

## VI. DAFTAR PUSTAKA

- Ahalya, N., Ramachandra, T.V., Kanamadi, R.D. 2003. Biosorption of heavy metal. *Research journal of chemistry and environment* Vol 7 (4) : 71-79.
- Aspinall, C. 2001. Small-scale mining in Indonesia. *International Institute for Environment and Development and the World Business Council for Sustainable Development*. England. p30.
- Balcázar J.L., Vendrell, D., Blas, I., Ruiz-Zarzuela, I., Muzquiz, J.L., Girones, O. 2008. Characterization of probiotic properties of lactic acid bacteria isolated from intestinal microbiota of fish. *Aquaculture* 278 : 188-191.
- Barbosa, J., Borges, S., Teixeira, P. 2014. Selection of potential probiotic *Enterococcus faecium* isolated from Portuguese fermented food. *International Journal of Food Microbiology* 191: 144–148
- Bhakta, J.N., Ohnishi, K., Munekage, Y., Iwasaki, K. .2010. Isolation and Probiotic Characterization of Arsenic-Resistant Lactic Acid Bacteria for Uptaking Arsenic . *World Academy of Science, Engineering and Technology* 4 :11-25.
- Bhakta, J.N., Ohnishi, K., Munekage, Y., Iwasaki, K., Wei, M.Q. 2012. Characterization of lactic acid bacteria-based probiotics as potential heavy metal sorbents *Journal of Applied Microbiology* 112 : 1193–1206.
- Björnberg, K.A., Vahter, M., Berglund, B., Niklasson, B., Blennow, M., Sandborgh-Englund, G. 2005. Transport of Methylmercury and Inorganic Mercury to the Fetus and Breast-Fed Infant. *Environmental Health Perspectives*. 113 (10 ) :1381-1385.
- Wei-Bin Lua, Jun-Ji Shi, Ching-Hsiung Wang , Jo-Shu Chang. 2006. Biosorption of lead, copper and cadmium by an indigenous isolate *Enterobacter* sp. J1 possessing high heavy-metal resistance. *Journal of Hazardous Materials* B134 : 80–86
- Dunne, C., O'Mahony, L. Murphy, G., Thornton, D., Morrissey, S., O'Halloran, M., Feeney, S., Flynn, G., Fitzgerald, C., Daly, B., Kiely, G.C., O'Sullivan, F., Shanahan, J.K., Collins, L. 2001. In Vitro selection criteria for probiotic bacteria of human origin: Correlation with in vivo findings. *American Journal for Clinical Nutrition* Vol. 73 : 387-392.
- Hui Lin, Xia Lu, Liyuan Liang, and Baohua Gu .2015. Thiol-Facilitated Cell Export and Desorption of Methylmercury by Anaerobic Bacteria. *Environ. Sci. Technol. Lett.* 2: 292–296
- Fatimawali, F., Kepel, B., Yusuf, I., Badaruddin, F., Natsir, R., Retnoningrum, D. 2014. Isolation and Characterization of Partial Sequence of *merA* Gene from Mercury Resistant Bacterium *Klebsiella pneumoniae* Isolated from Sario River Estuary Manado. *Research Journal of Environmental and Earth Sciences* Vol. 6(3) : 156-160.
- Francois, F., Lombard, C., Guigner, J.M., Soreau, P., Jaisson, F.B., Martino, G., Vandervennet, M., Garcia, D., Molinier, A.L., Pignol, D., Peduzzi, J., Zirah, S., Rebuffat, S., .2012. Isolation and Characterization of Environmental Bacteria Capable of Extracellular Biosorption of Mercury.

- Journal of Applied and Environmental Microbiology* Vol. 78 (4) : 1097-1106.
- Gaudana, S.B., Dhanani, A.S., Bagchi, T. 2010. Probiotic attributes of *Lactobacillus starins* isolated from food and of human origin. *British Journal of Nutrition* Vol. 103: 1620-1628.
- Giller, K., Witter, E., and McGrath, S.P. 1998. Toxicity of heavy metals to microorganisms and microbial processes in agricultural soils: a review," *Soil B. Biochem.*, vol. 30, pp. 1389–1414..
- Gundacker, C., Pietschnig, B., Wittmann, K.J., Lischka, A., Salzer, H., Hohenauer, L., Schuster, E. 2002. Lead and Mercury in Breast Milk. *Pediatrics* 110 (5): 873-878.
- Hui Lin, Xia Lu, Liyuan Liang, and Baohua Gu .2015. Thiol-Facilitated Cell Export and Desorption of Methylmercury by Anaerobic Bacteria. *Environ. Sci. Technol. Lett* 2: 292–296.
- Halttunen T., Salminen, S., Tahvonen, R. 2007. Rapid removal of lead and cadmium from water by specific Lactic acid bacteria. *International Journal of food microbiology* 114: 30-35.
- Ismawati, Y .2010. Policy Brief: Artisanal and Small Gold Mining in Indonesia. *BaliFokus*. Denpasar.
- Kaushik, J.K., Kumar, A., Duary, R.K., Mohanty, A.K., Grover, S., Batish, V.K. 2009. Functional and Probiotic Attributes of an Indigenous Isolate of *Lactobacillus plantarum*. *PloS ONE Journal* Vol. 4(12) : e8099.
- Kinoshita, K., Sohma, Y., Ohtake, F., Ishida, M., Kawai, Y., Kitazawa, H., Saito, T., Kimura, K. 2013. Biosorption of heavy metals by lactic acid bacteria and identification of mercury binding protein. *Journal of Research in Microbiology* Vol. 16 :701-709
- Kisworo, D., Elegado, F.B., Barraquio, V.L. 2008. Phenotypic and genotypic Characterization of Probiotic Bacteria Isolated from Probiotic Dairy Product in the Philippines. *Phillippine Journal of Science* Vol. 137 (1) : 77-83.
- Krisnayanti, B.D., Anderson, C.W.N., Utomo, W.H., Feng, X., Handayanto, E., Mudarisna, N., Ikram, H., Khususiah. 2012. Assessment of environmental mercury discharge at a four-year-old artisanal gold mining area on Lombok Island, Indonesia. *Journal of Environmental Monitoring*. DOI: 10.1039/c2em30515a.
- Latha, S., Vinothini, G., Dhanasekaran, D. 2014. Chromium (Cr (VI)) biosorption property of the newly isolated actinobacterial probiont *Streptomyces werraensis* LD22. *Journal Biotech* Vol 3: pp.
- Liebert, C.A., Wireman, J., Smith, T., Summers, A.O. 1997. Phylogeny of Mercury Resistance (*mer*) Operons of Gram-Negative Bacteria Isolated from the Fecal Flora of Primates. *Applied and environmental microbiology* Vol. 63 (3): 1066-1076.
- Mishra, S.P. 2014. Adsorption–desorption of heavy metal ions. *Current Science* Vol. 107(4): 602-612.
- Monachese, M., Burton, J.P., Reida, G. 2012. Bioremediation and Tolerance of Humans to Heavy Metals through Microbial Processes: a Potential Role

- for Probiotics?. *Applied and Environmental Microbiology* Vol 78 (18): 6397–6404.
- Nami, Y., Abdullah, N., Haghshenas, B., Radiah, D., Rosli, R., Khosroushahi, A.Y. 2014. Probiotic assessment of *Enterococcus durans* 6HL and *Lactococcus lactis* 2HL isolated from vaginal microflora. *Journal of Medical Microbiology* 63: 1044–1049.
- Narita, M., Chiba, K., Nishizawa, H., Ishii, H., Huang, C.C., Kawabata, Z.I., Silver, S., Endo, G. 2003. Diversity of mercury resistance determinants among *Bacillus* strains isolated from sediment of Minamata Bay. *Journal of Federation of European Microbiological Science: Microbiology Letters* Vol. 223 : 73-82.
- Nascimento, A.M.A and Souza, E.C. 2003. Operon mer : bacterial resistance to mercury and potential bioremediation of contaminated environments. *Genetic and Molecular Research journal* Vol 2(1): 92-101.
- Nilanjana, Vimala, Kartika. 2008. Biosorption of Heavy metal-an overview. *Indian Journal of biotechnology*. Vol 7: 159-169.
- Ogier, J.C. and Serror, P. 2008. Safety assessment of dairy microorganisms: The *Enterococcus* genus. *International Journal of Food Microbiology*. 126 : 291–301.
- Pieniz, S., Andreazza, R., Anghinoni, T., Camargo, F., Brandelli, A. 2014. Probiotic potential, antimicrobial and antioxidant activities of *Enterococcus durans* strain LAB 18s. *Food Control* 37 : 251-256.
- Prasetyo, B., Krisnayani, B.D., Utomo, W.H., Anderson, C.W.N. 2010. Rehabilitation of Artisanal Mining Gold Land in West Lombok, Indonesia: 2. Arbuscular Mycorrhiza Status of Tailings and Surrounding Soils. *Journal of Agricultural Science* Vol. 2 (2) : 202-209.
- Saarela, M., Mogensen, G., Fonden, R., Matto, J., Mattila-Sandholm, T. 2000. Probiotic bacteria: safety, functional and technological properties. *Journal of Biotechnology* Vol. 84 : 197– 215.
- Setyabudi, F.M.C.S., Gasong, B.T., Abrian, S. 2016. Probiotic bacteria of human origin as methyl mercury bio-sorption agent from Sekotong - West Lombok. Science and Technology Research Grant Presentation. Indonesia Toray Science Foundation Seminar on Science and Technology. Jakarta, march 7 2016.
- Sinaga, D.M., Siriwong, W., Gasong, B.T., Robson, M.G. 2015. Environmental Impacts of Mercury on Soil and Water Resources in Sekotong's Gold Mining Villages in Lombok, Indonesia. *Proceeding of the 1st International Conference on Environmental, Livelihood, and Services: Environment for Live*. PP.
- Siswanto, B., Krisnayani, B.D., Utomo, W.H., Anderson, C.W.N. 2012. Rehabilitation of artisanal gold mining land in West Lombok, Indonesia: Characterization of overburden and the surrounding soils. *Journal of Geology and Mining Research* Vol. 4 (1) :1-7.
- Sudarmaji, Mukono, J., Corie, I.P. 2006. Toksikologi Logam Berat B3 dan Dampaknya Terhadap Kesehatan. *Jurnal Kesehatan Lingkungan* VOL. 2(2):129 -142.

- Tuomola, E., Crittenden, R., Playne, M., Isolauri, E., Salminen, S. 2001. Quality assurance criteria for probiotik bacteria. *American Journal for Clinical Nutrition* Vol. 73:393-398.
- USEPA . 2001. Method 1630: Methylmercury in Water by Distillation, Aqueous Ethylation, Purge and Trap, and CVAFS, EPA-821-R-01-020, U.S. EPA, Washington, DC, 2001.
- Valls, M and de Lorenzo, V (2002) Exploiting the genetic and biochemical capacities of bacteria. Exploiting the genetic and biochemical capacities of bacteria for the remediation of heavy metal pollution. *FEMS Microbiology Reviews* 26: 327-338.
- Zheng, W., Maiorino, R.M., Brendel, K., Aposhian, H.V. 1990. Determination and Metabolism of Dithiol Chelating Agents : Biliary Excretion of Dithiols and Their Interactions with Cadmium and Metallothionein. *Journal of Fundamental and Applied Toxicology* Vol. 14 : 598-607.
- Zoghi, A., Darani, K.K., Sohrabvandi, S. 2014. Surface Binding of Toxins and Heavy Metals by Probiotic. *Mini- Review in Medical Chemistry* Vol. 14 (1) : 84-98.