

DAFTAR PUSTAKA

- Anggadiredja, T. Jana, 2009, *Rumput Laut ; Pembudidayaan, Pengolahan, & Pemasaran Komoditas Perikanan Potensial*, 65, Penebar Swadaya, Depok.
- Beppu, F., Hosokawa, M., Niwano, Y., & Miyashita, K., 2012, Effects of dietary fucoxanthin on cholesterol metabolism in diabetic/obese KK-Ay mice, *Lipids in Health and Disease.*, **11**:112.
- Demirel, Z., Yildirim, Z.D., Tuney, I., Kesici, K., & Sukatar, A., 2012, Biochemical Analysis of Some Brown Seaweeds from the Aegean Sea. *Botanica Serbica.* **36** (2): 91–95.
- Demmig-Adams, B., & Adams, WW., 2002, Antioxidants in photosynthesis and human nutrition, *Science.*, **298**: 2149-2153.
- Dirman, A., 2016, Uji Aktivitas Antioksidan dan Anti Penuaan Dini Rumput Laut Coklat (*Padina australis Hauck*)., *Tesis*, Program Pascasarjana Universitas Gadjah Mada, Yogyakarta.
- Enzo Life Sciences: Neutrophil elastase colorimetric drug discovery kit. <http://www.enzolifesciences.com/BML-AK497/neutrophil-elastasecolorimetric-drug-discovery-kit>, (10 September 2016).
- Fisher, G.J., Kang, S., Varani, J., Csorgo, Z.B., Wan, Y., Datta, S., Voorhees, J.J., 2002, Mechanism of Photoaging and Chronological Skin Aging. *ArchDermatol. Department of Dermatology, Arch Dermatol.*, Vol **138**: p. 1462-1470.
- Fowler, B. 2003. Functional and Biological Markers of Aging. In : Klatz, R. 2003. *Anti-Aging Medical Therapeutics volume 5. Chicago : the A4M Publications.* p. 43.
- Frete, Hd., Budhi, P., AB, Susanto., & L, Limantara. 2012. Karotenoid dari Makroalgae dan Mikroalgae: Potensi Kesehatan Aplikasi dan Bioteknologi. *J. Teknol dan Industri Pangan*, **23** (2): 221-228.
- Goldman, R dan Klatz, R. 2007, *The New Anti-Aging Revolution*, 19-25, Printmate Sdn. Bhd, Malaysia.
- Guiry, M.D. & Guiry, G.M., 2017. AlgaeBase. World-wide electronic publication, National University of Ireland, Galway, <http://www.algaebase.org>, 23 February 2017.

- Heo, S.J.; Yoon, W.J.; Kim, K.N.; Ahn, G.N.; Kang, S.M.; Kang, D.H.; Affan, A.; Oh, C.; Jung, W.K.; Jeon, Y.J., 2010, Evaluation of anti-inflammatory effect of fucoxanthin isolated from brown algae in lipopolysaccharide-stimulated RAW 264.7 macrophages. *Food Chem. Toxicol.*, **48**, 2045–2051.
- Hosokawa, M., Miyashita, T., Nishikawa, S., Emi, S., Tsukui, T., Beppu, F., Okada, T., & Miyashita, K., 2010. Fucoxanthin regulates adipocytokine mRNA expression in white adipose tissue of diabetic/obese KK-Ay mice, *Arch Biochem Biophys.*, **504**:17–25.
- Imokawa, Genji & Ishida, Koichi., 2015, Biological Mechanisms Underlying the Ultraviolet Radiation-Induced Formation of Skin Wrinkling and Sagging I: Reduced Skin Elasticity, Highly Associated with Enhanced Dermal Elastase Activity, Triggers Wrinkling and Sagging, *Int J Mol Sci.*, **16** (4), 7753–7775.
- Jaswir, I., Dedi, N., Reno, F.H., & Fitri, O., 2011, Carotenoids: Sources, medicinal properties and their application in food and nutraceutical industry. A review. *J. Med. Plant. Res.*, **5** (33): 7119-7131.
- Maeda, H., Hosokawa, M., Sashima, T., Funayama, K., & Miyashita, K., 2005, Fucoxanthin from edible seaweed, *Undaria pinnatifida*, Shows Antiobesity Effect Through UCP1 Expression in White Adipose Tissues, *Biochem. Biophysic. Res. Comm.*, **332**: 392-397.
- Maeda, H., Tsukui, T., Sashima, T., Hosokawa, M., & Miyashita, K., 2008, Seaweed Carotenoid, Fucoxanthin, as a Multi-functional Nutrient, *Asia Pac J. Clim. Nutr.*, **17** (S1) : 196-199.
- Mecham, Robert P., Thomas J. Broekelmann., Catherine J. Fliszar., Steven D. Shapiro., Howard G. Welgus., & Robert M. Senior., 1997, Elastin Degradation by Matrix Metalloproteinases, Cleavage Site Specificity And Mechanisms Of Elastolysis, *JBC.*, **272**, 18071-18076.
- Nomura, T., Kikuchi, M., Kubodera, A., and Kawakami, Y., 1997, Proton-donative antioxidant activity of fucoxanthin with 1,1-diphenyl-2-picrylhydrazyl (DPPH), *Biochem. Mol. Biol. Int.*, **42**(2): 361–370.
- Nurchayanti, A.D.R., & Timotius, K.H., 2007, Fucoxanthin sebagai Antiobesitas. *J.Teknologi dan Industri Pangan.*, **18**(2): 134-141.
- Nursid, M., Wikanta, T., & Susilowati, R., 2013, Aktivitas Antioksidan, Sitotoksitas dan Kandungan Fukosantin Ekstrak Rumput Laut Coklat dari Pantai Binuangeun, Banten, *JPB Kelautan dan Perikanan*, vol.8 (1), 73-84.

- Pangkahila, W., 2007, *Anti Aging Medicine : Memperlambat Penuaan, Meningkatkan Kualitas Hidup*. Cetakan I, 37-40, Buku Kompas, Jakarta.
- Peng, J., Yuan, JP., Wu, CF., & Wang, JH., 2011, Fucoxanthin, a Marine Carotenoid Present in Brown Seaweeds and Diatoms: Metabolism and Bioactivities Relevant to Human Health. *Mar. Drugs.*, **9**: 1806-1828.
- Rabe JH, Mamelak AJ, McElgunn PJ, Morison WL, Sauder DN., 2006, Photoaging: mechanisms and repair. *J Am Acad Dermatol.*, **55**:1-19.
- Shimoda, H.; Tanaka, J.; Shan, S.J.; Maoka, T., 2010, Anti-pigmentary activity of fucoxanthin and its influence on skin mRNA expression of melanogenic molecules, *J. Pharm. Pharmacol.*, **62**, 1137–1145.
- Sugawara, T., Matsubara, K., Akagi, R., Mori, M., & Hirata, T., 2006, Antiangiogenic activity of brown algae fucoxanthin and its deacetylated product, fucoxanthinol, *J. Agric. Food Chem.*, **54**, 9805–9810.
- Urikura, I., Sugawara, T., Hirata, T., 2011, Protective effect of fucoxanthin against UVB-induced skin photoaging in hairless mice, *Biosci. Biotechnol. Biochem.*, **75**, 757–760.
- WHO Report., 2010, WHOSIS (WHO Statistical Information System), http://apps.who.int/whosis/database/core/core_select_process.cfm/, 19 Mei, 2016.
- Wirasti., 2016. Uji Aktivitas Antioksidan dan Anti Penuaan Dini Rumput Laut Coklat (*Turbinaria decurrens* Bory), *Tesis*, Program Pascasarjana Universitas Gadjah Mada, Yogyakarta.
- Yaar, M. 2006. *Clinical and Histological Features of Intrinsic versus Extrinsic Skin Aging.*, dalam Gilchrest, B.A., Krutmann, J., (Ed.) 10-21 Springer, Berlin.
- Yoshiko, S & Hoyoku, N., 2007, Fucoxanthin, a Natural Carotenoid, Induces G1 Arrest and GADD45 Gene Expression in Human Cancer Cells, *In Vivo.*, **21**: 305 –31
- Zhang, P., Lei, X., Zhang, Z., Lei, Z., & Sugiura, N., 2008, Study on fucoxanthin extraction from *Laminaria japonica* with ethanol solution for health food development, *The Journal of the Agricultural Structures, Japan.*, **39** (1), 9-16