

Michael Melzer
College of Tropical Agriculture and Human Resources
 Plant & Environmental Protection Sciences
 FTE Distribution: 25% I; 60% R; 15% E

Education

<u>Degree</u>	<u>University</u>	<u>Major</u>
Bachelors	Trent University	Biology & Environmental Sciences
Masters	University of Hawaii	Botanical Sciences (Plant Pathology)
PhD	University of Hawaii	Tropical Plant Pathology

Professional Appointments

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Student Researcher	University of Guelph	1997-1998
Research Assistant	University of Hawaii	1998-2000
Junior Researcher	University of Hawaii	2000-2012
Assistant Researcher (non-tenure track)	University of Hawaii	2012-2014
Assistant Researcher (tenure track)	University of Hawaii	2014-2019
Associate Researcher	University of Hawaii	2019-

Current Courses Taught

Course Number and Title (credits)

PEPS 601 Agrosecurity and Food Safety (2)
 PEPS 615 Diagnosis and Management of Tropical Plant Diseases, Pests, and Disorders (3)
 PEPS 615L Diagnosis and Management of Tropical Plant Disease Laboratory (1)
 TRMD 395 One Health Journal Club (1)

Publications (reverse chronological order for last 5 years)

Book Chapters

- Arnott, C, Atwood, J., Bartlett, R., Hoffman, K., Kaufman, L., Kuo, J., Melzer, M. Neville, R., Penniman, T., Rodriguez, D., and Wells, L. 2021. Biosecurity in a Global Invasion Hotspot: Hawaii as a Model for Interagency Biosecurity Planning *in* Invasive Alien Species: Observations and Issues from Around the World, Pullaiah, T. and Ielmini, M.R. (eds.). Wiley <https://doi.org/10.1002/9781119607045.ch46>
- Quito-Avila, D.F., Freitas-Astua, J., and Melzer, M.J. 2020. Bluner-, Cile-, and Higreviruses (*Kitaviridae*) in Reference Module in Life Sciences (Amsterdam: Elsevier). doi: 10.1016/B978-0-12-809633-8.21248-X

Refereed Journal Publications

- Paryavi, M., Weiser, K., Melzer, M., Ghorbani, R., and Jenkins, D. 2025. Autonomous cellular-networked surveillance system for coconut rhinoceros beetle. Computers and Electronics in Agriculture 235:110310 <https://doi.org/10.1016/j.compag.2025.110310>
- Halpin-McCormick, A., Silva, A., Sherrill, T., Corpuz, B., Kambic, L., Lucas, S., Koko, J., Gordon, D., Dunn, L., Kroessig, T., Walsh, S., Walcher, H., Motomura-Wages, S., Ahmad, A.A., Gutierrez, R., Shankle, M., Suzuki, J., Radovich, T., Kagawa-Viviani, A., Melzer, M.J., and Kantar, M. 2025. Virus incidence in Hawaiian heritage sweetpotato. Plant Health Progress <https://doi.org/10.1094/PHP-12-24-0164-S>
- Paryavi, M., Weiser, K., Melzer, M., Crook, D., Ramadugu, C., and Jenkins, D.M. 2025. Programmable LED array for evaluation artificial light sources to improve pest trapping. Insects 16(2) 170 <https://doi.org/10.3390/insects16020170>
- Tzanetakis, I.E., et al. 2025. Streamlining global germplasm exchange: integrating scientific rigor and common sense to exclude phantom agents from regulation. Plant Disease (in press) <https://doi.org/10.1094/PDIS-04-24-0745-FE>
- Tay, W.T., Marshall, S.D.G., Popa-Baez, A.D., Dulla, G.F.J., Blas, A.L., Sambiran, J.W., Hosang, M., Millado, J.B.H., Melzer, M., Rane, R.V., Hogarty, T., Cho, D.Y-C., Alouw, J.C., Faheem, M., Hoffmann, B.D. 2024. Alternative DNA markers to detect Guam-specific CRB-G (Clade I) Oryctes rhinoceros (Coleoptera: Scarabaeidae) indicate that the beetle did not disperse from Guam to the Solomon Islands or Palau. Diversity 16(10), 634 <https://doi.org/10.3390/d16100634>

- Larrea-Sarmiento, A.E., Galanti, R., Olmedo-Velarde, A., Wang, X., Al Rwahnih, M., Borth, W., Lutgen, H., Fitch, M.M., Sugano, J., Sewake, K., Suzuki, J., Wall, M.M., Melzer, M., and Hu, J. 2024. Characterization of two novel viruses within a complex virome from flowering ginger in Hawaii. *Plant Disease* 108: 3001-3009 <https://doi.org/10.1094/PDIS-10-23-2181-RE>
- Lutgen, H., Vowell, T., Marquez, J., Ho, J., Matsunaga, J., and Melzer, M. 2024. First report of *Xylella fastidiosa* subsp. *sandyi* infecting oleander (*Nerium oleander*) in Hawaii, USA. *New Disease Reports* 2024;50e12308 DOI:10.1002/ndr2.12308
- Vowell, T., Manley, M., Ho, J., Watanabe, S., and Melzer, M.J. 2023. Impact of metal salts on the survival, development, and oviposition behavior of coconut rhinoceros beetle (Coleoptera:Scarabaeidae). *Frontiers in Insect Science* <https://doi.org/10.3389/finsc.2023.1157769>
- Wang, X., Larrea-Sarmiento, A.E., Olmedo-Velarde, A., Kong, A., Borth, W., Suzuki, J.Y., Wall, M.M., Melzer, M., and Hu, J. 2023. First detection and genome characterization of a new RNA virus, Hibiscus betacarmovirus, and a new DNA virus, hibiscus soymovirus, naturally infecting *Hibiscus* spp. in Hawaii. *Viruses* 15(1), 90 DOI: 10.3390/v15010090
- Wang, X., Larrea-Sarmiento, A., Olmedo-Velarde, A., Kong, A., Borth, W., Suzuki, J.Y., Wall, M.M., Melzer, M., and Hu, J. 2023. First detection and complete genome sequence of a new tobamovirus naturally infecting *Hibiscus rosa-sinensis* in Hawaii. *Archives of Virology* 168:40 <https://doi.org/10.1007/s00705-022-05634-0>
- Olmedo-Velarde, A., Larrea-Sarmiento, A., Wang, X., Hu, J., and Melzer, M.J. 202X. A breakthrough in kitavirids: genetic variability, reverse genetics, Koch's postulates and transmission of hibiscus green spot virus 2. *Phytopathology* (in press) <https://doi.org/10.1094/PHYTO-04-23-0110-R>
- Kong, A.T., Olmedo-Velarde, A., Borth, W., Wang, K.-H., Hu, J.S., and Melzer, M.J. 202X. Molecular and biological characterization of a novel tobamovirus infecting sunn hemp (*Crotalaria juncea* L.) in Hawaii. *Plant Disease* (in press) <https://doi.org/10.1094/PDIS-09-22-2148-RE>
- Lutgen, H., Olmedo-Velarde, A., Kong, A., and Melzer, M. 2023. First report of plumeria mosaic virus infecting *Plumeria* spp. in the United States. *Plant Disease* 107:1956* <https://doi.org/10.1094/PDIS-09-22-2019-PDN>
- Wang, X., Larrea-Sarmiento, A., Olmedo-Velarde, A., Al Rwahnih, M., Borth, W., Suzuki, J.Y., Wall, M.M., Melzer, M., and Hu, J. 202X. Survey of viruses infecting *Basella alba* in Hawaii. *Plant Disease* (in press)
- Wang, X., Larrea-Sarmiento, A., Olmedo-Velarde, A., Borth, W., Suzuki, J.Y., Wall, M.M., Melzer, M., and Hu, J. 2022. Complete genome organization and characterization of Hippeastrum latent virus. *Virus Genes* 58:367-371 (<https://doi.org/10.1007/s11262-022-01901-z>)
- Olmedo-Velarde, A., Loristo, J., Kong, A., Waisen, P., Wang, K.-H., Hu, J., and Melzer, M. 2022. Examination of the virome of taro plants affected by a lethal disease, the alomae-bobone virus complex, in Papua New Guinea. *Viruses* 14:7 1410 (<https://doi.org/10.3390/v14071410>)
- Olmedo-Velarde, A., Roy, A., Larrea-Sarmiento, A., Wang, X., Padmanabhan, C., Nunziata, S., Nakhla, M.K., Hu, J., and Melzer, M.J. 2022. First report of the hibiscus strain of citrus leprosis virus C2 infecting passionfruit (*Passiflora edulis*). *Plant Disease* 106:2539
- Keith, L.M., Sugiyama, L.S., Brill, E., Adams, B.L., Fukuda, M., Hoffman, K.M., Ocenar, J., Kawabata, A., Kong, A.T., McKemy, J.M., Olmedo-Velarde, A., and Melzer, M.J. 2022. First report of coffee leaf rust caused by *Hemileia vastatrix* on coffee (*Coffea arabica*) in Hawaii. *Plant Disease* (<https://doi.org/10.1094/PDIS-05-21-1072-PDN>)
- Jenkins, D., Watanabe, S., Haff, R., Melzer, M., Jackson, E., Liang, P.-S. 2021. Dose response of coconut rhinoceros beetle (Coleoptera: Scarabaeidae) to 92 kV x-ray irradiation. *Journal of Applied Entomology* 145:1039-1049
- Olmedo-Velarde, A., Roy, A., Padmanabhan, C., Nunziata, S., Nakhla, M.K., and Melzer, M. 2021. First report of orchid fleck virus associated with citrus leprosis symptoms in rough lemon (*Citrus jambhiri*) and mandarin (*C. reticulata*) in the United States. *Plant Disease* 105:2258
- Olmedo-Velarde, A., Waisen, P., Kong, A.T., Wang, K.-H., Hu, J.S., and Melzer, M.J. 2021. Characterization of taro reovirus and its status in taro (*Colocasia esculenta*) germplasm from the Pacific. *Archives of Virology* (166:2563-2567)
- Larrea-Sarmiento, A., Olmedo-Velarde, A., Wang, X., Borth, W., Matsumoto, T.K., Suzuki, J.Y., Wall, M.M., Melzer, M., and Hu, J. 2021. A novel ampelovirus associated with mealybug wilt of pineapple (*Ananas comosus*) *Virus Genes* 57:464-468
- Olmedo-Velarde, A., Hu, J., and Melzer, M.J. 2021. A virus infecting *Hibiscus rosa-sinensis* represents an evolutionary link between cileviruses and higreviruses. *Frontiers in Microbiology* DOI: 10.3389/fmicb.2021.660237

- Wang, X., Olmedo-Velarde, A., Larrea-Sarmiento, A., Simon, A.E., Kong, A., Borth, W., Suzuki, J.Y., Wall, M.M., Hu, J., and Melzer, M.J. 2021. Genome characterization of fig umbra-like virus. *Virus Genes* 57:566-570
- Kuhn, J.H. et al (>100 authors). 2021. 2021 Taxonomic update of phylum Negarnaviricota (Riboviria: Orthornavirae), including the large orders Bunyavirales and Mononegavirales. *Archives of Virology* 166:3513-3566 (doi: 10.1007/s00705-021-05143-6)
- Dahan, J., Orellana, G.E., Feng, X., Kong, A.T., Hamasaki, R.T., Melzer, M.J., and Karasev, A.V. 2020. First report of clover yellow vein virus in *Crotalaria micans* in Hawaii. *Plant Disease* PDIS-06-20-1195-PDN
- Hamim, I., Borth, W.B., Suzuki, J.Y., Melzer, M.J., Wall, M.M., and Hu, J.S. 2020. Molecular characterization of tomato leaf curl Joydebpur virus and tomato leaf curl New Delhi virus associated with severe leaf curl symptoms of papaya in Bangladesh. *European Journal of Plant Pathology* 158:457-472
- Olmedo-Velarde, A., Navarro, B., Hu, J.S., Melzer, M.J., and DiSerio F. 2020. Novel fig-associated viroid-like RNAs containing hammerhead ribozymes in both polarity strands identified by high-throughput sequencing. *Frontiers in Microbiology* 11:1903
- Wang, X., Larrea-Sarmiento, A., Borth, W.B., Barone, R.P., Olmedo Velarde, A., Melzer, M., Suzuki, J., Wall, M.M., and Hu, J. 2020. First report of *Basella alba* naturally infected with basella rugose mosaic virus in Hawaii. *Plant Disease*. <https://doi.org/10.1094/PDIS-06-19-1266-PDN>
- Larrea-Sarmiento, A., Olmedo-Velarde, A., Green, J.C., Al Rwahnih, M., Wang, X., Li, Y-H., Wu, W., Zhang, J., Matsumoto, T.K., Suzuki, J.Y., Wall, M.M., Borth, W., Melzer, M.J., and Hu, J.S. 2020. Identification and complete genomic sequence of a novel sadwavirus discovered in pineapple (*Ananas comosus*). *Archives of Virology** <https://doi.org/10.1007/s00705-020-04592-9>
- Fuchs, M., Bar-Joseph, M., Candresse, T., Maree, H.J., Martelli, G.P., Melzer, M.J., Menzel, W., Minafra, A., Sabanadzovic, S., and ICTV Report Consortium. 2020. ICTV Taxonomy Profile: *Closteroviridae*.* <https://doi.org/10.1099/jgv.0.001397>
- Boluk, G., Dobhal, S., Crockford, A.B., Melzer, M., Alvarez, A.M., and Arif, M. 2020. Genome-informed recombinase polymerase amplification assay coupled with a lateral flow device for in-field detection of *Dickeya* species. *Plant Disease* <https://doi.org/10.1094/PDIS-09-19-1988-RE>
- Dobhal, S., Boluk, G., Babler, B., Stulberg, M.J., Rascoe, J., Nakhla, M.K., Chapman, T.A., Crockford, A.B., Melzer, M.J., Alvarez, A.M., Arif, M. 2020. Comparative genomics reveals signature regions used to develop a robust and sensitive multiplex TaqMan real-time qPCR assay to detect the genus *Dickeya* and *Dickeya dianthicola*. *Journal of Applied Microbiology* 128:1703-1719.
- Larrea-Sarmiento, A., Wang, X., Borth, W.B., Barone, R.P., Olmedo-Velarde, A., Melzer, M.J., Sugano, J.S.K., Galanti, R., Suzuki, J.Y., Wall, M.M., and Hu, J.S. 2020. First Report of Bean Common Mosaic Virus Infecting Flowering Ginger (*Alpinia purpurata*) in Hawaii. *Plant Disease* <https://doi.org/10.1094/PDIS-06-19-1264-PDN>
- Watanabe, S., Adams, B.-L., Kong, A., Masang, N., Vowell, T., and Melzer, M. 2020. Identification of genes that result in high mortality of coconut rhinoceros beetle (Scarabaeidae: Coleoptera) when targeted using an RNA interference approach: implications for large invasive insects. *Annals of the Entomological Society of America* (invited paper; in press)

Extension Publications

- Ho, J.R., Melzer, M.J., Honsberger, D., Chun, S., and Fleming, J. 2025. Red palm mite: a new pest of palms in Hawaii. College of Tropical Agriculture and Human Resilience IP-60
- Wang, X., Hu, J., Melzer, M., Galanti, R., and Ricordi, A. 2024. Viruses affecting hibiscus in Hawaii: their detection and management. College of Tropical Agriculture and Human Resources OF-62
- Connolly, C. and Melzer, M. 2023. Laurel Wilt: A potential threat to Hawaii avocado production. College of Tropical Agriculture and Human Resources IP-56

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

- www.crbhawaii.org
- www.agrosecurityhawaii.com
- Ramos-González, P.L., Freitas-Astúa, J., Li, J.-M., Peters, J., Rodrigues, J.C., Roy, A., and Melzer, M. 2022. Taxonomic proposal 2022.016P: Create three new species in the genus *Cilevirus*, family *Kitaviridae*. International Committee on the Taxonomy of Viruses
- Ramos-González, P.L., Freitas-Astúa, J., Li, J.-M., Peters, J., Rodrigues, J.C., Roy, A., and Melzer, M. 2022. Taxonomic proposal 2022.017P: Rename existing species in the family *Kitaviridae* (*Martellivirales*) to comply with binomial format. International Committee on the Taxonomy of Viruses

- Melzer, M.J., Freitas-Astua, J., Li, J.M., Peters, J., Ramos-Gonzalez, P.L., Rodrigues, J.V.C., and Roy, A. 2021. Create one new species in the genus *Cilevirus* (Martellivirales: Kitaviridae). International Committee on the Taxonomy of Viruses
- Melzer, M. Freitas-Astua, J., Gang, W., Rodrigues, J.C.V, and Roy, A. 2020. Taxonomic proposal 2020.010P: Create one new species in the genus *Blunervirus* (Martellivirales: Kitaviridae). International Committee on the Taxonomy of Viruses

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

- Member, International Organization of Citrus Virologists
- Reviewer for: Plant Disease, Journal of Citrus Pathology, Archives of Virology, European Journal of Plant Pathology, Journal of Phytopathology, Phytopathology, Journal of Virological Methods, Australasian Plant Disease Notes, Journal of Economic Entomology, Journal for Plant Diseases and Plant Protection, Journal of Plant Pathology, Plant Pathology, and Virology
- Steering Committee Member, Coordinating Group on Alien Pest Species
- Treasurer, Gamma Sigma Delta, The Honor Society of Agriculture

Graduate Students

<u>Category</u>	<u>Current Number of Students</u>	<u>Number Graduated (Career)</u>
Chair of Master's Committees	4	10
Chair of PhD Committees	1	1
Member of Master's Committees	0	10
Member of PhD Committees	3	6

Grant Support (PI Listed First)

- Melzer, M.J. 2024-2025. HI FY24 PPA Palm Survey 1S.0206, USDA-APHIS-PPQ Plant Protection Act 7721, \$87,236
- Melzer, M.J. 2024-2025. HI FY24 PD CAPS Specialty Crops Survey. USDA-APHIS-PPQ Cooperative Agricultural Pest Survey – Infrastructure, \$112,045
- Melzer, M.J. 2024-2025. HI FY24 PC CAPS Infrastructure. USDA-APHIS-PPQ Cooperative Agricultural Pest Survey – Infrastructure, \$95,734
- Melzer, M.J. 2024-2025. University of Hawaii's Huanglongbing Diagnostic Lab and survey. USDA-APHIS-PPQ Citrus Health, \$37,203
- Melzer, M.J., Jenkins, D., and Cheng, Z. 2024-2025. HI FY24 PPA CRB Response 6R.0442, USDA-APHIS-PPQ Plant Protection Act 7721, \$1,444,622
- Melzer, M.J., 2024-2025. HI FY24 PPA Canine Detection of CRB 6R.0, USDA-APHIS-PPQ Plant Protection Act 7721, \$377,639
- Melzer, M.J. 2024-2025. HI FY24 PPA Tropical Hosts Pest Survey 1. USDA-APHIS-PPQ Plant Protection Act 7721, \$34,679
- Melzer, M.J., Jenkins, D., and Cheng, Z. 2024-2025. Statewide management of coconut rhinoceros beetle. Hawaii Department of Land and Natural Resources, \$259,833
- Melzer, M.J., Jenkins, D., and Cheng, Z. 2024-2029. Coconut rhinoceros beetle management at Joint Base Pearl Harbor Hickam. NAVFAC Pacific, \$511,222
- Melzer, M.J., Friday, J.B., and Martin, C. 2024-2025. CGAPS Rapid Ohia Death. Hauoli Mau Loa Foundation, \$100,000
- Melzer, M.J. 2023-2024. Hawaii Combined Surveys 2023. USDA-APHIS-PPQ Cooperative Agricultural Pest Survey, \$112,045.
- Melzer, M.J. 2023-2024. Infrastructure. USDA-APHIS-PPQ Cooperative Agricultural Pest Survey, \$95,734
- Arif, M., Melzer, M., Jenkins, D., Neupane, K., Ochoa-Corona, F., Ma, L., Camacho, A. 2023-2028. Cultivating the NextGen of diverse biosecurity professionals through a Pacific-Continental Network (PaCoN). USDA-NIFA, \$7,000,000.
- Melzer, M.J., Jenkins, D., and Cheng, Z. 2023-2024. Response to coconut rhinoceros beetle in Hawaii. USDA-APHIS-PPQ Plant Protection Act 7721, \$1,969,118
- Melzer, M.J. 2023-2024. Canine detection of coconut rhinoceros beetle in Hawaii. USDA-APHIS-PPQ Plant Protection Act 7721, \$347,558

- Melzer, M.J., Friday, J.B., and Martin, C. 2023-2024. CGAPS Rapid Ohia Death. Hauoli Mau Loa Foundation, \$100,000
- Melzer, M.J. Jenkins, D., Cheng, Z. 2023-2026. Survey and management of coconut rhinoceros beetle to protect the watershed above Pearl Harbor. Hawaii Department of Land and Natural Resources, \$449,021
- Melzer, M.J. 2022. Core support for the Rapid Ohia Death (ROD) Statewide Outreach Specialist/Coordinator & Statewide initiatives. Department of Land and Natural Resources, \$37,000
- Melzer, M.J. 2022-2023. University of Hawaii's Huanglongbing Diagnostic Lab and survey. USDA-APHIS-PPQ Citrus Health, \$37,202
- Melzer, M.J. 2022-2023. Agrosecurity Lab Infrastructure. USDA-APHIS-PPQ Cooperative Agricultural Pest Survey – Infrastructure, \$103,500
- Melzer, M.J. 2022-2023. Hawaii Combined Survey. USDA-APHIS-PPQ Cooperative Agricultural Pest Survey. \$94,385
- Melzer, M.J. 2022-2023. Canine detection of coconut rhinoceros beetle in Hawaii. USDA-APHIS-PPQ Plant Protection Act 7721, \$378,408
- Melzer, M.J., Jenkins, D., Cheng, Z. 2022-2023. Response to coconut rhinoceros beetle in Hawaii. USDA-APHIS-PPQ Plant Protection Act 7721, \$1,945,492
- Melzer, M.J., Friday, J.B., Martin, C. 2022-2023. CGAPS Rapid Ohia Death. Hauoli Mau Loa Foundation, \$100,000
- Melzer, M.J. 2021-2022. The NCPN University of Hawaii. USDA-APHIS-PPQ National Clean Plant Network, \$17,261
- Melzer, M.J. 2021-2022. Agrosecurity Lab Infrastructure. USDA-APHIS-PPQ Cooperative Agricultural Pest Survey – Infrastructure, \$99,430
- Melzer, M.J. and Olmedo Velarde, A. 2021-2022. Survey for citrus leprosis and citrus fruit borer in Hawaii. \$30,733
- Melzer, M.J. 2021-2022. Hawaii bundled survey. USDA-APHIS-PPQ Cooperative Agricultural Pest Survey. \$63,652
- Melzer, M.J. 2021-2022. WPDN Agrosecurity Lab. USDA-NIFA (subaward from UC-Davis), \$25,000
- Melzer, M.J. 2021-2022. University of Hawaii's Huanglongbing Diagnostic Lab and survey. USDA-APHIS-PPQ Citrus Health, \$29,118
- Melzer, M.J., Cheng, Z., and Jenkins, D.M. 2021-2022. Response to coconut rhinoceros beetle in Hawaii. USDA-APHIS-PPQ Plant Protection Act 7721, \$2,530,282
- Melzer, M.J. 2021-2022. Canine detection of coconut rhinoceros beetle in Hawaii. USDA-APHIS-PPQ Plant Protection Act 7721, \$329,718
- Melzer, M.J. Friday, J.B., and Martin, C. 2021-2022. Rapid Ohia Death (ROD) Supplemental Request: ROD prevention outreach & diagnostics. Hauoli Mau Loa Foundation, \$100,000
- Melzer, M.J. and Olmedo-Velarde. 2021. Plant disease prevention capacity. Hauoli Mau Loa Foundation, \$30,000
- Melzer, M.J. 2017-2020. C-GAPS Biosecurity Graduate Assistant. Hauoli Mau Loa Foundation, \$37,804 (PI transfer from J. Leary)
- Melzer, M.J. 2019-2021. Survey for mango sudden decline and mango fruit rot in Hawaii. USDA-APHIS-PPQ Cooperative Agricultural Pest Survey, \$38,442 (PI transfer from J. Uchida)
- Melzer, M.J., Friday, J.B., and Martin, C. 2020-2021. Coordinating Group on Alien Pest Species – Rapid Ohia Death. Hauoli Mau Loa Foundation, \$100,000
- Melzer, M.J. 2020-2021. Core support for the Rapid 'Ōhi'a Death (ROD) Statewide Outreach Specialist/Coordinator. DLNR Division of Forestry and Wildlife, \$55,000
- Melzer, M.J. 2020-2021. Hawaii combined surveys. USDA-APHIS-PPQ Cooperative Agricultural Pest Survey, \$52,000
- Melzer, M.J. 2020-2021. The clean plant network in Hawaii. USDA-APHIS-PPQ National Clean Plant Network. \$20,000
- Melzer, M.J. 2020-2021. Canine detection of coconut rhinoceros beetle in Hawaii. USDA-APHIS-PPQ Plant Protection Act 7721, \$420,757
- Melzer, M.J. and Cheng, Z. 2020-2021. Response to coconut rhinoceros beetle in Hawaii. USDA-APHIS-PPQ Plant Protection Act 7721, \$1,999,224

Presentations at Conferences & Professional Meetings (*presenter)

- Melzer, M. 2024. Hawaii Report. WERA-20, Boise, ID.

- Wang, X.*, Larrea-Sarmiento, A., Galanti, R., Olmedo-Velarde, A., Melzer, M., and Hu, J. 2023. Identification and characterization of transmission vector of a new nucleorhabdovirus found on flowering ginger in Hawaii. Plant Health 2023, Denver, CO
- Paryavi, M.*, Weiser, K., Melzer, M., Ghorbani, R., and Jenkins, D. 2023. RhinoCam IoT – a distributed trap-surveillance system for coconut rhinoceros beetle connected to cellular network. American Society of Agricultural and Biological Engineers Annual Meeting, Omaha, NE
- Paryavi, M.*, Weiser, K., Melzer, M., and Jenkins, D. 2023. Aerial pesticide application for control of adult coconut rhinoceros beetle in palm trees. American Society of Agricultural and Biological Engineers Annual Meeting, Omaha, NE
- Melzer, M.*, Jenkins, D., and Cheng, Z. 2023. Chemical control of coconut rhinoceros beetle. Landscape Industry Council of Hawaii 2023 Green Industry Conference & Tradeshow, Honolulu, HI
- Melzer, M., 2023. WPDN Hawaii. Western Plant Diagnostic Network Regional Meeting, Denver, CO
- Vowell, T., and Melzer, M*. 2023. Army Natural Resources Program Oahu - CRB Projects. Makua and Oahu Implementation Team/Integrated Natural Resources Management Plan Meetings 2023, Honolulu, HI (online)
- Melzer, M. 2022. WPDN Update: Hawaii. National Plant Diagnostic Network Annual Meeting, Davis, CA
- Melzer, M. 2021. Exotic Pests and Diseases of Taro: Their threat to Hawaii and the Challenge of Developing Reliable Diagnostics. Virtual Invasive Pest Mini-Conference (online)
- Masang, N., Watanabe, S., Adams, B.-L., Olmedo-Velarde, A., Vowell, T., Kong, A., and Melzer, M*. 2021. From Diesel to DNA: Developing tools for Coconut Rhinoceros Beetle Management on Oahu. Hawaii Conservation Conference, Honolulu, HI (online)
- Olmedo-Velarde*, A., Melzer, M., Hu, J., Roy, A., and Bushe, B. 2020. Flat-mite transmitted viruses in Hawaii, a multi-crop study. WERA-20 Annual Meeting (online)
- Melzer, M. 2020*. WPDN 2020: Hawaii. Western Plant Diagnostic Network Annual Meeting, Tucson, AZ

Other Presentations

- Melzer, M*. 2025. Coconut rhinoceros beetle in Hawaii: Current Status and Future Actions. Hawaii Entomological Society
- Melzer, M* and Jenkins, D*. 2025. Wireless trap surveillance, remotely piloted aerial pesticide application, and light mediated behavior modification: new tools for management of coconut rhinoceros beetle. USDA-APHIS-PPQ-S&T Domestic & Emergency Scientific Support webinar (online)
- Melzer, M*. 2024. Coffee rust in Hawaii. Western Horticultural Inspection Society Annual Meeting (online)
- Melzer, M*. 2024. Orchid fleck virus, a new concern for Hawaii's orchid and citrus growers. Honolulu Orchid Society
- Melzer, M*. 2021. Exotic Pests and Diseases of Taro: Their threat to Hawaii and the Challenge of Developing Reliable Diagnostics. Virtual Invasive Pest Mini-Conference (online)