

Joshua H. S. Silva
College of Tropical Agriculture and Human Resources
Department of Tropical Plant and Soil Sciences
FTE Distribution: 0% I; 0% R; **100% E**

Education

<u>Degree</u>	<u>University</u>	<u>Major</u>
Bachelors	University of Hawaii, Mānoa	Natural Resources and Environmental Management
Masters	University of Hawaii, Mānoa	Tropical Plant and Soil Sciences

Professional Appointments

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Associate Extension Agent	University of Hawaii	2022 to Present
Assistant Extension Agent	University of Hawaii	2017 to 2022
Junior Extension Agent	University of Hawaii	2015-2017
Junior Researcher	University of Hawaii	2014-2015
Junior Specialist	University of Hawaii	2014
Junior Researcher	University of Hawaii	2013-2014

Publications (reverse chronological order)

Refereed Journal Publications

Klair, D., **Silva, J.**, Arizala, E.D., Boluk, G., Dobhal, S., Ahmad, A.A., Uyeda, J., Alvarez, A.M., and M. Arif. 2021. First Report of *Pectobacterium brasiliense* causing soft rot on mizuna (*Brassica rapa* var. *japonica*) in the United States. *Plant Disease*.

Klair, D., Boluk, G., **Silva, J.**, Arizala, E.D., Dobhal, S., and M. Arif. 2021. First Report of Soft Rot Disease on Pak Choi (*Brassica rapa* subsp. *chinensis*) caused by *Pectobacterium brasiliense* in the USA. *Plant Disease*.

Arizala, E.D., Dobhal, S., Paudel, S., Boluk, G., **Silva, J.**, Ahmad, A.A., Uyeda, J., Sugano, J., Alvarez, A.A., and M. Arif. 2020. First Report of *Pectobacterium brasiliense* causing Bacterial Soft Rot and Blackleg diseases of potato in Hawaii. *Plant Disease* 104(9): 2515.

Boluk, G., Arizala, E.D., Ocenar, J., Mokwele, J., **Silva, J.**, Dobhal, S., Uyeda, J., Alvarez, A.M., and M. Arif. 2020. First Report of *Pectobacterium brasiliense* Causing Soft Rot on *Brassica oleracea* var. *sabellica* L. in the United States. *Plant Disease* 104(10): 2721.

Hesler, L.S., W.D. Perreira, D.A. Yee, and **J.H.S. Silva**. 2019. New Records of Coccinellidae (Coleoptera) from Hawai'i, USA. *The Coleopterists Bulletin* 73(2): 382-386.

Matanane, L., M.K. Fialkowski, **J. Silva**, F. Li, C. Nigg, R.T. Leon Guerrero, and R. Novotny. 2017. Para I Famagu'on-Ta: Fruit and Vegetable Intake, Food Store Environment, and Childhood Overweight/Obesity in the Children's Healthy Living Program on Guam. *Hawaii J. Med. Public Health* 76(8): 225-233.

Silva, J.H.S., Deenik, J.L., Yost, R.S., Bruland, G.L., Crow, S.E. 2015. Improving clay content measurement in oxidic and volcanic ash soils of Hawaii by increasing dispersant concentration and

ultrasonic energy levels. *Geoderma* 237-238: 211-223.

Extension Publications

Kirk, E., **Silva, J.**, Keach, J., Hampton, M., and C. Hanakawa. 2023. Needs and Interests of Experienced Hawai'i Seed Savers. College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, Pub. SA-24. Honolulu, HI. pp. 1-3.

Gutierrez-Coarite, R., Tavares, K., Uyeda, J., and **J. Silva**. 2023. Evaluation of Amulet™ C-L Fruit Fly Bait Stations and Roosting Host Plants for the Control of Melon Fruit Fly on Zucchini Crops. College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, Pub. IP-54. Honolulu, HI. pp. 1-4.

Braley, L., Wang, K-H., **Silva, J.**, Yan, T., Nakamoto, S., and Su, W.W. Repurposing Papaya: Examining the Potential of Instant Biofumigation Using Papaya Seed Waste for Soil-borne Disease Management on Leafy Greens. College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, Pub. PD-123. Honolulu, HI. pp. 1-7.

Tavares, K., **Silva, J.**, and N. Ooki. 2021. Tropical Cyclone Emergency Management for Farmers. College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa. Honolulu, HI. <https://cms.ctahr.hawaii.edu/ER/Hurricanes>

Hubanks, H., **Silva, J.**, and K. Tavares. 2021. Food Safety and Conservation Co-Management: A Guide for Hawai'i Growers. College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, Pub. SA-20. Honolulu, HI. pp. 1-28.

Reppun, F., **Silva, J.H.S.**, Wong, K., and J.L. Deenik. 2017. A Soil Phosphorus Primer for Hawaiian Soils. College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, Pub. SCM-33. Honolulu, HI. pp. 1-5.

Fukumoto, G.K., Thorne, M.S., **Silva, J.H.**, and J.L. Deenik. 2016. Suitability Map for Forage-Finished Beef Production Using GIS Technology: Kaua'i Island. College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, Pub. PRM-10. Honolulu, HI. pp. 1-6.

Fukumoto, G.K., Thorne, M.S., **Silva, J.H.**, and J.L. Deenik. 2016. Suitability Map for Forage-Finished Beef Production Using GIS Technology: Maui Island. College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, Pub. PRM-9. Honolulu, HI. pp. 1-8.

Fukumoto, G.K., Thorne, M.S., **Silva, J.H.**, and J.L. Deenik. 2015. Suitability Map for Forage-Finished Beef Production Using GIS Technology: Hawai'i Island. College of Tropical Agriculture and Human Resources, University of Hawai'i at Mānoa, Pub. PRM-9. Honolulu, HI. pp. 1-6.

Government Technical Bulletin

Matsunaga, J.N. and **J. Silva**. 2020. Avocado Lace Bug: *Pseudacysta perseae* (Heidemann). New Pest Advisory. State of Hawaii Department of Agriculture. <https://hdoa.hawaii.gov/pi/files/2020/04/Avocado-lace-bug-NPA-3-31-20-FINAL.pdf>

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

Extension Newsletter Articles

Ahmad, A., Radovich, T., Uyeda, J., **Silva, J.**, Collier, E., Rodriguez, G., and S. Meaney. Hānai 'Ai Newsletter 56: October, November, December 2024. Evaluating New Sweet Corn Varieties for Maize Dwarf Virus (MDV) Resistance Under Hawaii Conditions. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-5.

Ricordi, A. and **J. Silva**. Hānai 'Ai Newsletter 55: July, August, September 2024. Comparison of coco coir, sphagnum moss and potting mix for air layer production of 'ulu (breadfruit, *Artocarpus altilis*) Ma'afala. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-6.

Ricordi, A., **Silva, J.**, Weiser, K., Melzer, M., and R. Huizingh. Hānai 'Ai Newsletter 55: July, August, September 2024. Field Study to compare the effectiveness of OneGuard, Imajet10, and Nanotek2000 in preventing damage from Coconut Rhinoceros Beetle in Waipio, Oahu, Hawaii. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-6.

Wang, K-H., Paudel, R., Mew, J., and **J. Silva**. Akamai Cover Crop Mix (White clover, buckwheat, black oat): Does it benefit soil health? Hānai 'Ai Newsletter 52: October, November, December 2023. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-8.

Ricordi, A. and **J. Silva**. Preliminary Trials on Use of Essential Oils for IPM of Coconut Rhinoceros Beetle. Hānai 'Ai Newsletter 52: October, November, December 2023. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-5.

Silva, J. 2023. Netting for Physical IPM of Coconut Rhinoceros Beetle. Hānai 'Ai Newsletter 51: July, August, September 2023. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-4.

Gutierrez-Coarite, R., Uyeda, J., **Silva, J.**, and K. Tavares. 2023. Diamondback Moth Management with Organic and Conventional Insecticides. Hānai 'Ai Newsletter 51: July, August, September 2023. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-4.

Pitiki, M., Wiseman, B., Wong, L., Sipes, B., **Silva, J.**, Uyeda, J., Manandhar, R., and K.H. Wang. 2023. Sustainable Pest and Soil Health Management for Sweet Potato Production. Hānai 'Ai Newsletter 51: July, August, September 2023. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-8.

Wang., K.H., Mew, J., and **J. Silva**. 2023. Akamai Cover Crop Mix: How to Establish? Partial Cost Analysis and Its Benefits. Hānai 'Ai Newsletter 50: April, May, June 2023. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-6.

Chung, P., Hanakawa, C., Ahmad, A., Uyeda, J., Lau, T., **Silva, J.**, and J. Sugano. 2023. Growing Lettuce Under Shade Conditions. Hānai 'Ai Newsletter 50: April, May, June 2023. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-4.

Silva, J., Tavares, K., Hawkins, J., and E. Kirk. 2022. Sound Cannons for Bird Deterrence: Regulations and Noise Complaints. Hānai 'Ai Newsletter 45: Jan, Feb, March 2022. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-2.

Silva, J., Deenik, J., Maaz, T., Uyeda, J., and A. Krenz. 2022. Reducing Fertilizer Requirements

through Sunn Hemp Cover Cropping. Hānai 'Ai Newsletter 45: Jan, Feb, March 2022. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-3.

Silva, J., Radovich, T., Bryant, G., and E. Palko. 2021. Basil Variety Trial: Beetle Susceptibility, Flowering and Internode Traits. Hānai 'Ai Newsletter 42: April, May, June 2021. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-4.

Tavares, K., **Silva, J.**, and N. Ooki. 2021. Tropical Cyclone Emergency Management for Farmers. Hānai 'Ai Newsletter 42: April, May, June 2021. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-2.

Wang, K.H., Budhathoki, S., Pugh, M., Shikano, I., **Silva, J.**, Uyeda, J., Manandhar, R., and B.S. Sipes. 2021. Insecticide Resistance Management for Diamondback Moth in Organic Farms: Integration of Trap Cropping, Intermittent Sprinkler Irrigation, and Biological Control. Hānai 'Ai Newsletter 41: Jan, Feb, March 2021. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-3.

Tavares, K., **Silva, J.**, and S. Wages. 2021. Produce Safety and On-Farm Flooding. Hānai 'Ai Newsletter 41: Jan, Feb, March 2021. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-3.

Silva, J. 2020. Downy Mildew Resistant Basil Variety Trials on O'ahu: Results from 2018-2019. Hānai 'Ai Newsletter 39: Fall 2020. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-5.

Silva, J., Tavares, K., and R. Shimabuku. 2020. Bagrada Bug: A Summertime Pest of Brassica. Hānai 'Ai Newsletter 39: Fall 2020. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-4.

Taniguchi, A., **Silva, J.**, Spinelli, G., Uyeda, J., Ahmad, A., Wang, K-H, and Sugano, J. 2020. Making Irrigation Decisions Using Tensiometers. Hānai 'Ai Newsletter 39: Fall 2020. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-4.

Tavares, K., Uyeda, J., and **J. Silva**. 2020. Conducting a Seed Germination Test: Why and How. Hānai 'Ai Newsletter 39: Fall 2020. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-5.

Ahmad, A., Uyeda, J., Radovich, T., Wages, S., **Silva, J.**, Kirk, E., Tavares, K., and Sugano, J. 2020. Guava Fruit Bagging for Bird and Fruit Fly Damage Control. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 39: Fall 2020. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-5.

Budhathoki, S., Wang, K-H., Waisen, P., Maeda, M., Paudel, R., **Silva, J.**, Manandhar, R., Uyeda, J., and B. Sipes. 2020. Using Trap Crops and Entomopathogenic Nematodes to Manage Caterpillar Pests on Head Cabbage. Hānai 'Ai Newsletter 38: Summer 2020. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-9.

Silva, J. 2020. Tipburn-Tolerant Butterhead Lettuce Substitutes for 'UH Manoa' Lettuce: On-Farm Field Trial, September 2019. Hānai 'Ai Newsletter 37: Spring 2020. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-6.

Ahmad, A., N.V. Hue, **J. Silva**, J. Uyeda, J. Sugano, T.J.K. Radovich, L. Nakamura-Tengan, S. Motomura, and K. Tavares. Evaluating Different Varieties and Biochar Application Rates on the Yield of Soybean. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 35: Fall 2019. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-4.

Spinelli, G., J. Uyeda, **J. Silva**, L. Okumura, A. Taniguchi & J. Sugano. Design of a Small- Scale Off-Grid Hydroponic System for Screen House Leafy Vegetable Production. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 34: Summer 2019. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-15.

Sugano, J., G. Spinelli, **J. Silva**, A. Taniguchi, L. Okumura, G. Teves, J. Bost, A. Ahmad and J. Uyeda. Field Screening of Various Lettuce Cultivars for Tip Burn Tolerance in Hawai'i. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 34: Summer 2019. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-7.

Spinelli, G., **J. Silva**, J. Uyeda, A. Taniguchi, L. Okumura, T. Radovich & J. Sugano. Electric Fence: Non-Chemical Wild Pig Deterrent. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 34: Summer 2019. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-10.

Taniguchi, A., L. Okumura, G. Spinelli, **J. Silva**, J. Uyeda, & J. Sugano. The Importance of Testing pH and EC in Agriculture. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 34: Summer 2019. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-5.

Bryant, G., T. Radovich, J. Sugano, A. Ahmad, J. Uyeda, **J. Silva**, and K.H Wang Organic Screenhouse Trial of TYLC Resistant Tomatoes: Preliminary Results. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 34: Summer 2019. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-3.

Silva, J., J. Sugano, and J. Uyeda. Celery Variety Trial: Preliminary Results, July 2018. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 33: November 2018-January 2019. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-6.

Silva, J., J. Sugano, and J. Uyeda. Downy Mildew Resistant Basil Variety Trial: Preliminary Results, August 2018. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 33: November 2018-January 2019. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-5.

Tavares, K.W., **J. Silva**, and S. Wages. On-Farm Readiness Review: A FSMA Resource for Farmers. Hānai 'Ai Newsletter 33: November 2018-January 2019. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-3.

Sugano, J., L. Okumura, **J. Silva**, J. Uyeda, and K.H. Wang. Scaling up Māmaki (*Pipturus albidus*) in Non-Forest Areas for Commercial Production. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 33: November 2018-January 2019. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-11.

Tavares, K.W. J. Uyeda, **J. Silva**, S. Wages, J. Sugano, and L. Nakamura-Tengan. In-Field Irrigation Water Treatment for the Food Safety Modernization Act Produce Safety Rule. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 33: November 2018-January 2019. University of

Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-2.

Sugano, J., L. Okumura, **J. Silva**, J. Uyeda, T. Radovich, S. Motomura-Wages, R. Corrales, K.H. Wang. Use of Resistant Varieties in Combination with Screen Systems. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 32: March-May 2018. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-8.

Uyeda, J., **J. Silva**, J. Sugano, L. Nakamura-Tengan, J. Zee, N. Ooki, S. Wages, K. Wong, K.H. Wang, T. Radovich, A. Ahmad. Evaluation of Multi-colored Carrot Varieties 2018. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 32: March-May 2018. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-14.

Silva, J., J. Uyeda, S. Fukuda, R. Corrales, D. Ogata, and J. Sugano. Soybean Variety Trial: Fall 2017. Sustainable and Organic Agriculture Program. Hānai 'Ai Newsletter 31: December 2017-February 2018. University of Hawaii at Mānoa. College of Tropical Agriculture and Human Resources. pp. 1-6.

Extension Videos, Web-Based Applications

Silva, J., Kirk, E., Wang, K-H., and Z. Freeman. 2024. Hawaii Basil IPM Webinar. <https://youtu.be/za7seMPYp7E?si=jzC8k-By4qZhQFz6>

Silva, J. 2022. Netting Dwarf Coconut Trees to Manage Coconut Rhinoceros Beetle. UH Cooperative Extension. <https://www.youtube.com/watch?v=S8ifHs22uBk>

Silva, J. and S. Motomura-Wages. 2020. Cleaning and Sanitizing. UH Farm Food Safety, Cottage Industry Series. <https://youtu.be/LxOhIgLv5o?si=LbZ0Galk0vIDJk1h>

Silva, J. and S. Motomura-Wages. 2020. Cross Contamination. UH Farm Food Safety, Cottage Industry Series. <https://youtu.be/hFcGtolHhAQ?si=XPO5aROFazN1W8Ti>

Silva, J. and S. Motomura-Wages. 2020. Storage and Refrigeration. UH Farm Food Safety, Cottage Industry Series. <https://youtu.be/SOLjx3xZL6M?si=URcIbjqOFX5G9LDr>

Silva, J. and S. Motomura-Wages. 2020. Washing Produce. UH Farm Food Safety, Cottage Industry Series. https://youtu.be/2Ieeby7sBas?si=rMK_537MkDZUByN

Silva, J. and S. Motomura-Wages. 2020. Worker Hygiene. UH Farm Food Safety, Cottage Industry Series. <https://youtu.be/vw7tmazgJII?si=-NPobNmFdIhZV1uX>

Ooki, N., **J. Silva**, A. Kawabata, E. Kirk, J. St. Pierre. 2018. *Agriculture in Hawai'i*. Google Expeditions app, Google. Available online at: <https://poly.google.com/view/2GXsp3pbOR->

Ooki, N., K. Caires, S. Canfield, L. Fujitani, A. Kaufman, K. Matsumoto, G. Morinaga-Kama, L. Nakamura-Tengan, C. Nazario-Leary, **J. Silva**, J. Sugano, K. Tavares, J. Uyeda. 2019. "Diversity in Agriculture". Available online at: <http://manoa.hawaii.edu/ctahr/dia/>

Nakamura-Tengan, L., L. Castro, C. Nazario-Leary, N. Ooki, R. Shimabuku, **J. Silva**, and K. Wong. 2017. "Rat Lungworm Disease Awareness". <https://www.youtube.com/watch?v=8PzqNrcMlzk>

Wong, K. and **J. Silva**. 2017. “How To: Rapid Soil Nitrate Testing”.
<https://www.youtube.com/watch?v=PFeY7yUnOuW>

Silva, J., S. Henriques. 2017. How to Make Soil Blocker Pots: Part 1. Youtube, Kauai Master Gardeners. https://www.youtube.com/watch?v=o_5Tr-VENJA

Silva, J., S. Henriques. 2017. How to Make Soil Blocker Pots: Part 2. Youtube, Kauai Master Gardeners. https://www.youtube.com/watch?v=SAqb83_lgkY

Grant Support

Principal Investigator

Title: Improving Produce Safety for Organic Production Using Natural Biocontrol Strategies

Source: USDA NIFA: University of Connecticut Subaward

Dollar Value: \$98,593.79 (Contribution: 80%)

Dates: September 1, 2024 – August 31, 2028

Title: Low-Carbon Fertilizer Production from Tropical Biomass Gasification

Source: Simonpietri Enterprises, LLC (US ED)

Dollar Value: \$24,941.94 (Contribution: 80%)

Dates: June 28, 2023 – March 27, 2024

Title: Act 136, SLH 2022 GAP Audit Food Safety Training Program

Source: Hawaii Department of Agriculture

Dollar Value: \$238,321 (Contribution: 80%)

Dates: June 16, 2023 – June 15, 2025

Title: Protecting Hawaii’s Chinese Cabbage, Mustard Greens, and Brassica Industry from New Soilborne Bacterial, Fungal, and Viral Diseases

Source: Hawaii Department of Agriculture, Specialty Crop Block Grant

Dollar Value: \$38,386 (Contribution: 80%)

Dates: January 1, 2022 – August 31, 2023

Title: Food Safety Modernization Act Produce Safety Rule Outreach and Education FY 2021

Source: Hawaii Department of Agriculture

Dollar Value: \$55,770 (Contribution: 80%)

Dates: February 1, 2021 – June 30, 2021

Title: Building Competencies in Hawaii’s Agricultural Professionals and Stakeholders in Under-Represented Agricultural Communities Through Collaborative Partnerships

Source: Western SARE

Dollar Value: \$75,000 (Contribution: 60%)

Dates: October 1, 2019 – September 30, 2022

Title: Effects of Field-Applied Water Sanitizers on Tropical Soil and Plant Health

Source: Hawaii Farm Bureau Federation

Dollar Value: \$54,500 (Contribution: 100%)

Dates: January 1, 2019 – February 28, 2021

Title: Soil Carbon Inventory and Working Lands Baseline

Source: Hawaii State Office of Planning, Business, Economic Development and Tourism

Dollar Value: \$60,000 (Contribution: 50%)

Dates: March 1, 2019 – February 28, 2021

Title: Crop-Specific Fertilizer Schedules to Improve Nitrogen Fertilizer Management for High-Value, Short-Season Vegetables and Herbs on Oahu

Source: CTAHR, Supplemental Funding

Dollar Value: \$76,000 (Contribution: 90%)

Dates: October 1, 2018 – September 30, 2020

Title: Evaluating Vegetable, Fruit, and other Specialty Crop Varieties for the Diverse Cropping Systems on Oahu

Source: CTAHR (Contribution: 90%)

Dollar Value: \$14,500

Dates: January - June 2018

Title: Updated Melon Fly Resistance and Control Programs for Hawaii.

Source: CTAHR, Statewide IPM Project-USDA NIFA

Dollar Value: \$4,600 (Contribution: 70%)

Dates: April 2018 – March 2019

Title: Food Safety Education for the Cottage Industry and Farmer's Market Groups.

Source: Western Regional Center to Enhance Food Safety

Dollar Value: \$15,250 (Contribution: 70%)

Dates: August 1, 2017- June 29, 2018

Co-Investigator

Title: Enhancing Food Safety Training Capacity to Support Hawai'i's Small Processors and Sprout Growers

Source: USDA NIFA

Dollar Value: \$109,090 (Contribution 5%)

Dates: 2024-2027

Title: Farmer-Driven Evaluation and Adoption of an Artificial Intelligence-Enhanced Weather-Based Irrigation Scheduling Tool in Hawaii via Intensive On-Farm Trials

Source: USDA NRCS

Dollar Value: \$2,425,773 (Contribution 5%)

Dates: 2024-2029

Title: Improving Banana and Taro Local Production with Plantlets/Hulies and Education Program

Source: Hawaii Department of Agriculture

Dollar Value: \$60,000 (Contribution 5%)

Dates: 2024-2026

Title: Estimating the Application Rate of Locally Produced Liquid Organic Fertilizer to Meet Crop N Requirement

Source: Western SARE

Dollar Value: \$74,547 (Contribution 25%)

Dates: 2023-2026

Title: Pacific Food Safety Education Training Collaborative

Source: USDA NIFA

Dollar Value: \$59,971 (Contribution 50%)

Dates: 2023-2026

Title: Increasing the number of sweet potato storage roots to increase the yield of sweet potato crops in Hawaii

Source: Hawaii Department of Agriculture

Dollar Value: \$40,000 (Contribution 5%)

Dates: 2023-2025

Title: Hawai'i Climate Smart Commodities: A Portfolio Approach to Equitably Scaling the Agriculture Sector

Source: USDA-NRCS

Dollar Value: \$11,267,322 (Contribution 5%)

Dates: 2022-2025

Title: Limited-English and Immigrant Farmer Education (LIFE): Improving Access to Support Services for Hawaii's Agricultural Population with Limited English Proficiency

Source: USDA-NIFA-2501

Dollar Value: \$743,667 (Contribution: 10%)

Dates: 2022-2025

Title: GoFarm Hawaii (GFH): Growing Hawaii's Agricultural Workforce and Industry

Source: USDA-NIFA-ANNH

Dollar Value: \$370,360 (Contribution: 5%)

Dates: 2022-2025

Title: Evaluating the Growth and Yield of Celery and Cilantro Varieties Statewide to Increase Local Production

Source: Hawaii Department of Agriculture-Specialty Crop Block Grant Program

Dollar Value: \$55,000 (Contribution: 5%)

Dates: 2022-2025

Title: **Support Development of the Western Cover Crops Council and Enhance Cover Crop Educational Resources and Adoption in the Western U.S.**

Source: USDA-NRCS

Dollar Value: \$26,149 (Contribution: 10%)

Dates: 2022-2025

Title: **GoFarm Hawaii (GFH): Training New Farmers and Growing Agribusiness in Hawaii**

Source: USDA-NIFA-ANNH

Dollar Value: \$450,000 (Contribution: 5%)

Dates: 2021-2023

Title: **Engaging Asian American and Pacific Islander (AAPI) Grower Educational Needs for Safe Fruit & Vegetable Production in HI & CA**

Source: USDA NIFA-Food Safety Outreach Program

Dollar Value: \$ 545,600 (Contribution: 30%)

Dates: 2021 - 2024

Title: **Cover Crop Mix for Orchard or Trellis Fruit and Vegetable Crops: Better Soil Health and Weed Management in Hawaii**

Source: USDA NRCS Conservation Innovation Grants

Dollar Value: \$ 60,488.18 (Contribution: 20%)

Dates: September 15, 2021 – September 14, 2023

Title: **Building Hawai'i's Capacity for Produce Safety Education**

Source: Hawaii Department of Agriculture, Specialty Crop Block Grant

Dollar Value: \$35,000 (Contribution: 5%)

Dates: April 1, 2021 – March 31, 2023

Title: **Producer-driven implementation of Soil Health Management Systems adapted to diverse cropping systems in tropical and subtropical island regions**

Source: USDA NRCS Conservation Innovation Grants

Dollar Value: \$1,984,441 (Contribution: 5%)

Dates: January 1, 2021 – December 31, 2022

Title: **Assessing dead-end trap crops for the management of diamondback moths in Hawaii**

Source: Hawaii Department of Agriculture, Specialty Crop Block Grant

Dollar Value: \$39,867 (Contribution: 5%)

Dates: January 1, 2021 – December 31, 2022

Title: **Leveraging established research plantings of breadfruit (*Artocarpus altilis*) to understand drivers of fruit quality and its impact on post-harvest processes and**

profits

Source: USDA NIFA

Dollar Value: \$497,302 (Contribution: 5%)

Dates: September 1, 2020 – August 31, 2025

Title: **Farm Food Safety Training for Local and Immigrant Crop Producers in Hawaii**

Source: USDA NIFA

Dollar Value: \$200,000 (Contribution: 5%)

Dates: September 1, 2020 – August 31, 2022

Title: **Instant Biofumigation Using Natural Products From Papaya Seed Waste for Sustainable Management of Soil-borne Plant Pathogens**

Source: Western SARE

Dollar Value: \$349,995 (Contribution: 10%)

Dates: May 1, 2020 – April 30, 2023

Title: **Implementing Soil Management Strategies and Soil Testing Technologies to Reduce Nutrient Loading for Intensive Farms on Oahu**

Source: Hawaii State Department of Health

Dollar Value: \$349,518 (Contribution: 30%)

Dates: August 1, 2019 – July 31, 2022

Title: **Hawaii Integrated Pest Management Program for Diamondback Moth and other Lepidopteran pests on Crucifers**

Source: Hawaii State Department of Agriculture

Dollar Value: \$ 46,400 (Contribution: 10%)

Dates: August 1, 2019 – June 30, 2022

Title: **Selecting Pigeon Pea and Green Bean Varieties for Market Preference, Value-added Products, and Other Benefits**

Source: Hawaii Department of Agriculture, Specialty Crop Block Grant

Dollar Value: \$40,000 (Contribution: 5%)

Dates: February 1, 2019 – January 31, 2022

Title: **Soil Health Management for Organic Cucumber Production: Impacts on Pollen Nutrition for Honey Bees and Host Plant Resistance against Pathogens**

Source: USDA NIFA

Dollar Value: \$1,950,743 (Contribution: 5%)

Dates: October 1, 2018 – September 30, 2022

Title: **Macro-propagation techniques for disease free banana planting material in the Pacific**

Source: Hawaii Department of Agriculture, Specialty Crop Block Grant

Dollar Value: \$39,557 (Contribution: 5%)

Dates: January 1, 2018 – December 31, 2019

Title: Soil health friendly biofumigation using brown mustard and oil radish cover crops for soil-borne disease management

Source: NRCS CIG (Contribution: 5%)

Dollar Value: \$74,995

Dates: September 1, 2018 – August 31, 2021

Title: Integrated Pest Management of *Bagrada hilaris*

Source: CTAHR, Statewide IPM Project-USDA NIFA

Dollar Value: \$9,600 (Contribution: 10%)

Dates: October 1, 2017 – September 30, 2020

Title: Whitmore Project: Applied Research/ Extension Support

Source: Hawaii Department of Agriculture

Dollar Value: \$23,496 (Contribution: 10%)

Dates: July 1, 2017 – June 30, 2018

Title: Small Farm Agricultural Water Monitoring and Treatment Multilingual Training Videos

Source: Western Regional Center to Enhance Food Safety

Dollar Value: \$17,750 (Contribution: 5%)

Dates: July 1, 2017 – June 29, 2018

Title: Investigating New, Rapid Soil Analytical Tools to Enhance Agricultural Nutrient Management in Maui County

Source: CTAHR Maui County-Office of Economic Development

Dollar Value: \$12,860.10 (Contribution: 20%)

Dates: March 2017-February 2018

Presentations at Conferences

Title: Bridging the “GAP” in Farm Food Safety Requirements: Understanding FSMA, OFRR, and Third-Party Audits

Authors: Silva, J.* and K. Tavares

Conference: Hawaii Agriculture Conference

Location: Honolulu, HI

Date: October 2019

Title: Current and Upcoming Food Safety Projects: Animals, Bubbles, and Sanitizers

Authors: Silva, J.*

Conference: Hawaii Agriculture Conference

Location: Honolulu, HI

Date: October 2019

Title: Pre-Emergent Herbicides and Hand-Weeding for Perennial and Annual Weed Management in Hawaii Green Onion Field Systems

Authors: Silva, J.*, J. Uyeda, K.H. Wang, J. Sugano, and A. Ahmad

Conference: American Society for Horticultural Sciences Conference

Location: Las Vegas, NV

Date: July 2019

Title: **Food Safety Education for the Cottage Industry and Farmers' Market Groups**

Authors: **Silva, J.*** and S. Motomura-Wages

Conference: Western Regional Center to Enhance Food Safety, 2nd Annual Meeting

Location: Davis, CA

Date: March 2018

Title: **Slug and Snail Management for Reducing Food Safety Risks and Plant Damage**

Authors: **Silva, J.***

Conference: Landscape Industry Council of Hawaii Green Industry Annual Conference

Location: Honolulu, HI

Date: October 2017

Title: **Farm Food Safety: a critical tool to access new markets and maintain food quality**

Authors: **Silva, J.*** and K. Wong

Conference: Hawai'i Agriculture Conference

Location: Honolulu, HI

Date: August 2017