

Jia-Wei Tay
 College of Tropical Agriculture and Human Resources (CTAHR)
 Department of Plant and Environmental Protection Sciences (PEPS)
 University of Hawaii at Manoa (UH)
 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

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 690 Graduate Seminar in Entomology (1)

- ◆ Fall 2019
- ◆ Spring 2023

PEPS 421 Foundations of Pest Management (1)

- ◆ Spring 2020
- ◆ Spring 2021
- ◆ Spring 2022
- ◆ Spring 2023
- ◆ Spring 2024
- ◆ Spring 2025

PEPS 491 Special Topics: Urban Pest Management (3)

- ◆ Spring 2020
- ◆ Summer 2024

PEPS 463 Medical and Urban Entomology (3)

- ◆ Fall 2021
- ◆ Fall 2023
- ◆ Fall 2024

PEPS 499 Directed Research (3)

- ◆ Fall 2020
- ◆ Spring 2022
- ◆ Spring 2023

PEPS 691 Special Topics (3)

- ◆ Spring 2025

PEPS 495 PEPS Capstone (4)

- ◆ Spring 2025

PEPS 700, 799, 699

- ◆ Fall 2020-present

PUBLICATIONS (LAST 5 YEARS)**Refereed Journal Publications**

Vijaya Movva, Binita Shrestha, Steve Hesler, Xiuxiu Sun, Junwei Zhu, Gregory Loeb, Jia-Wei Tay*, and Dong H. Cha*. 2025. Oviposition deterrent as a component of a push-pull management approach for *Drosophila suzukii*. *Environmental Entomology*. Accepted. *co-corresponding author

Charly Hartle, Chih-Chi Lee, Hung-Wei Hsu, Chun-Yi Lin, Kuan-Ling Liu, Joey Yin-Xin Chang, John A. Lawrence, Jia-Wei Tay*, Chin-Cheng Scotty Yang*. 2025. Five novel RNA viruses of the invasive big-headed ant (*Pheidole megacephala*). *Archives of Virology*.

Movva, Vijaya; Zhu, Junwei Jerry; Roda, Amy; Kendra, Paul E.; Yang, Xiangbing; Cloonan, Kevin; Tay, Jia-Wei; Cha, Dong H. 2024. Deterrence and behavioral mode of coconut oil-derived free fatty acids on *Zeugodacus cucurbitae* oviposition. *Insect Science*. <https://doi.org/10.1111/1744-7917.13460>

Tay, Jia-Wei. 2023. Highlights in urban entomology: Chemical, nonchemical, and alternative approaches to urban pest management as we *Adapt, Advance, Transform*. *Journal of Medical Entomology* 60: 1-6. <https://doi.org/10.1093/jme/tjac176>

Ming-Hsiao Peng, Kuan-Ling Liu, Chieh-Yen Tsai, Satomi Shiodera, Takashi F. Haraguchi, Masayuki Itoh, Shu-Ping Tseng, Chin-Cheng Scotty Yang, G. Veera Singham, Jia-Wei Tay, Kok-Boon Neoh. 2023. Urbanization influences the trophic position, morphology, and colony structure of invasive African big-headed ants (Hymenoptera: Formicidae) in Taiwan. *Myrmecological News* 33: 197-209. doi: 10.25849/myrmecol.news_033:197.

Roh, Gwang Hyun, Linnea Meier, Binita Shrestha, Stephen P Hesler, Junwei J Zhu, Paul E Kendra, Gregory M Loeb, Jia-Wei Tay, Dong H Cha. 2023. A 2-component blend of coconut oil-derived fatty acids as an oviposition deterrent against *Drosophila suzukii* (Drosophilidae: Diptera). *Journal of Economic Entomology* 116: 1671-1678. <https://doi.org/10.1093/jee/toad092>

Roh, Gwang Hyun, Kendra, Paul E., Zhu, Junwei J., Roda, Amy, Loeb, Gregory M., Tay, Jia-Wei and Cha, Dong H. 2023. Coconut oil derived five-component synthetic oviposition deterrent for oriental fruit fly, *Bactrocera dorsalis*. *Pest Management Science* 79: 3852-3859. <https://doi.org/10.1002/ps.7584>

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>

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. https://www.reabic.net/journals/bir/2022/4/BIR_2022_Hsu_et al.pdf

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* 12: e9660. <https://onlinelibrary.wiley.com/doi/pdf/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. *Insects' Special Issue "Advance in Biology and Management of Termites – In Memory of Professor Yoshimura"*
<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 Authorship with Choe).
<https://academic.oup.com/jee/article/114/4/1752/6273089>

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. <https://doi.org/10.1093/jee/toaa183>

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.
<https://link.springer.com/article/10.1007/s10340-019-01175-9>

Extension Articles

Tay, J. W. Ask the Experts: 2024's best metro areas to start a pest control business. Pest Gnome.
<https://pestgnome.com/blog/studies/best-metro-areas-pest-control-business/#expert=jia-wei-tay-phd>

Tay, J. W., Manandhar, R. and Wang, K. H. 2023. Hydrogel baits for ant control and the combined use of hydrogel baits and Tanglefoot for citrus sooty mold control. CTAHR Extension Publication, University of Hawaii. IP-55, August 2023. <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/IP-55.pdf>

Roshan Manandhar and Jia-Wei Tay. 2023. Enhancing Ant-Termite interactions to protect citrus trees from Forest tree termite damage. CTAHR Extension Publication, University of Hawaii. IP-58, December 2023. <https://www.ctahr.hawaii.edu/oc/freepubs/pdf/IP-58.pdf>

Tay, J. W. 2023. Hydrogel technology for pest ant management. Flyer and Extension bulletin. Thrive HI technology showcase event. University of Hawaii Office of Technology Transfer. June 17, 2023.

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/>

Tong, R. and Tay, J. W. 2022. Termite IPM section's development and updates. "MyIPM Hawaii" online mobile App
https://play.google.com/store/apps/details?id=com.bugwood.myipmhawaii&pcampaignid=web_share

Choe, D.H. and Tay, J.W. 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/>

EXTENSION ACTIVITIES**Field days, workshops, trainings, and symposiums organized or exhibited**

Co-exhibitor, 2025. Workshop on “A’o E Nana: Train to Observe”. CTAHR Conference, Campus Center, University of Hawaii at Mānoa. April 11, 2025.

Organizer and presenter, 2025. Webinar on urban pests and pesticide education. Online. April 2, 2025.

Exhibitor, 2024. Plant and Environmental Protection Sciences Exhibition. Mānoa Discovery Day, Campus Center, University of Hawaii at Mānoa. October 26, 2024.

Organizer, 2024. Workshop on “PCR and Molecular Techniques for Virus Detection in Ant Populations”. University of Hawaii at Manoa. October 7, 2024.

Organizer, 2024. Webinar on termite biology and management in Hawaii. Online. September 17, 2024.

Organizer, 2024. Symposium: IPM of Urban, Structural, Landscape, and Turfgrass Pests in Hawai‘i. 1st CTAHR conference, Honolulu, Hawaii. April 12, 2024.

Organizer, 2024. Conference Symposium: Navigating Urban Pest Management and Surveillance in Tropical Urban Areas. ESA Pacific Branch Annual Meeting. Waikoloa Beach, Hawaii. April 15-17, 2024.

Trainer and presenter, **2019, 2022, 2023**. Hawaii Pest Control Association Annual Learning Conference, The KROC Centre, Hawaii. September 2019, 2022, 2023.

Organizer and host, 2023, 3rd International Conference of the Subterranean Termites: Dr. Minoru Tamashiro Symposium. University of Hawaii at Manoa, Honolulu, Hawaii. September 18-19, 2023.

Organizer and host, 2023: Urban pest discussion session with Chinese Pest Control Association. Honolulu, Hawaii. October 19, 2023.

Co-organizer and presenter, **2022, 2023**. Fumigation field day; Hawaii Plantation Village, April 4, 2022 & 2023.

Trainer and presenter, 2022. Orchard Crop field day; Poamoho Research Station, April 30, 2022.

Co-organizer and presenter, **2022, 2023**. IPM workshop for “Termites & IPM”; Natsunoya Tea House; November 4, 2022 & 2023.

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

Presenter, 2021. BASF and Vesperis Termite field day. Hawaiian Plantation Village. July 8, 2021.

Contributor, 2021, Polyguard Inc. termite biology session. Construction Specification Institute webinar. June 30, 2021.

Contributor, 2021. Termite Membrane Barrier. Mass Timber Conference. March 30-April 1, 2021.

Presenter, 2021. 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.

Trainer, 2020. Subterranean termite inspection training for Rentokil-Terminix Hawaii. Pearl Country Club, Aiea, Hawaii. March 3, 2020. (cancelled due to COVID-19)

Co-trainer, **2019-2021 multiple years**. Termite monitoring educational project. Kaiser High School, Washington Middle School, Hawaii.

Co-organizer, 2019. Termite Inspection Training with Hawaii Pest Control Association. University of Hawaii at Manoa. August 23-24, 2019.

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

Exhibitor, 2019. Plant and Environmental Protection Sciences Exhibition. Welina Mānoa, Campus Center, University of Hawaii at Mānoa. August 26, 2019

Websites and videos

University of Hawaii Urban Pest Management program website:
<https://manoa.hawaii.edu/ctahr/urbanlab>

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

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

Featured in:

Next-gen urban entomologists, 2023. Pest Control Technology <https://www.pctonline.com/article/next-gen-urban-entomologists/>

LEADERSHIP ROLES AND SERVICES

2025	CTAHR Conference Planning Committee
2024-	UH Manoa Search Advocate
2024-2026	CTAHR Faculty Senate Executive Committee
2024-2026	Curriculum committee, Tropical Agriculture and the Environment
2024	CTAHR Faculty Mentoring Award Selection Committee
2024	Search committee member for tenure-track Assistant Specialist for Arthropod Identification and Monitoring
2024	Search committee member for tenure-track Assistant Specialist for Resilient Plant Pathology
2024	CTAHR New Student Orientation committee
2023-2026	CTAHR Faculty Senate
2022-2023	Hawaii Pest Control Association IPM Committee
2022	Judge, Student and Early Career Researcher Symposium, Hawaiian Entomological Society
2021-2023	Curriculum Committee, Tropical Agriculture and Environment
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 Committee. Office of Communication Services, CTAHR.

2020- Ex-officio committee, State of Hawaii Pest Control Board, Dept. of Commerce and Consumer Affairs
 2019- Student Competition Judge, Entomological Society of America Annual Meeting
 2019- Proctor, Board-Certified Entomologist (BCE) Certification Examination
 2019- Manager and Reviewer, Nan-Yao and Jill Su Entomology Scholarship
 2018- Reviewer, *Pest Management Science*, *Journal of Economic Entomology*, *Insects*, *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*, *California Agriculture*, books of CABI International Publisher

Professional Associations

State of Hawaii Pest Control Board, Hawaii Ant Working Group, Hawaii Pest Control Association, National Pest Management Association, Pacific Rim Termite Research Group, Hawaii Mosquito Working Group, National Conference on Urban Entomology, Entomological Society of America, Hawaiian Entomological Society, Professional Women in Pest Management

GRADUATE STUDENTS

<u>Category</u>	<u>Current Number of Students</u>	<u>Number Graduated (Career)</u>
Chair of Master's Committees	1	3
Chair of PhD Committees	2	0
Member of Master's Committees	1	1
Member of PhD Committees	1	1

GRANT SUPPORTS

Grants received at UHM, 2019-2024:

Extramural Grants and Contracts

Title of Grant: Integrating insecticidal baits-biocontrol agents as a novel and sustainable invasive ant management tool

Source of Grant: USDA's Natural Resources Conservation Service - Conservation Innovation Grants

Total Dollar Value: \$ 453,640

Dates of Grant: 10/1/2023-9/30/2025

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: \$ 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: USDA APHIS

Total Dollar Value: \$ 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

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

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

Dates of Grant: 9/1/2021-4/1/2022

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

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

Role: PI and co-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

Dates of Grant: 9/1/2021-7/31/2022

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

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

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

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

Role: PI: Jia-Wei Tay

Intramural Grants (occasional graduate student salary supports from CTAHR not listed)

Title of Grant: A‘o E Nānā: Training to Observe –Pest Surveillance Skills for the Community

Source of Grant: CTAHR CARES Concept Notes

Total Dollar Value (Your share of the grant value): \$ 64,216 (TBD)

Dates of Grant: 10/1/2024-9/30/2027

Role: Co-PI

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

Source of Grant: CTAHR

Total Dollar Value: \$ 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

PRESENTATIONS AT CONFERENCES

(First author of presentation is the presenter, unless otherwise noted.)

Tay, J.W., Krushelnycky, P., & Cheah, S.X. (2025, April 11). *Foraging activity and the use of an improved hydrogel bait in managing invasive long-legged ant, Anoplolepis gracilipes, on Oahu, Hawaii* (poster). CTAHR Conference, Honolulu, HI.

Shrestha, A., Khadka, B., Bhetwal, N., & Tay, J.W. (2025, April 4). *Food preference analysis of little fire ant, Wasmannia auropunctata in Hawaii* (poster). CTAHR Showcase and Research Symposium, Honolulu, HI.

Bhetwal, N., Shrestha, A., Khadka, B., & Tay, J.W. (2025, April 4). *Competitive interactions and aggressive dominance between two invasive species in Hawaii* (poster). CTAHR Showcase and Research Symposium, Honolulu, HI.

Khadka, B., Shrestha, A., Bhetwal, N., & Tay, J.W. (2025, April 4). *Exploring bait mixtures and delivery methods for treatment targeting little fire ant (Wasmannia auropunctata)* (poster). CTAHR Showcase and Research Symposium, Honolulu, HI.

Tay, J.W., Johnson, J. and Tong, R. (2025, March 31-April 2). Pacific Branch Entomological Society of America, Salt Lake City, UT.

Tay, J.W. (2024, August 31). *Invasive ant ecology and novel control strategies with a focus on the big-headed ant*. Semco's Special Urban Pest Seminar, Osaka, Japan. [Invited talk]

Tay, J.W. (2024, May 19–22). *Regulating ant populations in either direction using biodegradable hydrogel baits*. National Conference on Urban Entomology, Mobile, AL. [\[Invited talk\]](#)

Melia, J., Tong, R., & Tay, J.W. (2024, May 19–22). *Disparate morphology of *Coptotermes formosanus* colonies on Oahu*. National Conference on Urban Entomology, Mobile, AL. [\[Invited talk\]](#)

Tong, R., & Tay, J.W. (2024, May 19–22). *Distribution survey of termites on Oahu, Hawaii*. National Conference on Urban Entomology, Mobile, AL.

Chang, J. Y.-X., Lawrence, J. A., Yang, S. C.-C., & Tay, J.W. (2024, May 19–22). *Utilizing +ssRNA viruses within alginate hydrogel to combat the invasive big-headed ant, *Pheidole megacephala**. National Conference on Urban Entomology, Mobile, AL.

Tay, J.W. (2024, April 16). *Optimizing control strategies: Increasing or decreasing ant populations with biodegradable hydrogel baits*. Pacific Branch Entomological Society of America, Waikoloa Beach, HI.

Melia, J., Tong, R., & Tay, J.W. (2024, April 16). *Variable morphology of Formosan subterranean termite on Oahu*. Pacific Branch Entomological Society of America, Waikoloa Beach, HI.

Tong, R., & Tay, J.W. (2024, April 16). *Revisiting a roadside distribution survey for termites reveals expansion of *Coptotermes gestroi**. Pacific Branch Entomological Society of America, Waikoloa Beach, HI.

Chang, J. Y.-X., Lawrence, J. A., Yang, S. C.-C., & Tay, J.W. (2024, April 16). *Integrating +ssRNA viruses with alginate hydrogel for controlling the invasive big-headed ant, *Pheidole megacephala* on Oahu*. Pacific Branch Entomological Society of America, Waikoloa Beach, HI.

Tay, J.W. (2024, April 17). *Challenges, alternatives, and future perspective in urban IPM*. Pacific Branch Entomological Society of America, Waikoloa Beach, HI. [\[Invited talk\]](#)

Tay, J.W. (2024, April 12). *Enhancing IPM using a Biodegradable Hydrogel Ant Bait in Hawai'i*. 1st CTAHR Conference, Manoa, HI.

Tong, R., & Tay, J.W. (2024, April 12). *An Overview of Termite Distribution and Management Strategies in Hawai'i*. 1st CTAHR Conference, Manoa, HI.

Lawrence, J.A., & Tay, J.W. (2023, November 5–8). *Integration of biocontrol in biodegradable alginate hydrogels for the management of pest ants*. Entomological Society of America, National Harbor, MD.

Movva, V., Roh, G.H., Tay, J.W., Zhu, J., & Cha, D. (2023, November 5–8). *Efficacy of Natural Products as Oviposition Deterrents for Invasive Fruit Flies*. Entomological Society of America, National Harbor, MD.

Tay, J.W. (2023, October 19). *Hydrogels: from controlled release to a new bait delivery for insect pest management*. PestWorld, Honolulu Convention Center, HI. [\[Invited talk\]](#)

Lawrence, J.A., & Tay, J.W. (2023, October 6). *Ant ecology and behaviors*. Hawaii Pest Control Association Annual Learning Conference, The KROC Centre, HI.

Tay, J.W., Tong, R., Yew, J., & Melia, J. (2023, September 18–19). *Necrophobic behavior in *Coptotermes gestroi* and the chemical profiles of subterranean termite soldiers in Hawaii*. 3rd International Conference of the Subterranean Termite, Honolulu, HI.

Melia, J., Tong, R., & Tay, J.W. (2023, September 18–19). *A comparison of morphology among Coptotermes formosanus on O‘ahu*. 3rd International Conference of the Subterranean Termite, Honolulu, HI.

Tong, R., & Tay, J.W. (2023, September 18–19). *Distribution of termites on Oahu*. 3rd International Conference of the Subterranean Termite, Honolulu, HI.

Movva, V., Roh, G.H., Tay, J.W., Zhu, J., & Cha, D. (2023, July 23–27). *The efficacy of Natural Products as Oviposition Deterrents for Invasive Fruit Flies*. Annual Meeting of the International Society of Chemical Ecology, Bangalore, India.

Lawrence, J.A., & Tay, J.W. (2023, March 27). *Laboratory evidence for behavioral dominance of Wasmannia auropunctata over Pheidole megacephala*. CTAHR Student Research Symposium, Manoa, HI.

Tay, J.W. (2023, March 2-3). *Improved heat treatment to mitigate heat sinks for drywood termite (Blattodea: Kalotermitidae) management in condominiums*. Pacific Rim Termite Research Group, Bangkok, Thailand.

Tay, J.W., & Tong, R. (2022, November 13–16). *Necrophobic behavior in Coptotermes gestroi (Wasmann) (Blattodea: Rhinotermitidae) and analysis of their soldier compounds*. Entomological Society of America Joint Annual Meeting, Vancouver, Canada.

Lawrence, J.A., & Tay, J.W. (2022, November 13–16). *Behavioral Evidence for a Pheidole megacephala (Hymenoptera: Formicidae) supercolony on O‘ahu*. Entomological Society of America Joint Annual Meeting, Vancouver, Canada.

Lawrence, J.A., & Tay, J.W. (2022, October 19). *Ant Ecology, Identification, and Research Updates from UH*. Department of Defense’s Pest Management Recertification Course, Pearl Harbor, HI. [\[Invited talk\]](#)

Tay, J.W. (2022, September 16). *Challenges of urban termite management*. Hawaii Pest Control Association Annual Learning Conference, The KROC Centre, HI. [\[Invited talk\]](#)

Tay, J.W. (2022, May 15–18). *Development of an improved biodegradable hydrogel bait delivery system to attract and manage high numbers of invasive yellow crazy ants*. National Conference on Urban Entomology, Salt Lake City, UT. [\[Invited talk\]](#)

Salehi, J., Kirsch, J., & Tay, J.W. (2022, April 21). *Influence of larval habitat on mosquito wing length*. 46th Annual Albert L. Tester Memorial Symposium, UHM.

Kirsch, J., & Tay, J.W. (2022, April 20). *Influence of urbanization on the abundance of Aedes albopictus (Diptera: Culicidae) in the Nuaanu Valley on Oahu, Hawaii*. 46th Annual Albert L. Tester Memorial Symposium, UHM.

Gharbi, K., & Tay, J.W. (2022, April 11). *Field demonstration of improved heat technology for drywood termite management in condominium units*. Pacific Branch Entomology Society of America, Santa Rosa, CA.

Kim, S., Kirsch, J., & Tay, J.W. (2022, April 7). *Surveillance method to determine efficacy of attractants for improved mosquito control*. JABSOM Biomedical Symposium, UHM.

Tay, J.W. (2022, April 7). *Development of improved pest management solutions against invasive ants and drywood termites*. PBARC Seminar, Online. [[Invited talk](#)]

Kirsch, J.M., & Tay, J.W. (2022, March 11). *Influence of urbanization on the abundance of Aedes albopictus (Diptera: Culicidae) in the Nu'uuanu Valley on Oahu, Hawaii*. Hawaiian Entomological Society, Student and Early Career Researcher Symposium, Online.

Kirsch, J.M., & Tay, J.W. (2021, October 31–November 3). *Larvicidal effect of low concentrations of Beauveria bassiana against Aedes albopictus (Diptera: Culicidae)*. Entomological Society of America Annual Meeting, Denver, CO.

Gharbi, K., & Tay, J.W. (2021, October 31–November 3). *Fumigant toxicity of essential oils against thrips as affected by polymer release and adjuvants*. Entomological Society of America Annual Meeting, Denver, CO.

Tay, J.W. (2021, October 31–November 3). *Highlights in Urban Entomology for year 2021*. Entomological Society of America Annual Meeting, Denver, CO. [[Invited talk](#)]

Tay, J.W. (2020, November 11–25). *Hydrogel baits with improved water loss dynamics effectively attract and control higher numbers of pest ant populations*. Entomological Society of America Virtual Annual Meeting, Online.

Tay, J.W. (2020, October 15). *Management of invasive sugar-feeding ant and subterranean termites in Hawaii*. CTAHR Virtual Invasive Pest Mini Conference, Online. [[Invited talk](#)]

Tay, J.W. (2019, November 17-20). *Formosan and Asian subterranean termite tunneling behavior and their sustainable pest management using physical barrier*. Entomological Society of America Annual Meeting, St. Louis, MO.

Tay, J.W. (2019, September 20). *Biology and management of common pest ant species in Hawaii*. Hawaii Pest Control Association Annual Learning Conference, The KROC Centre, HI. [[Invited talk](#)]