DAFTAR PUSTAKA

Adhikari, R.Y., Malvankar, N.S., Tuominen, M.T. and Lovley, D.R., 2016. Conductivity of individual *Geobacter* pili. RSC Advances 6(10): 8354-8357.

Aklujkar, M., Krushkal, J., DiBartolo, G., Lapidus, A., Land, M.L. and Lovley, D.R., 2009. The genome sequence of *Geobacter metallireducens*: features of metabolism,physiology and regulation common and dissimilar to *Geobacter sulfurreducens*. BMC microbiology 9(1): 1-22.

Bazylinski, D. A., Frankel, R. B., and Konhauser, K. O. 2007. Modes of biomineralization of magnetite by microbes. Geomicrobiology Journal 24(6): 465–475.

Bender K.S., Buckley,D.H., Sattley, W.M., and Stahl D.A., 2019. Brock Biology of Microorganisms 15th Editon. United Kingdom. Pearson

Bertini, I., Luchinat, C., Parigi, G., and Ravera, E. 2017. Transition Metal Ions: Shift and Relaxation. Solution NMR of Paramagnetic Molecules. Amsterdam. Elsevier.

Coates, J.D., Phillips, E.J., Lonergan, D.J., Jenter, H. and Lovley, D.R., 1996. Isolation of *Geobacter* species from diverse sedimentary environments. Applied and Environmental Microbiology 62(5): 1531-1536.

Coppi, M.V., Leang, C., Sandler, S.J. and Lovley, D.R., 2001. Development of a genetic system for *Geobacter sulfurreducens*. Applied and Environmental Microbiology 67(7): 3180-3187.

Deng, D., Zhang, Y. and Liu, Y., 2015. A Geobacter strain isolated from rice paddy soil with higher bioelectricity generation capability in comparison to *Geobacter sulfurreducens* PCA. RSC Advances 5(55): 43978-43989.

Dou, J., Alpert, P. A., Corral Arroyo, P., Luo, B., Schneider, F., Xto, J., Huthwelker, T., Borca, C. N., Henzler, K. D., Raabe, J., Watts, B., Herrmann, H., Peter, T., Ammann, M., and Krieger, U. K. 2021. Photochemical degradation of iron(III) citrate/citric acid aerosol quantified with the combination of three complementary experimental techniques and a kinetic process model. Atmospheric Chemistry and Physics 21(1): 315–338.

Finster, K., Coates, J.D., Liesack, W. and Pfennig, N., 1997. *Desulfuromonas thiophila* sp. nov., a new obligately sulfur-reducing bacterium from anoxic freshwater sediment. International Journal of Systematic and Evolutionary Microbiology 47(3): 754-758.

Fitsanakis, V. A., Zhang, N., Garcia, S. and Aschner, M. 2010. Manganese (Mn) and iron (fe): interdependency of transport and regulation. Neurotoxicity Research 18(2): 124–131.

Gan, C., Wu, R., Luo, Y., Song, J., Luo, D., Li, B., Yang, Y. and Xu, M. 2021. Visualizing and isolating iron-reducing microorganisms at the single-cell level. Applied and

Environmental Microbiology 87(3): 1-35.

Garrity, G., 2005. Bergey's Manual® of Systematic Bacteriology: Volume 2: The Proteobacteria, Part C: The Alpha-. -Beta, -Delta, Epsilonproteobacteria (Vol. 2). USA. Springer Science & Business Media.

Ghorbanzadeh, N., Lakzian, A., Haghnia, G.H. and Karimi, A.R., 2014. Isolation and identification of ferric reducing bacteria and evaluation of their roles in iron availability in two calcareous soils. Eurasian Soil Science 47 (1): 1266-1273.

Gunina, A. and Kuzyakov, Y., 2015. Sugars in soil and sweets for microorganisms: review of origin, content, composition and fate. Soil Biology and Biochemistry 90 (2): 87-100.

Hoffmann, T. D., Reeksting, B. J., and Gebhard, S. 2021. Bacteria-induced mineral precipitation: a mechanistic review. Microbiology 167(4): 1-13.

Hori, T., Aoyagi, T., Itoh, H., Narihiro, T., Oikawa, A., Suzuki, K., Ogata, A., Friedrich, M. W., Conrad, R. and Kamagata, Y. 2015. Isolation of microorganisms involved in reduction of crystalline iron(III) oxides in natural environments. Frontiers in Microbiology 5(6): 370-386.

Kappler, A., Bryce, C., Mansor, M., Lueder, U., Byrne, J. M. and Swanner, E. D. 2021. An evolving view on biogeochemical cycling of iron. Nature Reviews Microbiology 19(6): 360–374.

Li, H.Y., Wang, H., Tao, X.H., Wang, X.Z., Jin, W.Z., Gilbert, J.A., Zhu, Y.G. and Zhang, Z.J., 2021. Continental-scale paddy soil bacterial community structure, function, and biotic interaction. Msystems 6(5): 1368-1380.

Lin, C., Larsen, E. I., Grace, P. R. and Smith, J. J. 2011. Occurrence of iron and associated bacterial populations in soils of a forested subtropical coastal catchment. European Journal of Soil Biology 47(5): 322–332.

Lin, W.C., Coppi, M.V. and Lovley, D.R., 2004. Geobacter sulfurreducens can grow with oxygen as a terminal electron acceptor. Applied and environmental microbiology 70(4): 2525-2528.

Lovley, D. R., S. J. Giovannoni, D. C. White, J. E. Champine, E. J. P. Phillips, Y. A. Gorby, and S. Goodwin. 1993. Geobacter metallireducens gen. nov. sp. nov., a microorganism capable of coupling the complete oxidation of organic compounds to the reduction of iron and other metals. Archives of Microbiology 159:336–344.

Lovley, D.R., Ueki, T., Zhang, T., Malvankar, N.S., Shrestha, P.M., Flanagan, K.A., Aklujkar, M., Butler, J.E., Giloteaux, L., Rotaru, A.E. and Holmes, D.E., 2011. Geobacter: the microbe electric's physiology, ecology, and practical applications. Advances In Microbial Physiology 59 : 1-100.

Mahadevan, R., Bond, D.R., Butler, J.E., Esteve-Nunez, A., Coppi, M.V., Palsson, B.O., Schilling, C.H. and Lovley, D.R., 2006. Characterization of metabolism in the Fe

(III)-reducing organism Geobacter sulfurreducens by constraint-based modeling. Applied and environmental microbiology 72(2): 1558-1568.

Mostafa, A., Im, S., Song, Y.-C., Ahn, Y., and Kim, D.-H. 2020. Enhanced anaerobic digestion by stimulating DIET reaction. Processes 8(4): 1-17.

Mowidu, I., 2017. Pengelolaan Keracunan Fe pada tanah sawah oleh petani di Kabupaten Poso. Agropet: 14:(2): 19-29.

Nixon, S. L., Bonsall, E. and Cockell, C. S. 2022. Limitations of microbial iron reduction under extreme conditions. FEMS Microbiology Reviews 46(6): 1-17.

Palma, V., Gutiérrez, M.S., Vargas, O., Parthasarathy, R. and Navarrete, P., 2022. Methods to evaluate bacterial motility and its role in bacterial–host interactions. Microorganisms 10(3): 563-577.

Perez-Guzman, L., Bogner, K. R. and Lower, B. H. 2010. Earth's Ferrous Wheel. Nature Education Knowledge 3 (10): 32-35.

Reiner, K., 2010. Catalase test protocol. American Society for Microbiology 11(2):1-6.

Roden, E.E. and Lovley, D.R., 1993. Dissimilatory Fe (III) reduction by the marine microorganism *Desulfuromonas acetoxidans*. Applied and Environmental Microbiology 59(3): 734-742.

Seeliger, S., Cord-Ruwisch, R. and Schink, B., 1998. A periplasmic and extracellular c-type cytochrome of Geobacter sulfurreducens acts as a ferric iron reductase and as an electron carrier to other acceptors or to partner bacteria. Journal of Bacteriology 180(14): 3686-3691.

Shields, P. and L. Cathcart. 2011. Motility Test Medium Protocol. Washington DC. American Society for Microbiology.

Soewandita, H., 2018. Analisis bencana kekeringan di wilayah Kabupaten Serang. Jurnal Sains dan Teknologi Mitigasi Bencana 13(1): 34-43.

Speers, A.M. and Reguera, G., 2012. Electron donors supporting growth and electroactivity of *Geobacter sulfurreducens* anode biofilms. Applied and Environmental Microbiology 78(2): 437-444

Straub, K.L., Kappler, A. and Schink, B. 2005. Enrichment and isolation of ferric-iron- and humic-acid-reducing bacteria. Methods in Enzymology 397: 58-77.

Sudiarsana, I.K.G., I.K.M. Budiasa, and M.A.P. Duarsa. 2019. Pertumbuhan dan produksi hijauan *Panicum maximum* cv. Trichoglume pada jenis tanah dan dosis pupuk TSP berbeda. Jurnal Peternakan Tropika 7(3): 1148-1163.

Sun, W., Xiao, E., Pu, Z., Krumins, V., Dong, Y., Li, B. and Hu, M., 2018. Paddy soil microbial communities driven by environment-and microbe-microbe interactions: a

case study of elevation-resolved microbial communities in a rice terrace. Science of the Total Environment 6(12): 884-893.

Sun, D., Wan, X., Liu, W., Xia, X., Huang, F., Wang, A., Smith, J.A., Dang, Y. and Holmes, D.E., 2019. Characterization of the genome from *Geobacter anodireducens*, a strain with enhanced current production in bioelectrochemical systems. RSC Advances 9(44): 25890-25899.

Touzel, J.P. and Albagnac, G., 1983. Isolation and characterization of Methanococcus mazei strain MC3. FEMS Microbiology Letters 16(2-3): 241-245

Ueki, T. 2021. Cytochromes in Extracellular Electron Transfer in *Geobacter*. Applied andEnvironmental Microbiology 87(10): 1-16

Vargas, M., Malvankar, N.S., Tremblay, P.L., Leang, C., Smith, J.A., Patel, P., Synoeyenbos-West, O., Nevin, K.P. and Lovley, D.R., 2013. Aromatic amino acids required for pili conductivity and long-range extracellular electron transport in *Geobacter sulfurreducens*. Mbio 4(2): 1110-1128.

Venkateswaran, K., Dollhopf, M.E., Aller, R., Stackebrandt, E. and Nealson, K.H., 1998. *Shewanella amazonensis* sp. nov., a novel metal-reducing facultative anaerobe from Amazonian shelf muds. International Journal of Systematic and Evolutionary Microbiology 48(3): 965-972.

Viulu, S., Nakamura, K., Kojima, A., Yoshiyasu, Y., Saitou, S. and Takamizawa, K., 2013. *Geobacter sulfurreducens* subsp. ethanolicus, subsp. nov., an ethanol-utilizing dissimilatory Fe (III)-reducing bacterium from a lotus field. The Journal of Generaland Applied Microbiology 59(5): 325-334.

Zhang, Z., Masuda, Y., Xu, Z., Shiratori, Y., Ohba, H. and Senoo, K. 2023. Active nitrogen fixation by iron-reducing bacteria in rice paddy soil and its further enhancement by iron application. Applied Sciences 13(14): 8156-8166.