SUKANYA THUENGTUNG

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EDUCATION

2016 - 2019	Doctor of Philosophy, Graduate School of Horticulture, **Chiba University**, Japan
2013 - 2016	Master of Science, Food Technology, **Mae Fah Luang University**, Thailand
2009 - 2013	Bachelor of Science, Food Technology, **Mae Fah Luang University**, Thailand

EXPERIENCES

2025-Present	**Lecturer**, Faculty of Agro-Industry, Chiang Mai University, Thailand
2023-2025	**Section Managing Editor,** MDPI AG, Bangkok Office
2022-2023	**Assistant Editor,** MDPI AG, Bangkok Office
2019 - 2021	**Postdoctoral Project Researcher**, Post-Harvest and Food Engineering Laboratory, Graduate School of Horticulture, Chiba University, Japan
2014	**Short-term Study Abroad for 6 months** at Graduate School of Horticulture, Chiba University, Japan
2012 - 2013	**Exchange Student in ASEAN International Mobility for Students (AIMS) Programme** at IPB University (Bogor Agricultural University), Indonesia

Additionally, I have been serving as a reviewer to review several manuscripts submitted to the following **International Journal**

A reviewer of **Food Science and Nutrition • ACS Omega • Food Hydrocolloids • Food Science and Technology Research • International Food Research Journal • International Journal of Biological Macromolecules • LWT - Food Science and Technology**

RESEARCH INTERESTS/EXPERTISE

- Food Processing
- Application of Emerging Technologies in Foods
- Chemistry and Biochemistry of Cereals Grains (i.e., Rice)
- Plant-based Foods
- Starch Digestibility
- Phytochemicals and Antioxidants

PUBLICATIONS

Research Articles

Thuengtung, S., Ketnawa, S., Ding, Y., Cai, Y., & Ogawa, Y. Effect of mild heat-moisture treatment for harvested raw paddy rice on physicochemical properties and in vitro starch digestibility of cooked rice. 2023. **Food Hydrocolloids for Health**, 3, 100133.

Zhang, C., Ketnawa, S., **Thuengtung, S.**, Cai, Y., Qin, W., & Ogawa, Y. (2022). Simulated In Vitro Digestive Characteristics of Raw Yam Tubers in Japanese Diet: Changes in Protein Profile, Starch Digestibility, Antioxidant Capacity and Microstructure. **Foods**, 11(23), 3892. https://doi.org/10.3390/foods11233892

Thuengtung, S., Ketnawa, S.,Ding, Y., & Ogawa, Y. Effect of heat-moisture treatment to raw paddy rice (*Oryza sativa* L.) on cooked rice properties. 2021. **Journal of Future Foods**, 1 (2), 179-186.

Thuengtung, S., & Ogawa, Y. Comparative study of conventional steam cooking and microwave cooking on cooked pigmented rice texture and their phenolic antioxidant. 2020. **Food Science & Nutrition**, 8, 2, 965-972.

Thuengtung ,S., Matsushita, Y., & Ogawa, Y. Comparison between microwave-cooking and steam-cooking on starch properties and in vitro starch digestibility of cooked pigmented rice. 2019. **Journal of Food Process Engineering**, 42, 6, e13150.

Thuengtung, S., & Ogawa, Y. Morphological structure, starch fractions and starch digestibility of three pigmented rice cultivars cooked by microwave cooking. 2018. **Journal of Food Science and Agricultural Technology (JFAT)**, 4, 17-22.

Thuengtung, S., Niwat, C., Tamura, M., & Ogawa, Y. In vitro examination of starch digestibility and changes in antioxidant activities of selected cooked pigmented rice. 2018. **Food Bioscience**, 23, 129-136.

PUBLICATIONS (CONT.)

Book Chapters

Thuengtung, S. Germinated Brown Rice, 2023, **Science of Rice Chemistry and Nutrition,** pp.235-261.

Thuengtung, S., & Ogawa, Y. Effects of Interactions Between Antioxidant Phytochemicals and Coexisting Food Components on Their Digestibility. In: Melton, L., Shahidi, F., Varelis, P. (Eds.), 2019, **Encyclopedia of Food Chemistry**, vol. 2, pp. 656–660.

Review Articles

Ketnawa, S., Reginio Jr., F.C., **Thuengtung, S.,** & Yukiharu Ogawa (2021): Changes in bioactive compounds and antioxidant activity of plant-based foods by gastrointestinal digestion: a review, **Critical Reviews in Food Science and Nutrition**, DOI: 10.1080/10408398.2021.1878100

Ogawa, Y. Donlao, N., **Thuengtung, S.**, Tian, J., Cai, Y., Reginio, F.C., Ketnawa, S., Yamamoto, N., & Tamura, M. Impact of food structure and cell matrix on digestibility of plant-based food. 2018. **Current Opinion in Food Science**, 19, 36-41.

PRESENTATION IN INTERNATIONAL CONFERENCES

International Joint Conference on JSAM and SASJ, and 13th CIGR VI Technical Symposium joining FWFNWG and FSWG Workshops. 2019. September 3rd-6th. Sapporo, Japan.

Presentation topic: Impact of crystallinity change during in vitro digestion on starch digestibility of microwave- and steam-cooked black rice

ICoFF 2019/ISNFF 2019. 2019. December 1st-5th. Kobe, Japan.

Presentation topic: Change of microwave-cooked pigmented rice structure and antioxidant phytochemicals before and during in vitro digestion

The 3rd International Conference on Agriculture and Agro-Industry (ICAAI). 2018. November 15th-17th. Chiang Rai, Thailand.

Presentation topic: Morphological structure, starch fractions and starch digestibility of three pigmented rice cultivars cooked by microwave cooking

The International Society for Nutraceuticals and Functional Foods (ISNFF). 2018. October 14th-17th. Vancouver, Canada.

Presentation topic: Influence of liquid amount on changes in morphological grain attributes of cooked rice during in vitro dynamic digestion model

Food Structures, Digestion and Health International Conference (FSDH). 2017. October 24th-27th. Sydney, Australia.

Presentation topic: Changes in antioxidant activities of pigmented rice during in vitro gastro-small intestinal digestion

The 18th Food Innovation Asia Conference. 2016. June 16th-18th. Bangkok, Thailand.

Presentation topic: Chemical properties, in vitro starch digestibility and enzymatic inhibitory activity of cooked colored rice