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DAFTAR PUSTAKA

Aceves-Lara, C.A., Latrille, E., Buffiere, P., Bernet, N., Steyer, J-P. 2008, "*Experimental Determination by Principal Component Analysis of a Reaction Pathway of Biohydrogen Production by Anaerobic Fermentation*", Chemical Engineering and Processing, 47, 1968-1975.

Andreesen, J. R., H. Bahl, and G. Gottschalk. 1991, "*Introduction to the Physiology and Biochemistry of the Genus Clostridium*", p. 27-62. In N. P. Minton and D. J. Clark (ed), Biotechnology Handbook, Vol. 3. Plenum Press, New York, N. Y.

Angenent, L. T., Karim, K., Al-Dahhan, M. H., Wrenn, B. A., Domiguez-Espinosa, R., 2004., "*Production of Bioenergy and Biochemicals from Industrial and Agricultural Wastewater*", Trends in Biotechnology, 22, 477-485.

Antonopoulou, G., I. Ntaikou, H. N. Gavala, I.V. Skiadas, K. Angelopoulous, G. Lyberados, 2007, "*Biohydrogen Production from Sweet Sorgum Biomass Using Mixed Acidogenic Cultures and Pure Cultures of Ruminococcus Albus*", Global NEST Journal, 9(2), 144-151.

Amekan, Yumechris, 2014, "*Pengaruh Perbedaan Asal Inokulum Terhadap Produksi Hidrogen Dari Limbah Buah Melon (cucumis Melo L.) Pada Fermentor Batch*", Universitas Gadjah Mada, Tesis.

Batstone, D. J., Keller, J., Angelidaki, I., Kalyuzhny, S. V., Pavlostathis, S. G., Rozzi, A., Sanders, W. T. M., Siegrist, H. and Vavilin, V. A., 2002, "*Anaerobic Digestion Model No. 1 (ADMI)*", IWA Publishing, London, UK.

Bossel, U., 2003, "*Well-to-Whell Studies, Heating Values, and the Energy Conservation Principle*", European Fuel Cell Forum.

Callie B, Schoenmaeker K, Vanbroekhoven K, Diels L., 2008, "*Dark Fermentative H_2 Production from Xylose and Lactose-Effects of on-line pH Control*", International Journal of Hydrogen Energy, 33, 522-530.

Chang, R.C., Lin, Y.C., 2004, "*Fermentative Hydrogen Production at Ambient Temperature*", International Journal Hydrogen Energy, 29, 715-720.

Chang, S., Li, J.Z., dan Liu, F., 2011, "*Evaluation of Different Pretreatments Methods for Preparing Hydrogen-Producing Seed Inocula From Wasteactivated Sludge*", Renewable Energy, 36, 1517-1522.

UNIVERSITAS GADJAH MADA
PENGARUH KONSENTRASI PEROKSIDA TERHADAP PRODUKSI BIOHIDROGEN DARI LIMBAH BUAH JERUK MELALUI METODE FERMENTASI GELAP
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Universitas Gadjah Mada, 2015 | Diunduh dari http://etd.repository.ugm.ac.id/

Chastain et al, 1996, "*Using Limonen-10-OL to Kill Bacteria, Yeast, and Fungi*", United States Patent, No. 5.543.435.

Cheong, D., Y., Hansen C. L., 2006, "*Bacterial Stress Enrichment Enhances Anaerobic Hydrogen Production in Cattle Manure Sludge, Appl*", Microbiol. Biotechnol., 72, 635-643.

Chin H-L, Chen Z-S., Chou C.P., 2003, "*Fedbatch Operation Using Clostridium acetobutylicum Suspension Culture as Biocatalyst for Enhancing Hydrogen Production*", Biotechnology Progress, 19, 383-388.

Chiu-Yue L and Rong-Chung C., 1999, "*Hydrogen Production During the Anaerobic Acidogenic Conversion of Glucose*", J Chem. Technol. Biotechnol, 74, 498-500.

Chiu-Yue L., 2006, "*Fermentative Hydrogen Production From Xylose Using Anaerobic Mixed Microflora*", International Journal of Hydrogen Energy, 31, 832 – 840.

Chong M.L., Sabaratnam V., Shirai Y. & Hassan M.A., 2009, "*Biohydrogen Production From Biomass and Industrial Wastes by Dark Fermentation*", International Journal of Hydrogen Energy, 34, 3277-3287.

Das, Debratas, T. Nejat Veziroglu, 2008, "*Advance in Biological Hydrogen Production Processes*", International Journal of Hydrogen Energy, 33, 6046-6057.

Das D., 2009, "*Advances in Biohydrogen Production Processes: an Approach Towards Commercialization*", International Journal of Hydrogen Energy, 34(17), 7349-7357.

Dawei,Liu. 2008, "*Biohydrogen Production by Dark Fermentation from Organic Wastes and Residues*", Department of Enviromental Engineering. Technical University of Denmark. Thesis.

Dong-Hoon Kim, et al., 2006, "*Effect of Gas Sparging on Continous Fermentative Hydrogen Production*", International Journal of Hydrogen Energy, 31, 2158-2169.

Evvyernie, D., K. Moromoto, S. Karita, T. Kimura, K. Sakka, K. Ohmiya, 2001, "*Conversionof Chitinous Wastes to Hydrogen Gas by Clostridium paraputrificum M-21*", Journal of Bioscience and Bioengineering , 91, 339-343.

UNIVERSITAS GADJAH MADA
PENGARUH KONSENTRASI PEROKSIDA TERHADAP PRODUKSI BIOHIDROGEN DARI LIMBAH BUAH JERUK MELALUI METODE FERMENTASI GELAP
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Universitas Gadjah Mada, 2015 | Diunduh dari http://etd.repository.ugm.ac.id/

Fang, H.H.P., Li, C.L. dan Zhang, T, 2006, "*Acidophilic Biohydrogen Production from Rice Slurry*", International Journal of Hydrogen Energy, 31, 683 – 692.

Gujer, W. and Zehnder, A. J. B., 1983, "*Conversion Processes in Anaerobic Digestion", Water Science and Technology*", 15,(8-9), 127-167.

Gupta, Ram B., 2009, "*Hydrogen Fuel Production, Transport, and Storage*", CRC Press, USA, 17-29.

Hallenbeck, Patrick C., John R. Benemann, 2002, "*Biological Hydrogen Production; Fundamentals and Limiting Processes*", International Journal of Hydrogen Energy, 27, 1185-1193.

Hallenbeck and Ghosh, 2009, " *Advances in Fermentative Biohydrogen Production: The Way Forward Trends Biotechnol*", 27, 287-297.

Hallenbeck, P.C., Abo-Hashesh, M., dan Ghosh, D., 2012, "*Review: Strategies for Improving Biological Hydrogen Production*", Bioresource Technology, 110, 1 – 9.

Halliwell B, Whiteman M., 2004, "*Measuring Reactive Species And Oxidative Damage* In Vivo *And In Cell Culture: How Should You Do It And What Do The Results Mean?*", Br J Pharmacol, 142, 231–255.

Hillmann, F., Fischer, R.-J. & Bahl, H., 2008, "*Perr Acts As A Switch For Oxygen Tolerance In The Strict Anaerobe Clostridium Acetobutylicum*", Mol Microbiol, 68, 848–860.

Ingram , L. O. and Doran, J. B., 1995, "*Conversion of Cellulosic Materials to Ethanol*", FEMS Microbiology Reviewa, Elsevier, 16, 235-241.

Ivanova G, Rakhely G, Kovacs KL, 2009, "*Thermophilic Biohydrogen Production from Energy Plants by Caldicellulosiruptor Saccharolyticus and Comparison with Related Studies*", Int. J. Hydrogen Energy, 34:3659-3670.

Jaapar, S.Z.S., Kalil, M.S., Ali, E., Anuar, N., 2011, "*Effect of Age of Inoculum, Size of Inoculum, and Headspace on Hydrogen Production Using Rhodobacter sphaeroides*", Bacteriology Journal, 1, 16-23.

Jenney, F. E., Jr., M. F. J. M. Verhagen, C. Xiaoyuan, and M. W. W. Adams., 1999, "*Anaerobic Microbes:Oxygen Detoxification Without Superoxide Dismutase*", Science 286, 306-309.

UNIVERSITAS GADJAH MADA
PENGARUH KONSENTRASI PEROKSIDA TERHADAP PRODUKSI BIOHIDROGEN DARI LIMBAH BUAH JERUK MELALUI METODE FERMENTASI GELAP
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Universitas Gadjah Mada, 2015 | Diunduh dari http://etd.repository.ugm.ac.id/

Jung, K.W., Kim, D.H., Kim, S.H., Shin, H.S., 2011, "*Bioreactor Design for Continuous Dark Fermentative Hydrogen Production*", Bioresource Technology, 102, 8612-8620.

Kapdan, I.K., F. Kargi, 2006, "*Biohydrogen Production from Waste Materials*", Enzyme and Microbial Technology, 38, 569-582.

Karadag, Dogan, Puhakka Jaakko A., 2010, "*Direction of Glucose Fermentation Toward Hydrogen or Ethanol Production Through On-Line pH Control*", International Journal of Hydrogen Energy, 35, 10245-10251.

Kharisma, Agung Dian, 2015, "*Pengaruh Hidrogen Peroksida terhadap Produksi Hidrogen Dari Limbah Buah Melon: Cucumis Melo L.) Oleh Mikroba Digester Biogas*", Universitas Gadjah Mada, Tesis.

Kim, J.0., Kim, Y.H., Yeom, S. H., Song, B.K., Kim, I.H., 2006, "*Enhancing Continuous Hydrogen Gas Production by the Addition of Nitrate Into an Anaerobic Reactor*", Process Biochem, 41, 1208-1212.

Kim, M.S., and Lee, D.Y., 2010, "*Fermentative Hydrogen Production from Tofu processing Waste and Anaerobic Digester Sludge Using Microbial Consorcium*", Bioresource Technology, 101, S48-S52.

Koskinen, Perttu, 2008, "*The Development and Microbiology of Bioprocesses for the Production of Hydrogen and Ethanol by Dark Fermentation*". Tampere University of Technology, Thesis.

Kotay, S.M., Das D., 2010, "*Microbial Hydrogen Production from Sewage Sludge Bioaugmented with A Constructed Microbial Consortium*", International Journal of Hydrogen Energy, 35, 10653-10659.

Kotay, S.M., Das D., 2006, "*Microbial Hydrogen Production with Bacillus Coagulans IIT-BT S1 Isolated from Anaerobic Sewage Sludge*", Bioresource Technology, Elsevier.

Kumar, N., Monga P.S., Biswas A.S., Das D., 2000, "*Modeling and Simulation of Clean Fuel Production by Enterobacter cloacae IIT-BT 08*", International Journal of Hydrogen Energy, 25, 945-952.

Lay, J.J., Fan, K.S., Chang, J.I., Ku, C.H., 2003, "*Influence of Chemical Nature of Organics Wastes on Their Conversion to Hydrogen by Heat-Shock Digested Sludge*", International Journal of Hydrogen Energy, 28, 1361-1367.

UNIVERSITAS GADJAH MADA
PENGARUH KONSENTRASI PEROKSIDA TERHADAP PRODUKSI BIOHIDROGEN DARI LIMBAH BUAH JERUK MELALUI METODE FERMENTASI GELAP
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Universitas Gadjah Mada, 2015 | Diunduh dari http://etd.repository.ugm.ac.id/

Levin, B.D., Pitt, L., Love, M., 2004, "*Biohydrogen Production : Prospects and Limitations to Practical Application*", International Journal of Hydrogen Energy, 29,173-185.

Li, C., Fang, H.H.P., 2007, "*Fermentative Hydrogen Production from Wastewater and Solid Wastes by Mixed Cultures*", Crit. Rev. Environ. Sci. Technol. 37, 1-39.

Lin, C. Y., C. H. Lay, 2004, "*Carbon-Nitrogen Ratio Effect on Fermentative Hydrogen Production by Mixed Microflora*", International Journal of Hydrogen Energy, 29, 41-45.

Liu, G., J. Shen, 2004, "*Effects of Culture and Medium Conditions on Hydrogen Production from Starch Using Anaerobic Bacteria*", Journal of Bioscience and Bioengineering, 98, 251-256.

Madigan M; Martinko J., 2005, "*Brock Biology of Microorganisms (11th ed. ed.)*", Prentice Hall. ISBN 0131443291.

Mata-Alvarez. J, Mace, S & Llabres, P, 2000, "*Anaerobic Digestion of Organic Solid Wastes. An Overview of Research Achievements and Perspectives*", Bioresources Technology, 74:3-16.

Maintinguer, S. I., Fernandes, Bruna S., Duarte, Iolanda C.S., Saavedra, Nora K., Adorno, M. Angela T., Varesche M. B., 2008, "*Fermentative Hydrogen Production by Microbial Consortium*", International Journal of Hydrogen Energy, 33, 4309-4317.

Metcalf and Eddy Inc, 2003, "*Waste Water Engineering Treatment and Reuse*", 4th Edition, Tata Mc Graw Hill Publication, New Delhi.

Morimoto, M., Atsuko, M., Atif, A. A. Y., Bgan, M. A., Fakhru'l-Razi, A., Iyuke, S.E., Bakir, A. M., 2004, "*Biological Production of Hydrogen from Glucose by Natural Anaerobic Microflora*", International Journal of Hydrogen Energy, 29, 709-713.

Nath K., Kumar A., Das D., 2006, "*Effect Of Some Environmental Parameters On Fermentative Hydrogen Production By Enterobacter Cloacae DM11*", Can J Microbiol, 52(6), 525-32.

Ni, M., Leung, D.Y.C., Leung, M.K.H., Sumathy, K., 2006, "*an Overview of Hydrogen Production from Biomass*", Fuel Processing Technology, 97, 461-472.

Nurrihadini, Oktavia D., 2009, "*Karakterisasi Sampah Buah Gemah Ripah Yogyakarta Sebagai Bahan Baku Produksi Biogas*", Teknologi Pangan dan Hasil Pertanian, Universitas Gadjah Mada, Yogyakarta.

UNIVERSITAS
GADJAH MADA
PENGARUH KONSENTRASI PEROKSIDA TERHADAP PRODUKSI BIOHIDROGEN DARI LIMBAH BUAH JERUK MELALUI METODE FERMENTASI GELAP
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Universitas Gadjah Mada, 2015 | Diunduh dari http://etd.repository.ugm.ac.id/

Palazzi, E., B. Fabiano, P. Perego, 2000, "*Process Development of Continuous Hydrogen Production by Enterobacter aerogenes in A Packed Column Reactor*", Bioprocess Engineering, 22, 205-213.

Patel, Sanjay, K. S., Purovit, Hermant, J., Kalia, Vipin C., 2010, *" Dark Fermentation Hydrogen Production by Defined Mixed Microbial Cultures Immobilized on Ligno-cellulosic Waste Materials*", International Journal of Hydrogen Energy, 35, 10674-10681.

Press, Roman, J., Santhanam, K. S. V., Miri, Massoud J., Bailey, A. V., Takaes, Gerald A., 2009, "*Introduction to Hydrogen Technology*", John Wiley & Sons, Inc., New Jersey, 173-174.

Purnomohadi, Agus, 2015, "*Pengaruh Penambahan Hidrogen Peroksida Terhadap Produksi Biohidrogen Oleh Clostridium Bifermentans Blk Yk-1999*", Universitas Gadjah Mada, Thesis.

Riebe, O., R. J. Fischer, D. A. Wampler, D. M. Kurtz, Jr., and H. Bahl, 2009, "*Pathway for H_2O_2 and O_2 Detoxification in Clostridium acetobutylicum*", Microbiology ,155, 16-24.

Ren N Q, Gong M L, 2006, " *Characteristics and Operation of Enchanced Continuous Biohydrogen Production Reactor Using Support Carrier"*, NCBI Journal.

Salmah, 2004, "*Analisa Pertumbuhan Mikroba pada Fermentasi*", Program Studi Teknik Kimia, Universitas Sumatera Utara, Medan.

Singh, Sneha, Sudhakaran, Anu K., Sarma, Priyangshu M., Subudhi, Sanjukta, Mandal, A.K., Gandham, G., Lal, B., 2010, "*Dark Fermentative Biohydrogen Production by Mesophilic Bacterial Consortia Isolated From Riverbed Sediments*", International Journal of Hydrogen Energy, 35, 10645-10652.

Solomon, B. o., Zheng A.P., Biebl, H.,Schlieker, H., Posten, C., Deckwer W. D., 1995, "*Comparison of The Energetic Efficiencies of Hydrogen and Oxychemicals Formation in Klebsiella pneumoniae and Clostridium butyricum during Anaerobic Growth on Glycerol*", Journal of Biochemistry, 39, 107-117.

Stefany, Windy, 2015, "*Produksi Biogas Dari Campuran Sampah Buah Dengan Perlakuan Awal Distilasi Uap*", Universitas Gadjah Mada, Tesis.

UNIVERSITAS
GADJAH MADA
PENGARUH KONSENTRASI PEROKSIDA TERHADAP PRODUKSI BIOHIDROGEN DARI LIMBAH BUAH JERUK MELALUI METODE FERMENTASI GELAP
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Universitas Gadjah Mada, 2015 | Diunduh dari http://etd.repository.ugm.ac.id/

Sung, 2004, "*Biological Hydrogen Production: Effects of pH and Intermediate Products*", *Int J Hydrogen Energy*. 29: 1123 – 1131.

Suwarni, Riris, 2010, "*Potensi Produksi Biogas Sampah Buah Semangka (citrullus Lanatus) dan Sampah Buah Nanas (ananas Comocus (I) Merr) di Pasar Buah Gemah Ripah Gamping Sleman*", Universitas Gadjah Mada, Tesis.

Taguchi F., Yamada, K., Hasegawa, K., Saito, T.T., Hara, K., 1996, "*Continous Hydrogen Production by Clostridium sp. Strain No.2 from Cellulose Hydrolisate in An Aqueous Two-Phase System*", Journal of Fermentation and Bioengineering, 82, 80-83.

Tanisho, S., Y. Ishiwata, 1994, "*Continous Hydrogen Production from Molasses by The Bacterium Enterobacter aerogenes*", International Journal of Hydrogen Energy, 19(10), 807-812.

Toshiaki, Y., Tomohito, K., Mashashige, I., Guido, G., 2012, "*Lactic Acid As A Substrate For Fermentative Hydrogen Production*", Int J Hydrogen Energy, 37, 16967 – 16973.

Vavilin, V. A., Qu X., Mazeas L., Lemunier M., Duquennoi C., He P.J. & Bouchez T, 2008, "*Methanosarcina as The Dominant Aceticlastic Methanogens During Mesophilic Anaerobic Digestion of Putrescible Waste*", Ant. Van Leeuwenh, 94, 593-605.

VicelmaL, et al, 2014, "*Hydrogen Production by Dark Fermentation*", Chemical Engineering Transactions, 38 , 481-486.

Wang, C.C., C. W. Chang, C. P. Chu, D. J. Lee, B. V. Chang, C. S. Liao, 2003, "*Producing Hydrogen from Wastewater Sludge by Clostridium bifermentans",* Journal of Biotechnology, 102, 83-92.

Wang, J., Wan, Wei , 2008, "*Effect of Temperature on Fermentative Hydrogen Production by Mixed Cultures*", International Journal of Hydrogen Energy, 33, 5392-5397.

Wang, Y., China, Y.H., Rozmiarek, R.T., Johnson, B.R., Gao, Y., Watson, J., Tonkovich, A.Y.L. and Vander Wiel, D.P, 2004, "*Highly Active and Stable Rh/MgO-AI2O3 Catalysts for Methane Steam Reforming*", Catal Today, 98, 575-581.

Wei Juan, Liu Zuo-Tao, Zhang Xin, 2010, "*Biohydrogen Production from Starch Wastewater and Application in Fuel Cell",* International Journal of Hydrogen Energy, 35(29), 49-52.

Weiland, P, 2010, "*Biogas Production : Curent State and Perspectives*", Appl Microbiol Biotechnol, 85:849-860.

UNIVERSITAS
GADJAH MADA
PENGARUH KONSENTRASI PEROKSIDA TERHADAP PRODUKSI BIOHIDROGEN DARI LIMBAH BUAH JERUK MELALUI METODE FERMENTASI GELAP
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Universitas Gadjah Mada, 2015 | Diunduh dari http://etd.repository.ugm.ac.id/

Yacobucci, B. D., and A. E. Curtright, 2004, "*A Hydrogen Economy and Fuel Cells: An Overview*", CRS Report for Congress.

Yokoi, H. A. Saitsu, H. Uchida, J. Hrose, S. Hayashi, Y. Takasaki, 2001, "*Microbial Hydrogen Production from Sweet Potato Starch Residue*", Journal of Bioscience and Bioengineering, 91, 58-63.

Yokoi, H., Maki, R., Hirose, J., Hayashi, S., 2002, "*Microbial Production of Hydrogen from Starch-Manufacturing Wastes*", Biomass Bioenergy, 22, 389-395.