Yuxin Liu

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Motivated PhD student specializing in **coral-dinoflagellate symbiosis** with a robust background in **Marine Ecology**, **Phycology**, and **Photosynthesis**. Experienced in conducting in-depth research and analysis to understand how marine primary producers adapt to global climate and environmental changes.

EDUCATION

2024 - 04 – present	***Integrated Biosciences, PhD***	The University of Tokyo, *Japan*
2022 - 04 – 2024 - 03	***Applied Marine Biology, MSc***	Tohoku University, *Japan*
2016 - 09 – 2020 - 06	***Marine Resources and Environment, BSc***	Ocean University of China, *China*

PROFESSIONAL EXPERIENCE

2023 - 11 – 2024 - 03 ***Macroevolution Unit, Okinawa Institute of Science and Technology***

- Analyzed **morphological features** of epiphytic gastropods inhabiting seaweeds
- Collected **fish phenotypes** and analyzed **biometrics** in Large Marine Ecosystems (LME) around Japan

2021 - 04 – 2023 - 11 ***Chloroplast Systems and Synthetic Biology Laboratory, Westlake University***

- Maintained the **high-throughput** mutant library of *Chlamydomonas reinhardtii*
- Provided support to the **mutant screening system** via **robotics** and **plant/algal phenotyping** facilities
- Conducted experiments on the GATA transcription factor to explore **photosynthetic gene regulation**

2017 - 11 – 2021 - 02 ***Laboratory of Phycology and Algal Aquaculture, Ocean University of China***

- Completed research on the responses of seaweed to **ocean acidification** and **eutrophication**
- Assisted with **mesoscale experiments** and prepared reports on seaweed aquaculture
- Participated in the collection of **seaweed specimens** for Shandong Museum

2017- 09 – 2018 - 06 ***Laboratory of Fisheries Ecosystem Monitoring and Assessment, Ocean University of China***

- Completed species identification of fish collected from Haizhou Bay fishery resources surveys
- Conducted **size spectra**, **stomach content**, and **stable isotope** analysis
- Assisted the course *Biological Resource Survey Techniques*

2018 - 08 – 2019 - 06 ***Key Laboratory of Marine Ecology and Environment Science, Chinese Academy of Sciences***

- Completed the species identification of **phytoplankton** collected from cruises around the Yangtze River Estuary
- Investigated the relationship between **algae feed** and **locomotor behavior** of sea cucumber *Apostichopus armata*

SKILLS

Diving: Advanced Open Water Diver with **50+ scuba dives** and **200+ snorkeling excursions** for field investigations;

Programming language: Python and **R**; **Technical skills:** Isolating and analyzing **DNA, RNA and protein**, **Molecular cloning**, **Scanning electron microscopy**, Data gathering and evaluation, **Scientific Drawing**

Languages: Mandarin Chinese (Native), **English** (Fluent), **Japanese** (Fluent), **Korean** (Basic)

PUBLICATIONS & PRESENTATIONS

Liu, Y., Cao, J., Chu, Y. *et al*. The brown algae *Saccharina japonica* and *Sargassum horneri* exhibit species-specific responses to synergistic stress of ocean acidification and eutrophication. ***Journal of Ocean University of China*** 20, 1253–1262 (2021). https://doi.org/10.1007/s11802-021-4853-6

Zhang, Y., Xu, J., Liu, Y., *et al*. Effects of elevated atmospheric concentration of CO_2 on growth of *Zostera marina* (in Chinese). ***Periodical of Ocean University of China*** 50 (06), 1253–1262 (2020). https://10.16441/j.cnki.hdxb.20180284

Liu, Y., Abe, T., Nakano, K., *et al*. Canopy-forming brown algae and understory red algae as temporally variable habitats for epiphytic microgastropods (poster presentation). ***The 9th Asian Pacific Phycological Forum, Sapporo 2024***.

Liu, Y., Abe, T., Nakano, K., *et al*. Temporal variations in epiphytic gastropod diversity on two predominant macroalgae (oral presentation). ***SCESAP Biodiversity Symposium, Kaohsiung 2023***.

Liu, Y., Yang, Y., Liu, D., et al. Ecophysiological responses of *Saccharina japonica* under synergistic stress of ocean acidification, warming, and eutrophication (oral presentation in Chinese). ***The 6th National Innovation Symposium of Plant Production, Hebei 2019***.

AWARDS

2023 - 04	**The Japan Science Society Sasakawa Scientific Research Grant**
2020 - 07	**Outstanding Undergraduate Thesis Award**
2019 - 12	**Best Report Award in the 6th National Innovation Symposium of Plant Production**
2019 - 09	**Outstanding Student Award**
2019 - 09	**The Third Class Scholarship Award for Excellence in Academic Work**
2018 - 09	**Scholarship Award for Science and Technology Innovation**
2017 - 09	**Scholarship Award for Participation in Social Activities**

WORK & VOLUNTEER

2021- 11 – present **Freelance Content Writer** ***Molecular Plant, Cell Press***
Write brief reports on the latest published articles in plant science

2023 - 09 ***The 2023 Autumn Meetings of the Japanese Society of Fisheries Science***

2018 - 06 ***Shanghai Cooperation Organization Qingdao Summit***

2018 - 01 ***APEC Training Workshop on Marine Sustainable Fisheries Development***