

## DAFTAR PUSTAKA

- Abdel, F. W., Hammad, T. 2001. Chondroitin sulfate and glucosamine: A review of their safety profile. *Journal American Nutraceutical Association* 3: 16-23.
- Afridiana, N. 2011. Recovery glukosamin hidroklorida dari cangkang udang melalui hidrolisis kimiawi sebagai bahan sediaan suplemen osteoarthritis [skripsi]. Bogor: Institut Pertanian Bogor.
- Alphan, J. V. 1929. Preparation of glucosamine hydrochloride. *Chemistry Weekblad* 26: 602.
- Anderson, J. W., Nicolosi, R. J., Borzelleca, J. F. 2005. Glucosamine effects in humans: a review of effects on glucose metabolism, side effects, safety considerations and efficacy. *Food and Chemical Toxicology* 43:187-201.
- Association of Official Analytical and Chemistry (AOAC). 1995. Officials Methods of Analysis of AOAC Internasional. Virginia: Association of Official Analytical and Chemistry Inc.
- Association of Official Analytical Chemistry (AOAC). 2005. Official Methods of Analysis. 18<sup>th</sup> Ed. Maryland: Association of Official Analytical Chemists Inc.
- Association of Official Analytical and Chemistry (AOAC). 2007. Officials Methods of Analysis. 18th Ed. Association of Official Analytical and Chemistry Inc., Maryland.
- American Society for Testing and Materials (ASTM). 2002. D1110 Test Methods for Water Solubility. West Conshohocken: ASTM International.
- Bastaman, S. 1989. Studies on degradation and extraction of chitin and chitosan from prawn shella. belfast. Thesis. The Departement of Mechanical Manufacturing Acronautical and Chemical Engineering. The Queens University.
- Benavente, M., Arias, S., Moreno, L., dan Martinez, J. 2015. Production of glucosamine hydrochloride from crustacean shell. *Journal of Pharmacology* 3(10): 20-26.
- Berry, A., Burlingame, R. P., dan Millis, J.R. 2002. Process and materials for production of glucosamine. US patent 6,372,457.
- Brugnerotto, J. 2001. An infrared investigation inrealtion with chitin and chitosan characterization. *Polymer* 42: 3569-3580.
- Cahyono & Eko. 2015. Produksi glukosamin dengan metode hidrolisis bertekanan sebagai bahan penunjang kesehatan sendi. [Tesis]. Bogor: Sekolah Pascasarjana Institut Pertanian Bogor.
- Cahyono, E., Suptijah, P., Wientarsih, I. 2014. Development of a pressurized hydrolysis method for producing glucosamine. *Asian Journal of Agriculture and Food Sciences*. 2(5):390-396.

- Challener, C. 2003. Speciality supplements are the bright spot in US dietary supplement market-Focus 2003: Foodadditives/nutraceutical/vitamins-industry overview. Chemistry Market Rep. July 14.
- Chmielowski, R.A., Wu, H.S., Wang, S.S. 2007. Scale-up of upstream and downstream operations for the production of glucosamine using microbial fermentation. Biotechnology Journal 2: 996-1006.
- Crespo, M. O. P., Martinez, M. V., Hernandez, J. L., dan Yusty, M. A. L. 2006. High performance liquid chromatographic determination of chitin in the snow crab Chionoecetes opilio. Journal of Chromatography 1116: 189-192.
- Czechowska-Biskup, R., Jarosinska, D., Rokita, B., Ulanski, P., dan Rosiak, J. M. 2012. Determination of Degree of Deacetylation of Chitosan-Comparison of Methods. Progress on Chemistry and Application of Chitin and Its Derivatives 17(1): 5-20.
- Departemen Kelautan dan Perikanan (DKP). 2009. Indeks Statistik Perikanan Indonesia. Jakarta: Departemen Kelautan dan Perikanan.
- European Food Safety Authority (EFSA). 2009. Scientific Opinion on the substantiation of a health claim related to glucosamine hydrochloride and reduced rate of cartilage degeneration and reduced risk of development of osteoarthritis pursuant. Parma, Italy. European Food Safety Authority 7(10): 1358.
- Erika, I., Rojas, D., Waldo, M., Arguelles, M., Inocencio, H. C., Javier, H., Jaime, L. M., dan Francisco, M. G. 2005. Determination of chitin and protein contents during the isolation of chitin from shrimp waste. Macromolecular Bioscience 6: 340–347.
- Ernawati. 2012. Pembuatan Glukosamin Hidroklorida (GlcN HCl) dengan Metode Autoklaf. Skripsi. Fakultas Perikanan dan Ilmu Kelautan. Institut Pertanian Bogor, Bogor.
- FDA (U.S. Food and Drug Administration). 2004. Letter Regarding the Relationship Between the Consumption of Crystalline Glucosamine Sulfate and a Reduced Risk of Osteoarthritis (Docket No. 2004P-0060).
- Hathcock, J. N., Andrew, S. 2006. Risk assessment for glucosamine and chondroitin sulfate. Regulatory Toxicology and Pharmacology 47: 78–83.
- Hernawan, C. D. P., Suharto, S. K. W., dan Kismurtono, M. 2009. “Optimization of Chitin Production from Penaeus monodon Shells at Ambient Temperature. Surabaya: Indonesia Institute of Sciences”. Proceedings of National Seminar on Applied Technology, Science, and Arts (1<sup>st</sup> APTECS), ISSN 2086-1931.
- Hutchings, J.B. 1999. Food Color and Appearance. Chapman and Hall Food Science Book. Aspen Publishers, Inc., Gaithersburg, Maryland.
- Kralovec, J. A., Barrow, C. J. 2008. Marine Nutraceutical and Functional Foods: Glucosamine Production and Health Benefits. Canada: CRC Press.

- Marganov. 2003. Potensi Limbah Udang sebagai Penyerap Logam Berat (Timbal, Kadmium, dan Tembaga) di Perairan. Tesis. IPB, Bogor.
- Martati, E., Susanto, T., Yunianta, dan Ulifah, I. A. 2002. Isolasi Khitin dari Cangkang Rajungan (*Portunus pelagicus*) Kajian Suhu dan Waktu Proses Deproteinasi. J. Tek. Pert. 3(2): 129-137.
- Martin, A., Swarwick, J., dan A. Cammarata. 1993. Farmasi Fisik 2. Edisi III. Jakarta: UI Press. Pp. 940-1010, 1162, 1163, 1170.
- Melati, E. 2014. Pembuatan glukosamin hidroklorida (GlcN HCl) dari kitin karapas udang dengan metode autoklaf. Skripsi. Fakultas Perikanan dan Ilmu Kelautan Institut Pertanian Bogor, Bogor.
- Mojarrad, J. S., Mahboob, N., Valizadeh, H., Ansarin, M., Bourbour, S. 2007. Preparation of glucosamine from exoskeleton of shrimp and predicting production by response surface methodology. Journal of Agricultural and Chemistry 55:2246-2250.
- Nielsen, S.S. 2009. "Food Analysis" 4<sup>th</sup> ed. S.Suzane Nielsen, Springer, USA.
- Nurjannah, A., Darmanto, Y. S., Wijayanti, I. 2016. Optimasi pembuatan glukosamin hidroklorida (GLcN) dari limbah cangkang rajungan melalui hidrolisis kimiawi. Jurnal Pengolahan Hasil Perikanan Indonesia 19(1): 26-35.
- Pavelka, K., Gatterova, J., Olejarova, M., Machacek, S., Giacovelli, G., Rovati, L.C. 2002. Glucosamine Sulphate Use and Delay Progression of Knee Osteoarthritis: A 3-Year, Randomized, Placebo-Controlled, Double-blind Study. Archives of Internal Medicine 162: 2113-2123.
- Puspawati, N.M., dan Simpen, I.N. 2010. Optimasi Deasetilasi Khitin dari Kulit Udang dan Cangkang Kepiting Limbah Restoran Seafood menjadi Khitosan melalui Variasi Konsentrasi NaOH. Universitas Udayana, Bukit Jimbaran. Jurnal Kimia 4 (1), Januari 2010: 79-90.
- Ravichandran, S., Rameshkumar, G., Prince, A. R. 2009. Bio chemical composition of shell and flesh of the Indian white shrimp *Panaes indicus* (H.milneEdwards, 1837). Journal of Scientific Research 4(3):191-194.
- Rismawan. 2012. Rendemen Glukosamin dari Kitin Udang [skripsi]. Bogor (ID): Sekolah Tinggi Matematika dan Ilmu Pengetahuan Alam.
- Sanusi, M. 2004. Transformasi Kitin dari Hasil Iolsai Limbah Industri Udang beku menjadi Kitosan. Mar. Chim Acta 5(2): 28-32.
- Shantosh, S., Mathew, P. T. 2007. Preparation of glucosamine and carboxymethylchitin from shrimp shell. Journal of Applied Polymer Science 107: 280-285.
- Standar Nasional Indonesia (SNI). 2004. Air Dan Air Limbah Bagian 11: Cara Uji Derajat Keasaman pH dengan Menggunakan Alat pH Meter. Jakarta (ID). Badan Standarisasi Nasional.
- Sibi, G., Dhananjaya, K., Ravikumar, K. R., Mallesha, H., Venkatesha, R. T., Trivedi, D., Bhusal, K.P., Neeraj, Gowda, K. 2013. Preparation of

- glucosamine hydrochloride from crustacean shell waste and it's quantitation by RP- HPLC. American-Eurasian Journal of Scientific Research. 8(2):63-67.
- Soegiharto, W. 2017. Pembuatan glukosamin dari kitin kulit udang windu (Paneous monodon) dengan metode hidrolisis dan pemanasan. [Skripsi]. Fakultas Sains dan Teknologi Universitas Pelita Harapan, Tangerang.
- Soltani, M., Karini, K., Zamani, A. 2017. Fungal Glucosamine: Production, Purification, and Characterization. International Journal of Research Studies in Biosciences (IJRSB). 5(1):56-64.
- Suyanto, S. Rachmatun, dan Ahmad, Mujiman. 2004. Budidaya Udang Windu. Penebar Swadaya, Jakarta.
- Ulfa, M. 2016. Penentuan kadar glukosamin dari fermentasi kulit udang oleh *Mucor michei* dengan metode uji ninhidrin dan spektrofotometri Uv-Vis. Skripsi. Fakultas Matematika dan Ilmu Pengetahuan Alam, Universitas Lampung, Lampung.
- Underwood, A.L. 1990. Analisis Kimia Kuantitatif Edisi ke Enam. Erlangga. Jakarta
- United States Pharmacopeia (USP). 2006. United States Pharmacopeia (29th Ed.) & National Formulary (23rd Ed.). Maryland: Pharmacopeia (USP) Convention Inc.
- White, T., Stegemann, J. A. 2001. Environmentally preferred materials. In advance in Environmental Materials. Material Research Society: Singapore 2: 249-260.
- Yan, X., Evenocheck, H. M. 2012. Chitosan analysis using acid hydrolysis and HPLC/UV Carbohydrate Polymers. 87: 1774-1778. Doi: 10.1016/j.carbpol.2011.09.091.
- Yanar, Y., H. Büyükçapar, M. Yanar dan M. Göcer. 2007. Effect of carotenoids from red pepper and marigold flower on pigmentation, sensory properties and fatty acid composition of rainbow trout. Food chem. 100:326-330
- Zhou, C., Sui, Q., Sun, N., Wang, J., Huang, K., Che, H. 2013. Glucosamine sodium sulfate can penetrate skin and may affect glucose metabolism in rats. Journal Drug Metabolite Toxicol. 4(2):01-06.