

Daftar Pustaka

- Abbas, Z. K., Saggu, S., Sakeran, M. I., Zidan, N., Rehman, H., & Ansari, A. A. (2014). Phytochemical, antioxidant and mineral composition of hydroalcoholic extract of chicory (*Cichorium intybus* L.) leaves. *Saudi Journal of Biological Sciences*, 22(3), 322–326. <https://doi.org/10.1016/j.sjbs.2014.11.015>
- Abdelrheem, D. A., Abd El-Mageed, H. R., Mohamed, H. S., Rahman, A. A., Elsayed, K. N. M., & Ahmed, S. A. (2021). Bis-indole alkaloid caulerpin from a new source *Sargassum platycarpum*: isolation, characterization, in vitro anticancer activity, binding with nucleobases by DFT calculations and MD simulation. *Journal of Biomolecular Structure and Dynamics*, 39(14), 5137–5147. <https://doi.org/10.1080/07391102.2020.1784285>
- Abreu, M. H., Pereira, R., & Sassi, J.-F. (2015). Marine Algae and the Global Food Industry. In *Marine Algae* (pp. 300–319). Taylor & Francis Group, LLC. www.netalgae.eu
- Adetoro, A. O., Opara, U. L., & Fawole, O. A. (2021). Effect of blanching on enzyme inactivation, physicochemical attributes and antioxidant capacity of hot-air dried pomegranate (*Punica granatum* L.) arils (cv. wonderful). *Processes*, 9(1), 1–18. <https://doi.org/10.3390/pr9010025>
- Agarry, S., Ajani, A., & Aremu, M. (2013). Thin Layer Drying Kinetics of Pineapple: Effect of Blanching Temperature – Time Combination. *Nigerian Journal of Basic and Applied Sciences*, 21(1). <https://doi.org/10.4314/njbas.v21i1.1>
- Aguilar-Santos, G. (1970). Caulerpin, a New Red Pigment from Green Algae of the Genus *Caulerpa*. *J. Chem. SOC. (C)*.
- Ahmed, J., Al-Salman, F., & Almusallam, A. S. (2013). Effect of blanching on thermal color degradation kinetics and rheological behavior of rocket (*Eruca sativa*) puree. *Journal of Food Engineering*, 119(3), 660–667. <https://doi.org/10.1016/j.jfoodeng.2013.06.038>
- Ahmed, S. A., Abdelrheem, D. A., Abd El-Mageed, H. R., Mohamed, H. S., Rahman, A. A., M Elsayed, K. N., & Ahmed, S. A. (2020). Destabilizing the structural integrity of COVID-19 by caulerpin and its derivatives along with some antiviral drugs: An in silico approaches for a combination therapy. *Structural Chemistry*, 31, 2391–2412. <https://doi.org/10.1007/s11224-020-01586-w/Published>
- Akomea-Frempong, S., Perry, J. J., & Skonberg, D. I. (2022). Effects of pre-freezing blanching procedures on the physicochemical properties and microbial quality of frozen sugar kelp. *Journal of Applied Phycology*, 34(1), 609–624. <https://doi.org/10.1007/s10811-021-02610-0>
- Amade, P., & Lemée, R. (1998). Chemical defence of the mediterranean alga *Caulerpa taxifolia*: variations in caulerpenyne production. *Aquatic Toxicology*, 43, 287–300.

- Amico, V., Oriente, G., Piattelli, M., Trinyali, C., Fattorusso, E., Mayno, S., & Mayo, L. (1978, June 20). Caulerpenyne, An Unusual Sequiterpenoid from the Green Alga *Caulerpa Polifera*. *Tetrahedron Letters*, 30, 3593–3596.
- Andrès, E., Molinari, J., Péterszegi, G., Mariko, B., Ruszova, E., Velebny, V., Faury, G., & Robert, L. (2006). Pharmacological properties of rhamnase-rich polysaccharides, potential interest in age-dependent alterations of connective tissues. *Pathologie Biologie*, 54(7), 420–425.
- Aroyehun, A. Q. B., Razak, S. A., Palaniveloo, K., Nagappan, T., Rahmah, N. S. N., Jin, G. W., Chellappan, D. K., Chellian, J., & Kunnath, A. P. (2020). Bioprospecting cultivated tropical green algae, *caulerpa racemosa*: a perspective on nutritional properties, antioxidative capacity and anti-diabetic potential. *Foods*, 9(9). <https://doi.org/10.3390/foods9091313>
- Atmadja, W. S. (1999). *Sebaran Dan Beberapa Aspek Vegetasi Rumpun Laut (Makroalga) Di Perairan Terumbu Karang Indonesia*.
- Ayyad, S. E., & Badria, F. A. (1994). Caulerpine: an antitumor Indole Alkaloid from *Caulerpa racemosa*. *Alex. J. Pharm. Sci.*, 8(3), 217–219.
- Bai, J. W., Gao, Z. J., Xiao, H. W., Wang, X. T., & Zhang, Q. (2013). Polyphenol oxidase inactivation and vitamin C degradation kinetics of Fuji apple quarters by high humidity air impingement blanching. *International Journal of Food Science and Technology*, 48(6), 1135–1141. <https://doi.org/10.1111/j.1365-2621.2012.03193.x>
- Barbosa, M., Valentão, P., & Andrade, P. B. (2014). Bioactive compounds from macroalgae in the new millennium: Implications for neurodegenerative diseases. *Marine Drugs*, 12(9), 4934–4972. <https://doi.org/10.3390/md12094934>
- Benzie, I. F. F., & Strain, J. J. (1996). The Ferric Reducing Ability of Plasma (FRAP) as a Measure of “Antioxidant Power”: The FRAP Assay. *Analytical Biochemistry*, 239, 70–76.
- Binsan, W., Benjakul, S., Visessanguan, W., Roytrakul, S., Tanaka, M., & Kishimura, H. (2008). Antioxidative activity of Mungoong, an extract paste, from the cephalothorax of white shrimp (*Litopenaeus vannamei*). *Food Chemistry*, 106(1), 185–193. <https://doi.org/10.1016/j.foodchem.2007.05.065>
- Blanc, N., Hauchard, D., Audibert, L., & Ar Gall, E. (2011). Radical-scavenging capacity of phenol fractions in the brown seaweed *Ascophyllum nodosum*: An electrochemical approach. *Talanta*, 84(2), 513–518. <https://doi.org/10.1016/j.talanta.2011.01.034>
- Brown, E. M., Allsopp, P. J., Magee, P. J., Gill, C. I., Nitecki, S., Strain, C. R., & Mccorley, E. M. (2014). Seaweed and human health. *Nutrition Reviews*, 72(3), 205–216. <https://doi.org/10.1111/nure.12091>
- Burnette, F. S. (1977). PEROXIDASE AND ITS RELATIONSHIP TO FOOD FLAVOR AND QUALITY: A REVIEW. *Journal of Food Science*, 42.

- Cahyanurani, A. B., & Ummah, R. (2020). Study of Water Quality in Sea Grape Cultivation (*Caulerpa racemosa*) in Brackish Water Aquaculture Institute (BBPBAP) Jepara. *Jurnal Ilmu Perikanan*, 11(2), 58–65.
- Cengiz, S., Cavas, L., & Yurdakoc, K. (2010). Alpha-amylase inhibition kinetics by caulerpenyne. *Mediterranean Marine Science*, 11(1), 93–103. <https://doi.org/10.12681/mms.93>
- Cengiz, S., Cavas, L., Yurdakoc, K., & Pohnert, G. (2011). The Sesquiterpene Caulerpenyne from *Caulerpa* spp. is a Lipoxygenase Inhibitor. *Marine Biotechnology*, 13(2), 321–326. <https://doi.org/10.1007/s10126-010-9303-1>
- Chen, X., Sun, Y., Liu, H., Liu, S., Qin, Y., & Li, P. (2019). Advances in cultivation, wastewater treatment application, bioactive components of *Caulerpa lentillifera* and their biotechnological applications. *PeerJ*, 2019(1). <https://doi.org/10.7717/peerj.6118>
- Chhe, C., Imaizumi, T., Tanaka, F., & Uchino, T. (2018). Effects of hot-water blanching on the biological and physicochemical properties of sweet potato slices. *Engineering in Agriculture, Environment and Food*, 11(1), 19–24. <https://doi.org/10.1016/j.eaef.2017.10.002>
- Darmawati, A., Niartiningsih, R., Syamsuddin, J., & Jompa. (2013). Analisis Kandungan Karotenoid pada *C. racemosa* yang Dibudidayakan pada Berbagai Jarak dan Kedalaman. *Prosiding. Seminar Nasional UNMAS Denpasar*. .
- De Corcuera, J. I. R., Cavalieri, R. P., & Powers, J. R. (2004). Blanching of Foods. In *Encyclopedia of Agricultural, Food, and Biological Engineering*. <https://doi.org/10.1081/E-EAFE-120030417>
- De Gaillande, C., Payri, C., Remoissenet, G., & Zubia, M. (2017). Caulerpa consumption, nutritional value and farming in the Indo-Pacific region. *Journal of Applied Phycology*, 29(5), 2249–2266. <https://doi.org/10.1007/s10811-016-0912-6>
- De Souza, É. T., De Lira, D. P., De Queiroz, A. C., Da Silva, D. J. C., De Aquino, A. B., Campessato Mella, E. A., Lorenzo, V. P., De Miranda, G. E. C., De Araújo-Júnior, J. X., De Oliveira Chaves, M. C., Barbosa-Filho, J. M., De Athayde-Filho, P. F., De Oliveira Santos, B. V., & Alexandre-Moreira, M. S. (2009). The antinociceptive and anti-inflammatory activities of caulerpin, a bisindole alkaloid isolated from seaweeds of the genus *Caulerpa*. *Marine Drugs*, 7(4), 689–704. <https://doi.org/10.3390/md7040689>
- Deng, L. Z., Pan, Z., Mujumdar, A. S., Zhao, J. H., Zheng, Z. A., Gao, Z. J., & Xiao, H. W. (2019). High-humidity hot air impingement blanching (HHAIB) enhances drying quality of apricots by inactivating the enzymes, reducing drying time and altering cellular structure. *Food Control*, 96, 104–111. <https://doi.org/10.1016/j.foodcont.2018.09.008>
- Dewanto, V., Xianzhong, W., Adom, K. K., & Liu, R. H. (2002). Thermal processing enhances the nutritional value of tomatoes by increasing total antioxidant activity. *Journal of Agricultural and Food Chemistry*, 50(10), 3010–3014. <https://doi.org/10.1021/jf0115589>

- Dey, P., Kundu, A., Kumar, A., Gupta, M., Lee, B. M., Bhakta, T., Dash, S., & Kim, H. S. (2020). Analysis of alkaloids (indole alkaloids, isoquinoline alkaloids, tropane alkaloids). In *Recent Advances in Natural Products Analysis* (pp. 505–567). Elsevier. <https://doi.org/10.1016/B978-0-12-816455-6.00015-9>
- Deylami, Mahsa. Z., Abdul Rahman, R., Tan, C. P., Bakar, J., & Olusegun, L. (2016). Effect of blanching on enzyme activity, color changes, anthocyanin stability and extractability of mangosteen pericarp: A kinetic study. *Journal of Food Engineering*, 178, 12–19. <https://doi.org/10.1016/j.jfoodeng.2016.01.001>
- Dimara, L., & Yenusi, N. T. B. (2011). Uji Aktivitas Antibakteri dan Antioksidan Ekstrak Pigmen Klorofil Rumput Laut *Caulerpa racemosa* (Forsskal) J.Agardh. *JURNAL BIOLOGI PAPUA*, 3(2), 53–58.
- Dini, I., Soekamto, N. H., Firdaus, Supratman, U., & Latip, J. (2021). Alkaloid caulerpin and cytotoxic activity against NCL-H460 lung cancer cells isolated along with β -sitosterol from the *Halimeda cylindracea* decaisne. *Sains Malaysiana*, 50(9), 2663–2674. <https://doi.org/10.17576/jsm-2021-5009-14>
- Drake, S. R., & Kinman, K. (1984). Canned Dry Bean Quality as Influenced by High Temperature Short Time (HIST) Steam Blanching. *Journal of Food Science Volume*, 49, 1318–1320.
- Dwihandita, N. (2009). *Perubahan Kandungan Antioksidan Anggur Laut (Caulerpa racemosa) Akibat Pengolahan*. Institut Pertanian Bogor, Bogor. Retrieved from <https://repository.ipb.ac.id/handle/123456789/7467>.
- El Shafay, S., El-Sheekh, M., Bases, E., & El-Shenody, R. (2022). Antioxidant, antidiabetic, anti-inflammatory and anticancer potential of some seaweed extracts. *Food Science and Technology (Brazil)*, 42, 1–12. <https://doi.org/10.1590/fst.20521>
- Esteves, P. O., de Oliveira, M. C., de Souza Barros, C., Cirne-Santos, C. C., Laneuvillle, V. T., & Palmer Paixão, I. C. (2019). Antiviral Effect of Caulerpin Against Chikungunya. *Natural Product Communications*, 14(10). <https://doi.org/10.1177/1934578X19878295>
- Fajar, A., Ibrahim, R., & Dewi, N. (2014). Stabilitas ekstrak kasar pigmen klorofil, beta karoten, dan caulerpin alga hijau (*Caulerpa racemosa*) pada suhu penyimpanan yang berbeda. *Jurnal Pengolahan Dan Bioteknologi Hasil Perikanan*, 3(1), 1–10. <http://www.ejournal-s1.undip.ac.id/index.php/jpbhp>
- Figuroa, V., Farfán, M., & Aguilera, J. M. (2021). Seaweeds as Novel Foods and Source of Culinary Flavors. *Food Reviews International*. <https://doi.org/10.1080/87559129.2021.1892749>
- Fithriani, D. (2009). *Potensi antioksidan Caulerpa racemosa di perairan Teluk Hurun Lampung* [Thesis]. Institut Pertanian Bogor.
- Fithriani, D. (2015). Opportunities And Challenges for Developing *Caulerpa Racemosa* as Functional Foods. *KnE Life Sciences*, 2(1), 85. <https://doi.org/10.18502/kls.v1i0.90>

- Francezon, N., Tremblay, A., Mouget, J. L., Pasetto, P., & Beaulieu, L. (2021). Algae as a Source of Natural Flavors in Innovative Foods. *Journal of Agricultural and Food Chemistry*, 69(40), 11753–11772. <https://doi.org/10.1021/acs.jafc.1c04409>
- Guiamba, I. R. F., & Svanberg, U. (2016). Effects of blanching, acidification, or addition of EDTA on vitamin C and β -carotene stability during mango purée preparation. *Food Science and Nutrition*, 4(5), 706–715. <https://doi.org/10.1002/fsn3.335>
- Guiry, M. D., & Guiry, G. M. (2020, November 27). *AlgaeBase*. World-Wide Electronic Publication, National University of Ireland, Galway. <https://www.algaebase.org>
- Gunawan', M. I., & Barringer', S. A. (2000). Green Color Degradation of Blanched Broccoli (*Brassica Oleracea*) Due to Acid And Microbial Growth. *Journal of Food Processing Preservation*, 24, 253–263.
- Guo, Y., Wu, B., Guo, X., Liu, D., Wu, P., Ma, H., & Pan, Z. (2021). Ultrasonication and thermosonication blanching treatments of carrot at varying frequencies: Effects on peroxidase inactivation mechanisms and quality characterization evaluation. *Food Chemistry*, 343(128524). <https://doi.org/10.1016/j.foodchem.2020.128524>
- Gupta, S., Cox, S., & Abu-Ghannam, N. (2011). Effect of different drying temperatures on the moisture and phytochemical constituents of edible Irish brown seaweed. *LWT*, 44(5), 1266–1272. <https://doi.org/10.1016/j.lwt.2010.12.022>
- Hamid, S. S., Wakayama, M., Ashino, Y., Kadowaki, R., Soga, T., & Tomita, M. (2020). Effect of blanching on the concentration of metabolites in two parts of *Undaria pinnatifida*, *Wakame* (leaf) and *Mekabu* (sporophyll). *Algal Research*, 47. <https://doi.org/10.1016/j.algal.2020.101829>
- Haryatfrehni, R., Dewi, S. C., Meilianda, A., Rahmawati, S., & Sari, I. Z. R. (2015). Preliminary Study the Potency of Macroalgae in Yogyakarta: Extraction and Analysis of Algal Pigments from Common Gunungkidul Seaweeds. *Procedia Chemistry*, 14, 373–380. <https://doi.org/10.1016/j.proche.2015.03.051>
- Heras-Ramírez, M. E., Quintero-Ramos, A., Camacho-Dávila, A. A., Barnard, J., Talamás-Abbud, R., Torres-Muñoz, J. V., & Salas-Muñoz, E. (2012). Effect of Blanching and Drying Temperature on Polyphenolic Compound Stability and Antioxidant Capacity of Apple Pomace. *Food and Bioprocess Technology*, 5(6), 2201–2210. <https://doi.org/10.1007/s11947-011-0583-x>
- Ho, C.-T. (1992). Phenolic Compounds in Food: an Overview. In *Phenolic Compounds in Food and Their Effects on Health II* (pp. 1–7). American Chemical Society. <https://pubs.acs.org/sharingguidelines>
- Hong, D. D., Hien, H. M., & Son, P. N. (2007). Seaweeds from Vietnam used for functional food, medicine and biofertilizer. *Journal of Applied Phycology*, 19(6), 817–826. <https://doi.org/10.1007/s10811-007-9228-x>

- Huarte, E., Juárez, I., Cid, C., & de Peña, M.-P. (2021). Impact of blanching and frying heating rate/time on the antioxidant capacity and (poly)phenols of cardoon stalks (*Cynara cardunculus* L. var. *altilis* DC). *International Journal of Gastronomy and Food Science*, 26, 100415. <https://doi.org/10.1016/j.ijgfs.2021.100415>
- Imanningsih, N., Muchtadi, D., Wresdiyati, T., & -, K. (2013). Acidic Soaking And Steam Blanching Retain Anthocyanins And Polyphenols In Purple *Dioscorea alata* FLOUR. *Jurnal Teknologi Dan Industri Pangan*, 24(2), 121–128. <https://doi.org/10.6066/jtip.2013.24.2.121>
- Januar, H., Wikanta, T., & Hastarini, E. (2004). Hubungan antara Musim dengan Kadar Caulerpin dalam *Caulerpa racemosa*. *Jurnal Penelitian Perikanan Indonesia*, 10.
- Ji, H., Shao, H., Zhang, C., Hong, P., & Xiong, H. (2008). Separation of the polysaccharides in *Caulerpa racemosa* and their chemical composition and antitumor activity. *Journal of Applied Polymer Science*, 110(3), 1435–1440.
- Jung, V., Thibaut, T., Meinesz, A., & Pohnert, G. (2002). Comparison of the wound-activated transformation of caulerpenyne by invasive and noninvasive *Caulerpa* species of the Mediterranean. *Journal of Chemical Ecology*, 28(10), 2091–2105. <https://doi.org/10.1023/A:1020710230532>
- Kachhadiya, S., Kumar, N., & Seth, N. (2018). Process kinetics on physico-chemical and peroxidase activity for different blanching methods of sweet corn. *Journal of Food Science and Technology*, 55(12), 4823–4832. <https://doi.org/10.1007/s13197-018-3416-3>
- Kamal, C., & Sethuraman, M. G. (2012). Caulerpin-A bis-indole alkaloid as a green inhibitor for the corrosion of mild steel in 1 M HCl solution from the marine alga *caulerpa racemosa*. *Industrial and Engineering Chemistry Research*, 51(31), 10399–10407. <https://doi.org/10.1021/ie3010379>
- Kamsiati, E., Rahayu, E., & Herawati, H. (2020). Pengaruh Blanching terhadap Karakteristik Daun Ubi Kayu Instan. *METANA*, 16(1), 39–46. <https://doi.org/10.14710/metana.v16i1.30461>
- Kase, A. G. O., Calumpong, H., & Rupidara, A. (2020). Secondary metabolites of some varieties of *Caulerpa* species. *IOP Conference Series: Materials Science and Engineering*, 823(1), 1–9. <https://doi.org/10.1088/1757-899X/823/1/012041>
- Klein, J., & Verlaque, M. (2008). The *Caulerpa racemosa* invasion: A critical review. *Marine Pollution Bulletin*, 56(2), 205–225. <https://doi.org/10.1016/j.marpolbul.2007.09.043>
- Koca, N., Karadeniz, F., & Burdurlu, H. S. (2007). Effect of pH on chlorophyll degradation and colour loss in blanched green peas. *Food Chemistry*, 100(2), 609–615.
- Kumar, A., Krishnamoorthy, E., Devi, H. M., Uchoi, D., Tejpal, C. S., Ninan, G., & Zynudheen, A. A. (2018). Influence of sea grapes (*Caulerpa racemosa*) supplementation on physical, functional, and anti-oxidant properties of semi-

- sweet biscuits. *Journal of Applied Phycology*, 30(2), 1393–1403. <https://doi.org/10.1007/s10811-017-1310-4>
- Kumar, M., Gupta, Vishal., Kumari, P., Reddy, C. R. K., & Jha, B. (2011). Assessment of nutrient composition and antioxidant potential of Caulerpaceae seaweeds. *Journal of Food Composition and Analysis*, 24(2), 270–278. <https://doi.org/10.1016/j.jfca.2010.07.007>
- Lachos-Perez, D., Baseggio, A. M., Mayanga-Torres, P. C., Maróstica, M. R., Rostagno, M. A., Martínez, J., & Forster-Carneiro, T. (2018). Subcritical water extraction of flavanones from defatted orange peel. *Journal of Supercritical Fluids*, 138, 7–16. <https://doi.org/10.1016/j.supflu.2018.03.015>
- Lann, K. Le, Jégou, C., & Stiger-Pouvreau, V. (2008). Effect of different conditioning treatments on total phenolic content and antioxidant activities in two Sargassacean species: Comparison of the frondose *Sargassum muticum* (Yendo) Fensholt and the cylindrical *Bifurcaria bifurcata* R. Ross. *Phycological Research*, 56(4), 238–245. <https://doi.org/10.1111/j.1440-1835.2008.00505.x>
- Leandro, A., Pacheco, D., Cotas, J., Marques, J. C., Pereira, L., & Gonçalves, A. M. M. (2020). Seaweed's bioactive candidate compounds to food industry and global food security. *Life*, 10(8), 1–37. <https://doi.org/10.3390/life10080140>
- Lee, F. A. (1958). *THE BLANCHING PROCESS* (pp. 63–106).
- Lesser, M. P. (2006). Oxidative stress in marine environments: Biochemistry and physiological ecology. *Annual Review of Physiology*, 68, 253–278. <https://doi.org/10.1146/annurev.physiol.68.040104.110001>
- Lim, Y. Y., & Murtijaya, J. (2007). Antioxidant properties of *Phyllanthus amarus* extracts as affected by different drying methods. *LWT*, 40(9), 1664–1669. <https://doi.org/10.1016/j.lwt.2006.12.013>
- Liu, D. Q., Mao, S. C., Zhang, H. Y., Yu, X. Q., Feng, M. T., Wang, B., Feng, L. H., & Guo, Y. W. (2013). Racemosins A and B, two novel bisindole alkaloids from the green alga *Caulerpa racemosa*. *Fitoterapia*, 91, 15–20. <https://doi.org/10.1016/j.fitote.2013.08.014>
- Lorenzo, V. P., Barbosa Filho, J. M., Scotti, L., & Scotti, M. T. (2015). Combined structure- and ligand-based virtual screening to evaluate caulerpin analogs with potential inhibitory activity against monoamine oxidase B. *Revista Brasileira de Farmacognosia*, 25(6), 690–697.
- Macedo, N. R. P. V., Ribeiro, M. S., Villação, R. C., Ferreira, W., Pinto, A. M., Teixeira, V. L., Cirne-Santos, C., Paixão, I. C. N. P., & Giongo, V. (2012). Caulerpin as a potential antiviral drug against herpes simplex virus type 1. *Journal of Pharmacognosy*, 22(4), 861–867. <https://doi.org/10.1590/S0102>
- Magdugo, R. P., Terme, N., Lang, M., Pliego-Cortés, H., Marty, C., Hurtado, A. Q., Bedoux, G., & Bourgougnon, N. (2020). An analysis of the nutritional and health values of *Caulerpa racemosa* (Forsskål) and *Ulva fasciata* (Delile)—Two chlorophyta collected from the Philippines. *Molecules*, 25(12). <https://doi.org/10.3390/molecules25122901>

- Magliozzi, L., Maselli, V., Almada, F., Di Cosmo, A., Mollo, E., & Polese, G. (2019). Effect of the algal alkaloid caulerpin on neuropeptide Y (NPY) expression in the central nervous system (CNS) of *Diplodus sargus*. *Journal of Comparative Physiology A*, 205, 203–210. <https://doi.org/10.1007/s00359-019-01322-8>
- Mahadevan, K. (2015). Seaweeds: A sustainable food source. In *Seaweed Sustainability: Food and Non-Food Applications* (pp. 347–364). Elsevier Inc. <https://doi.org/10.1016/B978-0-12-418697-2.00013-1>
- Maharani, B. C., Lindriati, T., & Diniyah, N. (2016). Pengaruh Variasi Waktu Blanching dan Konsentrasi Asam Sitrat Terhadap Karakteristik dan Aktivitas Ekstrak Pigmen Ubi Jalar Ungu (*Ipomoea batatas* L.). *Indonesian Journal of Food Research*, 1(1), 60–67. <https://doi.org/10.24198/jp2.2016.vol1.1.10>
- Maiti, B. C., & Thomson, R. H. (1977). Caulerpin. In *Marine natural products chemistry*. *Marine Natural Products Chemistry*, 159–160.
- Manoppo, J. I. C., Nurkolis, F., Batubara, S. C., Rompies, R., Mayulu, N., Assa, Y. A., Natanael, H., Wewengkang, D. S., & Rotinsulu, H. (2021). Nata de ceulerpa from sea grape fermentation (*Caulerpa racemosa*) by *Acetobacter xylinum* as a functional food rich in vitamin C. *Proceedings of the Nutrition Society*, 80(OCE3). <https://doi.org/10.1017/s0029665121002664>
- Martínez, S., Pérez, N., Carballo, J., & Franco, I. (2013). Effect of blanching methods and frozen storage on some quality parameters of turnip greens (“grelos”). *LWT*, 51(1), 383–392. <https://doi.org/10.1016/j.lwt.2012.09.020>
- Matanjun, P., Mohamed, S., Mustapha, N. M., Muhammad, K., & Ming, C. H. (2008). Antioxidant activities and phenolics content of eight species of seaweeds from north Borneo. *Journal of Applied Phycology*, 20(4), 367–373. <https://doi.org/10.1007/s10811-007-9264-6>
- Matsukawa, R., Dubinsky, Z., Kishimoto, E., Masaki, K., Masuda, Y., Takeuchi, T., Chihara, M., Yamamoto, Y., Niki, E., & Karube, I. (1997). A comparison of screening methods for antioxidant activity in seaweeds. *Journal of Applied Phycology*, 9, 29–35.
- Mehta, D., Prasad, P., Bansal, V., Siddiqui, M. W., & Sharma, A. (2017). Effect of drying techniques and treatment with blanching on the physicochemical analysis of bitter-gourd and capsicum. *LWT*, 84, 479–488. <https://doi.org/10.1016/j.lwt.2017.06.005>
- Minh, N. P., Thi Yen Nhi, T., Kim Tuyen, L., Hung Phi, T., Tan Khoa, D., & Quoc Thuan, T. (2019). Technical Factors Affecting Seagrass (*Caulerpa lentillifera*) Production By Cultivation And Its Stability By Post-Harvest Treatment. *J. Pharm. Sci. & Res.*, 11(3), 783–786.
- Muliani, S., Rosmiati, & Isma, M. F. (2021). Analysis Of The Suitability of The Quality of The Water of Kuala Langsa For The Cultivation of Sea Grapes (*Caulerpa Recemosa*) Reviewed By Gis. *Jurnal Ilmiah Samudra Akuatika*, IV(2), 66–75.

- Murcia, M. A., López-Ayerra, B., Martínez-Tomé, M., & García-Carmona, F. (2000). Effect of industrial processing on chlorophyll content of broccoli. *Journal of the Science of Food and Agriculture*, 80(10), 1447–1451.
- Nagappan, T., & Vairappan, C. S. (2014). Nutritional and bioactive properties of three edible species of green algae, genus *Caulerpa* (Caulerpaceae). *Journal of Applied Phycology*, 26(2), 1019–1027. <https://doi.org/10.1007/s10811-013-0147-8>
- Nalawade, S. A., Sinha, A., & Hebbar, H. U. (2018). Infrared based dry blanching and hybrid drying of bitter gourd slices: Process efficiency evaluation. *Journal of Food Process Engineering*, 41(4).
- Nayak, B., Liu, R. H., & Tang, J. (2015). Effect of Processing on Phenolic Antioxidants of Fruits, Vegetables, and Grains—A Review. *Critical Reviews in Food Science and Nutrition*, 55(7), 887–918. <https://doi.org/10.1080/10408398.2011.654142>
- Negi, P. S., & Roy, S. K. (2000). Effect of Blanching and Drying Methods on β - Carotene, Ascorbic acid and Chlorophyll Retention of Leafy Vegetables. *LWT*, 33(4), 295–298. <https://doi.org/10.1006/fstl.2000.0659>
- Nguyen, V. T., Ueng, J. P., & Tsai, G. J. (2011). Proximate Composition, Total Phenolic Content, and Antioxidant Activity of Seagrape (*Caulerpa lentillifera*). *Journal of Food Science*, 76(7). <https://doi.org/10.1111/j.1750-3841.2011.02289.x>
- Nie, J., Chen, D., Lu, Y., & Dai, Z. (2021). Effects of various blanching methods on fucoxanthin degradation kinetics, antioxidant activity, pigment composition, and sensory quality of *Sargassum fusiforme*. *LWT*, 143(111179), 1–9. <https://doi.org/10.1016/j.lwt.2021.111179>
- Nielsen, C. W., Holdt, S. L., Sloth, J. J., Marinho, G. S., Sæther, M., Funderud, J., & Rustad, T. (2020). Reducing the high iodine content of *Saccharina latissima* and improving the profile of other valuable compounds by water blanching. *Foods*, 9(5). <https://doi.org/10.3390/foods9050569>
- Nielsen, P. G., Carl, J. S., & Christophersen, C. (1982). Final Structure of Caulerpicin, a Toxin Mixture from the Green Alga *Caulerpa Racemosa*. *Phytochemistry*, 21(7), 1643–1645.
- Noè, S., Badalamenti, F., Bonaviri, C., Musco, L., Fernández, T. V., Vizzini, S., & Gianguzza, P. (2018). Food selection of a generalist herbivore exposed to native and alien seaweeds. *Marine Pollution Bulletin*, 129(2), 469–473. <https://doi.org/10.1016/j.marpolbul.2017.10.015>
- Nurjanah, ., Jacoeb, A. M., Hidayat, T., & Chrystiawan, R. (2018). Perubahan Komponen Serat Rumpuk Laut *Caulerpa* sp. (dari Tual, Maluku) akibat Proses Perebusan. *Jurnal Ilmu Dan Teknologi Kelautan Tropis*, 10(1), 35–48. <https://doi.org/10.29244/jitkt.v10i1.21545>
- Nurjanah, N., Jacoeb, A. M., Asmara, D. A., & Hidayat, T. (2019). Phenol Component of Fresh and Boiled Sea Grapes (*Caulerpa* sp.) from Tual, Maluku. *Food ScienTech Journal*, 1(1), 31. <https://doi.org/10.33512/fsj.v1i1.6244>

- Nursyamsi, F. N., & Husni, A. (2021). Soaking Time in Lime Solution Increases the Antioxidant Activity, Antidiabetic Activity, and Consumer Acceptance Level of *Sargassum Polycystum* Seaweed Tea. *Journal of Hunan University (Natural Sciences)*, 48(7), 276–285.
- Oboh, G. (2005). Effect of blanching on the antioxidant properties of some tropical green leafy vegetables. *LWT*, 38(5), 513–517. <https://doi.org/10.1016/j.lwt.2004.07.007>
- Olivera, D. F., Viña, S. Z., Marani, C. M., Ferreyra, R. M., Mugridge, A., Chaves, A. R., & Mascheroni, R. H. (2008). Effect of blanching on the quality of Brussels sprouts (*Brassica oleracea* L. gemmifera DC) after frozen storage. *Journal of Food Engineering*, 84(1), 148–155. <https://doi.org/10.1016/j.jfoodeng.2007.05.005>
- Ornano, L., Donno, Y., Sanna, C., Ballero, M., Serafini, M., & Bianco, A. (2014). Phytochemical study of *Caulerpa racemosa* (Forsk.) J. Agarth, an invading alga in the habitat of la Maddalena archipelago. *Natural Product Research*, 28(20), 1795–1799. <https://doi.org/10.1080/14786419.2014.945928>
- Osuna-Ruiz, I., López-Saiz, C. M., Burgos-Hernández, A., Velázquez, C., Nieves-Soto, M., & Hurtado-Oliva, M. A. (2016). Antioxidant, antimutagenic and antiproliferative activities in selected seaweed species from Sinaloa, Mexico. *Pharmaceutical Biology*, 54(10), 2196–2210. <https://doi.org/10.3109/13880209.2016.1150305>
- Othman, R., Noh, N. H., Hatta, F. A. M., & Jamaludin, M. A. (2018). Natural carotenoid pigments of 6 chlorophyta freshwater green algae species. *Journal of Pharmacy and Nutrition Sciences*, 8(1), 1–5. <https://doi.org/10.6000/1927-5951.2018.08.01.1>
- Park, J. S., Han, J. M., Surendhiran, D., & Chun, B. S. (2022). Physicochemical and biofunctional properties of *Sargassum thunbergii* extracts obtained from subcritical water extraction and conventional solvent extraction. *Journal of Supercritical Fluids*, 182. <https://doi.org/10.1016/j.supflu.2022.105535>
- Parvez, M., Ara, J., Sultana, V., Qasim, R., & Uddin Ahmad, V. (2000). Caulerpin. *Acta Crystallographica*, C56, 96–97.
- Permatasari, H. K., Nurkolis, F., Augusta, P. S., Mayulu, N., Kuswari, M., Taslim, N. A., Wewengkang, D. S., Batubara, S. C., & Ben Gunawan, W. (2021). Kombucha tea from seagrasses (*Caulerpa racemosa*) potential as a functional anti-ageing food: in vitro and in vivo study. *Heliyon*, 7(9). <https://doi.org/10.1016/j.heliyon.2021.e07944>
- Pesando, D., Huitorel, P., Dolcini, V., Amade, P., & Girard, J. P. (1998). Caulerpenyne interferes with microtubule-dependent events during the first mitotic cycle of sea urchin eggs. *European Journal of Cell Biology*, 77(1), 19–26. [https://doi.org/10.1016/S0171-9335\(98\)80098-8](https://doi.org/10.1016/S0171-9335(98)80098-8)
- Pesando, D., Lemkealb, R., Ferrua, C., Amade, P., & Girard, J.-P. (1996). Effects of caulerpenyne, the major toxin from *Caulerpa taxifolia* on mechanisms related to sea urchin egg cleavage. *Aquatic Toxicology*, 35, 139–155.

- Pujimulyani, D., Raharjo, S., Marsono, Y., & Santoso, U. (2012). The effect of blanching on antioxidant activity and glycosides of white saffron (*Curcuma mangga* Val.). *International Food Research Journal*, 19(2), 617–621.
- Pusecker, K., Laatsch, H., Helmke, E., & Weylandb, H. (1997). Dihydrophencomycin Methyl Ester, a New Phenazine Derivative from a Marine Streptomycete. *The Journal of Antibiotics*, 50(6), 479–483.
- Putnarubun, C., & Valentine, R. Y. (2020). Pigmen Klorofil Pada Alga *Caulerpa* sp. Di Kepulauan Kei. *Jambura Fish Processing Journal*, 2(2), 41–48. <https://doi.org/10.37905/jfpj.v2i2.6855>
- Ratana-Arporn, P., & Chirapart, A. (2006). Nutritional Evaluation of Tropical Green Seaweeds *Caulerpa lentillifera* and *Ulva reticulata*. *Nat. Sci.*, 40, 75–83.
- Raub, M. F., Cardellina, J. H., & Schwede, J. G. (1987). The Green Algal Pigment Caulerpin as a Plant Growth Regulator. *Phytochemistry*, 26(3), 619–620.
- Rohman, A., Riyanto, S., Yuniarti, N., Saputra, W. R., Utami, R., & Mulatsih, W. (2010). Antioxidant activity, total phenolic, and total flavonoid of extracts and fractions of red fruit (*Pandanus conoideus* Lam). *International Food Research Journal*, 17, 97–106.
- Sappati, P. K., Nayak, B., VanWalsum, G. P., & Mulrey, O. T. (2019). Combined effects of seasonal variation and drying methods on the physicochemical properties and antioxidant activity of sugar kelp (*Saccharina latissima*). *Journal of Applied Phycology*, 31(2), 1311–1332. <https://doi.org/10.1007/s10811-018-1596-x>
- Schoefs, B. (2004). Determination of pigments in vegetables. *Journal of Chromatography A*, 1054(1–2), 217–226. <https://doi.org/10.1016/j.chroma.2004.05.105>
- Sihono, S., Tarman, K., Madduppa, H., & Januar, H. I. (2018). Metabolite Profiles and Antioxidant Activity of *Caulerpa racemosa* with Different Handlings. *Squalen Bulletin of Marine and Fisheries Postharvest and Biotechnology*, 13(3), 93. <https://doi.org/10.15578/squalen.v13i3.355>
- Simopoulos, A. P. (2002). The importance of the ratio of omega-6/omega-3 essential fatty acids. *Biomed Pharmacother*, 56, 365–379. www.elsevier.com/locate/biophar
- Sinurat, E., & Suryaningrum, Th. D. (2019). Aktivitas Antioksidan dan Sifat Sensori Teh Rumput Laut *Sargassum* sp. Berdasarkan Variasi Lama Perendaman. *JPHPI*, 22(3), 581–588.
- Song, X., Yu, X., Zhou, C., Xu, B., Chen, L., Yagoub, A. E. A., Emeka, O. C., & Wahia, H. (2021). Conveyor belt catalytic infrared as a novel apparatus for blanching processing applied to sweet potatoes in the industrial scale. *LWT*, 149, 111827.

- South, G. R., Morris, C., Bala, S., & Lober, M. (2012). *Value adding and supply chain development for fisheries and aquaculture products in Fiji, Samoa and Tonga: Scoping study for Caulerpa (Sea grapes)*.
- Sugawara, T., Ganesan, P., Li, Z., Manabe, Y., & Hirata, T. (2014). Siphonaxanthin, a green algal carotenoid, as a novel functional compound. *Marine Drugs*, 12(6), 3660–3668. <https://doi.org/10.3390/md12063660>
- Sun, Y., Liu, Z., Song, S., Zhu, B., Zhao, L., Jiang, J., Liu, N., Wang, J., & Chen, X. (2020). Anti-inflammatory activity and structural identification of a sulfated polysaccharide CLGP4 from *Caulerpa lentillifera*. *International Journal of Biological Macromolecules*, 146, 931–938. <https://doi.org/10.1016/j.ijbiomac.2019.09.216>
- Tanna, B., Choudhary, B., & Mishra, A. (2018). Metabolite profiling, antioxidant, scavenging and anti-proliferative activities of selected tropical green seaweeds reveal the nutraceutical potential of *Caulerpa* spp. *Algal Research*, 36, 96–105. <https://doi.org/10.1016/j.algal.2018.10.019>
- Tanna, B., Yadav, S., & Mishra, A. (2020). Anti-proliferative and ROS-inhibitory activities reveal the anticancer potential of *Caulerpa* species. *Molecular Biology Reports*, 47(10), 7403–7411. <https://doi.org/10.1007/s11033-020-05795-8>
- Tapotubun, A. M. (2018). Komposisi Kimia Rumpun Laut (*Caulerpa lentillifera*) dari Perairan Kei Maluku dengan Metode Pengeringan Berbeda. *Jurnal Pengolahan Hasil Perikanan Indonesia*, 21(1), 13. <https://doi.org/10.17844/jphpi.v21i1.21257>
- Tapotubun, A. M., Savitri, I. K. E., & Matrutty, T. E. A. A. (2016). Penghambatan bakteri patogen pada ikan segar yang diaplikasi *Caulerpa lentillifera*. *Jurnal Pengolahan Hasil Perikanan*, 19(3), 299–308. <https://doi.org/10.17844/jphpi.2016.19.3.299>
- Taslim, N. A., & Nurkolis, F. (2021). Antioxidant and cytotoxic activities of three species of tropical seaweeds. *Annals of R.S.C.B*, 15(6), 6500–6504.
- Tello-Ireland, C., Lemus-Mondaca, R., Vega-Gálvez, A., López, J., & Di Scala, K. (2011). Influence of hot-air temperature on drying kinetics, functional properties, colour, phycobiliproteins, antioxidant capacity, texture and agar yield of alga *Gracilaria chilensis*. *LWT- Food Science and Technology*, 44(10), 2112–2118. <https://doi.org/10.1016/j.lwt.2011.06.008>
- Tijskens, L. M. M., Barringer, S. A., & Biekman, E. S. A. (2001). Modelling the effect of pH on the colour degradation of blanched broccoli. *Innovative Food Science & Emerging Technologies*, 2, 315322.
- Uribe, E., Vega-Gálvez, A., García, V., Pastén, A., López, J., & Goñi, G. (2019). Effect of different drying methods on phytochemical content and amino acid and fatty acid profiles of the green seaweed, *Ulva* spp. *Journal of Applied Phycology*, 31(3), 1967–1979. <https://doi.org/10.1007/s10811-018-1686-9>
- Vasanthi, C., Appa Rao, V., Narendra Babu, R., Sriram, P., & Karunakaran, R. (2020). In-vitro antioxidant activities of aqueous and alcoholic extracts of

- Sargassum species—Indian brown seaweed. *Journal of Food Processing and Preservation*, 44(11). <https://doi.org/10.1111/jfpp.14877>
- Vest, S. E., Dawes, C. J., & Romeo, J. T. (1983). Distribution of Caulerpin Caulerpicin in Eight Species of the Green Alga *Caulerpa*. *Botanica Marina*, XXVI, 313–316.
- Vidal, J. P., Laurent, D., Kabore, S. A., Rechencq, E., Boucard, M., Girard, J. P., Escale, R., & Rossi, J. C. (1984). Caulerpin, Caulerpicin, *Caulerpa scalpelliformis*: Comparative Acute Toxicity Study. *Botanica Marina*, 533–537.
- Wang, H., Fang, X. M., Sutar, P. P., Meng, J. S., Wang, J., Yu, X. L., & Xiao, H. W. (2021). Effects of vacuum-steam pulsed blanching on drying kinetics, colour, phytochemical contents, antioxidant capacity of carrot and the mechanism of carrot quality changes revealed by texture, microstructure and ultrastructure. *Food Chemistry*, 338. <https://doi.org/10.1016/j.foodchem.2020.127799>
- Wang, H. O., Fu, Q. Q., Chen, S. J., Hu, Z. C., & Xie, H. X. (2018). Effect of Hot-Water Blanching Pretreatment on Drying Characteristics and Product Qualities for the Novel Integrated Freeze-Drying of Apple Slices. *Journal of Food Quality*, 2018. <https://doi.org/10.1155/2018/1347513>
- Wang, Y., Sun, J., Ma, D., Li, X., Gao, X., Miao, J., & Gao, W. (2019). Improving the contents of the active components and bioactivities of *Chrysanthemum morifolium* Ramat.: The effects of drying methods. *Food Bioscience*, 29, 9–16. <https://doi.org/10.1016/j.fbio.2019.03.003>
- Wardani, A. D., Susanto, E., Dewi, N., & Purnamayati, L. (2020). Pengaruh Perbedaan Pre-Treatment Terhadap Stabilitas Karotenoid dan Fenol pada Ekstrak *Sargassum Duplicatum* Selama Penyimpanan. *JPHPI 2020*, 23(2), 236–247.
- Wijesekara, I., Pangestuti, R., & Kim, S. (2011). Biological activities and potential health benefits of sulfated polysaccharides derived from marine algae. *Carbohydrate Polymers*, 84(1), 14–21. <https://doi.org/https://doi.org/10.1016/j.carbpol.2010.10.062>
- Windrayani, E., & Ekantari, N. (2021). The Fortification Effects of Sea Grapes (*Caulerpa racemosa*) Powder on Color and Sensory of Hakau Dim Sum Wrappers. *IOP Conference Series: Earth and Environmental Science* 919, 919(1). <https://doi.org/10.1088/1755-1315/919/1/012048>
- Wink, M. (1994). The cell culture medium-a functional extracellular compartment of suspension-cultured cells. *Plant Cell, Tissue and Organ Culture*, 38, 307–319.
- Wolfe, K. L., & Liu, R. H. (2003). Apple peels as a value-added food ingredient. *Journal of Agricultural and Food Chemistry*, 51(6), 1676–1683. <https://doi.org/10.1021/jf025916z>
- Wu, L., He, T., Gu, W., & Wang, J. (2010). Effects of caulerpin on adventitious rooting in soybean hypocotyls cuttings. *Plant Physiology Communications*. *Plant Physiology Communications*, 46(9), 895–901.

- Xiao, H. W., Pan, Z., Deng, L. Z., El-Mashad, H. M., Yang, X. H., Mujumdar, A. S., Gao, Z. J., & Zhang, Q. (2017). Recent developments and trends in thermal blanching – A comprehensive review. *Information Processing in Agriculture*, 4(2), 101–127. <https://doi.org/10.1016/j.inpa.2017.02.001>
- Xu, H., Wu, M., Zhang, X., Wang, B., Wang, S., Zheng, Z., Li, D., & Wang, F. (2022). Application of blanching pretreatment in herbaceous peony (*Paeonia lactiflora* Pall.) flower processing: Improved drying efficiency, enriched volatile profile and increased phytochemical content. *Industrial Crops and Products*, 188(115663). <https://doi.org/10.1016/j.indcrop.2022.115663>
- Xu, Naijin., Chen, Guanqun., & Liu, Hui. (2017). Antioxidative categorization of twenty amino acids based on experimental evaluation. *Molecules*, 22(12). <https://doi.org/10.3390/molecules22122066>
- Yang, P., Liu, D. Q., Liang, T. J., Li, J., Zhang, H. Y., Liu, A. H., Guo, Y. W., & Mao, S. C. (2015). Bioactive constituents from the green alga *Caulerpa racemosa*. *Bioorganic and Medicinal Chemistry*, 23(1), 38–45. <https://doi.org/10.1016/j.bmc.2014.11.031>
- Yap, W. F., Tay, V., Tan, S. H., Yow, Y. Y., & Chew, J. (2019). Decoding antioxidant and antibacterial potentials of Malaysian green seaweeds: *Caulerpa racemosa* and *caulerpa lentillifera*. *Antibiotics*, 8(3). <https://doi.org/10.3390/antibiotics8030152>
- Zubia, M., Robledo, D., & Freile-Pelegrin, Y. (2007). Antioxidant activities in tropical marine macroalgae from the Yucatan Peninsula, Mexico. *Journal of Applied Phycology*, 19(5), 449–458. <https://doi.org/10.1007/s10811-006-9152-5>