# Than The Anh

Lecturer, Department of Entomology, Faculty of Agronomy, Vietnam National University of Agriculture, Trau Quy, Gia Lam, Hanoi, Vietnam, PhD student at School of Natural Sciences, 205BCR Culloden Rd, Macquarie University, Wallumattagal Campus Macquarie Park NSW 2109 **Email:** anh.than-the@hdr.mq.edu.au Mobile: +84389909287 Google scholar: <u>Anh The Than - Google Scholar</u> Linkedin: <u>The Anh Than | LinkedIn</u>

# EDUCATION

PhD in Biological Sciences School of Natural Sciences, Faculty of Science and Engineering, Macquarie University. Thesis title: Deciphering the effects of ecological factors on oviposition behaviour and their impacts on offspring performance
Master of Research in Biological Sciences
Department of Biological Sciences, Faculty of Science and Engineering, Macquarie
University.
MRES thesis: Functional significance of ecological factors during larval development
Bachelor of Crop Science
Faculty of Agronomy, Vietnam National University of Agriculture (formerly known as Hanoi University of Agriculture).
Advanced Education Program cooperated between Vietnam National University of Agriculture (VNIIA) Vietnam and The University of California Davis (UC Davis)

#### **RESEARCH INTERESTS**

I have a strong background in insect biology, ecology, and microbiology. During my bachelor's and master's degrees, I investigated the effects of ecological factors, including nutritional composition in diet and population density, on the fitness and survival of the beet armyworm (*Spodoptera exigua*) and Queensland fruit fly (*Bactrocera tryoni*). For my PhD, I am currently working on *Drosophila melanogaster* to explore the effects of bacterial infection, nutritional composition, and larval density on the oviposition behaviors of the fly, as well as the transgenerational effects of these factors on the fitness, bacterial resistance, and reproduction of the offspring.

# **RESEARCH EXPERIENCE**

- Experimental design and implementation
- Extensive experience in handling insects (Queensland fruit fly (Qfly), Drosophila, moths) for research purposes.
- Bacterial culturing: prepare media (broth and agar plate), culture bacterial in incubator.
- Excellent experience in microinjection techniques (Qfly and Drosophila).
- Molecular biology assay: Protein and lipid extraction.
- Data analysis and interpretation, self-study R for data analysis and visualisation (glm, glmm, ggplot2, tydiverse), OneNote for electronic lab book, Endnote and Mendeley for referencing.
- Prepare manuscripts, grants, and presentations.
- Perform administrative functions such as ordering chemicals, lab consumables, lab instruments, booking airfare/accommodation for conference.
- Familiar with Adobe tools for images editing (Lightroom and Photoshop)

#### WORKING EXPERIENCE

- Jan 2014 Lecturer
- **Present** Department of Entomology, Faculty of Agronomy, Vietnam National University of Agriculture, Hanoi, Vietnam

## Feb 2023 – Sessional Teaching Academic

Present School of Natural Sciences, Macquarie University, Wallumattagal Campus Macquarie Park NSW 2109

## May 2013 Research assistant

-Dec 2013 Biological Control Center, Plant Protection Research Institute, Hanoi, Vietnam Project: Application of *Metarhizium anisopliae* and *Beauveria bassiana* in biological control.

# PUBLICATIONS

- MORIMOTO, J., **THAN, A. T.,** NGUYEN, B., LUNDBÄCK, I., DINH, H. & PONTON, F. 2022. Density-by-Diet Interactions during Larval Development Shape Adult Life History Trait Expression and Fitness in a Polyphagous Fly. *The American Naturalist*, 199, E170-E185.
- Than, A. T., Anh, L., Hieu, P., & Giang, H. (2022). Effects of Diet Composition on the Life-History Traits of Bactrocera Dorsalis (Hendel) (Diptera: Tephritidae). Vietnam Journal of Agricultural Sciences, 5(4), 1628–1637.
- DINH, H., LUNDBÄCK, I., KUMAR, S., **THAN, A. T.,** MORIMOTO, J. & PONTON, F. 2022. Sugar-rich larval diet promotes lower adult pathogen load and higher survival after infection in a polyphagous fly. *Journal of Experimental Biology*, 225.
- Than, A.T., Ponton, F., & Morimoto, J. (2020). Integrative developmental ecology: a review of densitydependent effects on life-history traits and host-microbe interactions in non-social holometabolous insects. *Evolutionary Ecology*, 34, 659-680.
- Nguyen, B., **Than, A.,** Dinh, H., Morimoto, J., & Ponton, F. (2020). Parental Microbiota Modulates Offspring Development, Body Mass and Fecundity in a Polyphagous Fruit Fly. *Microorganisms*, **8**.
- Morimoto, J., Nguyen, B., Lundbäck, I., **Than, A.T**., Tabrizi, S.T., Ponton, F., & Taylor, P.W. (2020). Effects of carbohydrate types on larval development and adult traits in a polyphagous fruit fly. *Journal of Insect Physiology*, **120**, 103969.
- MORIMOTO, J., NGUYEN, B., DINH, H., **THAN, A. T.**, TAYLOR, P. W. & PONTON, F. 2019. Crowded developmental environment promotes adult sex-specific nutrient consumption in a polyphagous fly. *Frontiers in Zoology*, 16, 4.
- NGUYEN, B., PONTON, F., **THAN, A.**, TAYLOR, P. W., CHAPMAN, T. & MORIMOTO, J. 2019. Interactions between ecological factors in the developmental environment modulate pupal and adult traits in a polyphagous fly. *Ecology and Evolution*, *9*, 6342-6352.
- NGUYEN, D. T., **THAN, A. T**., JONCKHEERE, W., NGUYEN, V. H., LEEUWEN, T. V. & CLERCQ, P. D. 2019. Life tables and feeding habits of *Proprioseiopsis lenis* (Acari: Phytoseiidae) and implications for its biological control potential in Southeast Asia. *Systematic and Applied Acarology*, 24, 857-865.

#### SUPERVISION

Roukaya Al Kalaaji, (Feb-June, 2024), master student, School of Natural Sciences, Macquarie University.

## FUNDED PROJECTS

April 2021 – Dec 2021	Project: "Species composition of Tephritid fruit fly in guava production area at Gia Lam, Hanoi 2021; Effect of ecological factors on the development of the oriental fruit fly <i>Bactrocera dorsalis</i> (Hendel)"
	Member: <b>Than The Anh,</b> Ho Thi Thu Giang, Le Ngoc Anh, Pham Thi Hieu, Nguyen Van Son, Tran Danh Linh, Tran Thi Khanh Linh. Funded by Vietnam-Belgium project (VNUA)– (1,000 EURO)
April 2016 - April 2018	Project: "Species composition and the application of predatory mites belonging to Phytoseiidae family in controlling thrips and red mite in Vietnam" Member: Nguyen Duc Tung, <b>Than The Anh</b> , Nguyen Thi Kim Oanh, Nguyen Thi Thuy Funded by National Foundation for Science and Technology Development, Ministry of Science and Technology and Cooperated with Belgium – granted 745 million VND for 2 years (~US\$32,000)
May 2016 – Dec 2016	Project: Effect of the systemic neonicotinoid insecticide Thiametoxam stake dips on cassava spider mite and its' generalist phytoseiid predator <i>Neoseiulus longispinosus</i> Member: Nguyen Duc Tung, <b>Than The Anh,</b> Nguyen Thi Thuy Funded by The International Center for Tropical Agriculture (CIAT) in Vietnam (~US\$5,000)

## SCHOLARSHIP, AWARDS AND TRAVEL GRANTS

Macquarie University Research Excellence Scholarship (iMQRES) for PhD Program at Macquarie University (2020-2024)

**Macquarie University – Vietnam International Education Development (MQ-VIED)** Joint Scholarship for my Master of Research (2 years) at Macquarie University (**2018-2019**)

**Macquarie University Student Representative Committee (SRC) Grant** for presentation at the Society for 2024 Australian Entomological Society 55th Annual General Meeting and Scientific Conference (2024AES) (Nov 2024).

**Postgraduate Research Funding (PGRF) for Conference granted by Macquarie University** for presentation at the Society for Experimental Biology Centenary Conference 2023 (July 2023)

## ATTENDED COURSES, WORKSHOPS

Oral Presentation at the 2024 Australian Entomological Society 55th Annual General Meeting and Scientific Conference (2024AES), 17-21 November, Hobart, Australia.

Poster presentation at the Society for Experimental Biology Centenary Conference 2023 (4-7 July 2023), Edinburgh, Scotland (UK).

Poster presentation at the Asia Pacific Drosophila Research Conference (21-26 July 2023), Cairns, QLD, Australia.

Oral presentation at the Japan – Asia Youth Exchange Program in Science (Sakura Exchange Program in Science, 02-10 Feb 2015), administered by Japan Science and Technology Agency, at Kyushu University, Fukuoka, Japan

Attended the Training program on Biological Control research methods at the University of Tsukuba, Ibaraki, Japan (22–26 Jul 2013)

Attended the 8<sup>th</sup> Asian crop science association conference at Vietnam National University of Agriculture, Hanoi, Vietnam (23–25 Sept 2014)

## **OUTREACH AND VOLUNTEERS WORKS**

- Reviewer for Journal of Asia-Pacific Entomology
- PLC Sydney Science Summit 2019 with the theme "illuminating the Possibilities" (23 Feb 2019)
- National Science Week at the Australian Museum (13 Aug 2019). We showcased our research activities on fruit fly to engage students at the event.
- National Science Week 2018 at Royal Botanic Garden (Sydney), volunteered in games and activities to engage young students in science.

## **OTHER ACTIVITIES**

Member of Society for Experimental biology (5/2023-Present)

#### REFEREES

1. Assoc. Prof. Fleur Ponton

School of Natural Sciences, Faculty of Science and Engineering, Macquarie University Email: fleur.ponton@mq.edu.au

2. Dr. Juliano Morimoto Room 202 – Second floor of the Zoology Building, University of Aberdeen (UK) Email: juliano.morimoto@abdn.ac.uk

# **3.** Assoc. Prof. Dr. Nguyen Duc Tung Department of Entomology, Faculty of Agronomy, Vietnam National University of Agriculture, Vietnam. Email: nguyenductung@vnua.edu.vn