

**DAFTAR PUSTAKA**

- Ajisaka, T., Huynh Quang Nang, Nguyen Huu Dinh, Lu Baoren, Put, A., Jr, Phang Siew Moi, Noro, T. & Yoshida, T. 1997. Taxonomic and nomenclatural study of *Sargassum duplicatum* Bory and related species. La Jolla, California: California Sea Grant College System. In: Taxonomy of Economic Seaweeds. (Abbott, I.A. Eds) 6(6) : 27-36.
- Ale, M. T., Mikkelsen, J. D., & Meyer, A. S. 2011. Important determinants for fucoidan bioactivity: A critical review of structure-function relations and extraction methods for fucose-containing sulfated polysaccharides from brown seaweeds. *Marine Drugs*, 9(10) : 2106–2130.
- Ale, M. T., Mikkelsen, J. D., & Meyer, A. S. 2012. Designed optimization of a single-step extraction of fucose-containing sulfated polysaccharides from *Sargassum* sp. *Journal of applied phycology*, 24(4) : 715-723.
- Bailey, M. J., Biely, P., & Poutanen, K. 1992. Interlaboratory testing of methods for assay of xylanase activity. *Journal of biotechnology*, 23(3) : 257-270.
- Balboa, E. M., Conde, E., Moure, A., Falqué, E., & Domínguez, H. 2013. In vitro antioxidant properties of crude extracts and compounds from brown algae. *Food chemistry*, 138(2-3) : 1764-1785.
- Bilan, M. I., Grachev, A. A., Shashkov, A. S., Thuy, T. T. T., Van, T. T. T., Ly, B. M., & Usov, A. I. 2013. Preliminary investigation of a highly sulfated galactofucan fraction isolated from the brown alga *Sargassum polycystum*. *Carbohydrate Research*, 377(13) : 48–57.
- Bose, A. K., Manhas, M. S., Pednekar, S., Ganguly, S. N., Dang, H., He, W., & Mandadi, A. 2005. Large scale Biginelli reaction via water-based biphasic media: a green chemistry strategy. *Tetrahedron letters*, 46(11) : 1901-1903.
- Brown, E., Allsopp P. J., Magee P. J., Gill C. I., Nitecki S., Strain C. R., and McSorley M. 2014. Seaweed and human health. *Nutrition Reviews*. 72(3): 2015-216.
- Chaiklahan, R., Chirasawan, N., Triratana, P., Tia, S., & Bunnag, B. 2014. Effect of extraction temperature on the diffusion coefficient of polysaccharides from Spirulina and the optimal separation method. *Biotechnology and bioprocess engineering*, 19(2) : 369-377.
- Chang, X. L., Wang, C., Feng, Y., & Liu, Z. 2006. Effects of heat treatments on the stabilities of polysaccharides substances and barbaloin in gel juice from Aloe vera Miller. *Journal of Food Engineering*, 75(2) : 245-251.
- Gazali, M., Nurjanah, N., & Zamani, N. P. 2018. Eksplorasi senyawa bioaktif alga cokelat *Sargassum* sp. Agardh sebagai antioksidan dari Pesisir Barat Aceh. *Jurnal Pengolahan Hasil Perikanan Indonesia*, 21(1) : 167-178.

- Irzham, F. N., & Harijono, H. 2014. Pengaruh penggantian air dan penggunaan  $\text{NaHCO}_3$  dalam perendaman ubi kayu iris (*Manihot esculenta crantz*) terhadap kadar sianida pada pengolahan tepung ubi kayu. Jurnal Pangan dan Agroindustri, 2(4) : 188-199.
- Kanimozhi, A. S., Johnson, M., & Malar, T. R. 2015. Phytochemical composition of *Sargassum Polycystum* C Agardh and *Sargassum Duplicatum* J Agardh. *Int J Pharm Pharm Sci*, 7(8) : 393-397.
- [KKP] Kementerian Kelautan Perikanan. 2020. Genjot Nilai Ekspor, KKP Targetkan Produksi 10,99 Juta Ton Rumput Laut di 2020. <https://kkp.go.id/artikel/16505-genjot-nilai-ekspor-kkp-targetkan-produksi-10-99-juta-ton-rumput-laut-di-2020>.
- Koesoemawardani, D., Rizal, S., & Tauhid, M. 2013. Perubahan sifat mikrobiologi dan kimiawi rusip selama fermentasi. Agritech, 33(3) : 265-272.
- Li, J. W., Ding, S. D., & Ding, X. L. 2007. Optimization of the ultrasonically assisted extraction of polysaccharides from *Zizyphus jujuba* cv. jinsixiaozao. *Journal of food engineering*, 80(1) : 176-183.
- Lim, S. J., Mustapha, W. A. W., & Maskat, M. Y. 2017. Seaweed tea: fucoidan-rich functional food product development from Malaysian brown seaweed, *Sargassum binderi*. *Sains Malays*, 46(9) : 1573-1579.
- Lim, S. J., Mustapha, W. A. W., Schiehser, S., Rosenau, T., & Böhmdorfer, S. 2019. Structural elucidation of fucoidan from *Cladosiphon okamuranus* (Okinawa mozuku). *Food chemistry*, 272(10) : 222-226.
- Manteu, S. H., & Nurjanah, T. N. 2018. Karakteristik rumput laut cokelat (*Sargassum polycystum* dan *Padina minor*) dari perairan Pohuwato Provinsi Gorontalo. Jurnal Pengolahan Hasil Perikanan Indonesia. 21(3): 396-405.
- Mattio L, Payri CE. 2010. Assessment of five markers as potential barcodes for identifying *Sargassum* subgenus *Sargassum* species (Phaeophyceae, Fucales). *Cryptogamie Algol*. 31(4) : 467 – 485.
- Miller, G. L. 1959. Use of dinitrosalicylic acid reagent for determination of reducing sugar. *Analytical chemistry*, 31(3) : 426-428.
- Nishiyama, M. F., Costa, M. A. F., Costa, A. M. D., Souza, C. G. M. D., Bôer, C. G., Bracht, C. K., & Peralta, R. M. 2010. Brazilian green tea (*Camellia sinensis* var assamica): effect of *infusi* time, mode of packaging and preparation on the extraction efficiency of bioactive compounds and on the stability of the beverage. *Food Science and Technology*, 30(1) : 191-196.
- Pratiwi, Y. H., Ratnayani, O., & Wirajana, I. N. 2018. Perbandingan metode uji gula pereduksi dalam penentuan aktivitas  $\alpha$ -L-Arabinofuranosidase dengan

- substrat janur kelapa (*Cocos nucifera*). *Jurnal Kimia (Journal of Chemistry)*, 12(2) : 134-139.
- Ponce N. A., Pujol C. A., Damonte E. B., Flores M. L., & Stortz CA. 2003. Fucoidans from the brown seaweed *Adenocystis utricularis*: extraction methods, antiviral activity and structural studies. *Carbohydr Res*, 338(2) : 153–165.
- Roohinejad, S., Koubaa, M., Barba, F. J., Saljoughian, S., Amid, M., & Greiner, R. 2017. Application of seaweeds to develop new food products with enhanced shelf-life, quality and health-related beneficial properties. *Food Research International*, 99(16) : 1066-1083.
- Saklar, S., Ertas, E., Ozdemir, I. S., & Karadeniz, B. 2015. Effects of different brewing conditions on catechin content and sensory acceptance in Turkish green tea infusions. *Journal of food science and technology*, 52(10) : 6639-6646.
- Sanjeewa, K. A., Kang, N., Ahn, G., Jee, Y., Kim, Y. T., & Jeon, Y. J. 2018. Bioactive potentials of sulfated polysaccharides isolated from brown seaweed *Sargassum* spp in related to human health applications: a review. *Food Hydrocolloids*, 81(40) : 200-208.
- Shang, H., Zhou, H., Duan, M., Li, R., Wu, H., & Lou, Y. 2018. Extraction condition optimization and effects of drying methods on physicochemical properties and antioxidant activities of polysaccharides from comfrey (*Symphytum officinale* L.) root. *International journal of biological macromolecules*, 112(8) : 889-899.
- Silveira, T. F. F., Meinhart, A. D., Ballus, C. A., & Godoy, H. T. 2014. The effect of the duration of *infusi*, temperature, and water volume on the rutin content in the preparation of mate tea beverages: an optimization study. *Food Research International*, 60(24) : 241-245.
- Sinurat, E. 2011. Isolasi dan karakterisasi serta uji aktivitas fukoidan sebagai anti koagulan daru rumput laut coklat (*Sargassum crassifolium*). [Thesis]. The Degree Master of Science at Universitas Indonesia, Indonesia. 53 halaman
- Somogyi, M. J. 1952. Notes on Sugar Determination. *Journal of Biological Chemistry*, 195(1): 19–23.
- Sugiono, W. S., & Adisoehono, L. 2014. Extraction optimization by response surface methodology and characterization of fucoidan from brown seaweed *Sargassum polycystum*. *International Journal of ChemTech Research*, 6(1), 195-205.
- Vuong, Q. V., Golding, J. B., Stathopoulos, C. E., Nguyen, M. H., & Roach, P. D. 2011. Optimizing conditions for the extraction of catechins from green tea using hot water. *Journal of separation science*, 34(21) : 3099-3106.

- Wang, J.; Zhang, Q.B.; Zhang, Z.S.; Li, Z. 2008. Antioxidant activity of sulfated polysaccharide fractions extracted from *Laminaria japonica*. *Int. J. Biol. Macromol.* 42(2) : 127–132.
- Wijesinghe, W. A. J. P., & Jeon, Y. J. 2012. Biological activities and potential industrial application of fucose rich sulfated polysaccharides and fucoidans isolated from brown seaweed: A review. *Carbohydrate Polymers*, 88(1) : 13–20.
- Zailanie, K. and Kartikaningsih, H. 2016. Dietary fiber and fatty acids in the Thallus of brown alga (*Sargassum duplicatum* J.G. Agardh). *International Food Research Journal* 23(4) : 1584-158.
- Zhang, Q. W., Lin, L. G., & Ye, W. C. 2018. Techniques for extraction and isolation of natural products: a comprehensive review. *Chinese medicine*, 13(20) : 1-26.