

## CURRICULUM VITAE

**Name:** Jaruwan Mayakun, PhD

**Academic Position:** Asst. Prof. Dr.



### Education background:

Degrees	Subjects	University
Ph.D (2012)	Biology (International Program)	Prince of Songkla University, Thailand
M.Sc. (2006)	Ecology (International Program)	Prince of Songkla University, Thailand
Bsc. (2003)	Biology (Second Class Honors)	Prince of Songkla University, Thailand

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### International Research grants:

1. the Dongsha Atoll Research Award DARA 2016-2017 and 2019 from Dongsha Atoll Research grant to do research on seagrass and *Halimeda macroloba* at Dongsha Atoll, collaborating with Assoc.Prof.Dr. Shao-Lun Liu, Tunghai University, Taiwan
2. The International Research Grant (SCI6202121N) from Prince of Songkla University to do research on “Seagrass beds as refugia for *Halimeda macroloba* from herbivorous fishes; insights into growth rate and calcification rate” and have collaboration together with Assoc.Prof.Dr. Shao-Lun Liu, Tunghai University, Taiwan during May 17 to July 16, 2019

## Research grants:

### On-going research projects:

1. Population dynamics and community of *Halimeda macroloba* Decaisne
2. Calcification, carbon production of *Halimeda* to carbon budgets
3. Seagrass beds offer a grazing refuge for *Halimeda macroloba*
4. Algal succession pattern in a tropical intertidal community
5. Genetic and morphological diversities of *Caulerpa* (Ulvophyceae)
6. Effect of herbivore exclusion and degree of coral bleaching on coral-algal community dynamics
7. Community structures of non-geniculate corallines algae
8. Physiological responses and genomic adaptations of *Halimeda macroloba* to climate changes.

### Research Publications:

- Seatan, U., Nontasak, P., Palasin, K., Saelim., Wonglapsuwan, M., Mayakun, J., Pongparadon, S. and Chotigeat, W. 2021. Potential health benefits of fucoidan from the brown seaweeds *Sargassum plagiophyllum* and *Sargassum polycystum*. *Journal of Applied Phycology*. <https://doi.org/10.1007/s10811-021-02491-3>
- Jantasrirad, S., Mayakun, J., Numnuam, A. and Kaewtatip, K. 2021. Effect of filler and sonication time on the performance of brown alga (*Sargassum plagiophyllum*) filled cassava starch biocomposites, *Algal Research*. <https://doi.org/10.1016/j.algal.2021.102321>.
- Sarak, S., Boonsuk, P., Sukolrat, A., Mayakun, J. and Kaewtatip, K. 2021. Effects of alkali treatment duration on properties of Khlum fiber for application as a reinforcement material. *International Journal of Environmental Science and Technology*. <https://doi.org/10.1007/s13762-021-03302-5>
- Mayakun, J., Liao, C-P. and Liu, S-L. 2020. The standing stock and CaCO<sub>3</sub> contribution of *Halimeda macroloba* in the tropical seagrass-dominated ecosystem in Dongsha Island, the main island of Dongsha Atoll, South China Sea. *Journal of the Marine Biological Association of the United Kingdom* 1–9. <https://doi.org/10.1017/S0025315420001113>
- Mayakun, J., Kim, J. H. and Prathep, A. 2020. Timing of disturbance, top-down, and bottom-up driving on early algal succession patterns in a tropical intertidal community. *Phycological Research*.68: 135-143. <https://doi.org/10.1111/pre.12406>
- Kattika, P., Phetcharat, S. and Mayakun, J. 2019. Some species of *Gracilaria* (Gracilariaceae, Rhodophyta) from Southern Thailand. *Taxonomy of Southeast Asian Seaweeds III*; Phang, Song & Lim (eds), 47-57.
- Titioatchasai, J., Prathep, A. and Mayakun, J. 2019. Algal successional pattern in tropical subtidal coral reef community. *Journal of Fisheries and Environment*. 43: 11-18.

- Pattarach, K., Mayakun, J. and Angelo Draisma, S. 2019. An Enigmatic *Caulerpa macrodisca* Decaisne (Chlorophyta) from the Mangrove Channels on the Andaman Sea Coast of Thailand. *Journal of Fisheries and Environment*. 43: 27-42.
- Mayakun, J. and Prathep, A. 2019. Calcium carbonate productivity by *Halimeda macroloba* in the tropical intertidal ecosystem: The significant contributor to global carbonate budgets. *Phycological Research* 67(2): 94-101.
- Mayakun, J. 2019. Spatial variation in early patterns of algal recruitment in a tropical intertidal Community. *Songklanakarin J. Sci. Technol* 41(2): 483-489.
- Chiarathanakrit, C., Mayakun, J., Prathep A. and Kaewtatip, K. 2019. Comparison of the effects of calcified green macroalga (*Halimeda macroloba* Decaisne) and commercial CaCO<sub>3</sub> on the properties of composite starch foam trays. *International Journal of Biological Macromolecules* 121: 71-76.
- Pattarach, K., Titioatchasai, J., Darakrai, A. and Mayakun, J. 2018. Effects of wave exposure and shore level on seagrass abundance and distribution in intertidal community. *Songklanakarin J. Sci. Technol.* 40(6): 1446-1450.
- Prathep A., Kaewsrikhaw R., Mayakun J., Darakrai A., 2018. The effects of light intensity and temperature on the calcification rate of *Halimeda macroloba*. *Journal of Applied Phycology* 30(6):3405-3412.
- Sondak C., Ang P., Beardall J., Bellgrove A., Boo S., Gerung G., Hepburn C., Hong D., Hu Z., Kawai H., Largo D., Lee J., Lim P., Mayakun J., Nelson W., Oak J., Phang S., Sahoo D., Peerapornpis Y., Yang Y., Chung I., 2017. Carbon dioxide mitigation potential of seaweed aquaculture beds (SABs). *Journal of Applied Phycology* 29(5): 2363-2373.
- Mayakun, J., Kim, J. H., Lapointe, B. E. and Prathep, A. 2017. The resource allocation of *Halimeda macroloba* Decaisne in relation to nitrogen and phosphorus enrichment. *Songklanakarin J. Sci. Technol.* 39:269-273.
- Mayakun, J. 2016. Seaweed succession: Research in Thailand (in Thai). *KKU Science Journal*; 44 (4). 262 - 273
- Sondak, C.F.A., Ang, P.O., Beardall, J. et al. 2016. Carbon dioxide mitigation potential of seaweed aquaculture beds (SABs). *J. Appl. Phycol.* doi:10.1007/s10811-016-1022-1
- Mayakun, J. Bunruk, P. and Kongsang, R. 2014. Growth rate and calcium carbonate accumulation of *Halimeda macroloba* Decaisne (Chlorophyta: Halimedaceae) in Thai waters. *Songklanakarin J. Sci. Technol.* 36: 419-423.
- Mayakun, J. 2104. Green alga, *Halimeda macroloba* Decaisne in Thailand (in Thai). *KKU Science Journal*; 42: 262-273.

- Mayakun, J. Kim, J. H., Lapointe, B. E. and Prathep, A. 2013. Effects of nutrient enrichment and herbivory on morphology, reproduction and chemical content of *Turbinaria conoides* (Phaeophyceae) Phycological Research. 61: 270-276.
- Mayakun, J. Kim, J. H., Lapointe, B. E. and Prathep, A. 2013. Algal response to nutrient enrichment; insights into growth and chemical concentrations in two algae, *Halimeda macroloba* Decaisne and *Turbinaria conoides* (J. Agardh) Kützing. Songklanakarin J. Sci. Technol. 35: 389-395.
- Mayakun, J. Kim, J. H., Lapointe, B. E. and Prathep, A. 2012. The effects of herbivore exclusion and nutrient enrichment on growth and reproduction of *Halimeda macroloba* Decaisne (Chlorophyta: Halimedaceae). ScienceAsia. 38: 227-234.
- Mayakun, J. Kim, J. H., Lapointe, B. E. and Prathep, A. 2012. Gametangial characteristics in the sexual reproduction of *Halimeda macroloba* Decaisne (Chlorophyta: Halimedaceae). Songklanakarin J. Sci. Technol. 34: 211-216.
- Mayakun, J., Kim, J. H. and Prathep, A. 2010. Effects of Herbivory and Season of Clearing on Species Composition and Algal Succession in a tropical intertidal shore, Phuket, Thailand. Phycological Research. 58: 88-96.
- Prathep, A., Mayakun, J., Tantiprapas, P and Darakrai, A.2008. Can macroalgae recover, 13 months after the 2004 Tsunami?: a case study at Talibong Island, Trang Province, Thailand. Journal of Applied Phycology. 20: 907-914.
- Prathep A, Darakrai, A., Tantiprapas, P., Mayakun, J., Thongroy, P., Wichachucherd, B. and Sinutok, S. 2007. Diversity and community of macroalgae at Koh Taen, Haad Kanom-Mu Koh Tale Tai, marine National Park, Nakhon Si Thammarat Province, Thailand. Marine Research in Indonesia. Vol. 32, No.2: 153-162.
- Mayakun, J. and Prathep, A. 2005. Seasonal and temporal variations in diversity of macroalgae in Samui island, Thailand. Songklanakarin Journal of Science and Technology. Vol/ 27(spl.3):653-663.

**Postgraduate students' supervision:**

**Completed supervision** for 2 master students

**On-going:** 3 PhD and 2 master students