DAFTAR PUSTAKA

Ahuactzin-Pérez, M., Tlécuitl-Beristain, S., García-Dávila, J., Santacruz-Juárez, E., González-Pérez, M., Gutiérrez-Ruíz, M.C. dan Sánchez, C. 2018. Kinetics and pathway of biodegradation of dibutyl phthalate by *Pleurotus ostreatus*. Fungal Biology 122 : 991-997.

Alegbeleye, O.O., Opeolu, B.O. dan Jackson, V. 2017. Bioremediation of polycyclic aromatic hydrocarbon (PAH) compounds:(acenaphthene and fluorene) in water using indigenous bacterial species isolated from the Diep and Plankenburg rivers, Western Cape, South Africa. Brazilian Journal of Microbiology 48 : 314-325.

Anggarkasih, M.G., Yuliana, N.D., Regiyana, Y., Massijaya, M.Y. dan Budijanto, S. 2018. Analysis of di-n-butyl phthalate (dbp) residue in commercial food packaging from recycled paper and its migration into food simulant. Journal of Agroindustrial Technology 28 : 171 -179.

Barman, S., Bhattacharya, S.S. dan Mandal, N.C. 2020. Serratia. In Beneficial Microbes in Agro-Ecology : 27-36.

Bornscheuer, U.T. 2002. Microbial carboxyl esterases: classification, properties and application in biocatalysis. FEMS Microbiology 26 : 73-81.

Braun, V. dan Schmitz, G. 1980. Excretion of a protease by *Serratia marcescens*. Archives of Microbiology 124 : 55-61.

Cadogan, D.F. dan Howick, C.J. 2000. Plasticizers. Ullmann's Encyclopedia of Industrial Chemistry 27 : 599-618.

Carstens, L., Cowan, A.R., Seiwert, B. dan Schlosser, D. 2020. Biotransformation of phthalate plasticizers and bisphenol a by marine-derived, freshwater, and terrestrial fungi. Frontiers in Microbiology 11 : 317.

Chen, H., Mao, W., Shen, Y., Feng, W., Mao, G., Zhao, T., Yang, L., Yang, L., Meng, C., Li, Y. dan Wu, X. 2019. Distribution, source, and environmental risk assessment of phthalate esters (PAEs) in water, suspended particulate matter, and sediment of a typical Yangtze River Delta City, China. Environmental Science and Pollution Research 26 : 24609-24619.

Cooney, S., O'Brien, S., Iversen, C. dan Fanning, S., 2014. Bacteria: other pathogenic Enterobacteriaceae–Enterobacter and other genera. Encyclopedia of Food Safety 1 : 433-441.

Croom, E. 2012. Metabolism of xenobiotics of human environments. Progress in Molecular Biology and Translational Science 112 : 31-88.

Ding, J., Wang, C., Xie, Z., Li, J., Yang, Y., Mu, Y., Tang, X., Xu, B., Zhou, J. dan Huang, Z. 2015. Properties of a newly identified esterase from *Bacillus* sp. K91 and its novel function in diisobutyl phthalate degradation. PLoS One 10 : 119-216.

Elston, H.R. 1965. A bacteriological study of non-chromogenic variants of *Serratia marcescens* from human sources. Journal of Clinical Pathology 18 : 618-621.

Engelhardt, G. dan Wallnofer, P.R. 1978. Metabolism of di-and mono-n-butyl phthalate by soil bacteria. Applied and Environmental Microbiology 35 : 243-246.

Eskander, S. dan Saleh, H.E.D. 2017. Biodegradation: process mechanism. Environmental Science & Engineering 8 : 1-31.

Farzanehfar, V., Faizi, M., Naderi, N. dan Kobarfard, F. 2017. Development of an analytical method for dibutyl phthalate determination using Surrogate analyte approach. Iranian Journal of Pharmaceutical Research : IJPR 16 : 140.

Fineran, P.C., Everson, L., Slater, H. dan Salmond, G.P. 2005. A GntR family transcriptional regulator (PigT) controls gluconate-mediated repression and defines a new, independent pathway for regulation of the tripyrrole antibiotic, prodigiosin, in Serratia. Microbiology 151 : 3833-3845.

Garcia, A.C.F.S., Araújo, B.R., Birolli, W.G., Marques, C.G., Diniz, L.E.C., Barbosa, A.M., Porto, A.L.M. dan Romão, L.P.C. 2019. Fluoranthene biodegradation by *Serratia* sp. AC-11 immobilized into chitosan beads. Applied Biochemistry and Biotechnology 188 : 1168-1184.

Giri, A.V., Anandkumar, N., Muthukumaran, G. dan Pennathur, G. 2004. A novel medium for the enhanced cell growth and production of prodigiosin from *Serratia marcescens* isolated from soil. BMC Microbiology, 4 : 1-10.

Givskov, M., Eberl, L., Christiansen, G., Benedik, M.J. dan Molin, S. 1995. Induction of phospholipase-and flagellar synthesis in *Serratia liquefaciens* is controlled by expression of the flagellar master operon *flh*D. Molecular Microbiology 15 : 445-454.

Gong, J., Hogman, C.F., Hambraeus, A., Johansson, C.S. dan Eriksson, L. 1993. Transfusion-associated *Serratia marcescens* infection: studies of the mechanism of action. Transfusion 33 : 802-808.

Grimont, P.A. dan Grimont, F. 1978. The genus serratia. Annual Reviews in Microbiology 32 : 221-248.

Gupta, A. dan Thakur, I.S. 2015. Biodegradation of wastewater organic contaminants using *Serratia* sp. ISTVKR1 isolated from sewage sludge. Biochemical Engineering Journal 102 : 115-124.

Immergut, E.H. dan Mark, H.F. 1965. Principles of plasticization. ; American Chemical Society: Washington, DC.

Jackman, J. 2012. The Microbe : The Basics of Structure, Morphology, and Physiology as They Relate to Microbial Characterization and Attribution. Springer, New York.

Johns, N.I., Blazejewski, T., Gomes, A.L. dan Wang, H.H. 2016. Principles for designing synthetic microbial communities. Current Opinion in Microbiology 31 : 146-153.

Joutey, N.T., Bahafid, W., Sayel, H. dan El Ghachtouli, N. 2013. Biodegradation: involved microorganisms and genetically engineered microorganisms. Biodegradation Life of Science 1 : 289-320.

Keller, M.A., Piedrafita, G. dan Ralser, M. 2015. The widespread role of non-enzymatic reactions in cellular metabolism. Current Opinion in Biotechnology 34 : 153-161.

Knapp, J.S. dan Bromley-Challoner, K.C.A. 2003. Recalcitrant organic compounds. Handbook of Water and Wastewater Microbiology : 559-595.

Kong, X., Jin, D., Jin, S., Wang, Z., Yin, H., Xu, M. dan Deng, Y. 2018. Responses of bacterial community to dibutyl phthalate pollution in a soil-vegetable ecosystem. Journal of Hazardous Materials 353 : 142-150.

Kumar, V., Sharma, N. dan Maitra, S.S. 2017. Comparative study on the degradation of dibutyl phthalate by two newly isolated *Pseudomonas* sp. V21b and *Comamonas* sp. 51F. Biotechnology Reports 15 : 1-10.

Lertsirisopon, R., Soda, S., Sei, K. dan Ike, M. 2009. Abiotic degradation of four phthalic acid esters in aqueous phase under natural sunlight irradiation. Journal of Environmental Sciences 21 : 285-290.

Li, C., Tian, X., Chen, Z., Yu, D., Deng, J. dan Xu, H. 2012. Biodegradation of an endocrine-disrupting chemical di-n-butyl phthalate by *Serratia marcescens* C9 isolated from activated sludge. African Journal of Microbiology Research 6 : 2686-2693.

Lin, Y.C., Huang, C. dan Lai, H.C. 2019. Revealing the ultrastructure of the membrane pores of intact *Serratia marcescens* cells by atomic force microscopy. Heliyon 5 : 26-36.

Lu, T., Xue, C., Shao, J., Gu, J.D., Zeng, Q. dan Luo, S. 2016. Adsorption of dibutyl phthalate on *Burkholderia cepacia*, minerals, and their mixtures: behaviors and mechanisms. International Biodeterioration & Biodegradation 114 : 1-7.

Mathews, M.M. 1956. White mutants of *Serratia marcescens*: a study of physiological and morphological characteristics. Journal of Heredity 47 : 85-87.

Monreal, J. dan Reese, E.T.,1969. The chitinase of *Serratia marcescens*. Canadian Journal of Microbiology : 689-696.

Murdoch, S.L., Trunk, K., English, G., Fritsch, M.J., Pourkarimi, E. dan Coulthurst, S.J. 2011. The opportunistic pathogen *Serratia marcescens* utilizes type VI secretion to target bacterial competitors. Journal of Bacteriology 193 : 6057-6069.

Nambiar, V.N., Surendran, P.K. dan Iyer, M.K. 1974. Morphological, biochemical and growth characteristics of *Serratia* strains isolated from sardine [*Sardinella longiceps*]. Fishery Technology 11 : 129-136.

Namikoshi, M., Fujiwara, T., Nishikawa, T. dan Ukai, K. 2006. Natural abundance 14C content of dibutyl phthalate (DBP) from three marine algae. Marine Drugs 4 : 290-297.

Nozawa, T. dan Maruyama, Y. 1988. Anaerobic metabolism of phthalate and other aromatic compounds by a denitrifying bacterium. Journal of Bacteriology 170 : 5778-5784.

Ogawa, G., Ishida, M. dan Urano, N. 2009. Isolation and identification of dibutyl phthalate-degrading bacteria from hydrospheres in Tokyo. The Journal of General and Applied Microbiology 55 : 261-265.

Pancholy, S.K. and Lynd, J.Q. 1971. Microbial esterase detection with ultraviolet fluorescence. Applied Microbiology : 939-941.

Pandey, A.K., Chaudhary, P., Singh, S.B., Arora, A., Kumar, K., Chaudhry, S. dan Nain, L. 2012. Deciphering the traits associated with PAH degradation by a novel *Serratia marcesencs* L-11 strain. Journal of Environmental Science and Health, Part A 47 : 755-765.

Park, Y.C., Lee, S. dan Cho, M.H. 2014. The simplest flowchart stating the mechanisms for organic xenobiotics-induced toxicity: Can it possibly be accepted as a “central dogma” for toxic mechanisms?. Toxicological Research 30 : 179-184.

Poursat, B.A., van Spanning, R.J., de Voogt, P. dan Parsons, J.R. 2019. Implications of microbial adaptation for the assessment of environmental persistence of chemicals. Environmental Science and Technology 49 : 2220-2255.

Prasad, B. dan Suresh, S. 2012. Biodegradation of dimethyl phthalate, diethyl phthalate, dibutyl phthalate and their mixture by *Variovorax* sp. International Journal of Environmental Science and Development 3 : 283.

Putri, M.H., Handayani, K., Setiawan, W.A., Damayanti, B., Ratih, C.L. dan Arifiyanto, A. 2021. Screening of Extracellular Enzymes on *Serratia marcescens* strain MBC1. Jurnal Riset Biologi dan Aplikasinya 3 : 23-29.

Qiu, Y.L., Sekiguchi, Y., Imachi, H., Kamagata, Y., Tseng, I.C., Cheng, S.S., Ohashi, A. dan Harada, H. 2004. Identification and isolation of anaerobic, syntrophic phthalate isomer-degrading microbes from methanogenic sludges treating wastewater from terephthalate manufacturing. Applied and Environmental Microbiology 70 : 1617-1626.

Ravikumar, S., Baylon, M.G., Park, S.J. dan Choi, J.I. 2017. Engineered microbial biosensors based on bacterial two-component systems as synthetic biotechnology platforms in bioremediation and biorefinery. Microbial Cell Factories 16 : 1-10.

Smitha, M.S., Singh, S. dan Singh, R. 2017. Microbial biotransformation: a process for chemical alterations. Journal of Bacteriology and Mycology 4 : 85.

Spain, J.C. dan van Veld, P.A. 1983. Adaptation of natural microbial communities to degradation of xenobiotic compounds: Effects of concentration, exposure time, inoculum, and chemical structure. Applied and Environmental Microbiology 45 : 428-435.

Springael, D. dan Top, E.M. 2004. Horizontal gene transfer and microbial adaptation to xenobiotics: new types of mobile genetic elements and lessons from ecological studies. Trends in Microbiology 12 : 53-58.

Springael, D. dan Top, E.M., 2004. Horizontal gene transfer and microbial adaptation to xenobiotics: new types of mobile genetic elements and lessons from ecological studies. Trends in Microbiology 12 : 53-58.

Subramanian, M., Chander, R. dan Chattopadhyay, S. 2006. A novel naturally occurring tripyrrole with potential nuclease and anti-tumour properties. Bioorganic & Medicinal Chemistry 14 : 2480-2486.

Tigerstrom, R.G.V. dan Stelmaschuk, S. 1989. The use of Tween 20 in a sensitive turbidimetric assay of lipolytic enzymes. Canadian Journal of Microbiology 35 : 511-514.

Valentina, P.C., Alejandra, P.H., Daniel, C.C. dan Víctor Manuel, O.E. 2019. Antibacterial pigment production by *Serratia marcescens* using different casein types obtained from milk. Revista Colombiana de Biotecnología, 21 : 82-90.

Van Der Meer, J.R., De Vos, W.M., Harayama, S. dan Zehnder, A.J. 1992. Molecular mechanisms of genetic adaptation to xenobiotic compounds. Microbiological Reviews 56 : 677-694.

Wallace, D. R. 2005. Dibutyl Phthalate. Elsevier : New York.

Wei, R., Huang, S., Wang, Z., Wang, C., Zhou, T., He, J., Yuen, R. dan Wang, J. 2018. Effect of plasticizer dibutyl phthalate on the thermal decomposition of nitrocellulose. Journal of Thermal Analysis and Calorimetry 134 : 953-969.

Wright, R.J., Bosch, R., Gibson, M.I. dan Christie-Oleza, J.A. 2020. Plasticizer degradation by marine bacterial isolates: a proteogenomic and metabolomic characterization. Environmental Science & Technology 54 : 2244-2256.

Xu, G., Li, F. and Wang, Q. 2008. Occurrence and degradation characteristics of dibutyl phthalate (DBP) and di-(2-ethylhexyl) phthalate (DEHP) in typical agricultural soils of China. Science of the Total Environment 393 : 333-340.

Xu, W.J., Wan, Q., Wang, W.F., Wang, Y., Feng, F.Y., Cheng, J.J., Yuan, J.J. dan Yu, X.Y. 2020. Biodegradation of dibutyl phthalate by a novel endophytic *Bacillus subtilis* strain HB-T2 under in-vitro and in-vivo conditions. Environmental Technology : 1-10.

Yuan, S.Y., Huang, I.C. dan Chang, B.V. 2010. Biodegradation of dibutyl phthalate and di-(2-ethylhexyl) phthalate and microbial community changes in mangrove sediment. Journal of Hazardous Materials 184 : 826-831.

Zhao, Z., Liu, C., Xu, Q., Ahmad, S., Zhang, H., Pang, Y., Aikemu, A., Liu, Y. dan Yan, H., 2021. Characterization and genomic analysis of an efficient dibutyl phthalate degrading bacterium *Microbacterium* sp. USTB-Y. World Journal of Microbiology and Biotechnology 37 : 1-12.