

DAFTAR PUSTAKA

- Abd-Aziz, S., Hung, G.S., Hassan, M.A., Abdul Karim, M.I., and Samad, N., 2008, “ *Indirect Method for Quantification of cell Biomass During Solid State Fermentation of Palm Kernel Cake Based on Protein Content*”, Asian Journal of Scientific Research, Vol. 1(4), pp. 385-393.
- Adela, N.B., Nasrin , A.B., Loh, S.K., and Choo, Y.M., 2014, “ *Bioethanol Production by Fermentation of Oil Palm Empty Fruit Bunches Pretreated with Combined Chemicals*”, J. Appl. Environ. Biol. Sci., Vol 4(10), pp. 234 – 242.
- Abu Bakar, N.K., Zanirun, Z., Suraini, A.A., Farinazleen, M.G., and Hassan, M.A., 2012, “ *Production Of Fermentable Sugars From Oil Palm Empty Fruit Bunch Using Crude Cellulase Cocktails With Trichoderma Asperellum Upm1 And Aspergillus Fumigatus Upm2 For Bioethanol Production Sugars from OPEFB*”, BioResources Vol. 7(3), pp. 3627-3639.
- Alfred, 2001, “ *Benson’s Microbiologica Application Laboratory Manual in General Microbiology*”, eighth ed., The McGraw-Hill Companies.
- Alvira, P., Tomas-Pejo, E., et al., 2009, “ *Pretreatment technologies for an efficient bioethanol production process based on enzymatic hydrolysis*”, Bioresource Technology Article in press.
- Baharuddin, A. S., Abd Razak, N. A., Abdul Rahman, N. A., Budiatman, S., Shirai, Y., and Hassan, M. A., (2009) “ *Bioconversion of oil palm empty fruit bunch by Aspergillus niger EB4 under solid-state fermentation*”, Pertanika J. Tropical Agri.Sci., Vol. 32(2), pp. 143-151.
- Bari, M.N., Alam, M.Z., Muyibi, S.a., Jamal, P., and Mamun, A.A., 2010, “ *Effect of Particle size on Production of Citric Acid from Oil Palm Empty Fruit Bunches as New Substrate by Wild Aspergillus niger*”, J.Applied Sci., Vol. 10(21), pp. 2648-2652.
- Barrington, S., and Kim, J.W., 2008, “ *Response surface optimization of medium components for citric acid production by Aspergillus niger NRRL 567 grown in peat moss*”, Bioresource Technology, Vol. 99, pp. 368–377.

- Beuchat, L.R., 1981, “*Microbial stability as affected water activity, Cereal Foods World*”, Vol. 26, pp. 345-349.
- Chahal, D. S., 1985, “*Solid-State Fermentation with Trichoderma reesei for Cellulase Production*”, Appl. Environ. Biotechnol., 49 (1), 205-210.
- Chang, M. M., Chou, T. Y. C., and Tsao, G. T., 1981, “*Structure, pretreatment and hydrolysis of cellulose*”, Advances in Biochemical Engineering, Vol. 20, pp. 15-42.
- Chen, L. F., and Ynang, C. M., 1985, “*Selective Hydrolysis of Cellulose to Glucose without Degradation of Glucose using Zinc Chloride*”, U.S. Patent No. 4.525.218.
- Darnoko, Poeloengan, Z., dan Anas, I., 1992, “*Pembuatan pupuk organik dari tandan kosong kelapa sawit*”, Buletin Penelitian Kelapa Sawit Vol.2, Hal. 89-99.
- Datta, R., 1981, “*Acidogenic fermentation of lignocellulose-acid yield and conversion of components*”, Biotechnology and Bioengineering, Vol. 23 (9), pp. 2167-2170.
- Davis, Mark E. and Davis, Robert J., 2003, “*Fundamentals of chemical reaction engineering*”, McGraw-Hill Higher Education , New York, NY.
- Dawson, L., and Boopathy, R., 2008, “*Cellulosic ethanol Production from sugarcane Baggase without enzymatic Saccharification*”, BioResources, Vol. 3, pp. 452-460.
- Departemen Perindustrian, 2007, “*Gambaran Sekilas Industri Minyak Kelapa Sawit*”.
- Departemen Pertanian RI, 2014,
<http://ditjenbun.deptan.go.id/cigraph/index.php/viewstat/komoditiutama/8-Kelapa%20Sawit>, diakses pada tanggal 24 Agustus 2014.
- Desi, M., 2002, “*Aktifitas keratinase Bacillus licheniformis dalam memecah keratin bulu ayam*”. Skripsi, Fakultas Matematika dan Ilmu Pengetahuan Alam. Institut Pertanian Bogor, Bogor.

- Ezyana, K.B., Piong Yeau Seng, and Abd-Aziz, S., 2011, "*Effect of Oil Palm Empty Fruit Bunch Particle Size on Cellulase Production by Botryosphaeria sp. Under Solid State Fermentation*", Australian Journal of Basic and Applied Sciences, Vol. 5(3), pp. 276-280
- Fazlena, H., Idris, a., and Shuan, T.K., 2011, "*Preliminary study on enzymatic hydrolysis of treated oil palm (Elaeis) empty fruit bunches fibre (EFB) by using combination of cellulase and b 1-4 glucosidase*", Biomass and Bionergy, Vol. 35, pp. 1055-1059
- Felby, C., Klinke, H. B., Olsen, H. S., and Thomsen, A. B. , 2003, "*Ethanol from wheat straw cellulose by wet oxidation pretreatment and simultaneous saccharification and fermentation*", Proc., Applications of Enzymes to Lignocellulosics, ACS Symposium Series, Symposium on Applications of Enzymes to Lignocellulosics Held at the 223rd National Meeting of the American-Chemical-Society, Orlando, Florida, pp. 157-174.
- Galletti, A.M.R., and Antonetti, C., 2011, "*Biomass pre-treatment: separation of cellulose, hemicellulose and lignin- Existing technologies and perspectives*", University of Pisa, Italy.
- Gandjar, I., 2006, "*Mikologi Dasar dan Terapan*", Jakarta : Yayasan Obor Indonesia.
- Garcia-Ochoa, F., and Gomez, E., 2009, "*Bioreactor scale-up and oxygen transfer rate in microbial processes: An overview*", Biotechnology Advances, Vol. 27, pp. 153–176.
- Ghose, T.K., Pannir Selvam, P.V., et al., 1983, "*Catalytic solvent delignification of agricultural resi-dues: Organic catalysts*", Biotechnology and Bioengineering Vol. 25(11), pp. 2577-2590.
- Harmsen, P.F.H., Huijgen, W.J.J., Bermudez Lopez, L.M., and Bakker, R.R.C., 2010, "*Literature review of physical and chemical pretreatment processes for lignocellulosic biomass biosynergy project*", Food and Biobased Research Center, Wageningen University, The Netherlands.

- Hölker, U., Höfer, M., Lenz, J., 2005, “*Biotechnological advantages of laboratory-scale solid-state fermentation with fungi*”, Appl. Microbiol. Biotechnol. Vol. 64, pp. 175–186.
- Jian Shi, Chinn, M.S., and Sharma-shivappa, R.R., 2014, “*Interaction between fungal growth, substrate utilization, and enzyme production during solid substrate cultivation of Phanerochaete chrysosporium on cotton stalks*”, Bioprocess Biosyst Eng., Vol. 37, pp. 2463-2473.
- Kirk and Othmer, 2001, “*Kirk-Othmer Encyclopedia of Chemical Technology*”, 4th edition, vol 5, John Wiley and Sons, Inc., Canada.
- Krishna, C., 2005, “*Solid-state fermentation System – An overview*”, Critical Reviews in Biotechnology, Vol. 25, pp. 1 – 30.
- Lavigne, J. A., Hill, C. M. D., Tremblay, A., St-Pierre, P., and Tomashek, J. J., 2011, “*Cellulase Variants with Reduced Inhibition by Glucose*”, U.S. Patent No., 8.012.734 B2.
- Levenspiel, O., 1999, “*Chemical Reactor Engineering*”, 3th edition, John Wiley and Sons, Inc., New York.
- Lonsane, B.K., N.P. Ghidyal, s. Budiatman and S.V. Ramakrishna, 1985, “*Engineering aspect of solid state fermentation*”, Enzyme Microb. Technol., Vol. 7, pp. 258-265.
- Lowry, O.H., Rosebrough, N.J., Farr, A.L., and Randall, R.J., 1951, “*Protein measurement with the Folin phenol reagent*”, J Biol. Chem., Vol. 193, pp. 265-275.
- Madigan, M.T., and Martinko, J.M., 2006, “*Brock Biology of Microorganisms*”, 11th ed., New Jersey: Pearson Education. pp. 178-185.
- Miller, G.L., 1959, “*Use of dinitrosalicylic acid reagent for determination of reducing sugar*”, Anal. Chem., Vol. 31, pp. 426-428.
- Mitchell, D.A., de Lima Luz, L.F., and Krieger, N., 2011, “*Bioreactors for solid-state fermentation*”, In: Comprehensive Biotechnology, Second ed. Edited by: Moo-Yong, M. Elsevier, Vol.2, pp. 347 – 360.

- Mosier, N.S., and Ladish, M.R., 2009, ” *Modern Biotechnology Connecting Innovations in Microbiology and Biochemistry to Engineering Fundamentals*”, John Wiley & Sons, Inc., Hoboken, New Jersey.
- Mulia, D.S., Mudah, M., Maryanto, M., dan Purbomartono, C., 2014, “ *Fermentasi ampas tahu dengan aspergillus niger untuk meningkatkan kualitas bahan baku pakan ikan*”, Prosiding Seminar Nasional – Hasil Penelitian dan Pengabdian LPP UMP 2014, hal. 336-345.
- Nigam, P.S. and Pandey, A.’ 2009, “*Solid-state fermentation technology for bioconversion of biomass and agricultural residues*”, In: *Biotechnology for agro-industrial residues utilisation*, Edited by: Nigam, P.S. and Pandey, A. Springer Science + Business Media B.V., pp. 197 – 221.
- Nandakumar, M.P., Thakur, M.S., Raghavarao, K.S.M.S., and Ghildyal, N.P., 1996, “*Substrate particle size reduction by Bacillus coagulans in solid-state fermentation*” *Enzyme and Microbial Technology*, Vol. 18, pp. 121 – 125.
- O'Connor, R.P., R. Woodley, J.J. Kolstad, R. Kean, D.A. Glassner, B. Mastel, J.M. Ritzenthaler, H. John, J. Warwick, J.R. Hettenhaus, and R.K. Brooks, 2007, “*Process for fraction-ating ligno-cellulosic biomass into liquid and solid products*”, assignee U. S. A. Nature-works LLC, patent number WO 2007120210.
- Pandey, A., Soccol, C.R., and Larroche, C., 2008, “*Current Development in Solid – state Fermentation*”, Asiatech Pulisher, Inc., New Delhi.
- Rahayu, K., 1990, “*Tehnologi Enzim*”, Penerbit Pusat Antar Universitas Pangan dan Gizi UGM, Yogyakarta.
- Rivers, D., and Emert, G., 1988, “*Lignocellulose Pretreatment a Comparison of Wet and Dry Ball Attrition*”, *Biotechnology Letter*, Vol. 9(5), pp. 365-368.
- Richard, T.L., Veeken, A.H.M., de Wilde, V., and (Bert) Hamelers, H.V.M., 2004, “*Air-filled porosity and permeability relationships during solid-state fermentation*”, *Biotechnology Progress*, Vol. 20, pp. 1371 – 1381.
- Sangsurasak, P., Nopharatana, M., and Mitchell, D.A., 1996,” *Mathematical modeling of the growth of filamentous fungi in solid state fermentation*”, *J Sci Ind Res*, Vol. 55, pp. 333–342.

- Sohail, M., R. Siddiqi, A. Ahmad, and S. A. Khan, 2009, “*Cellulase production from Aspergillus niger MS82: Effect of temperature and pH*”, New Biotechnol., doi:10.1016/j.nbt.2009.02.002.
- Sudiyani, Y., Sembiring, K.C., Hendarsyah, H., dan Alawiyah, S., 2010, “*Alkaline pretreatment and enzymatic saccharification of oil palm empty fruit bunch fiber for ethanol production*”, Menara Perkebunan, Vol. 78(2), hal. 70-74.
- Sulhatun, 2005, “*Pemanfaatan Tandan Kosong Kelapa Sawit sebagai Sumber Lignin*”, Tesis Program Studi Magister Teknik Kimia Universitas Sumatera Utara.
- Shuler M.L., Kargi F., 2002. “*Bioprocess Engineering Basic Concepts*”, 2nd ed., Prentice-Hall International Inc., New Jersey.
- Umi Kalsom, M. S., Arbakariya, A., and Karim, M. I. A., 1998, “*Saccharification of pretreated oil palm empty fruit bunch fiber using cellulase of Chaetomium globosum*”, Journal of Agricultural and Food.
- Widiyanti, S. E., 2014, “*Kinetika Konsumsi Glukosa oleh Aspergillus niger dalam Produksi Bioethanol dari Lignoselulosa*”, Tesis Jurusan Teknik Kimia Fakultas Teknik Universitas Gadjah Mada Yogyakarta.
- Wood, T. M., and Bhat, M. K., 1988, “*Methods for measuring cellulase activities*”, London: Academic Press Inc. Chemistry, Vol. 46, pp. 3359–3364.
- Xu, W.Q. and Hang, Y.D., 1988, “*Roller culture technique for citric acid production by Aspergillus niger*”, Process Biochemistry, Vol. 23, pp. 117 – 118.
- Yeh, A.I., Yi-Ching Huan and Chen, S.H., 2010, “*Effect of particle size on the rate of enzymatic hydrolysis of cellulose*”, Carbohydrate Polymers, Vol.79, pp.192-199.
- Yohida, M., Liu, Y., Uchida, S., Kawarada, K., Ukagumi, Y., Ichinose, H., Kaneko, S., and Fukuda, K., 2008, “*Effect of Cellulose Crystallinity, Hemicellulose, and Lignin on the Enzymatic Hydrolysis of Miscanthus Sinensis to Monosaccharides*”, Bioscience, Biotechnology, and Biochemistry, Vol. 72(3), pp. 805-810.

Zhang, M., Xiaoxu Song, P.F., Zhang, Q., Zhang, Z.J., Pei, T., Deines, and Donghai Wang, 2011, “*Size Reduction of cellulosic biomass in biofuel manufacturing : effect of milling orientation on sugar yield*”, Proceeding of the ASME Internasional Manufacturing Science & Engineering Conference, USA.

Zhao, Y., Wang, Y., Zhu, J.Y., Ragauskas, A., and Deng, Y., 2008, “*Enhanced enzymatic hydrolysis of spruce by alkaline pretreatment at low temperature*” *Biotechnology and Bioengineering*, Vol. 99(6), pp. 1320–1328.

<http://www.real-statistics.com>