

Jia-Wei Tay
 College of Tropical Agriculture and Human Resources
 Department of Plant and Environmental Protection Sciences
 FTE Distribution: 25% I; 40% R; 35% E

Education

<u>Degree</u>	<u>University</u>	<u>Major</u>
PhD	University Science Malaysia	Urban and Industrial Entomology
Bachelors	University Science Malaysia	Applied Science (in Biology and Management of Vector and Parasites)

Professional Appointments

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Assistant Researcher/Assistant Professor	University of Hawai'i at Mānoa	2019 to Present
Postdoctoral Scholar	University of California, Riverside	2015 to 2018

Courses Taught

Course Number and Title (credits)

- PEPS 363L General Entomology Laboratory, Section 1 (1)
 - ◆ Fall 2019
- PEPS 363 General Entomology (1)
 - ◆ Fall 2019
- PEPS 690 Graduate Seminar in Entomology (1)
 - ◆ Fall 2019
 - ◆ Spring 2023
- PEPS 421 Foundations of Pest Management (1)
 - ◆ Spring 2020
 - ◆ Spring 2021
 - ◆ Spring 2022
- PEPS 491 Special Topics: Medical and Urban Entomology (3)
 - ◆ Spring 2020
- PEPS 463 Medical and Urban Entomology (3)
 - ◆ Fall 2021
- PEPS 499 Directed Research (3)
 - ◆ Fall 2020
 - ◆ Spring 2022
- PEPS 700, 799, 699 (Directed Research with PEPS + Tropical Medicine Graduate Certificate Program/ One Health)
 - ◆ Fall 2020
 - ◆ Spring 2021
 - ◆ Fall 2021
 - ◆ Spring 2022
 - ◆ Fall 2022

Publications

Refereed Journal Publications

Kirsch, John Mitchell and Jia-Wei Tay. 2022. Larval mortality and ovipositional preference in *Aedes albopictus* (Diptera: Culicidae) induced by the entomopathogenic fungus *Beauveria bassiana* (Hypocreales: Cordycipitaceae). *Journal of Medical Entomology* 59: 1687-1693. <https://doi.org/10.1093/jme/tjac084>

Gharbi, Karim and Jia-Wei Tay. 2022. Fumigant toxicity of essential oils against *Frankliniella occidentalis* and *F. insularis* (Thysanoptera: Thripidae) as affected by polymer release and adjuvants. *Insects* 13(6): 493. <https://doi.org/10.3390/insects13060493>

Tay, Jia-Wei. 2022. Highlights of Urban Entomology 2021: chemical, nonchemical, and alternative approaches to urban pest management as we adapt, advance, transform. *Journal of Medical Entomology*. <https://doi.org/10.1093/jme/tjac176>

Hsu, Po-Wei, Ching-Chen Lee, Feng-Chuan Hsu, Shu-Ping Tseng, Chun-Han Shih, Jia-Wei Tay, Yu-Chun Hsiao, Chin-Cheng Scotty Yang, and Chung-Chi Lin. 2022. Invasion of the little fire ant *Wasmannia auropunctata* (Roger, 1863) (Hymenoptera: Formicidae) in Taiwan. *Bioinvasions Records* 11: 864-875.

Liu, Kuan-Ling, Shu-Ping Tseng, Haruki Tatsuta, Kazuki Tsuji, Jia-Wei Tay, Veera Singham, Chin-Cheng Scotty Yang, Kok-Boon Neoh. 2022. Population genetic structure of the globally introduced big-headed ant in Taiwan. *Ecology and Evolution*. <https://doi.org/10.1002/ece3.9660>

Tay, Jia-Wei and Devon James. 2021. Field demonstration of heat technology to mitigate heat sinks for drywood termite (Blattodea: Kalotermitidae) management. *Insects* 12 (12): 1090. <https://doi.org/10.3390/insects12121090>

Choe, Dong-Hwan *, Jia-Wei Tay *, Kathleen Campbell, Houen Park, Les Greenberg and Michael K. Rust. 2021. Development and demonstration of low-impact IPM strategy to control Argentine ants in urban residential settings. *Journal of Economic Entomology* 114: 1752-1757 * *Equal contribution*.

Tay, Jia-Wei, Dong-Hwan Choe, Ashok Mulchandani and Michael K. Rust. 2020. Hydrogels: From controlled release to a new bait delivery for insect pest management. *Journal of Economic Entomology* 113: 2061-2068.

McCalla, Kelsey, Jia-Wei Tay, Ashok Mulchandani, Dong-Hwan Choe and Mark Hoddle. 2020. Biodegradable alginate hydrogel bait delivery system effectively controls high-density populations of Argentine ant in commercial citrus. *Journal of Pest Science* 93: 1031-1042.

Tay, Jia-Wei, Mark Hoddle, Ashok Mulchandani and Dong-Hwan Choe. 2017. Development of an alginate hydrogel to deliver aqueous bait for pest ant management. *Pest Management Science* 73: 2028-2038.

Lee, Ching-Chen, Hirotaka Nakao, Shu-Ping Tseng, Hung-Wei Hsu, Gwo-Li Lin, Jia-Wei Tay, Johan Billen, Fuminori Ito, Chow-Yang Lee, Chung-Chi Lin and Chin-Cheng Yang. 2017. Worker reproduction of the invasive yellow crazy ant *Anoplolepis gracilipes*. *Frontiers in Zoology* 14: 24.

Tay, Jia-Wei and Chow-Yang Lee. 2015. Induced disturbances cause *Monomorium pharaonis* (Hymenoptera: Formicidae) nest relocation. *Journal of Economic Entomology* 108: 1237-1242.

Tay, Jia-Wei and Chow-Yang Lee. 2015. Effects of a juvenile hormone analogue pyriproxyfen on monogynous and polygynous colonies of the Pharaoh ant *Monomorium pharaonis* (Hymenoptera: Formicidae). *Tropical Biomedicine* 32: 453-462.

Tay, Jia-Wei, Kok-Boon Neoh and Chow-Yang Lee. 2014. The roles of the queen, brood and worker castes in the colony growth dynamics of the Pharaoh ant, *Monomorium pharaonis* (Hymenoptera: Formicidae). *Myrmecological News* 20: 87-94.

Tay, Jia-Wei and Chow-Yang Lee. 2014. Influences of pyriproxyfen on fecundity and reproduction of the Pharaoh ant (Hymenoptera: Formicidae). *Journal of Economic Entomology* 107: 1216-1223.

Cheah, Shao-Xiong, Jia-Wei Tay, Lai-Kheng Chan and Zairi Jaal. 2013. Larvicidal, oviposition, and ovidical effects of *Artemisia annua* (Asterales: Asteraceae) against *Aedes aegypti*, *Anopheles sinensis*, and *Culex quinquefasciatus* (Diptera: Culicidae). *Parasitology Research* 112: 3275-3282.

Conference Proceedings

Tay, J.W., Hoddle, M., Mulchandani, A. and Choe, D. H. 2018. Use of a biodegradable hydrogel to deliver aqueous bait to control Argentine ants in residential settings. National Conference on Urban Entomology and Invasive Pest Ant Conference, Cary, NC.

Tay, J.W., Hoddle, M., Mulchandani, A. and Choe, D. H. 2017. The use of an alginate hydrogel to deliver aqueous bait to manage an invasive ant pest in residential settings. In: *Proceedings of the 9th International Conference on Urban Pests*. Birmingham, UK. M.P. Davies, C. Pfeiffer and W.H. Robinson (eds). Pureprint Group, UK, pp. 265-269.

Extension Publications

Tay, J. W. 2022. Know Your Pest – a UH entomologist’s primer on Hawaii bugs. Building Management Hawaii, June 2022: 22-23. <https://online.flippingbook.com/view/70003220/23/>

Tay, J. W. 2022. Termites in Hawaii. National Pest Management Association (NPMA) - Professional Women in Pest Management (Hawaii Chapter) bulletin. April 2022.

Tong, R. and Tay, J. W. 2022. Termite IPM section’s data contributor with updates. MyIPM online App Hawaii.

Choe, Dong-Hwan and Jia-Wei Tay. 2021. Low-impact ant IPM. *Pest Control Technology*. GIE Media, Inc. p. 38-42, Vol. 49, No. 11. Available online at <https://www.pctonline.com/article/low-impact-ant-ipm/>

Tay, J. W. 2021. Introduction and identification: ants, termites, cockroaches, and mosquitoes in Hawaii. Available online at <https://cms.ctahr.hawaii.edu/jwtay/Pest-info>

Tay, J. W and D. H. Choe. 2018. Using seaweed to deliver liquid ant baits. *Green Bulletin* 8: 1-2. (invited) Available online at <http://ipm.ucanr.edu/PDF/PUBS/greenbulletin.2018.spring.pdf>

Schall K., Tay, J. W., Mulchandani, A., Choe, D. H. and Hoddle, M. 2018. Harnessing hydrogels in the battle against invasive ants: Could a hydrogel baiting system solve Argentine ant problems in southern California citrus? *Citrograph* 9: 30-35. (invited) Available online at <https://ucanr.edu/sites/ucurbanpest/files/285788.pdf>

Extension Activities and Other Creative Works (i.e., Extension Videos, Websites, Exhibitions, etc.)

University of Hawaii Urban Pest Management program website:

<https://manoa.hawaii.edu/ctahr/urbanlab>

Selected extension activities/exhibitions:

Fumigation field day; Hawaii Plantation Village, April 4, 2022

Orchard Crop field day; Poamoho Research Station, April 30, 2022

IPM workshop for “Termites & IPM”; Natsunoya Tea House; November 4, 2022

Extension in the Garden Series: Garden Pest Management; Urban Garden Center, Dec 8, 2022

Jia-Wei Tay. 2022. A high-moisture biodegradable hydrogel bait delivery system with a low toxic insecticide for ant control. Patent application no. 63/307,288

John M. Kirsch and Jia-Wei Tay. 2021. Larvicidal effects of low concentrations of *Beauveria bassiana* against *Aedes albopictus* (Diptera: Culicidae). MUVE section’s poster. 1st place. 2021 Entomological Society of America.

(Students also won Entomology Games at Entomological Society of America 2021:

<https://cms.ctahr.hawaii.edu/News/ArtMID/48015/ArticleID/2236/The-Giant-Killers>)

Jia-Wei Tay. Co-organizer with BASF and Vesperis. Termite field day. Hawaiian Plantation Village. July 8, 2021.

Jia-Wei Tay. Co-organizer with Polyguard Inc. on termite session. Construction Specification Institute webinar. June 30, 2021.

Jia-Wei Tay. 2021. Medical & Urban Entomology PEPS 463 Course announcement YouTube video. July 25, 2021. <https://youtu.be/XuzrRo1eaCo>

Jia-Wei Tay. Exhibitor and Educator. Mass Timber Conference. March 30-April 1, 2021.

Jia-Wei Tay. Presenter. Mamalu Poepoe, Department of Land and Natural Resources meeting. Presented research to the “Strategic Biosecurity for Airports” working group and the stakeholders. August 3, 2021.

Jia-Wei Tay. Educational outreach. 2019-2021. Termite educational project. Kaiser High School, Hawaii, and Hawaii Pacific University.

Choe, Dong-Hwan, Jia-Wei Tay, Mark Hoddle, Ashok Mulchandani and Michael Rust. 2020. Biodegradable hydrogel to deliver aqueous bait to control pest ants. Patent application no. 62/400,161; Publication no. US20200029555; international publications BR112019005990, CN110114092, EP3518980, WO/2018/064186.

Jia-Wei Tay. November 6, 2019. Entomological Society of America (ESA) eNews:

<https://www.entsoc.org/system/files/Nov6-2019.pdf>

Jia-Wei Tay. November 4, 2019. Get to Know video interview. CTAHR YouTube channel, through the Office of Communication Services, University of Hawaii at Mānoa:

<https://youtu.be/wJKvdXZrTTA>

Jia-Wei Tay. November 1, 2019. CTAHR Exhibition. Society of Advancement of Chicanos/Hispanics and Native Americans (SACNAS) National Diversity in STEM Conference. Hawaii Convention Center.

Jia-Wei Tay. August 26, 2019. Plant and Environmental Protection Sciences Exhibition. Welina Mānoa, Campus Center, University of Hawaii at Mānoa.

Jia-Wei Tay. 2017. Using seaweed to kill invasive ants. Through University of California, Riverside official YouTube channel:
<https://youtu.be/CwDB8uyCCmg>

Jia-Wei Tay. 2017. Novel methods for Argentine ant IPM. Available online at
<https://ucanr.edu/sites/ucurbanpest/Research/Ant/>

Leadership Roles (Committees, Boards, Advisory, etc.)

- 2022 Editorial Board's Review Editor for Invasive Insect Species section in *Frontiers in Insect Science*
- 2021- Tropical Agriculture and Environment (TAE) Curriculum Committee
- 2021- Awardee. Entomological Society of America's MUVE Highlights in Urban Entomology
- 2020- Search committee member for tenure-track Assistant Researcher in Mycology (position frozen due to COVID-19)
- 2019- Ex-officio committee, State of Hawaii Pest Control Board, Dept. of Commerce and Consumer Affairs
- 2018- Reviewer, *Journal of Economic Entomology*, *Insects* (Reviewer Board), *Entomologia Experimentalis et Applicata*, *Journal of Asia-Pacific Entomology*, *Tropical Life Sciences Research*, *Journal of Agricultural and Food Chemistry*, *Proceedings of the Hawaiian Entomological Society*, *Forests*, *Journal of Medical Entomology*, *Agronomy*, *Journal of Fish and Wildlife Management*, *Sociobiology*, *Bulletin of Entomological Research*
- 2019- Member, UHM Graduate Faculty
- 2019- Member, Termite Inspection Training, Hawaii Pest Control Association
- 2019- Member, Hawaii Pest Control Association
- 2019- Student Competition Judge, Entomological Society of America Annual Meeting
- 2019- Proctor, Board-Certified Entomologist (BCE) Certification Examination
- 2019- Member of Hawaiian Entomological Society
- 2020- Manage Nan-Yao and Jill Su Entomology Scholarship
- 2021- Reviewer; book proposal of Nan-Yao Su and Chow-Yang Lee. CABI International Publisher.
- 2021- Judge. ESA's new Alate Award (for Historically Black Colleges and Universities and other Minority-Serving Institutions' candidates)
- 2021- Judge. Waipahu High School's STEM (Science, Technology, Engineering, and Math) Honors projects.
- 2021- Advisory. Office of Communication Services, CTAHR.

Graduate Students

<u>Category</u>	<u>Current Number of Students</u>	<u>Number Graduated (Career)</u>
Chair of Master's Committees	1	2
Chair of PhD Committees	1	0
Member of Master's Committees	2	1
Member of PhD Committees	1	0

Grant Support

Grants received from July 2019-October 2022 at UHM:

Extramural Grants and Contracts

Title of Grant: Field evaluations of baits in eliminating Formosan subterranean termites *Coptotermes formosanus* in Hawaii

Source of Grant: Corteva Agriscience

Total Dollar Value: \$ 15,000 (\$ 15,000)

Dates of Grant: 3/1/2022-12/31/2023

Role: PI: Jia-Wei Tay

Title of Grant: Application of novel and effective oviposition deterrents for *Bactrocera dorsalis* and other invasive fruit flies

Source of Grant: APHIS

Total Dollar Value: \$ 152,262 (\$ 152,262)

Dates of Grant: 9/1/2022-8/31/2023

Role: PI: Jia-Wei Tay

Title of Grant: Enhancing biological control of citrus sooty mold complex with novel ant control technology using entomopathogenic nematode water-storing hydrogels in an IPM approach

Source of Grant: Western IPM Center

Total Dollar Value: \$ 29,999

Dates of Grant: 3/1/2021-2/28/2022

Role: PI: Jia-Wei Tay; Co-PI: Koon-Hui Wang, Jensen Uyeda, Roshan Manandhar

Title of Grant: A Pilot Study: Entomopathogenic fungi on ovitraps' egg-laying substrate for mosquito control

Source of Grant: Hawaii Invasive Species Council (HISC), Hawaii Department of Land and Natural Resources (DLNR)

Total Dollar Value: \$ 24,000 (\$ 24,000)

Dates of Grant: 4/1/2021-1/31/2022

Role: PI: Jia-Wei Tay

Title of Grant: Biopesticides delivered with water-storing hydrogels for control of invasive yellow crazy ants

Source of Grant: Hawaii Invasive Species Council (HISC), DLNR

Total Dollar Value: \$ 31,548 (\$ 31,548)

Dates of Grant: 1/1/2021-4/1/2022

Role: PI: Jia-Wei Tay

Title of Grant: Application of novel and effective oviposition deterrents for *Bactrocera dorsalis* and other fruit flies

Source of Grant: USDA-ARS

Total Dollar Value: \$ 145,972 (\$ 145,972)

Dates of Grant: 9/1/2021-8/31/2022

Role: PI: Jia-Wei Tay

Title of Grant: Identification of a fruit fly surrogate and development of postharvest treatments for the quarantine pest *Bactrocera dorsalis*

Source of Grant: USDA-ARS

Total Dollar Value: \$ 119,703 (\$ 119,703)

Dates of Grant: 9/1/2020-7/31/2022

Role: PI: Jia-Wei Tay

Title of Grant: Field evaluations of baits in eliminating Formosan subterranean termites *Coptotermes formosanus* in Hawaii

Source of Grant: Corteva Agriscience

Total Dollar Value: \$ 20,000 (\$ 20,000)

Dates of Grant: 6/1/2021-5/31/2022

Role: PI: Jia-Wei Tay

Title of Grant: Evaluation of cross laminated timber resistance to *Coptotermes formosanus* attack

Source of Grant: Kai Hawaii, Inc.

Total Dollar Value: \$ 5,000 (\$ 5,000)

Dates of Grant: 1/1/2021-12/31/2021

Role: PI: Jia-Wei Tay

Title of Grant: Evaluation of a termite barrier as a defense system against Formosan subterranean termite in Hawaii

Source of Grant: Polyguard, Inc.

Total Dollar Value: \$ 13,500 (\$ 13,500)

Dates of Grant: 1/1/2021-12/31/2021

Role: PI: Jia-Wei Tay

Intramural Grants

Title of Grant: Improved detection and control of tropical invasive insect pests

Source of Grant: USDA-ARS

Total Dollar Value: \$ 140,000 (\$ 140,000)

Dates of Grant: 9/1/2020-9/30/2023

Role: PI: Jia-Wei Tay

Title of Grant: Linalool: biosynthesis in sweet basil and application in human health and pest control

Source of Grant: USDA NIFA Research Capacity Funds

Total Dollar Value (Your share of the grant value): \$ 8,970 (\$ 3,370)

Dates of Grant: 2020

Role: Co-PI

Title of Grant: Ecology and management of invasive urban pests in Hawaii

Source of Grant: USDA NIFA Hatch

Total Dollar Value (Your share of the grant value): n/a

Dates of Grant: 2020-2024

Role: PI

Title of Grant: Managing insects of urban and medical importance in Hawaii using integrated pest management

Source of Grant: Extension Plan of Work, Smith-Lever Fund

Total Dollar Value (Your share of the grant value): \$ 4,000

Dates of Grant: 2020-2024

Role: PI

Grants not awarded

NIFA Crop Protection and Pest Management. 2020, 2021. Title: Essential oils as effective organic alternatives to conventional insecticides for economically-damaging invasive pest species (as co-PI)

Western IPM Center Grant. 2020. Title: Development and evaluations of a controlled release system for mosquito management.

Pacific Southwest Center of Excellence in Vector-borne Diseases (PACVEC). 2020, 2021. Title: Development of a *Beauveria bassiana*-infused ovitraps network for biological control of *Aedes albopictus* and detection of future invasive mosquitoes on Oahu, Hawaii.

Presentations at Conferences

Title: Necrophobic behavior in *Coptotermes gestroi* (Wasmann) (Blattodea: Rhinotermitidae) and analysis of their soldier compounds

Authors: Tay, J.W.*, Tong, R.

Name of Conference: Entomological Society of America Joint Annual Meeting

Location: Vancouver, Canada

Date of Presentation: November 13-16, 2022

Title: Behavioral Evidence for a *Pheidole megacephala* (Hymenoptera: Formicidae) supercolony on O'ahu

Authors: Lawrence, J.A.*, Tay, J.W.

Name of Conference: Entomological Society of America Joint Annual Meeting

Location: Vancouver, Canada

Date of Presentation: November 13-16, 2022

Title: Ant Ecology, Identification, and Research Updates from UH

Authors: Lawrence, J.A.*, Tay, J.W.

Name of Conference: Department of Defense's Pest Management Recertification Course

Location: Pearl Harbor, Hawaii

Date of Presentation: October 19, 2022

Title: Challenges of urban termite management

Authors: Tay, J.W.*

Name of Conference: Hawaii Pest Control Association Annual Learning Conference (286 attendees)

Location: The KROC Centre, Hawaii

Date of Presentation: September 16, 2022

Title: Development of an improved biodegradable hydrogel bait delivery system to attract and manage high numbers of invasive yellow crazy ants

Authors: Tay, J.W.* (invited talk)

Name of Conference: National Conference on Urban Entomology

Location: Salt Lake City, Utah

Date of Presentation: May 15-18, 2022

Title: Influence of larval habitat on mosquito wing length

Authors: Salehi, J.*, Kirsch, J., Tay, J.W.

Name of Conference: 46th Annual Albert L. Tester Memorial Symposium

Location: UHM

Date of Presentation: April 21, 2022

Title: Influence of urbanization on the abundance of *Aedes albopictus* (Diptera: Culicidae) in the Nuaanu Valley on Oahu, Hawaii

Authors: Kirsch, J.*, Tay, J.W.

Name of Conference: 46th Annual Albert L. Tester Memorial Symposium

Location: UHM

Date of Presentation: April 20, 2022

Title: Field demonstration of improved heat technology for drywood termite management in condominium units

Authors: Gharbi, K. and Tay, J.W.

Name of Conference: Pacific Branch Entomology Society of America

Location: Santa Rosa, CA

Date of Presentation: April 11, 2022

Title: Surveillance method to determine efficacy of attractants for improved mosquito control

Authors: Kim, S.*, Kirsch, J, Tay, J.W.

Name of Conference: JABSOM Biomedical Symposium

Location: JABSOM, UHM

Date of Presentation: April 7, 2022

Title: Development of improved pest management solutions against invasive ants and drywood termites

Authors: Tay, J.W.*

Name of Conference: PBARC Seminar

Location: Online

Date of Presentation: April 7, 2022

Title: Influence of urbanization on the abundance of *Aedes albopictus* (Diptera: Culicidae) in the Nu'uuanu Valley on Oahu, Hawaii

Authors: Kirsch, J.M.* (2nd place in Masters student category), Tay, J.W.

Name of Conference: Hawaiian Entomological Society, Student and Early Career Researcher Symposium

Location: Online

Date of Presentation: March 11, 2022

Title: Larvicidal effect of low concentrations of *Beauveria bassiana* against *Aedes albopictus* (Diptera: Culicidae)

Authors: Kirsch, J.M.*, Tay, J.W.

Name of Conference: Entomological Society of America Annual Meeting

Location: Denver, Colorado

Date of Presentation: October 31 - November 3, 2021

Title: Fumigant toxicity of essential oils against thrips as affected by polymer release and adjuvants

Authors: Gharbi, K.*, Tay, J.W.

Name of Conference: Entomological Society of America Annual Meeting

Location: Denver, Colorado

Date of Presentation: October 31 - November 3, 2021

Title: Highlights in Urban Entomology for year 2021 – Award

Authors: Tay, J.W. *

Name of Conference: Entomological Society of America Annual Meeting

Location: Denver, Colorado

Date of Presentation: October 31 – November 3, 2021

Title: Hydrogel baits with improved water loss dynamics effectively attract and control higher numbers of pest ant populations

Authors: Tay, J.W.*

Name of Conference: Entomological Society of America Virtual Annual Meeting

Location: online

Date of Presentation: November 11-25, 2020

Title: Management of invasive sugar-feeding ant and subterranean termites in Hawaii

Authors: Tay, J.W.*

Name of Conference: CTAHR Virtual Invasive Pest Mini Conference

Location: online

Date of Presentation: October 15, 2020

Title: Field demonstration of heat technology to mitigate heat sinks for drywood termite management in Hawaii (paper accepted in 2020)

Authors: Tay, J.W.

Name of Conference: International Congress of Entomology (cancelled due to Covid-19)

Location: Helsinki, Finland

Title: Formosan and Asian subterranean termite tunneling behavior and their sustainable pest management using physical barrier

Authors: Tay, J.W.*

Name of Conference: Entomological Society of America Annual Meeting

Location: St. Louis, Missouri

Date of Presentation: November 17-20, 2019

Title: Biology and management of common pest ant species in Hawaii

Authors: Tay, J.W.*

Name of Conference: Hawaii Pest Control Association Annual Learning Conference (275 attendees)

Location: The KROC Centre, Hawaii

Date of Presentation: September 20, 2019

Title: Ecology and management of invasive Argentine ant

Authors: Tay, J.W.*

Name of Conference: Invasive Ant Conference 2018

Location: Kyoto University, Japan

Date of Presentation: January 23, 2018

Title: Alginate hydrogel for pest ant management in urban and agricultural areas

Authors: Tay, J.W.*

Name of Conference: Entomological Association of Southern California, Fall Meeting

Location: Los Angeles County Arboretum, Arcadia, California

Date of Presentation: September 12, 2017

Title: Benefits of and developments in Argentine ant control for citrus

Authors: Schall, K.A.*, J.W. Tay, A. Mulchandani, D.H. Choe and M. Hoddle

Name of Conference: California Association of Pest Control Advisers

Location: Ontario, California

Date of Presentation: August 2, 2017

Title: The use of an alginate hydrogel to deliver aqueous bait to manage an invasive ant pest in residential settings

Authors: Tay, J.W.*

Name of Conference: 9th International Conference on Urban Pests

Location: Birmingham, England

Date of Presentation: July 12, 2017

Title: Development of a hydrogel bait to deliver liquid ant bait for pest ant management

Authors: Tay, J.W.*

Name of Conference: 26th annual UC Riverside Urban Pest Management Conference

Location: Riverside, California

Date of Presentation: March 29, 2017

Title: Enhancing biological control of citrus pests with hydrogel baits for sustainable Argentine ant, *Linepithema humile*, management

Authors: Tay, J.W.*

Name of Conference: XXV International Congress of Entomology

Location: Orlando, Florida

Date of Presentation: September 28, 2016

Title: Fire ant baiting technology in almonds: Today and beyond

Authors: Schall, K.A.*, J.W. Tay, L. Greenberg and M. Hoddle

Name of Conference: UC Cooperative University of California Almond Integrated Pest Management Meeting

Location: Kearney Agricultural Research and Extension Center, Parlier, California

Date of Presentation: January 7, 2016

Title: The effects of juvenile hormone analog pyriproxyfen on the ovary development of the Pharaoh ant

Authors: Tay, J.W.*

Name of Conference: 2nd Global Conference on Entomology

Location: Sarawak, Malaysia

Date of Presentation: November 8-12, 2013

Title: The effects of a juvenile hormone analog on the reproductive physiology of *Monomorium pharaonis*

Authors: Tay, J.W.*

Name of Conference: International Symposium on Insects

Location: Kuala Lumpur, Malaysia

Date of Presentation: December 3-5, 2012

Title: The effects of pyriproxyfen on the egg production and ovary development of *Monomorium pharaonis*

Authors: Tay, J.W.*

Name of Conference: 6th International Conference on Biopesticides

Location: Chiang Mai, Thailand

Date of Presentation: December 11-16, 2011