Microbiology 79: 312–325.

Quiroz-Castañeda, R.E. and J.L. Folch-Mallol. 2013. Hydrolysis of biomass mediated by cellulases for the production of sugars. *In:* A.K. Chandel & S.S. da Silva (Eds.), Degradation of Lignocellulosic Biomass – Techniques, Applications and Commercialization. InTech Open, London, p: 119–155.

Rajnipriya, M., M. Nagalakshmaiah, M. Robert, and S. Elkoun. 2018. Importance of agricultural and industrial waste in the field of nanocellulose and recent industrial developments of wood-based nanocellulose: a review. ACS Sustainable Chemistry & Engineering 8: 2807–2828.

Russo, C.A.M. and A.P. Selvatti. 2018. Bootstrap and rogue identification tests for phylogenetic analyses. Molecular Biology and Evolution 35: 2327–2333.

Sahoo, K., R.K. Sahoo, M. Gaur, and E. Subudhi. 2020. Cellulolytic thermophilic microorganisms in white biotechnology: a review. Folia Microbiologica 65: 25–43.

Sari, C.N., R. Hertadi, A.F.P. Harahap, M.Y.A. Ramadhan, and M. Gozan. 2020. Process optimization of palm oil mill effluent-based biosurfactant of *Halomonas meridian* BK-AB4 originated from Bledug Kuwu mud volcano in Central Java for microbial enhanced oil recovery. Processes 8: 716.

Steinberg, J.P. and E.M. Burd. 2015. Other Gram-negative and Gram-variable bacilli. *In:* J.E. Bennet, R. Dolin, & M.J. Blaser (Eds.), Mandell, Douglas, and Bennet's Principles and Practice of Infectious Disease. Elsevier, Amsterdam, p: 2667–2683.

Suriya, J., S. Bharathiraja, P. Manivasagan, and S.K. Kim. 2016. Enzymes from rare actinobacterial strains. *In:* F. Touldra (Ed.), Advances in Food and Nutrition Research. Academic Press, London, p: 67–98.

Taton, A., S. Grubisic, E. Brambilla, R. de Wit, and A. Wilmotte. 2003. Cyanobacterial diversity in natural and artificial microbial mats of Lake Fryxell (McMurdo Dry

Valleys, Antarctica): a morphological and molecular approach. Applied and Environmental Microbiology 69: 5157–5169.

Taylor, C.R., E.M. Hardiman, M. Ahmad, P.D. Sainsbury, P.R. Norris, and T.D.H. Bugg. 2012. Isolation of bacterial strains able to metabolize lignin from screening of environmental samples. Journal of Applied Microbiology 131: 521–530.

Teather, R.M. and P.J. Wood. 1982. Use of Congo red-polysaccharide interactions in enumeration and characterization of cellulolytic bacteria from the bovine rumen. Applied and Environmental Microbiology 43: 777–780.

Ten, L.N., W. Im, M. Kim, M. Kang, and S. Lee. 2004. Development of a plate technique for screening of polysaccharide-degrading microorganisms by using a mixture of insoluble chromogenic substrates. Journal of Microbiological Methods 56: 375–382.

Tran, T., S.N. Dawrs, G.J. Norton, R. Virdi, and J.R. Honda. 2020. Brought to you courtesy of the red, white, and blue pigments of nontuberculous mycobacteria. AIMS Microbiology 6: 434–450.

Várnai, A., M. Siika-aho, and L. Viikari. 2013. Carbohydrate-binding modules (CBM) revisited: reduced amount of water counterbalances the need for CBMs. Biotechnology & Biofuels 6.

Wang, L., D. Fan, W. Chen, and E.M. Terentjev. 2015. Bacterial growth, detachment, and cell size control on polyethylene terephthalate surfaces. Scientific Reports 5: 15159.

Wiryawan, A., R. Suntari, Z. Kusuma, and Syekhfani. 2019. Concentration of some metals in water and soil samples at some locations near the hotmud flow at Porong disaster area, Sidoarjo, East Java, Indonesia. IOP Conference Series: Earth and Environmental Science 217: 012017.

Wood, P.J. 1980. Specificity in the interaction of direct dyes with polysaccharides. Carbohydrate Research 85: 271–287.

Wu, L. and G.J. Davies. 2018. Structure of the GH9 glucosidase/glucosaminidase from *Vibrio cholerae*. Acta Crystallographica Section F: Structural Biology Communications 74: 512–523.

Yabe, S., Y. Aiba, Y. Sakai, M. Hazaka, K. Kawahara, and A. Yokota. 2013. *Sphingobacterium thermophilum* sp. nov., of the phylum *Bacteroidetes*, isolated from compost. International Journal of Systematic and Evolutionary Microbiology 63: 1584–1588.

Zang, X., M. Liu, Y. Fan, J. Xu, X. Xu, and H. Li. 2018. The structural and functional contributions of β-glucosidase-producing microbial communities to cellulose degradation in composting. Biotechnology for Biofuels 11: 51.

Zong, Z., L. Ma, L. Yu, D. Zhang, Z. Yang, and S. Chen. 2015. Characterization of the interactions between polyethylene glycol and cellulase during the hydrolysis of lignocellulose. BioEnergy Research 8: 270–278.