

DAFTAR PUSTAKA

- Benson. 2001. *Microbiological Application Lab Manual*. 8th Ed. Mc Graw Hill Companies. New York.
- Bhuvana, 2006. Studies on Frictional Behaviour of Chitosan-Coated Fabrics.. *J. Aux Res*. 6(4):123-130.
- Boyd, C.E. 1999. *Codes of Practice for Responsible Shrimp Farming*. Department of Fishes and Allied Aquacultures. Auburn University. AL USA, 36 pp.
- Cappuccino, J.G. dan Chad, W. 2017. *Microbiology: A Laboratory Manual*. 11th Ed. Pearson Education. Benjamin Cummings Publishing Company inc. England.
- Capuccino, J.G. dan Shermman, N. 2005. *Microbiology: A Laboratory Manual*. 7th Ed. The Benjamin Cummings Publishing Company inc. San Fransisco.
- Chang, S.C. Wang, P. Vandamme, J.H. Hwang, P.S. 2004. A Novel Chitinolytic Bacterium Isolated from a Freshwater Pond for Shrimp Culture. *J. System Appl Microbiol*. 27:43-49.
- Chernin, L. Ismailov, Z. Harun, S. Chet, I. 1995. Chitinolytic *Enterobacter agglomerans* Antogonistic to Fungal Plant Pathogens. *Appl. Environ. J. Microbiol*. 1720-1726.
- Donderski, W. dan Brzezinska, M.S. 2003. *Polish Journal of Enviromental Studies*, 12(6):685-692.
- Fauziah dan Herdyastuti, N. 2013. Uji Aktivitas Bakteri Kitinolitik dari Tambak Udang di Lamongan dan Sidoarjo. *J. of Chemistry*. 2(1).
- Fitri, L. dan Yasmin, Y. Isolasi dan Pengamatan Morfologi Koloni Bakteri Kitinolitik. 2010. *J. Ilmiah Pendidikan-Biologi*. 3(2):20-25.
- Folders, J.J. Algra, M.C. Roelofs, C.L. 2001. Characterization of *Pseudomonas aeruginosa* Chitinase a Gradually Secreted Protein Leendert. *J. Tommassen*. 183:7044-7052.
- Frاندberg, E. dan Schnürer, J. 1997. Chitinolytic Properties of *Bacillus pabuli* K1. *J. Appl. Bacteriol*. 76:361-367.
- Gooday G.W. 1995. Diversity of Roles for Chitinases in Nature. In Chitin and Chitosan the Versatile Enviromentally Friendly Modern Material. *J. Biodegradation*. 1:191-202.
- Gooday, G.W. 1990. Physiology of Microbial Degradation of Chitin and Chitosan, *J. Biodegradation*.1:177-190.
- Haliza, W dan Suhartono M.T. 2012. Karakteristik Kitinase dari Mikrobia. *J. Teknologi Pascananen Pertanian*. 8(1):1-14.

- Hasyimi, Drs. H. M. 2010. Mikrobiologi dan Parasitologi Untuk Mahasiswa Keperawatan. CV Trans Info Media. Jakarta.
- Herdyastuti, N. T.J. Raharjo, Mudasir. dan S, Matjeh. 2009. Chitinase and chitinolytic microorganism; isolation characterization and potential. *Indonesian Journal of Chemistry*. 9(1):37-47.
- Lay, W. B. 1994. *Analisa Mikroorganisme di Laboratorium*. Edisi I. PT Rajawali Pers. Jakarta.
- Leboffe, Michel, J. dan Burton, E Pierce. A Photographic. Atlas Microbiology Laboratory. 4th Ed. 2011. Morton Publishing Company. Englewood, CO.
- Lehninger, A. 1998. *Dasar-Dasar Biokimia*. Jilid 1. Cetakan Pertama. Penerbit Erlangga. Jakarta.
- Muharni dan E. Nurnawati, 2007. Pengujian Aktivitas Kitinase *Bacillus circulans* Untuk Dikembangkan Sebagai Agen Biokontrol Pada Penyakit Tanaman, *J. Penelitian Sains*, 1: 144-150.
- Muzzarelli, RAA. 2008. *New Aspects of Chitin Chemistry and Enzymology*. In Binomium Chitin-Chitinase: Recent Issues. Musumeci S and Paoletti MG (Ed). Nova Science Publishers, Inc. page 2. New York.
- Nasran, S.F. Afriyani, dan N, Indriati. 2003. Produksi Kitinase dan Kitin Deasetilase dari *Vibrio Harveyi*. *J. Penelitian Perikanan Indonesia*. 9(5):33-38.
- Natsir, H. dan Dali. S. Isolasi, Skrining Dan Identifikasi Mikroorganisme Indigenus Penghasil Enzim Kitinolitik Asal Sulawesi Selatan. 2008. *J. Bioma*. 3(3).
- Nawani, N.N., B.P. Kapadnis, A.D. Das, A.S. Rao. dan S.K. Mahajan. 2002. Purification And Characterization of a Thermophilic and Acidophilic Chitinase from *Microbispora* sp. V2. *J. Appl. Microbiol.* 93:965-975
- Orinda, E., Puspita, I, D., Putra, P., Ustadi, Lelana Y, B, I. 2015. *Jurnal Perikanan. J. Fish. Sci.* 52(2):96-102
- Panda, F.T. 1999. Regulation and Cloning of Microbial Chitinase Genes, *Appl. J. Microbiol Biotechnol.* 51:141-151.
- Parija S.C. 2012. *Microbiology and Immunology*. 2nd Edition. Elsevier. India.
- Park, S.H. J.H. Lee. dan H. K. Lee. 2000. Purification and Characterization of Chitinase from a Marine Bacterium, *Vibrio* sp. 98Cj11027. *J. Of Microbiology*. 38(4):224-229.
- Patil, R.S. Ghormade, V. dan Deshpande, M.V. 2000. Chitinolytic Enzymes: an Exploration. *J. Enzyme and Microbial Technology*. 26:473-483.
- Patil. R.S. Ghormade. V. Mukund, V. dan Deshpande. 1999. Chitinolytic Enzymes: An Exploration. *J. Microbial Technology*. 26:473-483.

- Pelczar, Michael. dan E.C.S, Chan. 2006. *Dasar-Dasar Mikrobiologi*. Penerbit UI-Press. Jakarta.
- Pujiyanto, S. Kusdiyantini, E. dan Hadi, M. 2008. Isolasi dan Seleksi Bakteri Kitinolitik Isolat Lokal yang Berpotensi untuk Mengendalikan Larva Nyamuk *Aedes aegypti* L. *Jurnal Biodiversitas*. 9 (1): 5-8.
- Purwatiningsih, S. Wukirsari, T. Sjahriza, A. dan Wahyono, D. 2009. *Kitosan Sumber Biomaterial Masa Depan*. IPB Press. Bogor
- Rostinawati, T. 2008. *Skrining dan Identifikasi Bakteri Penghasil Enzim Kitinase dari Air Laut di Perairan Pantai Pondok Bali*. Penelitian Mandiri. Fakultas Farmasi Universitas Padjadjaran Jatinangor.
- Rukayadi, Y. 2002. Kitin Deasetilase dan Pemanfaatannya. *J. Hayati*. 9(4):130-134.
- Rundall, K.M. 1969. Chitin And Its Association With Other Molecules. *J. Polymer Sci*. 28:33-37.
- Setia, I.N. dan Suharjo. (2015). Chitinolytic assay and identification of bacteria isolated from shrimp waste based on 16S rDNA Sequences. *J. Advances in Microbiology*. 5:541-548.
- Sousa, A.M. Machado, I. Nicolau, A. Pereira, M.O. 2013. Improvments on colony morphology identification towards bacterial profiling. *J. of Microbiological Methods*. 95:327-335.
- Suhardi. 1992. *Monograf Kitin dan Kitosan*. Pusat Antar Universitas Pangan dan Gizi. Universitas Gadjah Mada. Yogyakarta.
- Suryadi, Y.T.P. Priyatno, M. Samudra, D.N. Susilowati, N. Lawati. dan E, Kustaman. 2013. *J. Agro Biogen*. 9(2):77-84.
- Suzuki, K.N. Taiyoji, N. Sugawara, B. Nikaidou, Henrissat. dan T. Watanabe. 1999. The Third Chitinase gene (chi C) of *Serratia marcescens* 2170 and the Relationship of its Product to Other Bacterial Chitinases. *J. Biochem*. 343:587-596
- Takahashi, M. Tsukiyama, T. Suzuki, T. 1993. Purication and Some Properties of Chitinase Produced by *Vibrio* sp. *J. Ferment*. 75(6):457-459.
- Thamthiankul, S.S. Suan-Ngay. dan S. Tantimavanich. 2001. Chitinase from *Bacillus thuringiensis* subsp. Pakistani, *Journal of Appl Microbiol Biotechnol*, 56:395-401
- Toharisman, A. 2007. *Peluang Pemanfaatan Enzim Kitinase di Industri Gula*. Pusat Pengembangan Penelitian Geologi Kelautan (P3GL).
- Ueda, M.A. Fujiwara, T. Kawaguchi. dan M. Arai. 1995. Purification and some Properties of Six Chitinases from *Aeromonas* sp. No. 10S-24. *J. Biosci Biotechnol Biochem*. 59(11):2162-2164.

- Wahyuni, S. Mery, K.W. Khaeruni, A. 2014. Karakterisasi Sifat Biokimia Isolat Bakteri Kitinolitik Asal Tambak Udang. *Jurnal Ilmiah : Biologi Eksperimen dan Keanekaragaman Hayati*, 2(2):49-54.
- Watanabe, A. V.H. Nong, D. Zhang, M. Arahira, N.A. Yeboah, K. Udaka, and C. Fukazawa, 1999. Moleculer Cloning and Ethylene Inducible Expression of Chi b1 Chitinase from Soybean (*Glycine max L.*). *J. Biosci Biotech Biochem.* 63: 251-256.
- Widodo, R. dan Adijaya, D. 2007. *Udang Vannamei*. Penebar Swadaya.
- Yamasaki, Y.I. Hayashi, Y. Ohta, T. Nakagawa, M. Kawamukai. dan H, Matsuda. 1993. Purification and Mode of Action of Chitosanolytic Enzyme from *Enterobacter sp. G-1*. *J. Biosci. J. Biotechnol Biochem.* 57 (3):444-449.
- Younes, I. dan Rianudo, M. 2015. "Chitin and chitosan preparation from marine sources.structure, properties and applications". *J. Marine Drugs.* 13:1133-1174.
- Yulianus, Y.P. dan Herdyastuti, N. 2014. Aktivitas bakteri kitinolitik yang diisolasi dari tambak udang Di tuban. *Journal of Chemistry.* 3(3)
- Zaidy, A.B. 2008. *Pendayagunaan Kalsium Media Perairan Dalam Proses Ganti Kulit Dan Konsekuensinya Bagi Pertumbuhan*. Tesis. Sekolah Pasca Sarjana. Institut Pertanian Bogor.

