CURRICULUM VITAE

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Position: Lecturer

Affiliation: Division of Biotechnology, School of Agro-Industry, Faculty of Agro-Industry, Chiang Mai University, Thailand

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EDUCATION

2021: Doctor of Philosophy in Agricultural Science (Innovative Science and Technology for Bio-Industry), Kyushu University, Fukuoka, Japan; thesis entitled "Study on gut microbiome and metabolome of Indonesian people in relation to dietary habits and metabolic diseases"

2016: Master of Science in Biotechnology, Kasetsart University, Bangkok, Thailand; thesis entitled "Characterization of Antimicrobial Substance from *Lactobacillus salivarius* KL-D4 and Its Application as Biopreservative"

2009: Bachelor of Science in Fermentation Technology, King Mongkut's Institute of Technology Ladkrabang, Bangkok, Thailand

FIELDS OF EXPERTISE

Gut microbiome, Gut metabolome, Gut health, Applied microbiology

EXPERIENCES

2017: Laboratory manager at GIB-Advanced Research and Development Center, Thailand Science Park, Pathum Tani, Thailand

2014: Assistant researcher at Specialized Research Unit: Prebiotics and Probiotics for Health, Department of Biotechnology, Faculty of Agro-Industry, Kasetsart University, Bangkok, Thailand

2012: Research trainee at Laboratory of Food Biotechnology, Department of Food and Health Sciences, Faculty of Environmental and Symbiotic Sciences, Prefectural

University of Kumamoto, Kumamoto, Japan

SCHOLARSHIPS

2017 – 2020: Japanese government scholarship (Monbukagakusho: MEXT)

2009 – 2011: National Research University scholarship (NRU), Kasetsart University, Thailand

GRANTS

1. **Research fellow**, Fiscal 2023 Japan Student Service Organization (JASSO) Follow-up Research Fellowship (Researcher ID: 2325), budget: 990,000 Yen, topic: "Comparative research on gut microbiota between Thai and Japanese people", **2023**
2. **Principal investigator**, The Murata Science Foundation 2023 (Grant no. 23TC09), budget: 800,000 Yen, topic: "Investigation on whole-genome sequencing and metabolomic profile of *Lactiplantibacillus plantarum* CMUB-N14: a probiotic for metabolic syndrome Management", **2023-2024**
3. **Principal investigator**, CMU Junior Research Fellowship Program, Chiang Mai University, budget: 100,000 Baht, topic: "Screening and characterization of Lactobacilli probiotics from fermented foods for obesity management", **2022-2023**
4. **Principal investigator**, TED Youth Startup (Ideation Incentive Program), Ministry of Higher Education, Science, Research and Innovation, budget: 100,000 Baht, topic: "Innovative yogurt supplemented with synbiotics for the management of metabolic syndrome", **2022-2023**
5. **Principal investigator**, Young researcher grant, Faculty of Agro-Industry, Chiang Mai University, budget: 70,000 Baht, topic: "Study of resistant starch properties from cultivated banana for CMUB probiotic encapsulation in yogurt", **2022-2023**
6. **Principal investigator**, TED Youth Startup (Proof of Concept), Ministry of Higher Education, Science, Research and Innovation, budget: 1,500,000 Baht, topic: "Sangravee Synbiotics Shot: Innovative synbiotic for metabolic syndrome", **2024-2025**

PUBLICATIONS

1. Tangjaidee P, Braspaiboon S, Singhadechachai N, Phongthai S, **Therdtatha P**, Rachtanapun P, Sommano SR, Seesuriyachan P. **2025**. Enhanced Bioactive Coffee Cherry: Infusion of Submerged-Fermented Green Coffee Beans via Vacuum Impregnation. Foods. 14(7): 1165. https://doi.org/10.3390/foods14071165.
2. Chomphoosee T, Seesuriyachan P, Wattanutchariya W, Tipbunjong C, **Therdtatha P**, Techapun C, Insomphun C, Panti N, Moukamnerd C. **2025**. A novel beverage of coffee cherry (cascara) water kefir rich in antioxidants, bioactive compounds, and exhibiting promising antibacterial and sensory qualities. LWT. 229: 117539. https://doi.org/10.1016/j.lwt.2025.117539.
3. Mwamburi SM, Islam SI, Dinh-Hung N, Dangsawat O, Sowanpreecha R, Khang LTP, Montha N, **Therdtatha P**, Dwinanti SH, Permpoonpattana P, et al. **2024**. Genomic Characterization of *Bacillus* sp. THPS1: A Hot Spring-Derived Species with Functional Features and Biotechnological Potential. Microorganisms. 12(12): 2476. https://doi.org/10.3390/microorganisms12122476.
4. Panti N, **Therdtatha P**, Doungta S, Saenkam S, Seesuriyachan P, Rachtanapun P, Sawangrat K. **2024**. Microbiological and biochemical characterization, and sensory evaluation of dragon blood tea kombucha. Chiang Mai J. Sci. 51(6): e2024088. https://doi.org/10.12982/CMJS.2024.088.
5. Sawangrat K, **Therdtatha P**, Pundee A, Seesuriyachan P, Panti N. **2024**. Development of new functional beverage: longan kefir supplemented with herbs. Curr. Appl. Sci. Technol. 24(6): e0259608. https://doi.org/10.55003/cast.2024.259608.
6. Rahayu SE, Yoga WK, Komalasari H, Mariyatun M, Yuda WA, Manurung NEP, Hasan PN, Suharman S, Pamungkaningtyas FH, Nurfiana DA, Pramesi PC, Gatya M, **Therdtatha P**, Nakayama J, Juffrie M, Djaafar TF, Marwati T, Utami T. **2024**. Probiotic chocolate containing *Lactobacillus plantarum* Dad-13 alters the gut microbiota composition of undernourished children in lombok: a randomized double-blind trial. Int. J. Food Sci. 2024: 1-13. https://doi.org/10.1155/2024/9493797.
7. Shinoda A, Lkhagvajav T, Mishima R, **Therdtatha P**, Jamiyan D, Purevdorj C, Sonomtseren S, Chimiddorj B, Namdag B, Lee YK, Shirchin D, Nakayam J. **2024**. Gut microbiome

signatures associated with type 2 diabetes in obesity in Mongolia. Front. Microbiol. 15. https://doi.org/10.3389/fmicb.2024.1355396.

8. **Therdtatha P**, La-ongkham O, Nakphaichit M, Mapato C, Rungruang S, Nakayama J, Nitisinprasert S. **2024**. Effect of lactic acid bacterial starter KUB-G2 on grass silage quality and its microbial community performed using 140-ton plastic bag silos. QUAL ASSUR SAF CROP. 15(SP1): 1-13. https://doi.org/10.15586/qas.v16iSP1.1442.
9. Thikham S, Jeenpitak T, Shoji K, Phongthai S, **Therdtatha P**, Yawootti A, Klangpetch W. **2024**. Pulsed electric field-assisted extraction of mushroom ß-glucan from *Pleurotus pulmonarius* by-product and study of prebiotic properties. Int J Food Sci Technol. 59: 3939–3949. https://doi.org/10.1111/ijfs.17144.
10. Thikham S, Tongdonyod S, Kantala C, **Therdtatha P**, Klangpetch W. **2024**. Enhancing enzymatic production efficiency of crude pectic oligosaccharides by pulsed electric field and study of prebiotic potential. J Food Sci Technol. 61(2): 320-330. https://doi.org/10.1007/s13197-023-05843-8.
11. **Therdtatha P**, Jareontanahun N, Chaisuwan W, Yakul K, Paemanee A, Manassa A, Moukamnerd C, Phimolsiripol Y, Sommano SR, Seesuriyachan P. **2023**. Production of functional Arabica and Robusta green coffee beans: Optimization of fermentation with microbial cocktails to improve antioxidant activity and metabolomic profiles. Biocatal. Agric. Biotechnol. 53: 102869. https://doi.org/10.1016/j.bcab.2023.102869.
12. Naklong K, **Therdtatha P**, Sumonsiri N, Leksawasdi N, Techapun C, Rachtanapun P, Taesuwan S, Nunta R, Khemacheewakul J. **2023**. Microencapsulation of *Bifidobacterium breve* to Enhance Microbial Cell Viability in Green Soybean Yogurt. Fermentation. 9(3):296. https://doi.org/10.3390/fermentation9030296.
13. Gruneck L, Jinatham V, **Therdtatha P**, Popluechai S. **2022**. Siamese Fighting Fish (Betta splendens Regan) Gut Microbiota Associated with Age and Gender. Fishes. 7(6):347. https://doi.org/10.3390/fishes7060347.
14. **Therdtatha P**, Shinoda A,Nakayama J. **2022**. Crisis of the Asian gut: associations among diet, microbiota, and metabolic diseases. BMFH. 2021-085. https://doi.org/10.12938/bmfh.2021-085.

15. Watanabe M, Sianoya A, Mishima R, **Therdtatha P**, Rodriguez A, Ramos DC, Lee YK, Dalmacio LM, Nakayama J. **2021**. Gut microbiome status of urban and rural Filipino adults in relation to diet and metabolic disorders. FEMS Microbiol Lett. 368(20): 149. https://doi.org/10.1093/femsle/fnab149.
16. Shinoda A, Shirchin D, Jamiyan D, Lkhagvajav T, Purevdorj C, Sonomtseren S,Chimiddorj B, Namdag B, **Therdtatha P**, Nakayama J. **2021**. Comparative Study of Gut Microbiota Mongolian and Asian People. Mong. J. Agric. Sci. 33. https://doi.org/10.5564/mjas.v33i2.1744.
17. **Therdtatha P**, Song Y, Tanaka M, Mariyatun M, Almunifah M, Manurung NEP, Indriarsih S, Lu Y, Nagata K, Fukami K, Ikeda T, Lee YK, Rahayu ES, Nakayama J. **2021**. Gut Microbiome of Indonesian Adults Associated with Obesity and Type 2 Diabetes: A Cross-Sectional Study in an Asian City, Yogyakarta. Microorganisms. 9(5): 897. https://doi.org/10.3390/microorganisms9050897.
18. Rahayu ES, Mariyatun M, Putri Manurung NE, Hasan PN, **Therdtatha P**, Mishima R, Komalasari H, Mahfuzah NA, Pamungkaningtyas FH, Yoga WK, Nurfiana DA, Liwan SY, Juffrie M, Nugroho AE, Utami T. **2021**. Effect of probiotic *Lactobacillus plantarum* Dad-13 powder consumption on the gut microbiota and intestinal health of overweight adults. World J Gastroenterol. 27(1): 107-128. Doi: 10.3748/wjg.v27.i1.107.
19. Kisuse J, La-Ongkham O, Nakphaichit M, **Therdtatha P**, Momoda R, Tanaka M, Fukuda S, Popluechai S, Kespechara K, Sonomoto K, Lee YK, Nitisinprasert S, Nakayama J. **2018**. Urban diets linked to gut microbiome and metabolome alterations in children: a comparative cross-Sectional study in Thailand. Front Microbiol. 9: 1345. https://doi.org/10.3389/fmicb.2018.01345.
20. **Therdtatha P**, Tandumrongpong C, Pilasombut K, Matsusaki H, Keawsompong S, Nitisinprasert S. **2016**. Characterization of antimicrobial substance from *Lactobacillus salivarius* KL-D4 and its application as biopreservative for creamy filling. Springerplus. 5(1): 1060. https://doi.org/10.1186/s40064-016-2693-4.