



DAFTAR PUSTAKA

- Adewuyi, Y. G. and Deshmane, V. G. (2015) 'Intensification of Enzymatic Hydrolysis of Cellulose Using High-Frequency Ultrasound: An Investigation of the Effects of Process Parameters on Glucose Yield', *Energy & Fuels*, 29(8), pp. 4998–5006. doi: 10.1021/acs.energyfuels.5b00661.
- Bacovsky, D., Dallos, M. and Wörgetter, M. (2010) *Status of 2nd Generation Biofuels Demonstration Facilities in June 2010, IEA Bioenergy Task 39, IEA Bioenergy Task 39: Commercializing 1st and 2nd generation liquid biofuels from biomass.*
- Basera, P., Chakraborty, S. and Sharma, N. (2024) 'Lignocellulosic biomass: insights into enzymatic hydrolysis, influential factors, and economic viability', *Discover Sustainability*. Springer Nature. doi: 10.1007/s43621-024-00543-5.
- Bhat, M. K. (2000) 'Cellulases and related enzymes in biotechnology', *Biotechnology Advances*, 18(5), pp. 355–383. doi: 10.1016/S0734-9750(00)00041-0.
- Caballero, Benjamin., Finglas, P. M. . and Toldrá, Fidel. (2016) *Encyclopedia of food and health*. Academic Press is an imprint of Elsevier.
- de Carvalho Silvello, M. A., Martínez, J. and Goldbeck, R. (2019) 'Increase of reducing sugars release by enzymatic hydrolysis of sugarcane bagasse intensified by ultrasonic treatment', *Biomass and Bioenergy*, 122, pp. 481–489. doi: 10.1016/j.biombioe.2019.01.032.
- Chemat, F., Zill-E-Huma and Khan, M. K. (2011) 'Applications of ultrasound in food technology: Processing, preservation and extraction', in *Ultrasonics Sonochemistry*. Elsevier B.V., pp. 813–835. doi: 10.1016/j.ultsonch.2010.11.023.
- Córdova, A. *et al.* (2022) 'Recent Advances in the Application of Enzyme Processing Assisted by Ultrasound in Agri-Foods: A Review', *Catalysts*, 12(1). doi: 10.3390/catal12010107.
- Du, B., Jeepipalli, S. P. K. and Xu, B. (2022) 'Critical review on alterations in physiochemical properties and molecular structure of natural polysaccharides upon ultrasonication', *Ultrasonics Sonochemistry*, 90, p. 106170. doi: 10.1016/j.ultsonch.2022.106170.



- Farhan, H. and Susila, I. W. (2019) 'PEMANFAATAN AMPAS TEBU (BAGASSE) SEBAGAI BAHAN BAKAR ALTERNATIF BIOETANOL DENGAN METODE DISTILASI MENGGUNAKAN BATU KAPUR MESH 80 DENGAN VARIASI BERAT DAN SUHU PEMANASAN BATU KAPUR', *Jurnal Teknik Mesin Unesa*, 07(02), pp. 83–88.
- Gai, L. *et al.* (2022) 'Ultrasonic-Assisted Dual-Alkali Pretreatment and Enzymatic Hydrolysis of Sugarcane Bagasse Followed by *Candida tropicalis* Fermentation to Produce Xylitol', *Frontiers in Nutrition*, 9. doi: 10.3389/fnut.2022.913106.
- Gao, Y. *et al.* (2014) 'Optimization of fed-batch enzymatic hydrolysis from alkali-pretreated sugarcane bagasse for high-concentration sugar production', *Bioresource Technology*, 167, pp. 41–45. doi: 10.1016/j.biortech.2014.05.034.
- Ika Oktavia, F. *et al.* (2014) *Hidrolisis Enzimatis Ampas Tebu (Bagasse) Memanfaatkan Enzim Selulase dari Mikrofungi Trichoderma reesei dan Aspergillus niger Sebagai Katalisator dengan Pretreatment Microwave Enzymatic Hydrolysis of Bagasse Utilizing Enzymes Cellulase From Micro Trichoderma reesei and Aspergillus niger As Catalyst In Microwave Pretreatment*, *Jurnal Keteknik Pertanian Tropis dan Biosistem*.
- Jambrak, A. R. *et al.* (2008) 'Effect of ultrasound treatment on solubility and foaming properties of whey protein suspensions', *Journal of Food Engineering*, 86(2), pp. 281–287. doi: 10.1016/j.jfoodeng.2007.10.004.
- Jeoh, T. *et al.* (2017) 'Mechanistic kinetic models of enzymatic cellulose hydrolysis—A review', *Biotechnology and Bioengineering*, 114(7), pp. 1369–1385. doi: 10.1002/bit.26277.
- Kembaryanti Putri, S. and Sudiyo, R. (2012) *Studi Proses Pembuatan Biodiesel dari Minyak Kelapa (Coconut Oil) dengan Bantuan Gelombang Ultrasonik*, *Jurnal Rekayasa Proses*.
- Kumar, R., Singh, S. and Singh, O. V. (2008) 'Bioconversion of lignocellulosic biomass: biochemical and molecular perspectives', *Journal of Industrial Microbiology & Biotechnology*, 35(5), pp. 377–391. doi: 10.1007/s10295-008-0327-8.
- Lan, T., Lin, T. and Qin, Y. (2020) 'Enhancement of enzyme hydrolysis by increasing the zeta potential to reduce non-productive cellulase adsorption



- on sugarcane bagasse treated with liquid hot water', *BioResources*, 15(3), pp. 5965–5974. doi: 10.15376/biores.15.3.5965-5974.
- Lazuardi Budi, K., Kusdiyantini, E. and Soedarto, J. (2018) 'Aktivitas Enzym Selulase yang Dihasilkan Oleh Bakteri *Serratia marcescens* pada Substrat Jerami', *Jurnal Biologi*, 7(1), pp. 35–42.
- Liu, Y. *et al.* (2020) 'Enhanced sugars production with high conversion efficiency from alkali-pretreated sugarcane bagasse by enzymatic mixtures', *BioResources*, 15(2), pp. 3839–3849. doi: 10.15376/biores.15.2.3839-3849.
- Lynd, L. R. *et al.* (2002) 'Microbial Cellulose Utilization: Fundamentals and Biotechnology', *Microbiology and Molecular Biology Reviews*, 66(3), pp. 506–577. doi: 10.1128/MMBR.66.3.506-577.2002.
- Maryana, R. *et al.* (2014) 'Alkaline Pretreatment on Sugarcane Bagasse for Bioethanol Production', *Energy Procedia*, 47, pp. 250–254. doi: 10.1016/j.egypro.2014.01.221.
- Mason, T. J. (1990) *Sonochemistry: the uses of ultrasound in chemistry*. Cambridge: The Royal Society of Chemistry.
- Modenbach, A. A. and Nokes, S. E. (2014) 'Effects of Sodium Hydroxide Pretreatment on Structural Components of Biomass', *Transactions of the ASABE*, 57(4), pp. 1187–1198. doi: 10.13031/trans.57.10046.
- Morais Junior, W. G. *et al.* (2021) 'Sugarcane Bagasse Saccharification by Enzymatic Hydrolysis Using Endocellulase and β -glucosidase Immobilized on Different Supports', *Catalysts*, 11(3), p. 340. doi: 10.3390/catal11030340.
- Ojo, A. O. (2023) 'An Overview of Lignocellulose and Its Biotechnological Importance in High-Value Product Production', *Fermentation*. Multidisciplinary Digital Publishing Institute (MDPI). doi: 10.3390/fermentation9110990.
- Pellis, A. *et al.* (2016) 'Ultrasound-enhanced enzymatic hydrolysis of poly(ethylene terephthalate)', *Bioresource Technology*, 218, pp. 1298–1302. doi: 10.1016/j.biortech.2016.07.106.
- Philippidis, G. P. (1994) 'Cellulase Production Technology', in, pp. 188–217. doi: 10.1021/bk-1994-0566.ch009.
- Restiawaty, E. *et al.* (2020) 'Bioethanol production from sugarcane bagasse using *neurospora intermedia* in an airlift bioreactor', *International Journal of*



- Renewable Energy Development*, 9(2), pp. 247–253. doi: 10.14710/ijred.9.2.247-253.
- Saratale, G. D. and Oh, M.-K. (2015) ‘Improving alkaline pretreatment method for preparation of whole rice waste biomass feedstock and bioethanol production’, *RSC Advances*, 5(118), pp. 97171–97179. doi: 10.1039/C5RA17797A.
- Sutikno, Marniza and Novita Sari (2015) *The effect of alkali pretreatment and acid hydrolysis on bagasse-reduced sugar*, *Jurnal Teknologi Industri & Hasil Pertanian*. Lampung.
- Tiwari, S. *et al.* (2022) ‘Multistep Structural and Chemical Evaluation of Sugarcane Bagasse, Pretreated With Alkali for Enhancing the Enzymatic Saccharification by Cellulase and Xylanase of the *Pseudomonas* sp. CVB-10 (MK443365) and *Bacillus paramycoides* T4 (MN370035) Mix-Culture System’, *Frontiers in Energy Research*, 9. doi: 10.3389/fenrg.2021.726010.
- Trisakti, B. and br Silitonga, Y. (2015) ‘PEMBUATAN BIOETANOL DARI TEPUNG AMPAS TEBU MELALUI PROSES HIDROLISIS TERMAL DAN FERMENTASI SERTA RECYCLE VINASSE (PENGARUH KONSENTRASI TEPUNG AMPAS TEBU, SUHU DAN WAKTU HIDROLISIS)’, *Jurnal Teknik Kimia USU*, 4(3). doi: 10.32734/jtk.v4i3.1476.
- Vinatoru, M., Mason, T. J. and Calinescu, I. (2017) ‘Ultrasonically assisted extraction (UAE) and microwave assisted extraction (MAE) of functional compounds from plant materials’, *TrAC Trends in Analytical Chemistry*, 97, pp. 159–178. doi: 10.1016/j.trac.2017.09.002.
- Ye, Z. and Berson, R. E. (2014) ‘Factors affecting cellulose hydrolysis based on inactivation of adsorbed enzymes’, *Bioresource Technology*, 167, pp. 582–586. doi: 10.1016/j.biortech.2014.06.070.