

## 7.0 BIBLIOGRAPHY

- Aderhold, C. J. Williams and Edyvean, R. G. J. (1996).** The removal of heavy metal ions by seaweeds and their derivatives. *Bio resource Technology*, 58 : 1-6.
- Aguilera-Morales, M., Casas-Valdez, M., Carrillo-Dominguez, S., González-Acosta, B., & Pérez-Gil, F. (2005).** Chemical composition and microbiological assays of marine algae *Enteromorpha* spp. as a potential food source. *Journal of food composition and analysis*, 18(1), 79-88.
- Ahmed, F.E. (1991)** Seafood safety, Washington DC, National Academy press, pp. 432.
- Al-Massarani, S. M. (2014).** Phytochemical and biological properties of sesquiterpene constituents from the marine red seaweeds *Laurencia*: a review. *Nat. Prod. Chem. Res*, 2(147), 1-13.
- Almela Concepcion, Jesus Clemente, M., Dinoraz Velez, and Rosa Montoro. (2006)** Total arsenic, inorganic arsenic, lead and cadmium contents in edible seaweed sold in Spain. *Food and Chemical Toxicology.*, vol. 44(1), pp.1901–1908.
- Aneiros, A., & Garateix, A. (2004).** Bioactive peptides from marine sources: pharmacological properties and isolation procedures. *Journal of Chromatography B*, 803(1), 41-53.

- Anon. (2005).** Case Study the *Lophelia* Reefs of Norway [http://www.lophelia.org/lophelia/case\\_2.htm](http://www.lophelia.org/lophelia/case_2.htm)>. December 8, 2009.
- Anonymous. (2002).** Maximum allowable concentration (MAC) of metals in vegetable, fruit and various foods, *J Agric Food Chem.*, 840–845.
- Antonisamy, M.J & Raj, E. D. S. (2011).** UV–VIS and HPLC studies on *Amphiroa anceps* (Lamarck) Decaisne. *Arabian Journal of Chemistry* doi:10.1016/j.arabjc.2011.09.005.
- AOAC International. (2000).** *Association of Official Analytical Chemists.* Official Methods of Analysis of AOAC. Washington DC: AOAC International.
- Apostolidis, A., Jacques, T. S., Freeman, A., Kalsi, V., Popat, R., Gonzales, G., & Fowler, C. J. (2008).** Histological changes in the urothelium and suburothelium of human overactive bladder following intradetrusor injections of botulinum neurotoxin type A for the treatment of neurogenic or idiopathic detrusor over activity. *European urology*, 53(6), 1245-1253.
- Apostolidis, E., & Lee, C. M. (2010).** *In vitro* potential of ascophyllum nodosum phenolic antioxidant-mediated  $\alpha$ -glucosidase and  $\alpha$ -amylase inhibition. *Journal of food science*, 75(3), H97-H102.
- Arasaki, T. F (1997).** Sea vegetables. *Jap. J. Phycol.* (Sofru), Vol.32: pp.293–299. **Nisizawa, K. (2002)** Seaweeds Kaiso – Bountiful harvest from the seas sustenance for health and well being by preventing common life style diseases, Japan Seaweed Association, Japan, pp. 59-68.

- Aslam, M. N., Kreider, J. M., Paruchuri, T., Bhagavathula, N., DaSilva, M., Zernicke, R. F., & Varani, J. (2010).** A mineral-rich extract from the red marine algae *Lithothamnion calcareum* preserves bone structure and function in female mice on a Western-style diet. *Calcified tissue international*, 86(4), 313-324.
- Athukorala, Y., Kim, K. N., & Jeon, Y. J. (2006).** Antiproliferative and antioxidant properties of an enzymatic hydrolysate from brown alga, *Ecklonia cava*. *Food and Chemical Toxicology*, 44(7), 1065-1074.
- Baghurst, P. A., Baghurst, K. I., & Record, S. J. (1996).** Dietary fibre, non-starch polysaccharides and resistant starch: a review. *Food Australia*, 48(3), S3-S35.
- Banu, A. T., & Mageswari, S. U. (2015).** Nutritional status and effect of seaweed chocolate on anemic adolescent girls. *Food Science and Human Wellness*, 4(1), 28-34.
- Banu, A. T., & Umamageswari, S. (2011).** Toxicity study of seaweeds in rat. *Con. J. Food Sci. Technol.*, 5(2), 23-31.
- Bhaskar, N., Hosokawa, M. & Miyashita, K. (2006).** Physiological effects of eicosapentanoic acid (EPA) and docosahexanoic acid (DHA) - A review, *Food Rev Int .*, vol. 22 (2), 291-307.
- Birch, G. F., Eyre, B., & Taylor, S. E. (1999).** The distribution of nutrients in bottom sediments of Port Jackson (Sydney Harbour), Australia. *Marine Pollution Bulletin*, 38(12), 1247-1251.

- Bird, M. I., Wurster, C. M., de Paula Silva, P. H., Bass, A. M., & De Nys, R. (2011).** Algal biochar–production and properties. *Bioresource technology*, *102*(2), 1886-1891.
- Bold, H. C., & Wynne, M. J. (1985).** Introduction to the Algae. 720 pp.
- Buck., Christofer.B., Cynthia.D. and Thompson. (2006)** Carrageenan is a potent inhibitor of papilloma virus infection, *J.App.Phycol.*, vol.2(7), pp.69.
- Buckle, P. J., Baldo, B. A., & Taylor, K. M. (1980).** The anti-inflammatory activity of marine natural products-6-n-tridecylsalicylic acid, flexibilide and dendalone 3-hydroxybutyrate. *Agents and actions*, *10*(4), 361-367.
- Burrow, E. M. (1991).** Seaweeds of the British Isles. Volume 2. Chlorophyta. National History Museum Publications, London xi- pp. 238.
- Burrow, E. M. (1991).** Seaweeds of the British Isles. Volume 2. Chlorophyta. Natural History Museum Publications, London Xi- 238.
- Burtin, P. (2003).** Nutritional value of seaweeds, *Electron. J. Environ. Agric. Food Chem.*, Vol.2(4), pp. 498–503.
- Caliceti, M., Argese,E. and Povani, B. (2005)** Heavy metal contamination in the sea weeds in venice lagoon, *J App Phyco.*, Vol.4(3), pp.34-38.
- Cardoso, C., Afonso, C., Lourenço, H., Costa, S., & Nunes, M. L. (2015).** Bioaccessibility assessment methodologies and their consequences for the risk–benefit evaluation of food. *Trends in Food Science & Technology*, *41*(1), 5-23.

- Carvalho, A. F. U., Portela, M. C. C., Sousa, M. B., Martins, F. S., Rocha, E. C., Farias, D. F., & Feitosa, J. P. A. (2009).** Physiological and physico-chemical characterization of dietary fibre from the green seaweed *Ulva fasciata* Delile. *Brazilian Journal of Biology*, 69(3), 969-977.
- Castro, I. A., Barroso, L. P., & Sinnecker, P. (2005).** Functional foods for coronary heart disease risk reduction: a meta-analysis using a multivariate approach. *The American journal of clinical nutrition*, 82(1), 32-40.
- Chakraborty and Santra. (2008).** biochemical composition of eight benthic algae colled form sunderban. *Indian Journal Marine Science.*, Vol 3(3), pp. 329- 332.
- Chandini, S., Kumar., Ganesan, P., Suresh, PV. and Bhaskar, N. (2008)** Seaweeds as a source of nutritionally beneficial compounds- A Review, *Journal Food Science and Technology.*, Vol. 45(1), pp.1-13.
- Charalampopoulos, D., Wang, R., Pandiella, S. S., & Webb, C. (2002).** Application of cereals and cereal components in functional foods: a review. *International journal of food microbiology*, 79(1), 131-141.
- Chen, Z. Y., Jiao, R., & Ma, K. Y. (2008).** Cholesterol-lowering nutraceuticals and functional foods. *Journal of Agricultural and Food Chemistry*, 56(19), 8761-8773.

- Cheung, V. G., Jen, K. Y., Weber, T., Morley, M., Devlin, J. L., Ewens, K. G., & Spielman, R. S. (2003).** Genetics of quantitative variation in human gene expression. In *Cold Spring Harbor symposia on quantitative biology* (Vol. 68, pp. 403-408). Cold Spring Harbor Laboratory Press.
- Chew, Y. L., Lim, Y. Y., Omar, M., & Khoo, K. S. (2008).** Antioxidant activity of three edible seaweeds from two areas in South East Asia. *LWT-Food Science and Technology*, 41(6), 1067-1072.
- Choi, J. I., Raghavendran, H. R. B., Sung, N. Y., Kim, J. H., Chun, B. S., Ahn, D. H., ... & Lee, J. W. (2010).** Effect of fucoidan on aspirin-induced stomach ulceration in rats. *Chemico-biological interactions*, 183(1), 249-254.
- Cofrades, S., López-López, I., Bravo, L. B., Ruiz-Capillas, C., Bastida, S., Larrea, M. T., & Jiménez-Colmenero, F. (2010).** Nutritional and antioxidant properties of different brown and red Spanish edible seaweeds. *Food Science and Technology International*.
- Cousens, (2001)** Guide to seashore life of Australia. New Holland, Sydney.
- Crasima et al, (1985)** Nutritional value of seaweeds EJEAF, che, Pp:498-503.
- Cunningham, S.; Joshi, L.** In: *Transgenic Crop Plants*; Kole, C. Ed.; Springer-Verlag: Berlin, Heidelberg 2010, pp. 343-357.

- Dar, A., Baig, H. S., Saifullah, S. M., Ahmad, V. U., Yasmeen, S., & Nizamuddin, M. (2007).** Effect of seasonal variation on the anti-inflammatory activity of *Sargassum wightii* growing on the N. Arabian Sea coast of Pakistan. *Journal of Experimental Marine Biology and Ecology*, 351(1), 1-9.
- Dawczynski, C., Schubert, R., & Jahreis, G. (2007).** Amino acids, fatty acids, and dietary fibre in edible seaweed products. *Food Chemistry*, 103(3), 891-899.
- Dawes, C. J. (1998).** *Marine botany*. John Wiley & Sons.
- Denise Phaneuf, Isabelle Coté, Pierre Dumas, Liliane A. Ferron, Alain LeBlanc, (2002).** Evaluation of the Contamination of Marine Algae (Seaweed) from the St. Lawrence River and Likely to Be Consumed by Humans, *Environmental Research*, 80(2), 175–182.
- Devi, G. K., Thirumaran, G., Manivannan, K., & Anantharaman, P. (2009).** Element composition of certain seaweeds from Gulf of Mannar Marine Biosphere Reserve; southeast coast of India. *World Journal of Dairy & Food Sciences*, 4(1), 46-55.
- Dhargalkar, v. K. (2014).** Uses of seaweeds in the Indian diet for sustenance and well-being. *Science and culture*.
- Dhargalkar, V. K. and Pereira, N. (2005)** Seaweed: promising plant of the millennium, *Science and culture.*, Vol.71(4), pp. 60–66.

- Dhargalkar, V. K., & Verlecar, X. N. (2009).** Southern Ocean seaweeds: A resource for exploration in food and drugs. *Aquaculture*, 287(3), 229-242.
- Dharmananda, S. (2002).** The nutritional and medicinal value of seaweeds used in Chinese Medicine. Accessed at: <http://www.itmonline.org/arts/seaweed>.
- Dharmananda, S. (2009).** Lycium Fruit: Food and Medicine. *Institute for Traditional Medicine Online Portland, OR*. <http://www.itmonline.org/arts/lycium.htm> (Accessed 16 February 2009).
- Draget, K. I., Smidsrød, O., & Skjak-Braek, G. (2005).** Alginates from algae. *Biopolymers Online*.
- Drotman RB, Lawhorn GT 1978.** Serum enzymes are indicators of chemical induced liver damage. *Drug Chem Toxicol 1*: 163-171.
- Drum, R. (2003).** Sea vegetables for food and medicine.
- Duarte, M.E.R.; Cauduro, J.P.; Nosedá, D.G.; Nosedá, M.D.; Gonçalves, A.G.; Pujol, C.A.; Damonte, E.B.; Cerezo, A.S. (2004)** The structure of the agaran sulphate from *Acanthophora spicifera* (Rhodomelaceae, Ceramiales) and its antiviral activity. Relation between structure and antiviral activity in agarans. *Carbohydr. Res.* Vol.339(1), pp.335–347.
- Erhart, S.2001.** Sea vegetables celebration, available online at: [www.algebase.com](http://www.algebase.com).



**Fahprathanchai Prannapus, Kanokporn Saenphet, Yuwadee Peerapornisal**

**and Salika Aritajat. (2006)** Toxicological evaluation of *Cladophora glomerata* kutzing and *Microspora floccose* thuret in albino rats. *SouthEast Asian J Trop Med Public Health*. Vol.37 (suppl 3). Pp. 206-209.

**Fernández-Martín, F., López-López, I., Cofrades, S., & Colmenero, F. J.**

**(2009).** Influence of adding Sea Spaghetti seaweeds and replacing the animal fat with olive oil or a konjac gel on pork meat batter gelation. Potential protein/alginate association. *Meat science*, 83(2), 209-217.

**Fleurence, J., (1999).** Seaweed proteins: biochemical nutritional aspects and

potential uses *Trends in Food Science & Technology*, 10 (1), pp. 25–28

**Frank Riget , Poul Johansen. and Gert Asmund. (1997)** Baseline levels and

natural variability of elements in three seaweeds species from west Greenland, Vol.34(6), pp. 171-176.

**Fritch, (1935).** The structure and reproduction of the algae Vol. I Cambridge.

**Garcia-Closas, R., Berenguer, A., & González, C. A. (2006).** Changes in food

supply in Mediterranean countries from 1961 to 2001. *Public health nutrition*, 9(01), 53-60.

**Ginsberg, M. D., Becker, D. A., Busto, R., Belayev, A., Zhang, Y.,**

**Khoutorova, L., & Belayev, L. (2003).** Stilbazulenyl nitron, a novel antioxidant, is highly neuroprotective in focal ischemia. *Annals of neurology*, 54(3), 330-342.

- Ginzberg, A., Cohen, M., Sod-Moriah, U. A., Shany, S., Rosenshtrauch, A., & Arad, S. M. (2000).** Chickens fed with biomass of the red microalga *Porphyridium* sp. have reduced blood cholesterol level and modified fatty acid composition in egg yolk. *Journal of Applied Phycology*, 12(3-5), 325-330.
- Gokulakrishnan, S., Raja, K., Sattanathan, G., & Subramanian, J. (2015).** Proximate composition of bio potential seaweeds from mandapam South East coast of India. *International Letters of Natural Sciences*, 45.
- Gopalan, C. (2002).** Multiple micronutrient supplementation in pregnancy. *Nutrition reviews*, 60(s5), S2-S6.
- Gopalan, C., & Ramachandran, P. (2004).** India's Food Production Policies- Need for Nutrition Orientation. *NFI Bulletin*, 25.
- Guiry, M. D. (2012).** How many species of algae are there?. *Journal of Phycology*, 48(5), 1057-1063.
- Gumul, D., Ziobro, R., Zięba, T., & Roj, E. (2011).** The influence of addition of defatted blackcurrant seeds on pro-health constituents and texture of cereal extrudates. *Journal of Food Quality*, 34(6), 395-402.
- Gupta, S., & Abu-Ghannam, N. (2011).** Bioactive potential and possible health effects of edible brown seaweeds. *Trends in Food Science & Technology*, 22(6), 315-326.

- Gupta, S., Rajauria, G., & Abu-Ghannam, N. (2010).** Study of the microbial diversity and antimicrobial properties of Irish edible brown seaweeds. *International journal of food science & technology*, 45(3), 482-489.
- Guzman, S., Gato, A., & Calleja, J. M. (2001).** Antiinflammatory, analgesic and free radical scavenging activities of the marine microalgae *Chlorella stigmatophora* and *Phaeodactylum tricornutum*. *Phytotherapy Research*, 15(3), 224-230.
- Han, Y., Qin, J., Chang, X., Yang, Z., Bu, D., & Du, J. (2005).** Modulating effect of hydrogen sulfide on gamma-aminobutyric acid B receptor in recurrent febrile seizures in rats. *Neuroscience research*, 53(2), 216-219.
- Hanaa, H., Abd, el., Baky., Farouk, K., El Baz., Gamal S. and El Baroty. (2008)** Evaluation of marine alga *Ulva lactuca* as a source of natural preservative ingredient, *Journal Agricultural and Environmental Science*. Vol.3 (3):pp. 434- 444.
- Hardy. and Guiry. (2006)** Algae base, [www.algaebase .com](http://www.algaebase.com).
- Heim, K. E., Tagliaferro, A. R., & Bobilya, D. J. (2002).** Flavonoid antioxidants: chemistry, metabolism and structure-activity relationships. *The Journal of nutritional biochemistry*, 13(10), 572-584.
- Holdt, S. L., & Kraan, S. (2011).** Bioactive compounds in seaweeds: functional food applications and legislation. *Journal of Applied Phycology*, 23(3), 543-597.

- Hong, D. D., & Hien, H. T. M. (2004).** Nutritional analysis of Vietnamese seaweeds for food and medicine. *BioFactors*, 22(1-4), 323-325.
- Hong, D.D., Hien, H. M., and Son, P.N, (2007)** Seaweeds from Vietnam used for functional food, medicine and biofertilizer , *J.Appl.Phycol.*, Vol.19(3):pp. 817- 826.
- Hui wang., Lawrence. and Vincent. (2008)** Seaweed Polysaccharide With anticancer Potential, *Journal Marine Botany.*, Vol.51(4), pp. 318-319.
- Hung, H.L. and Wang, B. G. (2004).** Antioxidant capacity and lipophilic content of seaweeds collected from the Qingdao coastline, *Journal Agric. Food Chem.*, Vol.52(4), pp.4993 – 4997.
- Hunter, K. J., & Fletcher, J. M. (2002).** The antioxidant activity and composition of fresh, frozen, jarred and canned vegetables. *Innovative Food Science & Emerging Technologies*, 3(4), 399-406.
- Hurd, C. L., Harrison, P. J., Bischof, K., & Lobban, C. S. (2014).** *Seaweed ecology and physiology*. Cambridge University Press.
- Irene yaychuck, (2006)** vegetables from the sea alkalize for health. <http://www.alkalize> for health.
- Irhimeh, MR., Fitton, J.H and Lowenthal, RM. (2007)** Fucoidan ingestion increases the expression of CXCR4 on human CD34+ cells. *Exp Hematol.*, 35(6), pp.989-994.

- Iso, H., Date, C., Noda, H., Yoshimura, T., & Tamakoshi, A. (2005).** Frequency of food intake and estimated nutrient intake among men and women: the JACC Study. *Journal of Epidemiology*, 15 (Supplement), S24-S42.
- Jaspars, M., & Folmer, F. (2013).** Sea vegetables for health. *Food and Health Innovation Service*.
- Jimenez-Escrig, A., & Goñi, C. I. (1999).** Nutritional evaluation and physiological effects of edible seaweeds. *Archivos latinoamericanos de nutricion*, 49(2), 114-120.
- Jiménez-Escrig, A., & Sánchez-Muniz, F. J. (2000).** Dietary fibre from edible seaweeds: Chemical structure, physicochemical properties and effects on cholesterol metabolism. *Nutrition Research*, 20(4), 585-598.
- Jiménez-Escrig, A., Rincón, M., Pulido, R., & Saura-Calixto, F. (2001).** Guava fruit (*Psidium guajava* L.) as a new source of antioxidant dietary fiber. *Journal of Agricultural and Food Chemistry*, 49(11), 5489-5493.
- Jothibai Margret, Kumaresan,S., and Ravikumar,S., (2009).** A preliminary study on the anti-inflammatory activity of methanol extract of *Ulva lactuca* in rat. *Journal of Environmental Biology Sep*, 30(5), 899-902.
- Kadam, S. U., & Prabhasankar, P. (2010).** Marine foods as functional ingredients in bakery and pasta products. *Food Research International*, 43(8), 1975-1980.

- Kaliaperumal, N. (2003).** Products from seaweeds. *SDMRI Research Publication*, 3, 33-42.
- Kaliaperumal, N., & Kalimuthu, S. (1997).** Seaweeds potential and its exploitation in India. *Seaweeds Research and Utilisation*, 19(1&2), 33-40.
- Karez, C.S., Magalhaer,.V.F. and Feiffer, W.C.P. (1996)** Trace metal accumulation by algae in sepetiba Bay, Brazil, *J.enviromental pollution.*, Vol.83(3), pp.351- 356.
- Karez, Claudia, S., Leonardo R. and Andrade. (2003)** Effects on growth accumulation of Zinc in six seaweeds species, *Journal Ecotoxic. Environmental. Safety.*, Vol.37(6), pp.223-228
- Karthikaidevi, G., Manivannan, K., Thirumaran, G., Anantharaman, P. and Balasubaramanian, T. (2009).** Antibacterial properties of selected green seaweeds from Vedalai coastal waters; Gulf of Mannar Marine Biosphere Reserve. *Global Journal of Pharmacology*, 3(2): 107-112.
- Keyrouz, R., Abasq, M. L., Le Bourvellec, C., Blanc, N., Audibert, L., ArGall, E., & Hauchard, D. (2011).** Total phenolic contents, radical scavenging and cyclic voltammetry of seaweeds from Brittany. *Food Chemistry*, 126(3), 831-836.

- Khan, M. E., Anker, R., Ghosh Dastidar, S. K., & Bairathi, S. (1987).** *Inequalities between men and women in nutrition and family welfare services: an in-depth enquiry in an Indian village* (No. 254672). International Labour Organization.
- Kilar, J. A., & McLachlan, J. (1986).** Ecological studies of the alga, *Acanthophora spicifera* (Vahl) Boerg. (Ceramiales: Rhodophyta): vegetative fragmentation. *Journal of experimental marine biology and ecology*, 104(1), 1-21.
- Kim Woo-Jung, Sung-Min Kim, Radek Pohl, Jana Čopíková, Yong. (2010)** Structure and antitumour activity of fucoidan isolated from sporophyll of Korean brown seaweed *Undaria pinnatifida* Carbohydrate Polymers. Vol.81(1): 41-48.
- Kim, S. J., Woo, S., Yun, H., Yum, S., Choi, E., Do, J. R., (2008).** Total phenolic contents and biological activities of Korean seaweed extracts. *Food Science and Biotechnology*, 14(6), 798–802.
- Kuda, T., & Ikemori, T. (2009).** Minerals, polysaccharides and antioxidant properties of aqueous solutions obtained from macroalgal beach-casts in the Noto Peninsula, Ishikawa, Japan. *Food Chemistry*, 112(3), 575-581.
- Kumar, M., Kumari, P., Trivedi, N., Shukla, M. K., Gupta, V., Reddy, C. R. K., & Jha, B. (2011).** Minerals, PUFAs and antioxidant properties of some tropical seaweeds from Saurashtra coast of India. *Journal of applied phycology*, 23(5), 797-810.

- Kumar, N., Bhandari, P., Singh, B., & Bari, S. S. (2009).** Antioxidant activity and ultra-performance LC-electrospray ionization-quadrupole time-of-flight mass spectrometry for phenolics-based fingerprinting of Rose species: *Rosa damascena*, *Rosa bourboniana* and *Rosa brunonii*. *Food and chemical toxicology*, 47(2), 361-367.
- Kusznierewicz, B., Bartoszek, A., Wolska, L., Drzewiecki, J., Gorinstein, S., & Namieśnik, J. (2008).** Partial characterization of white cabbages (*Brassica oleracea* Var.) from different regions by glucosinolates, bioactive compounds, total antioxidant activities and proteins. *LWT-Food Science and Technology*, 41(1), 1-9.
- Kwak, J. M., Nguyen, V., & Schroeder, J. I. (2006).** The role of reactive oxygen species in hormonal responses. *Plant Physiology*, 141(2), 323-329.
- Lahaye, M., & Jegou, D. (1993).** Chemical and physical-chemical characteristics of dietary fibres from *Ulva lactuca* (L.) Thuret and *Enteromorpha compressa* (L.) Grev. *Journal of Applied Phycology*, 5(2), 195-200.
- Lahaye, M., Michel, C., & Barry, J. L. (1993).** Chemical, physicochemical and in-vitro fermentation characteristics of dietary fibres from *Palmaria palmata* (L.) Kuntze. *Food Chemistry*, 47(1), 29-36.
- Larsen, R., Eilertsen, K. E., & Elvevoll, E. O. (2011).** Health benefits of marine foods and ingredients. *Biotechnology Advances*, 29(5), 508-518.



- Le Tutour, B., Benslimane, F., Gouleau, M. P., Gouygou, J. P., Saadan, B., & Quemeneur, F. (1998).** Antioxidant and pro-oxidant activities of the brown algae, *Laminaria digitata*, *Himanthalia elongata*, *Fucus vesiculosus*, *Fucus serratus* and *Ascophyllum nodosum*. *Journal of Applied Phycology*, *10*(2), 121-129.
- Li, Y. X., Wijesekara, I., Li, Y., & Kim, S. K. (2011).** Phlorotannins as bioactive agents from brown algae. *Process Biochemistry*, *46*(12), 2219-2224.
- Liu, R. H. (2003).** Health benefits of fruit and vegetables are from additive and synergistic combinations of phytochemicals. *The American journal of clinical nutrition*, *78*(3), 517S-520S.
- López-López, I., Bastida, S., Ruiz-Capillas, C., Bravo, L., Larrea, M. T., Sánchez-Muniz, F., & Jiménez-Colmenero, F. (2009).** Composition and antioxidant capacity of low-salt meat emulsion model systems containing edible seaweeds. *Meat science*, *83*(3), 492-498.
- Mabeau, S., & Fleurence, J. (1993).** Seaweeds in food products: biochemical and nutritional aspects. *Trends in Food Science & Technology*, *4*(4), 103-107.
- Manivannan, K., Thirumaran, G., Devi, G. K., Anantharaman, P., & Balasubramanian, T. (2009).** Proximate composition of different group of seaweeds from Vedalai Coastal waters (Gulf of Mannar): Southeast Coast of India. *Middle-East Journal of scientific research*, *4*(2), 72-77.

- Manzi, P., Marconi, S., & Pizzoferrato, L. (2007).** New functional milk-based products in the Italian market. *Food chemistry*, 104(2), 808-813.
- Marsham, S., Scott, G. W., & Tobin, M. L. (2007).** Comparison of nutritive chemistry of a range of temperate seaweeds. *Food chemistry*, 100(4), 1331-1336.
- Martin Rose., John Lewis. and Nicola Lang Ford. (2005)** Arsenic in seaweedsforms, concentrations an dietary exposure, *Journal Hydrobi.*, Vol.4(2),pp.123-134.
- Matanjun, P., Mohamed, S., Mustapha, N. M., & Muhammad, K. (2009).** Nutrient content of tropical edible seaweeds, *Eucheuma cottonii*, *Caulerpa lentillifera* and *Sargassum polycystum*. *Journal of Applied Phycology*, 21(1), 75-80.
- Matanjun, P., Teng, C. P., Ismail, N., Kassim, M. I. A., Wei-Yi, C., & Sian, M. T. C. (2011).** Nutrient Composition and Antioxidant Activities of Several Malaysian Tropical Seaweeds. Paper presented at the 12th Asian Food Conference 2011, BITEC Bangna, Bangkok, Thailand.16-18 June.
- Matsukawa, R., Dubinsky, Z., Kishimoto, E., Masaki, K., Masuda, Y., Takeuchi, T., ... & Karube, I. (1997).** A comparison of screening methods for antioxidant activity in seaweeds. *Journal of Applied Phycology*, 9(1), 29-35.
- Matsuno, T. (2001)** Aquatic animal carotenoids, *Fisheries Sci.*, Vol. 67(8), pp. 771 – 783 .

- Mayer, A. M., Jacobson, P. B., Fenical, W., Jacobs, R. S., Glaser, K. B. (1998).** Pharmacological characterization of the pseudopterosins: novel anti-inflammatory natural products isolated from the Caribbean soft coral, *Pseudopteroorgia elisabethae*. *Life sciences*, 62(26), PL401-PL407.
- McCance RA, Widdowson EM, Holland B.** *McCance and Widdowson's Composition of Foods*. 6th ed. Cambridge, Royal Society of Chemistry; 1993.
- McHugh, D. J. (2003).** A guide to the seaweed industry. Rome, Italy: Food and Agriculture Organization of the United Nations.
- Mendes, G.S.; Soares, A.R, Martins, F.O.; Albuquerque, M.C.M., Yoneshigue- Valentin, M.T.V (2010)** Antiviral activity of the green marine alga *Ulva fasciata* on the replication of human metapneumovirus. *Rev. Inst. Med. Trop. São Paulo*, Vol.52(1): 3-10.
- Metalijian, (2006)** The worlds healthiest foods, <http://www.whfoods.org>.
- Michael, M. D., Kulkarni, R. N., Postic, C., Previs, S. F., Shulman, G. I., Magnuson, M. A., & Kahn, C. R. (2000).** Loss of insulin signaling in hepatocytes leads to severe insulin resistance and progressive hepatic dysfunction. *Molecular cell*, 6(1), 87-97.
- Mihova, S. G., Georgiev, D. I., Minkova, K. M., & Tchernov, A. A. (1996).** Phycobiliproteins in *Rhodella reticulata* and photo regulatory effects on their content. *Journal of biotechnology*, 48(3), 251-257.

- Nagayama, K., Iwamura, Y., Shibata, T., Hirayama, I., & Nakamura, T. (2002).** Bactericidal activity of phlorotannins from the brown alga *Ecklonia kurome*. *Journal of Antimicrobial Chemotherapy*, 50(6), 889-893.
- Naidu, K.A., Tewari, A., Joshi, H.V., Viswanath, S., Remesh, H.P. and Rao, S.V. (1993)** Evaluation of nutritional quality and food, safety of seaweeds of India, *Journal Food safety.*, vol.13(2), pp.17-90.
- Nakagami, H., Maeda, K., Morishita, R., Iguchi, S., Nishikawa, T., Takami, Y., ... & Kaneda, Y. (2005).** Novel autologous cell therapy in ischemic limb disease through growth factor secretion by cultured adipose tissue-derived stromal cells. *Arteriosclerosis, thrombosis, and vascular biology*, 25(12), 2542-2547.
- Nakamura, T., Nagayama, K., Uchida, K., & Tanaka, R. (1996).** Antioxidant activity of Phlorotannins isolated from the brown alga *Eisenia bicyclis*. *Fisheries science*, 62(6), 923-926.
- National Academy of Agricultural Science, (NAAS) (2003)** Seaweed cultivation and utilization, policy paper. 22
- Nihon Konbu Kyoukai (Japan Konbu Association) in Konbu-Net: 2nd Kelp Report (2010).**

- Nishiyama, S., Mikeda, T., Okada, T., Nakamura, K., Kotani, T., & Hishinuma, A. (2005).** Transient hypothyroidism or persistent hyperthyrotropinemia in neonates born to mothers with excessive iodine intake. *Thyroid*, *14*(12), 1077-1083.
- Nishizawa, H., Shimomura, I., Kishida, K., Maeda, N., Kuriyama, H., Nagaretani, H., ... & Matsuzawa, Y. (2002).** Androgens decrease plasma adiponectin, an insulin-sensitizing adipocyte-derived protein. *Diabetes*, *51*(9), 2734-2741.
- Nussinovitch, A. (1997).** Hydrocolloid applications: gum technology in the food and other industries. New York, NY: Blackie Academic & Professional. 354 pp.
- Nwosu, F., Morris, J., Lund, V. A., Stewart, D., Ross, H. A., & McDougall, G. J. (2011).** Anti-proliferative and potential anti-diabetic effects of phenolic-rich extracts from edible marine algae. *Food Chemistry*, *126*(3), 1006-1012.
- Okuzumi, J., Takahashi, T., Yamane, T., Kitao, Y., Inagake, M., Ohya, K., Nishino, H., Tanaka, Y.(1993).** Inhibitory effects of fucoxanthin, a natural carotenoid, on N-ethyl-N'-nitro-N-nitrosoguanidineinduced mouse duodenal carcinogenesis. *Cancer Lett.*, *68*: 159-68.
- Ortiz, J., Romero, N., Robert, P., Araya, J., Lopez-Hernandez, J., Bozzo, C., Navarrete, E., Osorio, A. and Rios, A. (2006).** Dietary fibre, amino acid, fatty acid and tocopherol contents of the edible seaweeds

*Ulva lactuca* and *Durvillaea antarctica*, *Food Chemistry*, vol. 99(23), pp.98-104

- Ostraff, M. (2006)** Department of Integrative Biology, Brigham Young University, pp. 174-176.
- Padula M, (2000).** Photodynamic DNA damage induces by phycocyanin and its repair in *Saccharomyces cerevisiae*, *Brazilian Journal of medical and biological research*, P:32
- Pangestuti, R., & Kim, S. K. (2011).** Biological activities and health benefit effects of natural pigments derived from marine algae. *Journal of functional foods*, 3(4), 255-266.
- Park, D., Yun, Y. S., Ahn, C. K., & Park, J. M. (2007).** Kinetics of the reduction of hexavalent chromium with the brown seaweed *Ecklonia* biomass. *Chemosphere*, 66(5), 939-946.
- Patricia Burtin. (2003).** Nutritional value of seaweeds, *EJEAF CHE*, 498 – 503.
- Pattama Ratana-arporn, Anong Chirapart.** Nutritional Evaluation of Tropical Green Seaweeds *Caulerpa lentillifera* and *Ulva reticulata*. *Kasetsart J. (Nat. Sci.)*, 40: 75 – 83, 2006.
- Payá, M., Ferrándiz, M. L., Sanz, M. J., Bustos, G., Blasco, R., Rios, J. L., & Alcaraz, M. J. (1993).** Study of the antioedema activity of some seaweed and sponge extracts from the mediterranean coast in mice. *Phytotherapy Research*, 7(2), 159-162.

- Peerapornpisal, Y., Amornledpison, D., Rujjanawate, C., Ruangrit, K., & Kanjanapothi, D. (2006).** Two endemic species of macroalgae in Nan River, northern Thailand, as therapeutic agents. *Science Asia*, 32(1), 71-76.
- Peryam, D. R., & Pilgrim, F. J. (1957).** Hedonic scale method of measuring food preferences. *Food technology*.
- Phang, S. M., H. Y. Yeong, and K. Norzulaani. (2007).** Towards production of transformed *Gracillaria changii* (Rhodophyta) through protoplast and tissues culture. XIXth International Seaweed Symposium, Kobe, Japan.
- Podsędek, A. (2007).** Natural antioxidants and antioxidant capacity of Brassica vegetables: A review. *LWT-Food Science and Technology*, 40(1), 1-11.
- Potty, V. H. (1996).** Physio-chemical aspects, physiological functions, nutritional importance and technological significance of dietary fibres: A critical appraisal. *Journal of Food science and Technology*, 33(1), 1-18.
- Pulz, O., & Gross, W. (2004).** Valuable products from biotechnology of microalgae. *Applied microbiology and biotechnology*, 65(6), 635-648.
- Qari, R., & Siddiqui, S. A. (2010).** A comparative study of heavy metal concentrations in red seaweeds from different coastal areas of Karachi, Arabian sea. *Indian Journal of Marine Sciences*, 39(1), 27-42.
- Raghavendran, H. R. B., Sathivel, A., & Devaki, T. (2004).** Hepatoprotective nature of seaweed alcoholic extract on acetaminophen induced hepatic oxidative stress. *Journal of health science*, 50(1), 42-46.

- Raghavendran, H. R. B., Sathivel, A., & Devaki, T. (2005).** Effect of Sargassum polycystum (Phaeophyceae)-sulphated polysaccharide extract against acetaminophen-induced hyperlipidemia during toxic hepatitis in experimental rats. *Molecular and cellular biochemistry*, 276(1-2), 89-96.
- Rao, M. U. (1987).** Key for identification of economically important seaweeds. *CMFRI Bulletin*, 41, 19-25.
- Rashida qasim (1991)** Amino acid composition of some common seaweeds. *Pakistan Journal of Pharmaceutical Sciences*. Vol.4(1), pp. 49-54.
- Ratana-arporn, P., & Chirapart, A. (2006).** Nutritional evaluation of tropical green seaweeds Caulerpa lentillifera and Ulva reticulata. *Kasetsart J*, 40, 75-83.
- Rathore, S. S., Chaudhary, D. R., Boricha, G. N., Ghosh, A., Bhatt, B. P., Zodape, S. T., & Patolia, J. S. (2009).** Effect of seaweeds extract on the growth, yield and nutrient uptake of soybean (Glycine max) under rainfed conditions. *South African Journal of Botany*, 75(2), 351-355.
- Renaud, S. M., & Luong-Van, J. T. (2007).** Seasonal variation in the chemical composition of tropical Australian marine macroalgae. In *Eighteenth International Seaweeds Symposium* (pp. 155-161). Springer Netherlands.
- Renaud, S. M., Thinh, L. V., Lambrinidis, G., & Parry, D. L. (2002).** Effect of temperature on growth, chemical composition and fatty acid composition of tropical Australian microalgae grown in batch cultures. *Aquaculture*, 211(1), 195-214.



- Reusser ME, (1994)**, Nutrition Review, vol (52) Pp:367-375.
- Rindi, F. (2004)**. A long term comparison of the benthic algal flora of Clare Island, County Mayo, Western Ireland, *Biodiversity and conservation*, Vol.13(4), pp. 471-492.
- Robin South, G. R. (1993)**. Edible seaweeds: an important source of food and income to indigenous Fijians. *Naga, the ICLARM Quarterly*, 16(2-3), 4-6.
- Rodriguez Peria Alberto, Thomas P. Mawhinney, Denis Ricque Marie, L. Elizabeth Cruz. Suarez. (2011)** Chemical composition of cultivated seaweed *Ulva clathrata* (Roth) C. Agardh. Vol.129.Pp. 491– 498.
- Romero-González, M. E., Williams, C. J., & Gardiner, P. H. (2001)**. Study of the mechanisms of cadmium biosorption by dealginated seaweed waste. *Environmental science & technology*, 35(14), 3025-3030.
- Rozas, E., & Freitas, J. C. (2007)**. Anti-inflammatory activity of the apolar extract from the seaweed *Galaxaura marginata* (Rhodophyta, Nemaliales). *Journal of venomous animals and toxins including tropical diseases*, 13(2), 544-548.
- Ruperez, P., & Saura-Calixto, F. (2001)**. Dietary fibre and physicochemical properties of edible Spanish seaweeds. *European Food Research and Technology*, 212(3), 349-354.

- Rupérez, P., Ahrazem, O., & Leal, J. A. (2002).** Potential antioxidant capacity of sulfated polysaccharides from the edible marine brown seaweed *Fucus vesiculosus*. *Journal of Agricultural and Food Chemistry*, 50(4), 840-845.
- Sade, A., Ali, I., Ariff, M., & Raduan, M. (2006).** The seaweeds industry in Sabah, east Malaysia. *Journal of Southeast Asian Studies*, 11(1).
- Sandsdalen, E., Haug, T., Stensvåg, K., & Styrvold, O. B. (2003).** The antibacterial effect of a polyhydroxylated fucophlorethol from the marine brown alga, *Fucus vesiculosus*. *World Journal of Microbiology and Biotechnology*, 19(8), 777-782.
- Santoso, J., Yumiko, Y. and Takeshi, S. (2004)** Antioxidant activity of methanol extracts from Indonesian seaweeds in an oil emulsion model, *Fish Sci.*, Vol.70(4), pp. 183-188.
- Sartal, C. G., del Carmen Barciela-Alonso, M., & Bermejo-Barrera, P. (2012).** Effect of the cooking procedure on the arsenic speciation in the bioavailable (dialyzable) fraction from seaweed. *Microchemical Journal*, 105, 65-71.
- Schrag, A. (2006).** Quality of life and depression in Parkinson's disease. *Journal of the neurological sciences*, 248(1), 151-157.
- Shah, Z. C., & Huffman, F. G. (2003).** Current availability and consumption of carrageenan-containing foods. *Ecology of food and nutrition*, 42(6), 357-371.

- Shanrnugam, A., & Palpandi, C. (2010).** Biochemical Composition and Fatty Acid Profile of the Green Alga *Ulva reticulata*. *Asian journal of Biochemistry*, 5(3), 188-193.
- Shep, (2001)** sea vegetable celebration, book publishing company, summer town, P:22.
- Sho, C.H. (2001)** Economic seaweed resources and cultivation in Korea. *World Aquaculture*, Vol.32,pp.34-36.
- Silas, E. G., & Kalimuthu, S. (1987).** Commercial exploitation of seaweeds in India. *CMFRI Bulletin*, 41, 55-59.
- Smith, G.M, (2004).** Marine algal of the monterey peninsula, 9th ed. California, standard ford University, pp.487
- Sohn CH, Kain (Jones) JM (1989)** *Undaria, Laminaria* and *Enteromorpha* cultivation in Korea. In: Kain (Jones) JM, Andrews JW, McGregor JB (eds) Proceedings of the 2nd Workshop of COST 48 Subgroup 1. Port Erin, Isle of Man, British Isles, pp 42–45
- Solibami, V.J., Kamat, S.Y. (1985).** Distribution of tocopherol (Vitamin E) in Marine algae from Goa, West Coast of India. *Indian Journal of Marine Sciences*. 14 : 228 – 229.
- Southgate, C., Zapp, M. L., & Green, M. R. (1990).** Activation of transcription by HIV-1 Tat protein tethered to nascent RNA through another protein. *Nature* 345:640-642

**Sumayaa, 2007.** Recipe books promoting the use of 'sea vegetables' or 'marine vegetables' in home cooking are becoming more popular. The Department of Home Science, Thassim Beevi Abdul Kader College for women, Kilakarai published a recipe book under the UGC Innovative scheme and introduced the P. G. Diploma in seaweed farming and processing for food in 2004 – 2005.

**Teas *et al.*, (2009)** Dietary seaweed modifies estrogen and phytoestrogen metabolism in healthy postmenopausal women. *J. Nut.*, Vol.139(5). Pp: 939– 944.

**Thahira Banu, (2010).** Nutrient composition, antioxidant activity and therapeutic use of selected seaweeds, Ph.D., Thesis, 2010.

**Thomas, N. V., & Kim, S. K. (2011).** Potential pharmacological applications of polyphenolic derivatives from marine brown algae. *Environmental toxicology and pharmacology*, 32(3), 325-335.

**Troell, M., Robertson-Andersson, D., Anderson, R. J., Bolton, J. J., Maneveldt, G., Halling, C., & Probyn, T. (2006).** Abalone farming in South Africa: an overview with perspectives on kelp resources, abalone feed, potential for on-farm seaweed production and socio-economic importance. *Aquaculture*, 257(1), 266-281.

**Vasanthkumar, M., Parameswari, R. P., Kumar, V. V., Sangeetha, M. K., Gayathri, V., Raghavendran, H. B., ... & Vasanthi, H. R. (2010).** Anti-ulcer role of herbomineral siddha drug–Thamira parpam on

experimentally induced gastric mucosal damage in rats. *Human & experimental toxicology*.

**Venture Uan, J. (2006).** *In* Proceedings of the regional workshop on seaweed culture and marketing. South Pacific Aquaculture Development Project. Field.pp.10- 15.

**Venugopal, V. (2011).** Marine polysaccharides: *Food applications*. CRC Press.

**Volden, J., Bengtsson, G. B., & Wicklund, T. (2009).** Glucosinolates, L-ascorbic acid, total phenols, anthocyanins, antioxidant capacities and colour in cauliflower (*Brassica oleracea* L. ssp. botrytis); effects of long term freezer storage. *Food Chemistry*, 112(4), 967-976.

**Watanabe, F, Takenaka, S, Katsura H, Zakir Hussain Masumder, SAM, Abe, K, Tamura Y, Nakano Y (1999).** Dried green and purple lavers (Nori) contain substantial amounts of biologically active vitamin B12 but less of dietary iodine relative to other edible seaweeds. *J. Agric. Food Chem.* 47 : 2341-2343.

**Wel,W., Onnagawa, M., AYoshie, Y. and Suzuki, T.(2001)** Fisheries science, *Journal Food. Sci.technology.*, Vol.67(6), pp.1169-1173.

**Wong, K. H. and Cheung, P. C. K. (2000).** Proximate composition, amino acid profiles and some physico - chemical Properties of seaweeds. *Food Chem.*, Vol.1(6), pp. 75 – 78.

- Wong, K. H., & Cheung, P. C. (2001).** Nutritional evaluation of some subtropical red and green seaweeds Part II. In vitro protein digestibility and amino acid profiles of protein concentrates. *Food chemistry*, 72(1), 11-17.
- Yamori, Y., Miura, A., & Taira, K. (2001).** Implications from and for food cultures for cardiovascular diseases: Japanese food, particularly Okinawan diets. *Asia Pacific journal of clinical nutrition*, 10(2), 144-145.
- Yang, Y. (2002).** Chinese Herbal Medicines, Comparison and Characteristics, London, Churchill – Livingstone, pp.258.
- Yang, Y. J., Nam, S. J., Kong, G., & Kim, M. K. (2010).** A case-control study on seaweeds consumption and the risk of breast cancer. *British journal of nutrition*, 103(09), 1345-1353.
- Yoshinaga, J., Morita, M., Yukawa, M., Shiraishi, K., & Kawamura, H. (2001).** Certified reference material for analytical quality assurance of minor and trace elements in food and related matrixes based on a typical Japanese diet: interlaboratory study. *Journal of AOAC International*, 84(4), 1202-1208.
- Zakir, R. (2006)** Marine Source Nutraceuticals - New Wave of Health From the Sea. *Nutraceutical world.*, 2(6): 38-39.

**Zhang, D., & Hamauzu, Y. (2004).** Phenolics, ascorbic acid, carotenoids and antioxidant activity of broccoli and their changes during conventional and microwave cooking. *Food Chemistry*, 88(4), 503-509.

**Zhu, Y., Li, J., & Li, S. (2005).** The speciation and contents of arsenic in some algae from different regions. *Environ Chem*, 24(4), 478-480.