

DAFTAR PUSTAKA

- Ahern, T.J. and A.M. Klivanov. 1987. Why do enzyme irreversibly inactive at high temperature. *Biotec 1. Microbial Genetic Engineering and Enzyme Technology*. Gustav Fischer. Stuttgart. New York.
- Akiba, S., Y. Kiniura, K. Yamamoto, H. Kumagai. 1995. Purification and characterization of a protease.resistant cellulase from *Aspergillus niger*. *Bioengineering*. 79:125-130.
- Anggraini, N. 2011. *Peningkatan Kestabilan Enzim α -amilase dari Bacillus subtilis ITBCCB148 Dengan Modifikasi Kimia Menggunakan Asam Glioksilat*. (Skripsi). Universitas Lampung. Bandar Lampung.
- Apriyanti. 2010. *Peningkatan Kestabilan Enzim α -amilase dari Bacillus subtilis ITBCCB148 Dengan Modifikasi Kimia Menggunakan Dimetiladipimidat*. (Skripsi). Universitas Lampung. Bandar Lampung.
- Boyer, R.F. 1993. *Modern Experimental Biochemistry*. Benjamin Cumming Publishing Company. California.
- Busto, M.D., N. Ortega, M. Perez-Mateos. 1995. Induction of β -glukosidase in fungal and soil bacterial cultures. *Soil Biology and Biochemistry*. 27: 949-954.
- Duff, S.J.B and Murray, W.D. 1996. Bioconversion of forest products industry waste cellulose to fuel ethanol: a review. *Bioresource Technology*. 55. 1-33.
- Dwidjoseputro, D. 2005. *Dasar-Dasar Mikrobiologi*. Djambatan. Malang Halaman 180-181.

- Eijnsink, G.H., Sirgit, G. Torben, V. Bertus van de Burg. 2005. Directed Evolution of Enzyme Stability. Biomolecular Engineering. *Elsevier Science Inc.* New York. 23:21-30.
- Fan, L.T., Y.H. Lee, M.M. Gharpuray. 1982. The nature of lignocellulosics and their pretreatment for enzymatic hydrolysis. *Advances in Biochemical Engineering.* 23: 158-187.
- Fessenden, R.J. and Fessenden, J.S. 1992. *Kimia Organik Jilid II.* Erlangga. Jakarta. 395-396.
- Francis, G.E., C. Delgado and D. Fisher. 1992. PEG-modified Proteins In *Stability of Protein Pharmaceuticals Part B.* Ahern, T.J. and M. C. Manning editor. Plenum Press. New York. 246-247.
- Goddete, D.W, C. Terri, F.L. Beth, L. Maria, R.M. Jonathan, P.Christian, B.R. Robert, S.Y. Shioh, C.R. Wilson. 1993. Strategy and implementation of a system for protein engineering. *Journal of Biotechnology.* 28: 41-54.
- Gunam, I.B.W, Hardiman, T. Utami, 2004. Chemical Pretreatments on Bagasse to Enhance Hydrolysis of Its Cellulose Enzymatically. *The 3th Hokkaido Indonesian Student Association Scientific meeting (HISAS 3).* Sapporo.
- Janecek, S. 1993. Strategies for Obtaining Stable Enzymes. *Process Biochemistry.* 28. 435-445.
- Junita. 2002. *Mempelajari Stabilitas Termal Enzim Protease dari Bacillus stearothermophilus Dalam Pelarut Heksana, Toluena, dan Benzena.* (Skripsi). Institut Pertanian Bogor. Bogor.
- Kamelia, R, Muliawati S, Dessy N. 2005. *Isolasi dan karakterisasi protease intraseluler termostabil dari Bakteri Bacillus stearothermophilus RPI.* Seminar Nasional MIPA. Departemen Kimia. Institut Pertanian Bogor. Bogor.
- Kazan, D, H. Ertan, A. Erarslan. 1997. Stabilization of *Escherichia coli* Penicillin G Acylase against thermal inactivation by cross-linking with dextran dialdehyde polymers. *Applied Microbiology and Biotechnology.* 48: 191-197.

- Khajeh, K, Naderi-Manesh, H., Ranjbar, B., Moosavi-Movahedi, A. A, Nemat-Gorgani, M. 2001. Chemical Modification of Lysine Residues in *Bacillus* Alpha-Amylases: Effect on Activity And Stability. *Enzyme Microbiology Technology*. 28: 543-549.
- Khajeh, K., Azadeh E.H. and Mohsen N. G. 2004. Chemical Modification of Lysine Residue in *Bacillus lincheniformis* α -Amylase : Conversion of An Endo to Exo Type Enzyme. *Journal Of Biochemistry and Molecular Biology*. 37: 642-647.
- Lay, B. W. and Sugyo,H. 1992. *Mikrobiologi*. Rajawali Pers. Jakarta. 107-112.
- Lee, S.M., and Koo, Y.M. 2001. Pilot scale production of cellulose using *Trichoderma reesei* Rut C-30 in fed-batch mode. *Journal of Microbiology and Biotechnology*. 11: 229-233.
- Lehninger, A.L. 1982. *Dasar-Dasar Biokimia*. Erlangga. Jakarta.369 halaman.
- Lowry, O. H., N. J., Rosebrough, A. L., Farr, R. J. Randall. 1951. Protein measurement with the folin phenol reagent. *Journal of Biology and Chemistry*. 193-265.
- Mandels, M., A. Raymond, R. Charles. 1976. Measurement of saccharifying cellulose. *Biotechnology and Bioengineering*. John Wiley & Sons Inc.
- Martoharsono, S. dkk.1984. *Biokimia*. UGM Press. Yogyakarta.91.
- Mozhaev, V.V. and K. Martinek. 1984. Structur-Stability Relationship in Protein: New Approaches to Stabilizing Enzymes. *Enzyme Microbial Technology*. 50-59.
- Mozhaev, V.V., N.S. Melik-Nubarov, V.A. Siksniš and K. Martinek. 1990. Strategy for Stabilizing Enzymes. Part Two: Increasing Enzyme Stability by Selective Chemical Modication. *Biocatalysts*. 173: 189-196.

- Muchtadi, T.R. dan Sugiono. 1992. *Ilmu Pengetahuan Bahan Pangan*. Departemen Pendidikan dan Kebudayaan. Direktorat Jenderal Tinggi Pusat Antar Universitas Pangan dan Gizi. Institut Pertanian Bogor. Bogor.
- Nubarov, N.S., V.V. Mozheav, V.A. Siksni, K. Martinek. 1987. Enzyme Stabilization of α -Chymotrypsin by Reductive Alkylation with Glyoxylic Acid. *Biotechnology*. 9: 725-730.
- Page, D.S. 1997. *Prinsip-Prinsip Biokimia*. Erlangga. Jakarta. 465 halaman.
- Pelczar, M.J. and E. C. S. Chan. 1986. *Dasar- Dasar Mikrobiologi*. UI Press. Jakarta.
- Poedjiadi, A.1994. *Dasar-dasar Biokimia*. Jakarta.UI-Press. 155, 158-160.
- Pohl, T. 1990. *Concentration of protein removal of salute dalam M.P. Deutscher, Methods of Enzymology: Guide to Protein Purification*.Vol :182. Academic Press. New York.
- Purwadaria, T., P. A. Marbun, A. P. Sinurat, P. P. Ketaren. 2003. Perbandingan aktivitas enzim selulase dari bakteri dan kapang hasil isolasi dari rayap. *Jurnal Ilmu Ternak dan Veteriner*. 8(4): 213-219.
- Rao, Subba N.S. 1998. *Mikroorganisme Tanah dan Pertumbuhan*. UI Press. Jakarta. 228-229.
- Reed, G. 1975. *Enzymes in Food Processing*. Academic Press. New York. 212.
- Reese, E.T. 1976. History of cellulase program at U.S. Army Natick Development Center. *Biotechnology and Bioengineering*. Vol: 6. John Wiley & Sons Inc.
- Rodwell, V.W. 1987. *Harper's Review of Biochemistry*. EGC Kedokteran. Jakarta.

- Sariningsih, R. 2000. *Produksi Enzim Protease oleh Bacillus subtilis BAC-4*. (Skripsi). Institut Teknologi Bandung. Bandung.
- Scopes, R.K. 1982. *Protein Purification*. Springer Verlag. New York.
- Sebayang, F. 2005. Amobilisasi enzim penisilin asilase dari E.coli B₁O₄ dengan poliakrilamida. *Jurnal Komunikasi Penelitian* .17 (3): 1-3.
- Shahib, N. 2005. *Biologi Molekular Medik I*. Unpad Press. Bandung. 164-167
- Soemitro, S. 2005. Pengaruh Modifikasi Kimiawi Selektif Terhadap Kestabilan α -amilase dari *Saccharomycopsis fibuligera*. *Journal of Bionatura*. 7(3): 259-273.
- Stahl, S. 1999. *Thermophilic Microorganism: The Biological Background for Thermophily and Thermoresistance of Enzyme in Thermostability of Enzyme*. Gupta M. N editor. Springer Verlag. New Delhi. 59-60.
- Suhartono, M.T. 1989. *Enzim dan Bioteknologi*. PAU IPB. Bogor.
- Sundari, Eka Sulis. 2011. *Peningkatan Kestabilan Enzim α -amilase dari Bacillus subtilis ITBCCB148 Dengan Modifikasi Kimia Menggunakan Sitrat Anhidrida*. (Skripsi). Universitas Lampung. Bandar Lampung.
- Virdianingsih, R. 2002. *Mempelajari Stabilitas Termal dari Bacillus pumilus y1 dalam pelarut Heksana, Toluena, dan Benzena*. (Skripsi). Institut Pertanian Bogor. Bogor.
- Vrijic de T, de Hass GG, Tan GB, Keijsers ERP, Claassen PAM. 2002. Pretreatment of miscanthus for hydrogen production by Thermotoga elfii. *Int J. Hydrogen Energy*. 27. 1381-1390.
- Walsh, G., and D.R. Headon. 1994. *Protein Biotechnology*. John Willey and Sons. New York.
- Winarno, F.G. 1986. *Enzim Pangan dan Gizi*. PT. Gramedia Pustaka Utama. Jakarta. 155 halaman.

- Wirahadikusumah, M. 1997. *Biokimia: Protein, Enzim dan Asam Nukleat*. ITB. Press. Bandung. 91 halaman.
- Wiramargana, M. 1991. *Pengaruh Penggunaan Aditif Terhadap Stabilitas Enzim Protease Bacillus subtilis Selama Penyimpanan*. (Skripsi). FATETA-IPB, Bogor.
- Wyk, J.P.H.V., M. Mohulatsi. 2003. Biodegradation of wastepaper by cellulase from *Trichoderma viride*. *Bioresource Technology*. 86: 21–23.
- Yandri, A.S., Dian H. and Tati S. 2007. Isolasi, Pemurnian dan Karakterisasi Enzim Protease Termotabil Dari Bakteri Isolat Lokal *Bacillus subtilis* ITBCCB148. *Jurnal Sains MIPA* . 13(2): 100-106.
- Yang, Z., D. Michael, A. Robert, X.Y. Fang and J.R. Alan . 1996. Polyethylene Glycol-Induced Stabilization of Subtilisin. *Enzyme Microbial Technology*.. 18: 82-89.