

DAFTAR PUSTAKA

- Akansha.K., and Varsha.N. (2013). Production Of Amylase Enzyme By Isolated Microorganisms And It's Application. *International Journal of Pharmacy and Biological Sciences*, 3, 354-360.
- Alma'arif.A.L., Wijaya.A., and Murwono.D. (2012). Penghilangan racun asam sianida (HCN) dalam umbi gadung dengan menggunakan bahan penyerap abu. *Jurnal teknologi kimia industri* 1, 14-20.
- Ângelo.S.M.M., Martins-Meyer.T.S., Érika.V.C.F., Bianca.W.P.L., and Dellamora-Ortiz G.M. (2013). Enzymes in Bakery: Current and Future Trends.
- Anselm P. M., Carla F.C., Malik.B., Ken M.M. Hosea , Anthony M.M. , and Emrode.E. , Mattiassion.O. (2014). Characterisation and evaluation of a novel feedstock, Manihot glaziovii, Muell. Arg, for production of bioenergy carriers: Bioethanol and biogas. *Bioresource Technology*, 172, 58–67.
- Balat.M. (2007). Global bio-fuel processing and production trends. *Energy Explor exploit* 25, 195–218.
- Balat.M., Balat.H., Oz.C.(2008).Progres in bioethanol processing.*Progres in energy and combustion Science*. 551-573
- Bernfeld, P. (1955). Amylases, α and β . *Methods Enzymol*, 1, 149–158.
- Yang.B, Dai.Z, Ding.S.Y and Wyman.CE. (2011). *Biofuels*, 2, 421-450.
- Binod.P., Raveendran S.R., Singhania.R.R., Vikram.S., Devi.L., Nagalakshmi.S., Kurien.N., Rajeev.K., Sukumaran, and Pandey.A. (2010). Bioethanol production from rice straw: An overview. . *Bioresource Technology* 101, 4767-4774.
- Bjoern, L., Lied, E. and Espe, M. (2000). Enzymatic hydrolysis of by-products from the fish-filleting industry; chemical characterization and nutritional evaluation. *Journal of the Science of Food and Agriculture* 80: 581-589.
- Boedoyo.M.S.(2014). Prospek Pemanfaatan Bioethanol Sebagai Pengganti BBM di Indonesia.Pusat Teknologi Pengembangan Sumberdaya Energi, BPPT.55-63.
- Brune. (2009). *Symbionts aiding digestion*. In: Cardé RT, Resh VH (eds) *Encyclopedia of insects* (2nd ed.). New York: Academic Press.
- Buleon.A., Colonna.P., Planchot.V., Ball.S.(1998). Starch granules: Structure and biosynthesis. *International Journal of Biological Macromolecul* 23” 85-112.

Burkhill, I.H. (1935). *Dioscorea hispida*. A Dictionary of the Economic Products of the Malay Peninsula *The Crown Agents for the Colonies*. london

Chamaiporn.C., Thongchai.C., and Khanutsanan.W.(2015) Purification, Biochemical Characterization of a *Macrotermes gilvus* Cellulase and Zymogram Analysis. *Asian Journal of Biochemistry* 10 (5): 190-204.

Chandel.A.K., Chan.E., Rudravaram.R., Narasu.M.L., Rao.L.V., and Ravindra.P. (2007). Economics and environmental impact of bioethanol production technologies: an appraisal. . *Biotechnol Mol Biol Rev* 2, 14-32.

Christel.M.A., Julien.B., Catherine.B., Cédric.T., Philippe.T., Jacqueline.D., Frédéric.F., Eric.H., Edwin.D.P., Daniel.P., Vandenbol, and Micheline. (2012). Identification and characterization of a new xylanase from Gram-positive bacteria isolated from termite gut (*Reticulitermes santonensis*). *Protein Expression and Purification*, 83, 117-127.

Coursey , D.G. (1967). *Yams*. Longmans-Green, London.

Dabonné. S., Yahaya.K., Pamphile.K.B., Philomène.Z., and Simplie.G.T..(2013) Xylinasic and amylasic activities of some microorganisms in the digestive exudate of termites (*Macrotermes Subhyalinus* and *Macrotermes Bellicosus*). *Scientific Journal of Biological Sciences* 2(12) 244-255.

Das, S., Singh, S., Sharma, V., and Soni, M. L. (2011). “biotechnological applications of industrially important amylase enzyme”. *International Journal of Pharma & Bio Sciences*, 2 (1).

David .A., Odelson, John.A., and Breznak. (1985). cellulase and other polymer-hydrolyzing activities of trichomitopsis termopsidis, a symbiotic protozoan from termitest. *applied and environmental microbiology*, mar(49).2. 622-626 .

Demirkan.E. (2011). Production, purification, and characterization of α -amylase by *Bacillus subtilis* and its mutant derivates. *Turk j biol* 35, 705-712.

Dhillon, G.S., Brar, S.K., Kaur, S., Metahni, S.,and M'hamdi, N. (2012).Lactoserum as a moistening medium and crude inducer for fungal cellulase and hemicellulase induction through solid-state fermentation of apple pomace. *Biomass Bioenergy* 41, 165–174

Edijala, J.K., Okoh. P.N. , and Anigoro.R. (1999). Chemical assay of cyanides levels of short-time-fermented cassava products in the Abraka area of Delta State, Nigeria. *Food Chemistry* 107.

Fagbohoun J.B., Ahi A.P., Karamoko.Y, Dabonné.S., Kouadio.E.J.P and Kouamé.L.C.(2012). An endo-beta-D-glycosidase from salivary glands of *Macrotermes subhyalinus* little soldier with a dual activity against carboxymethylcellulose and xylan. *International Journal of Biosciences (IJB)* ; (2). 2.1-10.

- Fahrizal, Abubakar.Y, Muzaifa.M.,and Muslim. (2013). The Effects of Temperature and Length of Fermentation on Bioethanol production from Arenga Plant (*Arenga pinnata* MERR). *International journal on advanced science engineering information technology* 3, 54-57.
- Femi-Ola.T.O. and Olowe.B.M. (2011).Characterization of alpha amylase from *Bacillus subtilis* BS5 Isolated from *Amitermes evuncifer Silvestri*. Research Journal of Microbiology 6(2):140-146.
- Forgatty WM., and Kelly C.T. . (1983). Microbial enzymes and biotechnology. *Environmental and Applied Science Publishers*.
- Ghose, T. K. (1987). Measurement Of Cellulose Activities. *International Union Of Pure and Applied Chemistry*, 2, 257-268.
- Hamelick.CN.,Geertje van .H., and Andre' P.C.F. (2004). Ethanol from lignocellulosic biomass: techno-economic performance in short-, middle- and long-term. *Biomass and Bioenergy*, 28, 384–410.
- Harijono, Siwi.N., and Sutrisno.A. (2011). purifikasi dan karakterisasi linamarase gadung (*dioscorea Hispida dennst*) untuk detoksifikasi bubur umbi gadung. *jurnal teknologi pertanian*, 12, 76-82.
- Hashem.M.,Abdel N.A.,Zohri and Maysa M. A. A.(2013).Optimization of the fermentation conditions for ethanol production by new thermotolerant yeast strains of *Kluyveromyces* sp.African Journal of Microbiology Research. 7(37).4550- 4561.
- Hatami.M., Younesi.H., and Bahramifar.N. (2015). Simultaneous saccharification and fermentation (SSF) of rice cooker wastewater by using *Aspergillus niger* and *Saccharomyces cerevisiae* for ethanol production. *Journal of Applied Research in Water and Wastewater*, 3, 103-107.
- Henrissat.B. (1991). A classification of glycosyl hydrolases based on amino acid sequence similarities. *Biochem. Eng. J*, 280, 309 – 316.
- Hmidet.N., Ali, N.E., Haddar.A., Kanoun, S., Alya, S., and Nasri, M. (2009). Alkaline proteases And thermostable α -amylase co-produced by *bacillus licheniformis* nh1: characterization And potential application as detergent additive. *Biochem. Eng. J*, 47, 71–79.
- Huang, Xu.Z and Fang. (2014). Pretreatment Methods for Bioethanol Production. *Appl Biochem Biotechnol*.
- Hwanam.K., Byungchul.C., Seongho Park and Yong-Kil Kim. (2005). Engine Performance and Emission Characteristics of CRDI Diesel Engine Equipped with WCC and DOC using Ethanol Blended Diesel Fuel. *researchgate*.

- Hyodo, F., Azuma, J., Abe, T.(1999). Estimation of effect of passage through the gut of a lower termite *Coptotermes formosanus* Shiraki, on lignin by solid-state CP MASS C-13 NMR. . *Holzforschung*, 53, 244–246.
- Jane, J. L., Chen, J. F.(1992) Effects of amylose molecular size and amylopectin branch chain length on paste properties of starch. *Cereal Chem*, 69, 60-65.
- Jayalakshmi, N. and Mahalakshmi S. (2016). Amylase, Cellulase and Xylanase production from a novel bacterial isolate *Achromobacter xylosoxidans* isolated from marine environment. *International Journal of Advanced Research in Biological Science*, 3, 223-230.
- Jelena.D. Pejin.A., Ijljan.V., Mojovic.B., Dušanka J., Pejin .A., Sunc'ica.D., Kocic'-tanackov.A., Dragiša .S., Savic, Svetlana.B., Nikolic' B., Aleksandr.P.,and Djukic'-vukovic'. (2015) Bioethanol production from triticale by simultaneous saccharification And fermentation with magnesium or calcium ions addition. *Fuel*, 142, 58–64.
- Karimi,T.M.J, and Keikhosro. (2007). acid-based hydrolysis processes for ethanol from lignocellulosic materials : a review. *BioResources* 2, 472-499.
- Konig, H. (2006). *Bacillus* species in the intestine of termites and other soil invertebrates. *J. Appl. Microbiol*, 101, 620–627.
- Koswara.S. Pengolahan umbi gadung: southeast asian food and agricultural science and technology (seafast) center research and community service institution bogor agricultural university.
- Kuhad.R.C., Gupta.R., and Singh.A. (2011). Microbial Cellulases and Their Industrial Applications. *Review Article India*.
- Kumar.M.R, Kumaran.M.D.B, Balashanmugam.P.,A. Rebecca.I.N, Kumar.D.J.M and Kalaichelvan.P.T.. (2014), Production of Cellulase enzyme by *Trichoderma reesei* Cef19 and its Application in the Production of Bio-ethanol. *Pakistan Journal of Biological Sciences* 17, 735-739.
- Kumar N.S., Sourimuthu.M., and Devaraj S.B. (2015). Cellulolytic activity of gut extract of subterranean termite, *Odontotermes obesus* Rambur: A pretreatment tool for conversion of lignocellulosic biomass to fermentable sugar for biorefinery industry. *African Journal of Biotechnology*, 14, 1753-1756.
- Kumoro.A.C., Retnowati.D.S., Budiyati.C.S., Manurung.T. and Siswanto. (2012). Water Solubility, Swelling and Gelatinization Properties of Raw and Ginger Oil Modified Gadung (*Dioscorea hispida* Dennst) Flour *Research Journal of Applied Sciences, Engineering and Technology* 4, 2854-2860.
- Lehninger, A.L., Nelson, D.L. and Cox, M.M. 2005. Lehninger principles of biochemistry, 1. WH Freeman and Co, New York, US.

Lima.TdA, Pontual.EV, Dornelles.LP, Amorim.PK, Sá.RA, Coelho.LCBB,Napoleão.TH, Paiva.PMG. (2014). Digestive enzymes from workers and soldiers of termite Nasutitermes corniger. *Comparative Biochemistry and Physiology*, 176, 1-8.

Li.A. (2008). Municipal Solid Waste Used as Bioethanol Sources and its Related Environmental Impacts. *International Journal of Soil, Sediment and Water*, 1.

Li.D, Zhou.H., Xingcai.L, Wu-gao.Z, and Jian-guang.Y. (2005). Physico-chemical properties of ethanol–diesel blend fuel and its effect on performance and emissions of diesel engines. *Renewable Energy*, 30, 967–976.

Li.Y., Yin, Q., Ding, M., and Zhao, F. (2009). Purification, characterization and molecular cloning of a novel endo- β -1,4-glucanase AC-EG65 from the mollusc Ampullaria crossean. *Comp. Biochem. Physiol. B Biochem. Mol. Biol.* , 153, 149–156.

Lin, Y. (2006). Ethanol fermentation from biomass resources. *Microbiol Biotechnol* , 627-642.

Linoj.K.N.V., Dhavala.P., Goswami.A., and Maithel.S. (2006). Liquid Biofuels in south asia: resources and technologies. *Asian biotechnol Develop rev* 8, 31–49.

Lowry OH, Rosebrough NJ, Farr AL, and Randall RJ. (1951). Protein Measurement with The Folin Phenol Reagent. . *J.Biol chem* 193, 265-275.

Maiti, Sangrila.S. and Tushar.K. (2013). Cellulase Production by Bacteria: A Review. *British Microbiology Research Journal*, 3, 235-258.

Mansfield S.D., Mooney.C., Saddler.J.N. (1999). Substrate and enzyme characteristics that limit cellulose hydrolysis. *Biotechnol Prog* 15: 804–816.

Maurice.M.L.(2011). A study to determine the optimal operating conditions to convert cellulosic biomass into ethanol during enzymatic hydrolysis and microbial fermentation.Shanghai Jiao Tong University.1-42.

Mcewen.S.E, Slaytor.M and O'brien.r. W. (1980). Cellobiase Activity In Three Species Of Australian Termites. *Insect Biochem*, 10, 563-567.

Mead.D. (2013). Root crops.

Moshi.A.P., Crespo.C.F., Badshah.M., Hosea.K.M., Mshandete.A.M., Mattiasson.B.(2014). High bioethanol titre from Manihot glaziovii through fed-batch simultaneous saccharification and fermentation in automatic gas potential test system. *Bioresource Technol*, 156 , 348-356.

Mustafa.B., Havva.B.,and Cahide O' zb. (2008). Progress in bioethanol processing. *Progress in Energy and Combustion Science*, 34, 551–573.

Islam.M.S., Aktar.M. B., and Rahman M.M. (2014). Determination of alpha-amylase activity of Streptomyces spp isolated from Bangladeshi soils. *International Journal of Interdisciplinary and Multidisciplinary Studies*, 1, 167- 170.

Narayanan, P. Udhayaraja and J. Sriman. (2012). Optimization For Production Of Bioethanol Using Sorghum Stover By Saccharomyces cerevisiae. *International Journal of Research in Pure and Applied Microbiology*, 2, 64-67.

Nelson.S. (1944). A photometric adaptation of the somogyi method for the determination of glucose. *J.Biol.Chem*, 153, 375-380.

Noratiqah.K, Madiyah Md. Salleh, Adibah.Y., and Chun.S.C. (2015). Production of Lignocellulolytic Enzymes by Microorganisms Isolated from *Bulbitermes* sp. Termite Gut in Solid-State Fermentation. *Waste Biomass Valor*.

Novalinda.D., Linda,Yanti.Land.Edi.S.(2014). Utilization of Yam as a Source of Local food Material to Support Food Diversification at dry Land in Jambi Province.

Novy.V., Longus.K., and Nidetzky.B. (2015). From wheat straw to bioethanol: integrative analysis of a separate hydrolysis and co-fermentation process with implemented enzyme production. *Biotechnology for Biofuels* 8, 46.

O' hgren.K., Bura.R., Lesnicki.G.,Saddler.J.,and Zacchi.G. . (2007). A comparison between simultaneous saccharification and fermentation and separate hydrolysis and fermentation using steam-pretreated corn stover. *Process Biochemistry* 42, 834–839.

Onuki.S., Jacek.A., Koziel, Leeuwen.J., William .S., Jenks, David .A., Grewell, and Cai. (2008). *Ethanol production, purification, and analysis echniques: a review*. Iowa State University.

Pagarra.H, Hartono and. (2011). The Analysis Level of Ethanol as result of Fermentation Yeast of Breads on The Gadung Tuber Starch (*Dioscorea hispida* Dennst) toward Levels of Ethanol. *Bionature*, 12, 82-86.

Pathak.S.S., Kumar.S., Rajak, and Sandhu.S.S. (2005). study of effect of temperature on amylase production by soil mycotic flora of jabalpur region. *world journal of pharmacy and pharmaceutical sciences*, 1448-1458.

Rejzek, M.; Stevenson, C. E.; Southard, A. M.; Stanley, D.; Denyer, K.; Smith, A. M.; Naldrett, M. J.; Lawson, D. M.; and Field, R. A. (2011). "Chemical genetics and cereal starch metabolism: Structural basis of the non-covalent and covalent inhibition of barley β -amylase". *Molecular BioSystems*. 7 (3): 718–730

Rosa.D.L., Hidayat.N., and Wignyanto. (2014). Optimasi penurunan HCN pada umbi gadung (*dioscorea hispida* dennst) dengan perendaman air kapur. universitas briwijaya.

Rouland, C., Civas, A., Renox, J., and Petek, F. (1988). Purification and Properties of Cellulases from the termite *Macrotermes mulleri* (Termitidae, Macrotermitinae) and its symbiotic fungus *Termitomyces* sp. *Comp.Biochem. Physiol.*, 91B(3), 449-458.

Segel.IH. (1975) Biochemical calculations 2nd edition. California

Shengwei.H., Ping.S., and Hongyu.Z. (2012). Isolation and Identification of Cellulolytic Bacteria from the Gut of Holotrichia parallela Larvae (Coleoptera: Scarabaeidae). *International Journal of Molecular Sciences*, 13, 2563-2577.

Smith., Joseph.A. (2007). *Cellulolytic And Xylanolytic Gut Enzyme Activity Patterns In Major Subterranean Termite Pests.* (Dissertation), University of florida.

Soderstrom.J.M., Gable and G.zacchi. (2005). separate versus simultaneous saccharification and fermentation of two-step steam pretreated softwood for ethanol production. *J.wood chem, technol*, 25, 187-202.

Souza.P.M., and Magalhães.P.O. (2010). Application of microbial α -amylase in industry a review. *Braz. J. Microbiol*, 41, 850-861.

Sun.Y and Cheng.J.J (2005). Dilute acid pretreatment of rye straw and bermudagrass for ethanol production. *Bioresource Technology*, 96, 1599–1606.

Suryani.R., and Nisa.F.C. (2015). modifikasi pati singkong (*Manihot esculenta*) dengan enzim α -amilase sebagai agen pembuah serta aplikasinya pada proses pembuatan marshmallow *Jurnal Pangan dan Agroindustri* 3, 723-733.

Syafi'i.I , Harijono, and Erryana.M. (2009). Detoksifikasi Umbi Gadung (*Dioscorea hispida* denst) Dengan Pemanasan Dan Pengasaman Pada Pembuatan Tepung. *Jurnal Teknologi Pertanian*, 10, 62 – 68.

Taggar.M.S. (2015). insect cellulolytic enzymes: novel sources for degradation of lignocellulosic biomass *Journal of applied and natural science* 7, 625-630.

Tutt.M., Kikas.T., Kahr.H., Pointner.M., Kuttner.P. and Olt.J..(2014). Using steam explosion pretreatment method for bioethanol production from floodplain meadow hay. *Agronomy Research*, 12, 417–424.

Veeresh .J., and Wu.J.C. (2014). Microbial cellulases: Engineering, production and applications. *Renewable and Sustainable Energy*, 188–203.

Venkatesh C., and Pradeep.V. (2013). An overview of key pretreatment processes employed for bioconversion of lignocellulosic biomass into biofuels and value added products *Biotechnol Mol Biol Rev*, 3, 415–431.

Volk WA and MF Wheeler. (1988). *Mikrobiologi Dasar*.Jilid 1. S Adisoemarto (Ed.). Erlangga, Jakarta.Terjemahan dari *Basic Microbiology* 5 Ed. 77

Wahid.M.A, Mat.N., and Razali.H.J. (2011). Application of Automatic Timer for Irrigation System in *Dioscorea hispida* Dennst. *Propagation. Science and Technology 1*, 24-28.

Watanabe, H., and Tokuda, G. (2010). Cellulolytic systems in insects. *Ann. Rev. entomol.*, 55, 609–632.

Zhou.J.Q, Qin.L., Li.W.C.,Zhang.J.,Bao.J., Huang.Y.D.,Bing-Zhi.L., and Yuang.Y.J (2015). Simultaneous saccharification and co-fermentation of dry diluted acid pretreated corn stover at high dry matter loading: Overcoming the inhibitors by non-tolerant yeast. . *Bioresource Technology* 198, 39–46.

