

## DAFTAR PUSTAKA

- Abdizadeh, N., S Aminzadeh, S Jamili, A A Karkhane, N Farrokhi. 2014. Purification and Characterization of Pepsin-Solubilized Collagen from Skin of Sea Cucumber *Holothuria parva*. *Appl Biochem Biotechnol* (173):143–154. New York.
- Alhana, P Suptijah, K Tarman. 2015. Ekstraksi Dan Karakterisasi Kolagen Dari Daging Teripang Gamma. *Jurnal Pengolahan Hasil Perikanan Indonesia* 18(2):150-161. Institut Pertanian Bogor, Bogor.
- Astiana, I., Nurjanah, T Nurhayati. 2016. Karakteristik Kolagen Larut Asam Dari Kulit Ikan Ekor Kuning. *Jurnal Pengolahan Hasil Perikanan Indonesia* 19(1): 79-93.
- Cazes, J., 2005 *Analytical Instrumentation Handbook*. 3th. Florida :L Marcel Dekker. Hal 803-826.
- Choo, P S. 2008. Population status, Fisheries and Trade of Sea Cucumbers in Asia. In V. Toral-Granda, A. Lovatelli and M. Vasconcellos (eds). *Sea Cucumbers. A global Review of Fisheries and Trade*. FAO Fisheries and Aquaculture Technical Paper. (516); 81-118. FAO, Rome.
- Coates J. 2000. Interpretation of Infrared Spectra, a Practical Approach. Di dalam:Meyers RA, editor. *Encyclopedia of Analytical Chemistry*. Chichester:John Wiley & Sons Ltd.
- Damanik, D D P., N Surbakti, R Hasibuan. 2014. Ekstraksi Katekin Dari Daun Gambir (*Uncaria gambir roxb*) Dengan Metode Maserasi. *Jurnal Teknik Kimia USU Vol.3(2):10-14*. Universitas Sumatera Utara, Medan.
- Darmanto, Y S., F Swastawati, T W Agustini. 2010. Manfaat Dan Karakter Kolagen dari Berbagai Limbah Tulang Ikan. Badan Penerbit Universitas Diponegoro, Semarang.
- Doyle, B B., E G Bendit, E R Blout. 1975. Infrared Spectroscopy Of Collagen And Collagen-Like Polypeptides. *Biopolymers* 14(5):937–95. Harvard Medical School, Boston.

- Fawzya, Y N., E Chasanah, A Poernomo, M H Khirzin. 2016. Isolasi Dan Karakterisasi Parsial Kolagen Dari Teripang Gamma (*Stichopus variegatus*). JPB Kelautan dan Perikanan Vol. 11 (1): 91-100. Bogor.
- Ferrario, C., L Leggio, R Leone, C D Benedetto, L Guidetti, V Cocce, dkk. 2016. Marine-Derived Collagen Biomaterials from Echinoderm Connective Tissues. *Marine Environmental Research* : 1-12. Italy.
- Fontain-Vive, F., F Merzel, M R Johnson, G J Kearley. 2009. Collagen and Component Polypeptides: Low Frequency and Amide Vibrations. *Chemical Physics* 355:141–148.
- Gadi, D S., W Trilaksani, T Nurhayat. 2017. Histologi, Ekstraksi Dan Karakterisasi Kolagen Gelembung Renang Ikan Cunang *Muarenesox talabon*. *Jurnal Ilmu dan Teknologi Kelautan Tropis* Vol. 9(2):665-683. Bogor, Indonesia.
- Gandjar, I G., dan A Rohman. 2015. Kimia Farmasi Analisis. 15 ed. Yogyakarta: Pustaka Belajar, hal 323-480.
- Guo, Y., Y Dinga, F Xu, B Liu, Z Kou, W Xiao, J Zhu. 2016. Systems Pharmacology-Based Drug Discovery for Marine Resources : An Example Using Sea Cucumber (*Holothurians*). *Journal of Ethnopharmacology* 165 : 61–72.
- Institute Of Food Science and Technology. 2017. Protein: Acid Denaturation. <<https://www.ifst.org/lovefoodlovescience/resources/protein-acid-denaturation>>. Akses 21 Juni 2018.
- International Organization for Standardization. 2015. Coating powders -- Part 1: Determination of particle size distribution by sieving. ISO 8130-1:1992.
- Iranian Fisheries Research Organization. 2012. Available from: <http://en.ifro.ir/portal.aspx>. Akses 21 Juni 2018.
- Joy, D., B J Ford, S Bradbury. 2017. Scanning Electron Microscope (SEM). *Encyclopædia Britannica Online*. <<https://www.britannica.com/technology/scanning-electron-microscope>>. Akses 02 Oktober 2017.
- Karnila, R. 2011. Pemanfaatan Komponen Bioaktif Teripang Dalam Bidang Kesehatan. Skripsi. Universitas Riau, Riau.

- Karlina, R., M Astawan, Sukarno, T Wresdiyati. 2011. Karakteristik Konsentrat Protein Teripang Pasir (*Holothuria scabra J.*) dengan Bahan Pengekstrak Aseton. Jurnal Perikanan dan Kelautan, no. 16. Balai Penelitian Perikanan Laut, Jakarta.
- Kementerian Kelautan dan Perikanan. 2013. Buku Statistik 2012 Kementerian Kelautan dan Perikanan. Jakarta.
- Kiew, P L., and M M Don. 2013. The Influence Of Acetic Acid Concentration on The Extractability of Collagen From The Skin Of Hybrid *Clarias sp.* And Its Physicochemical Properties: A Preliminary Study. Focusing on Modern Food Industry, Vol. 2(3), 123–128. Malaysia.
- Kittiphattanabawon, P., S Benjakul, W Visessanguan, H Kishimura, F Shahidi. 2010. Biomedical Applications of Collagen. Isolation and Characterisation of Collagen from The Skin of Brownbanded Bamboo Shark (*Chiloscyllium punctatum*). The Journal of Food Chemistry 119:1519– 1526.
- Kong, J., and S Yu. 2007. Fourier transform infrared spectroscopic analysis of Protein Secondary Structures. Acta Biochimica et Biophysica Sinica 39(8):549-559.
- Kristanti, A N., N S Aminah, M Tanjung, B Kurniadi. 2008. Buku Ajar Fitokimia. Airlangga University Press, hal.109. Surabaya.
- Liu, Z., and Y Su. 2011. Amino Acid Composition and Functional Properties of Giant Red Sea Cucumber (*Parastichopus californicus*) Collagen Hydrolysates. Journal of Ocean University of China 10(1): 80-84. China.
- Maity, J P., S Kar, C M Lin, C Y Chen, Y F Chang, J S Jean, T R Kulp. 2013. Identification And Discrimination Of Bacteria Using Fourier Transform Infrared Spectroscopy. Spectrochimica Acta Part A: Molecular and Biomolecular Spectroscopy.116 : 478–484.
- Nimah, S., W F Ma’aruf, A Trianto. 2012. Uji Bioaktivitas Ekstrak Teripang Pasir (*Holothuria scabra*) Terhadap Bakteri *Pseudomonas Aeruginosa* dan *Bacillus cereus*. Jurnal Perikanan Vol.1 (2): 1-7. Universitas Diponegoro, Semarang.
- Nurhayati, Tazwir, Murniyati. 2013. Ekstraksi dan Karakterisasi Kolagen Larut Asam dari Kulit Ikan Nila (*Oreochromis niloticus*). JPB Kelautan dan Perikanan Vol. 8 (1): 85–92. Jakarta.

- O'Loughlin, P M. 2011 Sea Cucumber. *Paracaudina australis*, in Taxonomic Toolkit for marine life of Port Phillip Bay. Museum Victoria. <<http://portphillipmarinelife.net.au:8098/species/4850>>. Akses 28 Agustus 2017.
- O'Loughlin, P M, S Barmos, D V Spiegel. 2011. The Paracaudinid Sea Cucumbers of Australia and New Zealand (Echinodermata: Holothuroidea: Molpadida: Caudinidae). Memoirs of Museum Victoria (68): 37–65. Victoria.
- Pamungkas, T H. 2014. Kajian Potensi Collagen Pada Teripang Pasir (*Holothuria scabra*) Dari Pulau Pramuka Kepulauan Seribu. Skripsi. Institut Pertanian Bogor, Bogor.
- Park, S Y., K L Hee, L Seogjae, C H Hyeong, K C Somi, C Moonjae. 2012. Pepsin-Solubilised Collagen (PSC) from Red Sea Cucumber (*Stichopus japonicus*) Regulates Cell Cycle and The Fibronectin Synthesis in HaCaT Cell Migration. Food Chemistry (132): 487–492. Korea.
- Pratiwi, E. 2010. Perbandingan Metode Maserasi, Remaserasi, Perkolasi dan Reperkolasi dalam Ekstraksi Senyawa Aktif Andrographolide dari Tanaman Sambiloto (*Andrographis Paniculata* (Burm.f.) Nees). Skripsi. Institut Pertanian Bogor, Bogor.
- Rasyid, A. 2012. Identifikasi Senyawa Metabolit Sekunder Serta Uji Aktivitas Antibakteri Dan Antioksidan Ekstrak Metanol Teripang *Stichopus hermanii*. Jurnal Ilmu dan Teknologi Kelautan Tropis Vol.4 (2): 360-368. Pusat Penelitian Oseanografi LIPI, Jakarta.
- Rusli, A. 2004. Kajian proses ekstraksi gelatin dari kulit ikan patin segar. Thesis. Bogor. Sekolah Pasca sarjana Institut Pertanian Bogor.
- Silviyah, S., C S Widodo, Masruroh. 2015. Penggunaan Metode FT-IR (Fourier Transform Infra Red) Untuk Mengidentifikasi Gugus Fungsi Pada Proses Pembaluran Penderita Mioma. Artikel Jurusan Fisika FMIPA Universitas Brawijaya. 28 halaman.
- Singh, P., S Benjakul, S Maqsood, H Kishimura. 2010. Isolation and characterization of collagen extracted from the skin of striped catfish (*Pangasianodon hypophthalmus*). The Journal of Food Chemistry 124:97-105.

- Sinthusamran, S., S Benjakul., H Kishimura. 2013. Comparative Study On Molecular Characteristics of Acid Soluble Collagens From Skin And Swim Bladder of Seabass (*Lates calcarifer*). Food Chemistry 138 : 2435–2441.
- Shoulders, M D., and R T Raines. 2009. Collagen Structure and Stability. Annu Rev Biochem. (78): 929–958. Wisconsin.
- Siddiqui, Y D., E M Arief, A Yusoff, A H Suzina, S Y Abdullah. 2013. Isolation of Pepsin Solubilized Collagen (PSC) from Crude Collagen Extracted from Body Wall Of Sea Cucumber (*Bohadschia spp.*). Int Journal Pharm Science. 5(2):555-559. Malaysia.
- Tangsadthakun, C., S Kanokpanont, N Sanchavanakit, T Banaprasert, S Damrongsakkul. 2006. Journal of Metals, Materials and Minerals 16(1): 37-44. Thailand.
- Ward, A.G., A Courts. 1977. The Science and Technology of Gelatin. New York: Academic Press.
- Winarni, D., M Affandi, E D Masithah, H Darmayanti. 2012. Tahap Kematangan Gonad Teripang Paracaudina australis Pada Bulan Februari, Maret dan April 2012. Jurnal Oseana.
- Yamada, S., K Yamamoto, T Ikeda, K Yanagiguchi, Y Hayashi. 2014. Potency of Fish Collagen as a Scaffold for Regenerative Medicine. Review Article. BioMed Research International, pp. 1-8. Japan.
- Zhang, M., W Liu, G Li. 2009. Isolation and Characterisation of Collagens From The Skin of Largefin Longbarbel Catfish (*Mystus macropterus*). Food Chem. 115: 826–831.