

Arnold H. Hara  
2010-2019

**GOV. MSG. NO. 568**

Dept. of Plant and Environmental Sciences, CTAHR, University of Hawaii at Manoa  
Komohana Research & Extension Center, 875 Komohana St. Hilo, HI

**EDUCATION:** University of Hawaii at Manoa, B.S. Entomology , M.S. Entomology  
University of California, Davis, Ph.D. Entomology

**LIFETIME AND FELLOW ACHIEVEMENT AWARDS:**

- Hawaii Island Landscape Association Kupuna Award, Nov 2014
- Above and Beyond Award 2013 Honorable Mention, First Annual Hawaii Invasive Species Council Awards
- Hawaii Export Nursery Association, Hawaii MIDPAC Hall of Fame 2012
- Hawaii Florist & Shippers Association & Hawaii Floriculture & Nursery Association Award Recipient 2012
- Excellence in Research Award, UH-CTAHR, 2011
- Governor's State TEAM of the Year Award, Quarantine First Respon Best Educational Display on
- Invasive Species, 55<sup>th</sup> Annual Hilo Orchid Society Show, 2007
- Aurora Gold Award for "Coqui Frog Invasion in Hawaii", 2005
- Hawaii Export Nursery Association, Mid-Pacific Exposition, Best Booth Award, 2005
- Excellence in Extension Award for Outstanding Performance and Results, UH-CTAHR, 2005
- Certificate of Appreciation, Chrysanthemum white rust, USDA, APHIS, 2004
- Distinguished Achievement Award in Regulatory Entomology, Entomological Society of America, 2000
- Outstanding Service to Hawaii Florists and Shippers Association, 2000
- Epsilon Sigma Phi, 1998, IPM Implementation Team Award
- Gamma Sigma Delta, 1991, Outstanding Extension Person
- Nominated 1998 Society of American Florists Alex Laurie Award for Research & Extension

**PUBLICATIONS (1982-2014):**  
ders Team 2010

**PROFESSIONAL APPOINTMENTS:**

Professor Emeritus and Noncompensated employee	UH CTAHR	2016–present
Professor & Entomologist, 50% Research, 50% Extension.	UH CTAHR	1991-2015.
Associate Professor & Entomologist ,50% Research, 50% Extension.	UH CTAHR	1987-1991, Tenured 1987
Assistant Professor & Entomologist 70% Research, 30% Extension.	UH CTAHR	1982 - 1987.

**MAJOR RESPONSIBILITIES:**

Dr. Hara has been with the University of Hawaii for over 35 years focusing on insect and mite pests of agricultural and floricultural crops, elucidating the bionomics of these pests, and developing pest management programs that minimize the use of chemical pesticides. Dr Hara innovates preharvest and postharvest control treatments in a systems approach to quarantine security for floricultural crops to meet stringent interisland, interstate and foreign quarantine regulations. Some of his research accomplishments include the development of heat treatments to control quarantine pests, including the invasive coqui frog. As a Professor Emeritus, Dr. Hara continues his research and extension activities on major invasive species seriously impacting the Hawaiian Islands, including the little fire ant and coqui frog.

**PUBLICATIONS (2013-2019):**

**BOOK CHAPTERS**

**Hara, A. H., Kishimoto, C. M. and Niino-DuPonte, R. Y. 2013.** Host Range of the Nettle Caterpillar *Darna pallivitta* (Moore) (Lepidoptera: Limacodidae) in Hawai'i, pp. 183-191, *In* Jorge E. Peña [ed.], Potential Invasive Pests of Agricultural Crop Species. CAB International, UK.

#### ARTICLES IN REFEREED JOURNALS

- Roda A, Millar JG, Jacobsen C, Veasey R, Fujimoto L, Hara A, McDonnell, R. 2019.** A new synthetic lure for management of the invasive giant African snail, *Lissachatina fulica*. PLoS ONE 14(10): e0224270. <https://doi.org/10.1371/journal.pone.0224270>
- Benevides, F.L., W.J. Mautz, C.M. Jacobsen, and A.H. Hara. 2019.** Estimating density of calling male *Eleutherodactylus coqui* in Hawaii from audio recordings of the nighttime frog chorus. *Bioacoustics* 28: 101-114.
- Myers, R. Y., C.L. Mello, B. Bushe, J. Lichty, A.H. Hara, and B.S. Sipes. 2019.** Evaluation of fluopyram against *Radopholus similis* in *Anthurium andraeanum*. *Plant Disease* (submitted 09/18).
- Cabral, S.K., A.H. Hara, and R.Y. Niino-DuPonte. 2017.** Response of little fire ant (Hymenoptera:Formicidae) colonies to insect growth regulators and hydramethylnon. *Proceedings of the Hawaiian Entomol. Society* 49:1-10.
- Hara, A.H., Aoki, K. L., Cabral, S. K. and Niino-DuPonte, R. Y. 2014.** Attractiveness of Gel, Granular, Paste and Solid Formulations of Ant Bait Insecticides to the Little Fire Ant, *Wasmannia auropunctata* (Roger) (Hymenoptera: Formicidae). *Proc. Hawaii. Entomol. Soc.* 46: 45-54.
- Hollingsworth, R.G., F. Calvert and A. H. Hara. 2012.** *Dichromothrips smithi* (Zimmermann), a new thrips species infesting bamboo orchids *Arundina graminifolia* (D. Don) Hochr. And commercially grown orchids in Hawaii. *Proc. Hawaii. Entomol. Soc.* 44:1-9.
- Cabos, R.Y.M., M.M.C. Tsang, A.H. Hara, and A. Kawabata. 2012.** Eradication of *Rotylenchulus reniformis* from a volcanic cinder medium using steam sterilization. *Nematropica* 42: 245-252.
- Cabos, R.Y.M. A.H. Hara, and M.M.C. Tsang. 2012.** Hot water drench treatment for control of reniform nematodes in potted dracaena. *Nematropica* 42:72-79.
- Hara, A. H., S. K. Cabral, R. Y. Niino-DuPonte, C. M. Jacobsen and K. Onuma. 2011.** Bait insecticides and hot water drenches against the little fire ant, *Wasmannia auropunctata* (Roger) (Hymenoptera: Formicidae) infesting containerized nursery plants. *Florida Entomol.* 94: 517-526.
- Marr, S. R., S. A. Johnson, A. H. Hara, M. E. McGarrity. 2010.** Preliminary evaluation of the potential of the helminth parasite *Rhabdias elegans* as a biological control agent for invasive Puerto Rican coquí (*Eleutherodactylus coqui*) in Hawaii. *Biological Control* 54: 69-74.
- Tsang, M.M.C., A. H. Hara and M. H. Shintaku. 2010.** Thermal tolerance of propagative anthurium stem cuttings to disinfestation by heat treatment for burrowing nematodes and bacterial blight. *Crop Protection* 29: 525-531.
- Hara, A., C. Jacobsen, S. Marr and R. Niino-DuPonte. 2010.** Hot water as a potential disinfestation treatment for an invasive anuran, the coqui frog, *Eleutherodactylus coqui* Thomas (Anura: Leptodactylidae), on potted plants. *Inter. J. Pest Manage.* 56: 255 – 263.

#### ARTICLES IN OTHER PERIODICALS (INCLUDING EXTENSION PUBLICATIONS and Videos)

- Hara, A.H. and R. Niino-DuPonte. 2017.** Attractancy of two pyriproxifen ant baits to control the little fire ant, 2014. *Arthropod Manage. Tests* 2017: 1.
- Niino-DuPonte R.Y. and A. Hara. 2015.** Videos <http://www.ctahr.hawaii.edu/haraa/videos.asp>  
 "Sending Pest-Free Products to California" - Part 1, 2A, 2B  
 "Best Management Practices for the Coqui Frog"
- Hara, A., S. Nelson and R. Niino-DuPonte. 2016.** Landscape MD. App. Available for iPhone and Android devices. Release date: 2016-07-15. Landscape MD provides home gardeners and landscape and horticultural professionals with a quick diagnostic tool for common plant diseases and insect pests. The app's focus is on Hawai'i plants and pests, but many if not most of these are found throughout other tropical and subtropical locations. Users can search the database by symptom, plant part, or host plant or can browse all insects, diseases, or pests. Photographs and descriptions show the effects of infestation or disease, and "What to Do" sections provide Integrated Pest Management solutions for solving the problem by a variety of means. Links to publications with more in-depth information are provided. Landscape MD was produced by the University of Hawai'i at Manoa, College of Tropical Agriculture and Human Resources. Content by Arnold Hara, Scot Nelson, and Ruth Niino-Duponte. All photographs by the authors unless otherwise noted.

- Hara, A. and C. Kwan. 2015.** Root mealybugs. Landscape Hawaii, Landscape Industry Council of Hawaii. HI. November-December 2015:18, 28.
- Cabral, S.K. and A.H. Hara. 2015.** Efficacy of insecticides against root mealybugs in *Pisonia brunoniana*, 2012 (G3). Arthropod Manage. Tests 40:1-2.
- Hara, A.H., R.Y. Niino-DuPonte, S.K. Cabral. 2014.** Sending flowers to the mainland? University of Hawaii at Manoa, CTAHR, Honolulu, HI.  
[http://www.ctahr.hawaii.edu/haraa/sending%20pest%20free%20products%20\\_posting.pdf](http://www.ctahr.hawaii.edu/haraa/sending%20pest%20free%20products%20_posting.pdf)
- Hara, A.H., S.K. Cabral, R.Y. Niino-DuPonte, and J.M. Miyashiro. 2014 (rev Mar 2014).** Little fire ant products available for homeowner use. University of Hawaii at Manoa, CTAHR, Honolulu, HI.  
<http://www.ctahr.hawaii.edu/haraa/HomeownerLFAAtractancyrev030314CES.pdf>
- Hara, A.H., S.K. Cabral, R.Y. Niino-DuPonte, and J.M. Miyashiro. 2014 (rev May 2014).** Little fire ant products available for landscape, golf course and nursery use. University of Hawaii at Manoa, CTAHR, Honolulu, HI.  
[http://www.ctahr.hawaii.edu/haraa/rev%20Nursery\\_Landscape\\_LFA\\_Pesticides\\_5\\_2014CES.pdf](http://www.ctahr.hawaii.edu/haraa/rev%20Nursery_Landscape_LFA_Pesticides_5_2014CES.pdf)
- Hara, A., R. Niino-DuPonte, and S. Cabral. 2014.** Best management practices to prevent and control the little fire ant. Landscape Hawaii, Landscape Industry Council of Hawaii. May/June: 20-22.
- Hara, A.H., S.K. Cabral and K. L. Aoki. 2013.** Attractancy of Bait Insecticides to the Little Fire Ant, *Wasmannia auropunctata* (Roger) (Hymenoptera: Formicidae), pp 26-35, *In* Conf. Proc. 2013 Imported Fire Ant Conf., Virginia Beach, Virginia.
- Cabral, S, K, A. H. Hara and K. L. Aoki. 2012.** Efficacy of hydramethylnon, indoxacarb, and methoprene baits against the little fire ant *Wasmannia auropunctata* (Roger) (Hymenoptera: Formicidae), pp 80-84, *In* Conf. Proc. 2012 Imported Fire Ant Conf., Nashville, Tennessee.
- Hara, A. H. and R. K. Bento III. 2012.** Coconut and Palm Pests Alert. College of Tropical Agriculture and Human Resources, University of Hawaii at Manoa, Cooperative Agricultural Pest Survey.
- Young, C. and A. Hara. 2012.** The good guys, *In* C. Dacus and C.M. Dacus (eds.). Hawaii Landscape Dec 2011/Jan 2011, Landscape Industry Council of Hawaii.
- Cabral, S., A. H. Hara and R. Niino-DuPonte. 2011.** Knock-down and residual efficacy of contact insecticides against the little fire ant, *Wasmannia auropunctata* (Roger) Hymenoptera: Formicidae), pp 43-46, Conf. Proc. 2011 Imported Fire Ant Conf., Galveston, Texas.
- Hara, A. H., S. K. Cabral and K. R. Aoki. 2011.** Efficacy of spirotetramat against aphids and mealybugs on red ginger, 2009. Arthropod Manage. Tests 36: (G19).
- Hara, A. H. and S. K. Cabral. 2011.** Knock-down and residual efficacy of Phantom and Termidor SC against little fire ant, 2009. Arthropod Manage. Tests 36: (J1).
- Hara, A. H. & R. Niino-DuPonte. 2010a.** Tips for outwitting the wily coqui frog. Hawaii Tribune Herald, Jan 10, 2010.
- Hara, A. H. & R. Niino-DuPonte. 2010b.** UH coqui frog research details control methods, pp. 1, 8 *In* Hawaii Landscape Jan/Feb 2010, Landscape Industry Council of Hawaii.
- Hara, A. H., S.K. Cabral, R. Y. Niino-DuPonte, C.M. Jacobsen & K. Onuma. 2010.** Bait insecticides and hot water drenches against the little fire ant, *Wasmannia auropunctata* (Roger) Hymenoptera: Formicidae) infesting containerized nursery plants, pp 135-140, Proc. 2010 Imported Fire Ant and Invasive Ant Conf. Little Rock, AR.

#### ONLINE VIDEOS

Accessed at: <https://www.ctahr.hawaii.edu/haraa/videos.asp>

Hara, A.H. 2005. Controlling the Coqui Frog in Hawaii.

Hara, A.H., R.Y. Niino-DuPonte, S.K. Cabral, K.L. Aoki, and J.A. Zarders. 2015. Shipping Pest-Free Plants and Plant Products to California, Part 1: Understanding Regulations and Inspection (19 min)

Hara, A.H., R.Y. Niino-DuPonte, S.K. Cabral, K.L. Aoki, and J.A. Zarders. 2015. Shipping Pest-Free Plants and Plant Products to California, Part 2A: Most Intercepted Pests (Introduction and Scale Insects) (27 min)

Hara, A.H., R.Y. Niino-DuPonte, S.K. Cabral, K.L. Aoki, and J.A. Zarders. 2015. Shipping Pest-Free Plants and Plant Products to California, Part 2B: Most Intercepted Pests (Mealybugs to Thrips) (38 min)

Hara, A.H., R.Y. Niino-DuPonte, S.K. Cabral, K.L. Aoki, and J.A. Zarders. 2015. Best Management Practices for Exporting Pest-free Plant Products from Hawai'i - Coqui Frogs (15 min)

Hara, A.H., R.Y. Niino-DuPonte, S.K. Cabral, K.L. Aoki, and J.A. Zarders. 2015. Best Management Practices for Exporting Pest-free Plant Products from Hawai'i - Little Fire Ants (32 min)

Hara, A.H., R.Y. Niino-DuPonte, S.K. Cabral, K.L. Aoki, and J.A. Zarders. 2016. Best Management Practices for Exporting Pest-free Plant Products from Hawai'i - Slugs and Snails (24 min)

#### CONFERENCE PRESENTATIONS:

##### Invited National and International Conferences/Symposia/Workshops

- Bethke, J.A., L. Osborne, A.Hara, C.L. Palmer. 2015. Destination assessment of pre-ship treatments with biologicals on ornamental plant cuttings. Entomological Society of America Annual Meeting, Minneapolis, MN.
- Hara, A. H. 2014 Hawaiian Exports to California – Hot Water Treatments and Snail Control, County of San Diego, Dept. of Agriculture, Weights and Measures, Plant Health and Pest Prevention, San Marcos, CA, Feb 2014.
- Hara, A. H., S. K. Cabral. 2013. Invasive species management in Hawaii, *In Advances in Pest Management for Turfgrass and Ornamentals*, Entomological Society of America Annual Meeting, Austin, Texas.
- Hara, A. H. 2013. Hot water and steam in a systems approach to pest control, California Nursery Conference, Etiwanda, CA, Oct 2013.
- Hara, A. H. 2013. Slug control efforts in Hawaii, Workshop on Slugs and Snails Biology and Control in Agriculture, Nurseries and Landscapes, San Marcos, CA, Mar 2013.
- Hara, A. H. 2013. Hawaii's effort to send clean nursery stock to California, San Diego County Agriculture, Weights & Measures, San Marcos, CA, Mar. 2013.
- Hara, A. H. H. 2012. Heat as a postharvest disinfestation for floricultural crops, Symposium on Urban, Stored Products and Post Harvest Entomology, XXIV International Congress of Entomology, Aug 2012, Daegu, Korea.
- Hara, A. H. 2012. Heat as a sustainable postharvest disinfestation treatment for export horticultural crops (Keynote speaker). International Conference on Postharvest Pest and Disease Management in Exporting Horticultural Crops, Bangkok, Thailand.
- Hara, A. H. 2011. Entomology in Hawaii and assistance to Japan, *In Impact of the March 2011 Japanese Earthquake and Tsunami on Entomologists, Research and Society*, Entomological Society of America Annual Meeting, Reno, Nevada.
- Hara, A. H. 2011. Systems Approach to Quarantine Treatments for Export Ornamental, *In Quarantine Treatments for Export Markets of Hawaiian Horticultural Crops*. American Society for Horticultural Sciences, 2011 Annual Conference, Waikoloa, Hawaii.
- Hara, A. H. C. M. Kishimoto and R. Y. Niino-DuPonte 2010. Host range of the nettle caterpillar, *Darna pallivitta* (Moore) (Lepidoptera: Limacodidae) in Hawaii. Potential Invasive Species Workshop, University of Florida, Miami, Florida.

##### Invited Hawaii Conferences/Workshops/Meetings:

- Myers, R.Y., C.L. Mello, B. Bushe, J. Lichty, A.H. Hara, and B.S. Sipes. 2019. "Nematology Research Update 2019" Nutrien's 11th Annual Nursery Seminar.
- Myers, R.Y., C.L. Mello, B. Bushe, J. Lichty, A.H. Hara, and B.S. Sipes. 2019. "Management of Plant-parasitic Nematodes in Ornamental Crops" Hawaii Floral and Nursery Association's Growers Import Replacement Educational Research Seminar.
- Myers, R.Y., C.L. Mello, B. Bushe, J. Lichty, A.H. Hara, and B.S. Sipes. 2018. Management of plant-parasitic nematodes in ornamental crops (Evaluation of fluopyram against burrowing nematode in anthurium production). Hawaii Floriculture and Nursery Association's Import Replacement Educational Growers Seminar, Hilo, Hawaii, October 12, 2018.
- Myers, R.Y., C.L. Mello, B. Bushe, J. Lichty, A.H. Hara, and B.S. Sipes. 2018. Nematology research update (Evaluation of fluopyram against burrowing nematode in anthurium production). Nutrien (CPS) 10<sup>th</sup> Annual Nursery Seminar, H R.Y. ilo, Hawaii, September 21, 2018.
- Myers, R.Y., C.L. Mello, B. Bushe, J. Lichty, A.H. Hara, M. Tsang, and B.S. Sipes. 2017. Nematology research update (Managing plant- parasitic nematodes in your agricultural production system). CPS 9<sup>th</sup> Annual Nursery Seminar, Hilo, Hawaii, October 6, 2017.
- Myers, R.Y., C.L. Mello, B. Bushe, J. Lichty, A.H. Hara, M. Tsang, and B.S. Sipes. 2017. Managing plant-parasitic nematodes in floriculture and nursery production. Hawaii Floriculture and Nursery Association's Import Replacement Educational Growers Seminar, Hilo, Hawaii, October 5, 2017.
- Myers, R.Y., C.L. Mello, A.H. Hara, M. Tsang, A. Kawabata, J. Lichty, K. Sewake, and B.S. Sipes. 2015. Management of plant-parasitic nematodes in nursery production. CPS 7<sup>th</sup> Annual Nursery Seminar, Hilo,

- Hawaii, October 2, 2015.
- Myers, R.Y., C.L. Mello, A.H. Hara, M. Tsang, A. Kawabata, J. Lichty, K. Sewake, and B.S. Sipes. 2015. Management of burrowing nematodes in anthurium production. Hawaii Floriculture and Nursery Association's Import Replacement Educational Growers Seminar, Hilo, Hawaii, September 30, 2015.
- Hara, A. H. 2015. New and Chronic Invasive Pests and Its Management. Crop Production Service, 15<sup>th</sup> Annual Seminar, Honolulu Country Club, May 2015.
- Niino-DuPonte, R.Y., S.K. Cabral and A. H. Hara. 2015. Pests of Trees and Palms in Hawai'i", Western Section, International Society of Arboriculture, Waikoloa, HI, March , 2015.
- Hara, A. H. 2015. Managing invasive insects in the Hawaiian Landscape, Maintaining Healthy Landscapes, Hawaii Grower Products, Inc. Jan 2015, Maui Lani Golf Course Clubhouse and Waikoloa Queens; Market Place.
- Myers, R.Y., C.L. Mello, A.H. Hara, M. Tsang, A. Kawabata, J. Lichty, and B.S. Sipes. 2014. Management of plant-parasitic nematodes in nursery production. CPS 6<sup>th</sup> Annual Nursery Seminar, Hilo, Hawaii, October 3, 2014.
- Hara, A. H. 2014. Rhinoceros beetle/lobate lac scale control, 14<sup>th</sup> Annual Landscape Industry Council of Hawaii Green Industry Conference, Honolulu, HI, Oct 2014.
- Cabral, S. K. and A. H. Hara. Systems Approach: Update on CRB, LFA, Thrips Control, Scale Insects and Coqui Frog, 6<sup>th</sup> Annual CPS Nursery Conference, Hilo, Hawaii, Oct 2014.
- Hara, A. H. 2014. Little fire ant, Hawaii Pest Control Association, 2014 Learning Conference, Honolulu, HI, Sept. 1014.
- Cabral, S.K. and A. H. Hara. 2014 Alien Invaders of the Worst Kind – A Systems Approach to Pest Management, University of Hawaii CTAHR Research Station Farm Managers and CTAHR Administrators Meeting, Hilo, Hawaii, Aug 2014.
- Hara, A. H. 2014. Coconut Rhinoceros Beetle, *Oryctes rhinoceros* : A Major Threat to Hawaii's Coconut and Palm Trees, South Oahu Soil and Water Conservation District, Honolulu, HI, Sept 2014.
- Hara, A. H. 2014. Pest Management and Control, Hawaii MIDPAC Horticultural Conference & Expo, Hapuna Beach Prince Hotel, Waikoloa, HI, July 2014.
- Hara, A. H. 2014. Coconut Rhinoceros Beetle Threatens Hawaii's Palm Trees, Crop Production Services 14<sup>th</sup> Annual Seminar and Tradeshow, May 2014, Honolulu Country Club, Honolulu, Hawaii
- Hara, A. H. 2014. Old, New and Expected Landscape Pests in Hawaii, Maui Association of Landscape Professionals, March 25, 2014, Kahului, Maui, Hawaii.
- Hara, A. H. 2013. Insect Pests, In Landscapers' Conference, UH-CTAHR and Kauai Community College Office of Continuing Education & Training, Aug 2013.
- Hara, A. H. 2013. Sending pest-free products to California, UH-CTAHR, Kauai County Moikeha Bldg, Lihue, Kauai, Aug 2013.
- Hara, A. H. 2013. Common Pests & "Green" Solutions. Hawaii MIDPAC Horticultural Conference & Expo, Hapuna Beach Prince Hotel, Waikoloa, HI, July 2013.
- Hara, A. H. 2013. Insecticides and Biologicals Against Invasive Pests in Hawaii, Crop Production Services 13<sup>th</sup> Annual Seminar and Tradeshow, May 2013, Honolulu Country Club, Honolulu, Hawaii
- Hara, A. H. 2012. New Pests and their Control, 3<sup>rd</sup> Annual Hawaii Island Landscape Management Conference, November 17, 2012, Hawaii Island Landscape Association, Hapuna Beach Prince Hotel, Kohala Coast, Hawaii.
- Hara, A. H. 2012. Latest Development in Insect Control, Maui Flower Growers' Association, University of Hawaii Maui College, Kahului, Hawaii Nov. 2, 2012 and Hana Tropicals, Hana, Hawaii, Nov. 3, 2012.
- Hara, A. H. 2012. Newer, Safer Insecticides for Use in the Landscape, Landscape Industry Council of Hawaii (LICH) Green Industry Conference and Tradeshow, October 2012, Blaisdell Exhibition Hall, Honolulu, Hawaii.
- Hara, A. H. 2012. Newer Insecticides and Biologicals against Invasive Pests, Crop Production Services 4<sup>th</sup> Annual Nursery Seminar, October 2012, Hilo Hawaiian Hotel, Hilo, Hawaii.
- Hara, A. H. Hara, A. H. 2012. Quarantine Issues for Hawaii & California and the Systems Approach, Hawaii MIDPAC Horticultural Conference, Jul 2012, Imiloa Astronomy Center, Hilo, Hawaii.
- Hara, A. H. 2012. The Efficacy of Newer Insecticides against Invasive Species in Hawaii, Crop Production Services 12<sup>th</sup> Annual Seminar and Tradeshow, May 2012, Honolulu Country Club, Honolulu, Hawaii
- Hara, A. H. 2012. New and Emerging Pest in the Landscape and Nurseries, Crop Production Services 12<sup>th</sup> Annual Seminar and Tradeshow, May 2012, Honolulu Country Club, Honolulu, Hawaii

- Hara, A.H. 2011. Insect identification & control: The good and the bad, Landscape Management Conference, Hawaii Island Landscape Association, November 12, 2011, Kohala Coast, Hawaii.
- Hara, A. H. 2011. Neonicotinoid & tetronic acid insecticides and biocontrols against ornamental pests in Hawaii, Crop Production Services Nursery Seminar, October 27, 2011, Hilo, Hawaii.
- Hara, A. H. 2011. Control strategies for landscape insect pests, Maui Association of Landscape Professionals, September 20, 2011, Kahului, Maui, Hawaii.
- Hara, A. H. 2011. Invasive Species: Impact & Control, Hawaii Pest Control Association, Learning Conference, September 23, 2011, Koolina, Hawaii.
- Hara, A. H. 2011. California & Hawaii Quarantine Issues, including the coqui frogs, Hawaii MIDPAC, Hawaii Export Nursery Association Educational Conference, July 21, 2011, Hilo, Hawaii.
- Hara, A. H. 2010. Hawaii Cinder Soil Sterilization. Hawaii MIDPAC "New Vision for HENA", Hawaii Export Nursery Association, July 8, 2010, Hilo, HI.
- Hara, A. H. 2010. Biological Control of Insect Pests in Hawaii. Crop Production Services 10<sup>th</sup> Annual Seminar, May 13, 2010, Honolulu, HI.

#### Other Conference Presentations

- Lima, L., J.A. Bethke, L. Osborne, A. Hara and C. Palmer. 2015. Developing sustainable methods of control: Foliar arthropods: Mitigation during shipping. National Entomological Society of America Meeting, Minneapolis, MN.
- Cabral, S., A. H. Hara and R. Niino-DuPonte. 2011. Knock-down and residual efficacy of contact insecticides against the little fire ant, *Wasmannia auropunctata* (Roger) Hymenoptera: Formicidae, 2011 Imported Fire Ant Conf., Galveston, Texas.
- Hara, A. H., C. M. Jacobsen, K. Onuma. 2010. Bait Insecticides and Hot Water Drenches against the Little Fire Ant, *Wasmannia auropunctata* (Roger) (Hymenoptera: Formicidae) Infesting Containerized Nursery Plants. Annual Imported Fire Ant Conference, April 19-22, 2010, Little Rock, Arkansas (poster).

#### PUBLISHED ABSTRACTS

- Myers, R. Y., C.L. Mello, B. Bushe, J. Lichty, A.H. Hara, and B.S. Sipes. 2018. Effects of fluopyram on *Radopholus similis* in anthurium production. In Proceedings of the 57<sup>th</sup> Annual Meeting of the Society of Nematologists in Albuquerque, New Mexico, July 23-25, 2018. p. 67.
- Myers, R. Y., A.H. Hara, and M. Tsang. 2010. Steam treatment of volcanic cinder media for the eradication of *Rotylenchulus reniformis*. In Proceedings of the 30<sup>th</sup> International Symposium of the European Society of Nematologists, Vienna, Austria, September 19-23, 2010. p. 164.
- Hara, A. H. H. 2012. Heat as a postharvest disinfestation for floricultural crops, *In* XXIV International Congress of Entomology, Abstract CD S1202TU20, Aug 2012, Daegu, Korea.
- Hara, A. H. 2012. Heat as a sustainable postharvest disinfestation treatment for export horticultural crops, pp. 5, *In* Abstracts International Conference on Postharvest Pest and Disease Management in Exporting Horticultural Crops, Feb 2012, Bangkok, Thailand.
- Hara, A. H. 2012. Integration of pre-shipment hot water shower as a quarantine treatment for ornamental plants, pp. 91 (P033) *In* Poster Abstract 7th International Integrated Pest Management Symposium, Mar 2012 Memphis Tennessee.
- Hara, A. 2011. Systems Approach to Quarantine Treatments for Export Ornamental, <http://ashs.confex.com/ashs/2011/webprogram/Paper5289.html>, *In* The 2011 American Society for Horticultural Science (ASHS) Annual Conference and Abstract, Sept 2011, Waikoloa Hawaii.
- Hara, A. H. C. M. Kishimoto and R. Y. Niino-DuPonte 2010. Host range of the nettle caterpillar, *Darna pallivitta* (Moore) (Lepidoptera: Limacodidae) in Hawaii, pp. 30 *In* Abstracts Potential Invasive Species Workshop, University of Florida, Miami, Florida.
- Cabos, R., A. Hara, and M. Tsang. 2010. Steam treatment of volcanic cinder media for the eradication of *Rotylenchulus reniformis*. In Abstracts European Society of Nematologists' 30<sup>th</sup> International Symposium, September 19-23, 2010, Vienna, Austria.

#### MAJOR EXTENSION ACTIVITIES:

**Extension Agents, Pest Control Advisors and Growers Training in Insect Pest Management** - Develop pest management educational programs for ornamental crops emphasizing nonchemical control tactics and minimizing the use of chemical insecticides. Conduct cooperative projects with extension agents, UH and USDA researchers on biological control cultural control and chemical control of ornamental pests.

**Pest Identification and Pest Management Recommendations:** Provide weekly ID and pest control advise to numerous homeowners, farmers, nurserymen, landscapers, pest control technician, agrochemical technical representatives via phone call, text message, social media, email.

#### PROFESSIONAL SERVICES

Member, Pesticide Advisory Committee, Hawaii Dept. of Agriculture, 2014-present  
Reviewer, manuscripts submitted to Florida Entomologist, 2015-present

#### GIFTS IN SUPPORT OF RESEARCH (2018):

UH Foundation: Insect Control on Ornamental Crop	\$ 18,400
Coordinating Group on Alien Pest Species	7,900

#### EXTRAMURAL GRANTS (2010-2018):

PI/PI's	TITLE OF RESEARCH PROPOSAL	FUNDING AGENCY	AMOUNT AWARDED	DURATION
A.H. Hara, R. McDonnell (OSU)	Activators and Attractants for Giant African Snail	USDA, APHIS, Farm Bill	\$41,000	2017-2019
A.H. Hara, R. McDonnell (OSU)	Activators and Attractants for Giant African Snail	USDA, APHIS, Farm Bill	\$40,898	2016-2017
A.H. Hara, R. McDonnell (OSU)	Activators and Attractants for Giant African Snail	USDA, APHIS, Farm Bill	\$37,197	2015-2016
A.H. Hara	Best Mangement Practices and Quarantine Treatments for the Little Fire Ant on Commodities from Hawaii Island	Hawaii Dept. of Agriculture	\$95,000	2015-2016
A.H. Hara	Educational Initiative for Improving Risk Identification and Pest Detection in Hawai'i	USDA, APHIS, Farm Bill	\$55,000	2014-2015
A.H. Hara	Chemical and Microbial Control of Coconut Rhinoceros Beetle in Hawaii	USDA, APHIS, PPQ	\$182,853	2014-2015
A.H. Hara	Reducing Interisland Pest Movement at the Source	Hau'oli Mau Loa Foundation	\$73,686	2014-2016
A .H. Hara	Developing Sustainable Methods for Controlling Invasive Pests Pre- and Post-Invasion on Ornamental Plant Cuttings and Plants	USDA, APHIS, Farm Bill, IR-4	\$50,000	2013-2015
A. H. Hara	Educational Initiative for Improving Risk Identification and Pest Detection in Hawaii	USDA, APHIS, Farm Bill Section 10201	\$154,997	2012-2014

A. H. Hara	Systems Approach to Pest Management Practices-Potted Foliage Plants-Phase I	Hawaii Dept. of Agriculture/USDA, APHIS, PPQ	\$200,000	2012-2013
A.H. Hara	2011 IR-4 Ornamental Horticulture Research Project: 11-020 Mealybug Efficacy	USDA-NIFA	\$10,000	2011-2012
A. H. Hara	Survey and Detection of Coconut Pests in Hawaii	USDA, APHIS, PPQ, Cooperative Agricultural Pest Survey (CAPS)	\$50,170	2010-2011
A. H. Hara	Hot Shower Treatment for Disinfesting Potted-Plants of Coqui Frogs and other Invasive Pests	County of Hawaii	\$120,000,	2010-2011
N.J. Reimer, D. Oishi, C. Vanderwoude, A. H. Hara	Developing pest ant management systems in Hawaii nurseries	USDA-APHIS	\$11,000	2010-2011
A. H. Hara	Survey of Landscape and Ornamental Nurseries for Insect Pests	USDA, APHIS, PPQ, Cooperative Agricultural Pest Survey (CAPS)	\$44,977	2010-2011
A. H. Hara	Pre- and post-harvest pest management of major quarantine pests on cut flowers and foliage plants	USDA, NIFA, Floriculture Research	\$30,000	2010-2012
A. H. Hara and R. G. Hollingsworth	Alternatives of conventional insecticides for control of thrips in orchids and anthuriums	USDA, NIFA, Floriculture Research	\$15,000	2010-2012
A. H. Hara	Phytotoxicity to ornamental horticultural plants from BYI-83330 (spirotriamat)	USDA-NIFA	\$12,000	2009-2010
N.J. Reimer, D. Oishi, C. Vanderwoude, A. H. Hara	Control of Arboreal Little Fire Ants in Hawaiian Agricultural Systems	Hawaii Invasive Species Committee	\$7,420	2009-2010
A. H. Hara	IR-Western Region Ornamental Program	USDA-NIFA	\$12,000	2009-2011
A. H. Hara	Hawaii Extension IPM Program	USDA, NIFA, Smith-Lever Section 3(d)	\$70,477	2009-2010
A. H. Hara	Detection Techniques and Quarantine Treatments for High Risk Commodities Identified by the Kahului Airport Pest Risk Assessment	Hawaii Dept. of Transportation	\$149,000	2009-2011