

PERSONAL INFORMATION:

Xuan Bao Ngoc Nguyen

G1c Leske Building,
Faculty of Sciences, Engineering & Technology,
School of Animal and Veterinary Sciences,
Roseworthy Campus, The University of Adelaide,
South Australia, 5371. AUSTRALIA
Mobile: (+61) 411-544-913; (+84) 86-940-9967
Email address: xuanbaongoc.nguyen@adelaide.edu.au -
ngoc.nguy@kmutt.ac.th
Site: <https://ngoc-xb-nguyen.github.io/mysite/>



CURRENT POSITIONS:

Researcher in the Faculty of Sciences, Engineering and Technology, School of Animal and Veterinary Sciences, The University of Adelaide, South Australia, 5371

TERTIARY EDUCATION

2012-2017	BEng	Faculty of Food Science and Technology, Nong Lam University (NLU), Vietnam
2018-2020	MSc	Faculty of Postharvest Technology, KMUTT, Thailand
2021-2025	PhD	Faculty of Postharvest Technology, KMUTT, Thailand

EMPLOYMENT HISTORY

Jul. 2016 – Sep. 2016: Research internship, Fats and Oils Laboratory, Department of Food Technology, Universiti Putra Malaysia (UPM)
Sep. 2020 – Jan. 2021: Assistant researcher, Postharvest Biochemical Molecular Laboratory, Faculty of Postharvest Technology, KMUTT
Mar. 2024 – Jul. 2024: Research fellow (casual staff), Faculty of Sciences, Engineering and Technology, School of Animal and Veterinary Sciences, The University of Adelaide, South Australia, Australia
Jan. 2025 – Jun. 2025: Research fellow (remote), Postharvest Technology of Ornamental Laboratory, Faculty of Postharvest Technology, KMUTT
Sep. 2025 – present: Researcher (casual), Faculty of Sciences, Engineering and Technology, School of Animal and Veterinary Sciences, The University of Adelaide, South Australia, Australia

RESEARCH PROJECTS:

Past projects:

- 1-Preparation of lutein nano-dispersion via solvent displacement method: comparison between three different emulsifiers (Funded by Advanced Programme Scholarship, NLU, Vietnam).
- 2-Use of redox agents and organic acids under active modified atmosphere to replace sulfur dioxide fumigation of logan in retail supply chain (Funded by Postharvest Technology Innovation Center, Thailand)
- 3- Effects of gamma irradiation dose and short-term storage on phytochemicals, antioxidants, and textural properties of boiled 'Tainan 9' peanuts (Funded by the Petchra Pra Jom Klao Scholarship, Thailand)
- 4-Oil characterization and aflatoxin profile of peanut kernel subjected to gamma irradiation (Funded by the Petchra Pra Jom Klao Scholarship, Thailand)
- 5-Effectiveness of vinegar as a sanitizing agent to maintain the postharvest quality of fresh-cut pumpkin (Funded by the Petchra Pra Jom Klao Scholarship, Thailand)
- 6-Postharvest Induction of anthracnose resistance in 'Nam Dok Mai' mango fruit by plant growth regulators.(PhD project, Funded by the Petchra Pra Jom Klao Scholarship, Thailand)
- 7-Identified the protein profile of *Canine Parvovirus* using various purification methods
- 8-Metagenome analysis of the orange-bellied parrot
- 9-Profiling the circulating myxoma virus strains for future rabbit resistance and biocontrol potential studies

Current projects:

- 1-Effect of exposure of Vanda 'Sansai Blue' orchid cut flowers to exogenous ethylene on RNA-seq analysis of transcriptome dynamics in their florets (Thailand Science Research and Innovation (TSR) Basic Research Fund Fiscal year 2022)
- 2-Foliar spray of brassinosteroid prevents leaf yellowing and prolongs the display life of cut foliage ferns (*Davallia* sp.)

PUBLICATIONS:

Papers:

1. **Nguyen, N. X.**, Uthairatanakij, A., Laohakunjit, N., Jitareerat, P., Boonsirichai, K., Yap, E. S. P., & Kaprasob, R. (2022). Effects of gamma irradiation dose and short-term storage on phytochemicals, antioxidants, and textural properties of boiled 'Tainan 9' peanuts. *International Journal of Food Science & Technology*, 57(6), 3771-3782.
2. **Nguyen, N. X.**, Saithong, T., Boonyaritthongchai, P., Buanong, M., Kalapanulak, S., & Wongs-Aree, C. (2024). Methyl salicylate induces endogenous jasmonic acid and salicylic acid in 'Nam Dok Mai' mango to maintain postharvest ripening and quality. *Journal of Plant Physiology*, 303, 154356.
3. **Nguyen, N.X.**, Saithong, T., Thaiprasit, J., Chiewchankaset, P., Buanong, M., Boonyaritthongchai, P., Kalapanulak, S., Wongs-Aree, C., 2025. MeSA fumigation enhances the response to *Colletotrichum gloeosporioides* in postharvest 'Nam Dok Mai' mangoes by inducing endogenous jasmonic acid biosynthesis and MiSAMT expression. *Postharvest Biology and Technology* 230, 113822.
4. Development of a Novel Phage-Displayed Fusion Protein of Newcastle Disease Virus as a Highly Specific Antigen for Serological Assays (under review)

International Conference Proceedings:

- 1- **Nguyen, N. X.**, Uthairatanakij, A., Laohakunjit, N., Jitareerat, P., Rattanakreetakul, C., Boonsirichai, K., & Kaisangsri, N. (2020). Oil characterization and aflatoxin profile of peanut kernel subjected to gamma-irradiation. *International Journal of Food Engineering*, 6(1), 2-6.

National Conference Proceedings:

- 1- **Nguyen, X. B. N.**, Jitareerat, P., & Uthairatanakij, A. Effectiveness of Vinegar as a Sanitizing Agent to Maintain the Postharvest Quality of Fresh-cut Pumpkin.

HONOURS and AWARDS:

Achieved the third prize in the Vietnam National Biology Excellence Competition in the 2007 – 2008

Achieved the Vietnam National Five Good Merits in 2020

References:

- 1- Assoc. Prof. Dr. Chalermchai Wongs-Aree (former PhD advisor) - Email: chalermchai.won@kmutt.ac.th
Tel. 0 2470 7725 Fax. 0 2470 7728
Postharvest Technology Program, School of Bioresources and Technology, King Mongkut's University of Technology Thonburi (KMUTT), 49 Soi Thian Thale 25, Bang Khuntien Chaithalay Road, Tha Kham, Bang Khuntien, Bangkok 10150
- 2- Assoc. Prof. Dr. Farhid Hemmatzadeh (current supervisor) - Email: farhid.hemmatzadeh@adelaide.edu.au
Tel. +61 8 8313 7723
Faculty Of Sciences, School Of Animal And Veterinary Sciences, The University Of Adelaide, Roseworthy Campus, Roseworthy SA 5371, Australia
- 3- Assoc. Prof. Dr. Apiradee Uthairatanakij (former Msc advisor)- Email: apiradee.uth@kmutt.ac.th
- 4- Asst. Prof. Mantana Buanong (former supervisor) – Email: mantana.bua@kmutt.ac.th
- 5- Dr. Tan Tai Boon (former supervisor) – Email: taiboon_tan@upm.edu.my