

## DAFTAR PUSTAKA

1. Sun RC. Detoxification of biomass of bioethanol. *Bioresources*. 2008;4(2):452–5.
2. Park JK, Park YH, Jung JY. Production of bacterial cellulose by *Gluconacetobacter hansenii* PJK isolated from rotten apple. *Biotechnol Bioprocess Eng*. 2003;8(2):83–8.
3. Oktavianus F, Sigiyo RM, Bustan MD. Pembuatan bioetanol dari batang jarak menggunakan metode hidrolisis dengan katalis asam sulfat. *J Tek Kim*. 2013;19(2):27–32.
4. Suryadi H, Sutriyo, Sari HR, Rosikhoh D. Preparation of microcrystalline cellulose from water hyacinth powder by enzymatic hydrolysis using cellulase of local isolate. *J Young Pharm*. 2017;9(1):19–23.
5. Li XH, Yang HJ, Roy B, Park EY, Jiang LJ, Wang D, Miao YG. Enhanced cellulase production of the *Trichoderma viride* mutated by microwave and ultraviolet. *Microbiol Res*. 2009;165:190–8.
6. Zhang XZ, Zhang YHP. Bioprocessing technologies in biorefinery for sustainable production of fuels, chemicals, and polymers. 1st ed. Yang ST, El Enshasy HA, Thongchul N, editors. New Jersey: John Wiley & Sons; 2013.
7. Harun R, Danquah M, Forde G. Microalgal biomass as a cellulosic fermentation feedstock for bioethanol production. *J Chem Technol Biotechnol*. 2010;85:199–203.
8. Philippidis G. Cellulase production technology: evaluation of current status in enzymatic conversion of biomass for fuels production. *Am Chem Soc*. 1994;188–217.

9. Meryandini A, Widosari W, Maranatha B, Sunarti T, Rachmania N, Satria H. Isolasi bakteri selulolitik dan karakterisasi enzimnya. *Makara J Sscience*. 2009;13(1):33–8.
10. Baharuddin A, Razak M, Hock L, Ahmad M, Aziz S, Rahman N, Umikalsom MS, Hassan MA, Kenji S, Shirai Y. Isolation and characterization of thermophilic cellulase-producing bacteria from empty fruit bunches-palm oil mill effluent compost. *Am J Appl Sci*. 2010;7(1):56–62.
11. Makarim AK, Sumarno, Suryamto. Jerami Padi: Pengelolaan dan Pemanfaatan. Hermanto, Sunihardi, editors. Bogor: Badan Penelitian dan Pengembangan Pertanian; 2007.
12. Karimi K, Emtiazi G, Taherzadeh MJ. Ethanol production from dilute-acid pretreated rice straw by simultaneous saccharification and fermentation with *Mucor indicus*, *Rhizopus oryzae*, and *Saccharomyces cerevisiae*. *Enzyme Microb Technol*. 2006;40:138–44.
13. Sales EM, Barros TF, Velozo ED. Biotransformation of coumarins by *Saccharomyces cerevisiae*. *World J Pharm Pharm Sci*. 2014;3(12):209–16.
14. Boaventura MAD, Lopez RFAP, Takahashi JA. Microorganisms as tools in modern chemistry: the biotransformation of 3-indolylacetonitrile and tryptamine by fungi. *Brazilian J Microbiol*. 2004;35:345–7.
15. Rivai H, Djamaan A, Ramdani R. Up-scale of production and characterization of homolog vivacel from rice straw. *Int J Pharm Sci Med*. 2017;2(11):1–7.
16. Litri A. Biotransformasi mikrokristalin selulosa dari jerami padi menggunakan bakteri selulolitik. Sekolah Tinggi Ilmu Farmasi; 2019.
17. Paton J, Trapetti C. Bacteria [Internet]. 2018 [diakses pada 28 Desember 2018]. Tersedia dari: <https://www.nature.com/subjects/bacteria>

18. Vidyasagar A. What Are Bacteria? [Internet]. 2015 [diakses pada 28 Desember 2018]. Tersedia dari: <https://www.livescience.com/51641-bacteria.html>
19. Harti AS. Mikrobiologi Kesehatan. Yogyakarta: Andi Publisher; 2015.
20. Dwidjoseputro. Dasar-Dasar Mikrobiologi. Jakarta: Djembatan; 2010.
21. Brooks GF, Carroll KC, Butel JS, Morse SA, Mietzner TA. Medical Microbiology. 26th ed. New York: Mc Draw Hill Publishing; 2013.
22. Sanders ER. Aseptic laboratory techniques: Plating methods. J Vis Exp. 2012;(63):1–18.
23. Saraswati R, Husen E, Simanungkalit R. Metode Analisis Biologi Tanah. Bogor: Balai Besar Penelitian dan Pengembangan Sumberdaya Lahan Pertanian; 2007.
24. Huang S, Sheng P, Zhang H. Isolation and identification of cellulolytic bacteria from the gut of *Holotrichia parallela* larvae (coleoptera: scarabaeidae). Int J Mol Sci. 2012;13:2563–77.
25. Moat A, Faster J, Spector M. Microbial Physiology. USA: John Willey dan Sons Ltd; 2002.
26. Niranjane A. Screening diverse cellulase enzymes from the white rot fungus *Phlebia gigantea* for high activity and large scale applications. Royal Melbourne Institute of Technology; 2006.
27. Rao S. Mikroorganisme Tanah dan Pertumbuhan Tanah. Jakarta: UI Press; 1994.
28. Anand AAP, Vennison SJ, Sankar SG, Prabhu DIG, Vasani PT, Raghuraman T, Geoffrey CJ, Vandan SE. Isolation and characterization of bacteria from the gut of *Bombyx mori* that degrade cellulose, xylan, pectin and starch and their impact on digestion. J Insect Sci. 2010;10(107).

29. Gupta P, Samant K, Sahu A. Isolation of cellulose-degrading bacteria and determination of their cellulolytic potential. *Int J Microbiol.* 2011;2012.
30. Doi RH. Cellulases of mesophilic microorganisms cellulosome and noncellulosome producers. *Ann New York Acad Sci.* 2008;1125:267–79.
31. Mahjabeen F, Khan S, Choudhury N, Hossain MM, Khan TT. Isolation of cellulolytic bacteria from soil, identification by 16s rna gene sequencing and characterization of cellulase. *Bangladesh J Microbiol.* 2016;33:17–22.
32. Sethi S, Datta A, Gupta L, Gupta S. Optimization of cellulase production from bacteria isolated from soil. *ISRN Biotechnol.* 2013;2013.
33. Patagundi BI, Shivasharan CT, Kaliwal BB. Isolation and characterization of cellulase producing bacteria from soil. *Int J Curr Microbiol Appl Sci.* 2014;3(5):59–69.
34. Peristiwa, Natamihardja YS, Herlini H. Isolation and identification of cellulolytic bacteria from termites gut (*Cryptotermes sp.*). *J Phys Conf Ser.* 2018;1013.
35. Verma V, Verma A, Kushwaha A. Isolation and production of cellulase enzyme from bacteria isolated from agricultural fields in district Hardoi, Uttar Pradesh, India. *Adv Appl Sci Res.* 2012;3(1):171–4.
36. Lokhande S, Pethe AS. Isolation and screening of cellulolytic bacteria from soil and optimization of cellulase production. *Int J Life Sci.* 2017;5(2):277–82.
37. Khianggam S, Pootaeng-on Y, Techakriengkrai T, Tanasupawat S. Screening and identification of cellulase producing bacteria isolated from oil palm meal. *J Appl Pharm Sci.* 2014;04(04):090–6.
38. Vyas P, Kumar A. Biochemical and molecular characterization of cellulase producing bacterial isolates from cattle dung samples. *J Adv Res Biotechnol.* 2018;3(1).



39. Islam F, Roy N. Screening, purification and characterization of cellulase from cellulase producing bacteria in molasses. BMC Res Notes. 2018;11.
40. Berg J, Tymoczko J, Gatto G, Stryer L. Biochemistry. 8th ed. New York: W H Freeman; 2015.
41. Howard R, Rensburg E, Abotsi E. Lignocellulose biotechnology: Issues of bioconversion and enzyme production. African J Biotechnol. 2002;2(12):602–19.
42. Sjostrom E. Kimia, Kayu, Dasar-Dasar dan Penggunaannya. Hamidjojo H, editor. Yogyakarta: UGM Press; 1995.
43. Anindyawati T. Potensi selulase dalam mendegradasi lignoselulosa limbah pertanian untuk pupuk organik. Ber Selulosa. 2010;46:263–7.
44. Andersen N, Stenby EH, Michelsen ML. Enzymatic hidrolysis of cellulose: experimental and modelling studies. Technical University of Denmark; 2007.
45. Shankar T, Isaaiarasul. Cellulase production by *Bacillus pumilus* EWBCM1 under varying cultural conditions. Middle-East J Sci Res. 2011;8(1):40–5.
46. Thoorens G, Krier F, Leclercq B, Carlin B, Evrard B. Microcrystalline cellulose, a direct compression binder in a quality by design environment—A review. Int J Pharm. 2014;473:64–72.
47. Ohwoavworhua FO, Adelakun TA, Okhamafe AO. Processing pharmaceutical grade microcrystalline cellulose from groundnut husk: extraction methods and characterization. Int J Green Pharm. 2009;97–104.
48. Nsor-Atindana J, Chen M, Goff HD, Zhong F, Sharif HR, A YL. Functionality and nutritional aspects of microcrystalline cellulose in food. Carbohydr Polym. 2017;172:159–74.

49. Kharismi RRAY, Sutriyo, Suryadi H. Preparation and characterization of microcrystalline cellulose produced from betung bamboo (*Dendrocalamus asper*) through acid hydrolysis. J Young Pharm. 2018;10(2):79–83.
50. Pratiwi R, Rahayu D, Barliana MI. Pemanfaatan selulosa dari limbah jerami padi (*Oryza sativa*) sebagai bahan bioplastik. Indones J Pharm Sci Technol. 2016;3(3).
51. Acharya T. Colony Morphology of Bacteria; How to describe Bacterial Colonies? [Internet]. 2013 [diakses pada 12 Maret 2019]. Tersedia dari: <https://microbeonline.com/colony-morphology-bacteria-describe-bacterial-colonies/>
52. Sandle T. Pharmaceutical Microbiology. Cambridge: Elsevier Ltd; 2016.
53. Cappuccino JG, Sherman N. Microbiology: A Laboratory Manual. 10th ed. New York: Pearson; 2014.
54. Varghese N, P JP. Microbiology Laboratory Manual. Kerala: Kerala Agricultural University; 2014.
55. Madigan MT, Martinko JM, Stahl DA, Clark DP. Brock Biology of Microorganisms. 13th ed. San Fransisco: Benjamin C ummings; 2012.
56. Acharya T. Decarboxylation Test: Types, uses, principles, procedure and results [Internet]. 2015 [diakses pada 21 Februari 2019]. Tersedia dari: <https://microbeonline.com/decarboxylation-test-types-uses-principles-procedure-results/>
57. Wilson G. Virtual Unknown Microbiology. Texas: Intuitive Systems, Inc.; 2012.
58. Public Health England. UK Standards for Microbiology Investigations: Aesculin hydrolysis test. London: Assets Publishing; 2018.

59. Halim A, Ben ES, Sulastri E. Pembuatan mikrokristalin selulosa dari jerami padi (*Oryza sativa* linn.) dengan variasi waktu hidrolisa. J Sains dan Teknol Farm. 2002;7(2):80–7.
60. Liang YL, Zhang Z, Wu M, Wu Y, Feng JX. Isolation, screening, and identification of cellulolytic bacteria from natural reserves in the subtropical region of China and optimization of cellulase production by *Paenibacillus terrae* ME27-1. Biomed Res Int. 2014;2014.
61. Aye NC, Zun KT. Investigation of cellulolytic activity of bacteria from municipal solid waste. Int J Sci Eng Technol Res. 2014;3(26):5216–20.
62. Purnamasari D. Isolasi dan seleksi bakteri selulolitik penghambat pertumbuhan cendawan pada tanaman kelapa sawit. Institut Pertanian Bogor; 2013.
63. Usmi, FH. Isolasi dan karakterisasi bakteri penghasil bioplastik poli(3-hidroksibutirat) dari sampel tanah sungai kampar riau. Universitas Andalas; 2018.
64. Bala D, Abioye O, Damisa D, Kuta F, Adabara N, Udenyi E. Isolation and screening of soil bacteria with the potential to produce antibiotics. Res Rev Biosci. 2012;6(12):361–4.
65. Ahmad B, Nigar S, Shah SSA, Bashir S, Ali J, Yousaf S, Bangash JA. Isolation and identification of cellulose degrading bacteria from municipal waste and their screening for potential antimicrobial activity. World Appl Sci J. 2013;27(11):1420–6.
66. Yoon J, Park J, Suh D, Hong S, Ko S, Kim S. Comparison of dyes for easy detection of extracellular cellulases in fungi. Mycobiology. 2007;35(1):21–4.

67. Zverlova V V, Holl W, Schwarz H. Enzymes for digestion of cellulose and other polysaccharides in the gut of longhorn beetle larvae, *Rhagium inquisitor* L. (Col., Cerambycidae). Int Biodeterior Biodegradation. 2003;51(2):175–9.
68. Saptarini NM, Indriyati W. Isolation of cellulolytic bacteria from termites with cellulose of corn cobs as a carbon source. Int J Pharm Pharm Sci. 2014;6(4):215–7.
69. Kar A. Pharmaceutical Microbiology. New Delhi: New Age International Ltd; 2017.
70. Thairu Y, Nasir I, Usman Y. Laboratory perspective of gram staining and its significance in investigations of infectious diseases. J Med. 2014;1(4):168–74.

