

Ty McDonald
College of Tropical Agriculture and Human Resources
Tropical Plant and Soil Science
FTE Distribution: 0% I; 0% R; 100% E

Education

<u>Degree</u>	<u>University</u>	<u>Major</u>
Masters	University of Hawaii - Manoa	Agronomy and Soil Science
Bachelors	University of Vermont	Plant and Soil Science

Lifetime and Fellow Achievement Awards (peer nominated and endorsed national and International-important for those without accreditation that is peer nominated and endorsed, recognized)

- ***Communication Award for Extension Publications, Western Region. 2005.***

Award given by the National Association of County Agricultural Agents (NACAA) for two personal columns published in two Hawaii Island newspapers, the *West Hawaii Today*, (circulation 15,000) and the *Hawaii Tribune-Herald* (circulation 21,600).

Professional Appointments

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Associate Extension Agent	University of Hawaii	2014 to present
Assistant Extension Agent	University of Hawaii	2003 to 2014

Extension Training and Certification Courses Coordinated and Instructed annually

Landscape Maintenance Training Program. For green industry workforce, Hawaii Island. 2007 to 2019.

West Hawaii Master Gardener Volunteer Training Program. For Extension volunteers. 2003 to present.

Publications (reverse chronological order)

Conference Proceedings

Griffis, Jr., J.L., T.G. McDonald and M.M. Manners. 2016. Preliminary Evaluation of Effects of Spraying *Aminoethoxyvinylglycine* (AVG, ReTain®) on Purple-fruited Pitanga (*Eugenia uniflora* L.). *Proceedings of the Plant Growth Regulation Society* 2015: 94-97. (Presented at the 2015 Annual Conference of the Plant Growth Regulation Society of America at the Sheraton, Keauhou Bay, HI, July 2015.)

Griffis, Jr., J.L., M.M. Manners, C.E. Sams, T.G. McDonald and T.J.K. Radovich. 2013. Purple-fruited pitanga (*Eugenia uniflora* L.): crop development and commercialization. *Proc. Fla. State Hort. Soc.* 126: 30-34. (Presented at the Florida State Horticulture Society 126th Annual Conference. June, 2013).

Manners, M.M., J.L. Griffis, Jr. and T.G. McDonald. 2011. Time after scion harvest and grafting method influence graft success rate for purple-fruited pitanga (*Eugenia uniflora* L.). *Proc. Fla. State Hort. Soc.* 124: 28-30. (Presented at the Florida State Horticulture Society 124th Annual Conference. June, 2011.)

McDonald, T.G. 2005. *Killer Figs on the Loose and Training Offered by H.I.L.A.* Proceedings of the 2005 National Association of County Agricultural Agents 90th Annual Meeting and Professional Improvement Conference. (abstract). Buffalo, NY.

Refereed Journal Publications

Griffis, Jr. J.L. Jr., M.M. Manners and T.G. McDonald. 2020. Breeding, research and development of purple-fruited pitanga (*Eugenia uniflora* L.) as a commercial crop in Hawai'i, USA – 2007 to 2017. *Acta Horticulturae* 1299: 221-227. (Presented at the VII International Symposium on Tropical and Subtropical Fruits, Istanbul, Turkey, 2018.)

- Griffis, Jr., J.L. M.M. Manners, T.G. McDonald and Ö. Tuncay. 2018. Advances in the Purple-Fruited Pitanga (*Eugenia uniflora* L.) Long-term Breeding Program in Hawai'i. *Acta Horticulturae* 1205: 931-939. (Presented at the International Symposium on Tropical and Temperate Horticulture ISTTH 2016, Cairns, Australia, Nov. 2016.)
- Griffis, Jr., J.L., T.G. McDonald and M.M. Manners. 2017. Seedless Purple-fruited Pitanga (*Eugenia uniflora* L.) – Another Discovery from the Long-term Pitanga Breeding Project at the Kona Experiment Station in Hawai'i. *Hortscience* 52(9): S434 (abstr.). (Presented at the American Society for Horticultural Science annual conference, Waikoloa, HI.)
- Griffis, Jr., J.L., T.G. McDonald, Ö. Tuncay and M.M. Manners. 2016. Unexpected variations in flowering and fruiting occur in clonally propagated purple-fruited Pitanga 'Zill Dark' (*Eugenia uniflora* L.) grown in Kona, Hawai'i USA. *Acta Horticulturae* (In Press). (Presented at the 6th International Symposium on Tropical and Subtropical Fruits, Kafr El-Sheikh, Egypt, Sept. 2016.)
- Griffis, Jr., J.L., T.G. McDonald, M.M. Manners and Ö. Tuncay. 2016. Flowering and Fruiting Data for Purple-Fruited Pitanga (*Eugenia uniflora* L.) Grown in Hawai'i At the Kona Experiment Station Aid in Selection of Potential New Varieties. *Hortscience* 51(9): S251 (abstr.). (Presented at the American Society for Horticultural Science annual conference at Atlanta, GA, Aug. 2016.)
- Griffis, Jr., J.L., M.M. Manners, T.G. McDonald and J.P. Bingham. 2015. Effects of Refrigerated Storage on Post-Harvest Quality of Ripe Fruits of the Tropical, Purple-fruited Pitanga (*Eugenia uniflora* L.). *Acta Horticulturae* 1088:113-118. (Presented at the 2nd Southeast Asia Symposium on Quality Management in Postharvest Systems, Vientiane Laos, Dec. 2013.)
- Griffis, Jr., J.L., C.E. Sams, M.M. Manners, T.J.K. Radovich and T.G. McDonald. 2013. Commercial Development of an Underutilized Fruit Crop: Purple-Fruited Pitanga (*Eugenia uniflora* L.) – A Case Study. *Hortscience* 48(9): S231 (abstr.). (Presented at the ASHS Annual Conference, Desert Springs, CA)
- Griffis, Jr., J.L., C.E. Sams, T.G. McDonald, M.M. Manners and T.J.K. Radovich. 2013. A progress report on commercialization in the USA of purple-fruited pitanga (*Eugenia uniflora* L.), an underutilized fruit crop. *Acta Horticulturae* 979: 807-814. (Presented at the 2nd Int'l Symposium on Underutilized Plant Species - Crops for the Future: Beyond Food Security, Kuala Lumpur, Malaysia, June, 2011.)
- Griffis, Jr., J.L., C.E. Sams, M.M. Manners, T.G. McDonald and T.J.K. Radovich. 2012. Purple-fruited pitanga – antioxidant levels and flavors of mature fruits vary considerably among closely-related cultivars. *Acta Horticulturae* 959: 209-216 (& cover photo). (Presented at III International Symposium on Guava and other Myrtaceae, Petrolina, Pernambuco Brazil, Apr. 2012.)
- Wheeler, K., T.G. McDonald, J.L. Griffis, Jr., T.J.K. Radovich, J-P Bingham and M.M. Manners. 2011. Flavonol and anthocyanin analyses of purple-fruited selections of *Eugenia uniflora* L. (Pitanga) by high performance liquid chromatography. *Hortscience* 46(9): S362 (abstr.). (Presented at the ASHS Annual Conference, Waikoloa, HI, Sept., 2011.)
- Smith, V.E., T.G. McDonald, M.M. Manners and J.L. Griffis, Jr. 2009. Development of pitanga (*Eugenia uniflora* L.) as a commercial crop for Hawai'i. *Hortscience* 44(4): 1150 (abstr.). (Presented at the ASHS Annual Conference, St. Louis, MO, July, 2009.)
- Griffis, Jr., J.L., T.G. McDonald, V.E. Smith, and M.M. Manners. 2009. *Eugenia uniflora* – A nutritious, easy-to-grow fruit for the tropics." *Acta Horticulturae* 806: 277-284 (& cover photo). (Presented at the Int'l Symposium "Underutilized Plant Species for Sustainable Development." Tanzania. 2008.)
- Manners, M.M., J.L. Griffis, Jr., T.G. McDonald and V.E. Smith. 2008. Grafting trials on *Eugenia uniflora* L." *HortScience* 43(4): 1180 (abstr.). (Presented at the ASHS Annual Conference, Orlando, FL.)
- Miyasaka, S.C., J.D. Hanson, T.G. McDonald and G.K. Fukumoto. 2007. Effects of nitrogen and potassium in kikuyu grass on feeding by yellow sugarcane aphid. *Crop Protection* 26 (2007) 511-517.

Miyasaka, S.C., J.D. Hanson, G.K. Fukumoto, T.G. McDonald. 2003. Screening kikuyu grass for resistance to yellow sugarcane aphid. 2003 Annual Meeting, American Society of Agronomy, Crop Science Society of America, Soil Science Society of America. (poster).

Extension Publications

a. University of Hawaii

McDonald, T. and K. Bellstein. *The West Hawaii Master Gardener Helpline Digest PLUS*. UH Cooperative Extension – Kona. Aug. 2023.

McDonald, T. and K. Bellstein. *The West Hawaii Master Gardener Helpline Digest PLUS*. UH Cooperative Extension – Kona. July. 2023.

McDonald, T. 2023. *Plant a tree – but watch out for those figs*. Hanai’Ai/ The Food Provider Newsletter. University of Hawaii, Sustainable and Organic Agriculture Program. Vol.50 April-May-June. 2023.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. May. 2023.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. Apr. 2023.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. Mar. 2023.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. Feb. 2023.

McDonald, T. *The Weekly WEEKEND-2023*. A weekly email newsletter for participants in the 2022 WHMG Volunteer Training program. Feb. 2023 through April 2023. Issues 2.1 to 2.12.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. Jan. 2023.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. Dec. 2022.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. Nov. 2022.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. Oct. 2022.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. Sept. 2022.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. Aug. 2022.

McDonald, T. and L. Hayden. *The West Hawaii Master Gardener Helpline Digest*. UH Cooperative Extension – Kona. July 2022.

McDonald, T. *The Weekly WEEKEND-2022*. A weekly email newsletter for participants in the 2022 WHMG Volunteer Training program. Feb. 2022 through May 2022. Issues 1.1 to 1.12.

- McDonald, T. Propagating plants from seed made easy. *West Hawaii Master Gardener Program* website. UH-CTAHR. May, 2020. <https://drive.google.com/file/d/1BBK5esTdRWDuT080st2kCa6vBEnyMxHX/view>
- McDonald, T. Germination is a Beautiful Thing. *CTAHR Notes*. UH-CTAHR. Apr. 28, 2020.
- Cho, A., A. Kawabata, T. McDonald, and M. Nagao. 2018. *Grafting Avocado*. University of Hawaii – CTAHR, Cooperative Extension Service Publication F_N-51, July. 2018.
- McDonald, T. 2018. *News from West Hawaii*. Statewide University of Hawaii Master Gardener Newsletter. Issue No. 22. June-July 2018.
- McDonald, T. 2017. *Kona Days: West Hawaii MG Program Update*. Statewide University of Hawaii Master Gardener Newsletter. Issue 21. Sept. – Dec. 2017. Pp. 1-4.
- Cho, A., M. Quintanilla-Tornel, T. McDonald, A. Kawabata, and S. Nakamoto. 2017. '*Sharwil*' *Avocado Identification*. University of Hawaii – CTAHR, Cooperative Extension Publication F_N-50, Nov. 2017.
- McDonald, T. 2017. *News from West Hawaii*. Statewide University of Hawaii Master Gardener Newsletter. Issue No. 20. May-Aug. 2017.
- McDonald, T. 2017. *News from West Hawaii*. Statewide University of Hawaii Master Gardener Newsletter. Issue No. 19. Mar./Apr. 2017.
- McDonald, T. 2017. *News from West Hawaii*. Statewide University of Hawaii Master Gardener Newsletter. Issue No. 18. Jan./Feb. 2017.
- Makrevis, C. and T. McDonald. 2013. Plant nutritional deficiencies symptoms chart. University of Hawaii, West Hawaii Master Gardener Program website: <http://www.ctahr.hawaii.edu/UHMG/WestHI/index.asp>.
- McDonald, T. and C. Makrevis. 2012. Home remedies for soft-bodied insect control. University of Hawaii, West Hawaii Master Gardener Program website: <http://www.ctahr.hawaii.edu/UHMG/WestHI/index.asp>.
- McDonald, T. and C. Makrevis. 2012. Sugar – boric acid bait for ants. University of Hawaii, West Hawaii Master Gardener Program website: <http://www.ctahr.hawaii.edu/UHMG/WestHI/index.asp>
- McDonald, T. 2010. *The Avocado in Kona*. Hanai' Ai/ The Food Provider Newsletter. University of Hawaii, Sustainable and Organic Agriculture Program. Vol. 4. June-July-Aug 2010. <http://www.ctahr.hawaii.edu/sustainag/news/articles/V4-Mcdonald-avocado.pdf>
- McDonald, T. 2006. Edible plants for Hawaii Landscapes. West Hawaii Ornamental and Landscape E-news. Cooperative Extension Service, UH-CTAHR. Sept., 2006.
- McDonald, T. 2006. Plant Health Care: Cultural practices affect plant health. West Hawaii Ornamental and Landscape E-news. Cooperative Extension Serv., UH-CTAHR. Sept., 2006.
- McDonald, T. 2006. New pests: Asian citrus psyllid. West Hawaii Ornamental and Landscape E-news. Cooperative Extension Service, UH-CTAHR. June, 2006.
- McDonald, T. 2006. Pest update: little fire ant. West Hawaii Ornamental and Landscape E-news. Cooperative Extension Service, UH-CTAHR. June, 2006.
- McDonald, T. 2006. Pest Update: Erythrina gall wasp and little fire ant. West Hawaii Ornamental and Landscape E-news. Cooperative Extension Service, UH-CTAHR. Mar, 2006.
- McDonald, T. 2006. IPM: Hawaii Pesticide Information Retrieval System (HPIRS). West Hawaii Ornamental and Landscape E-news. Cooperative Extension Serv., CTAHR. Mar., 2006.

McDonald, T. 2006. Plant Health Care: An ounce of prevention is worth a pound of cure. West Hawaii Ornamental and Landscape E-news. Cooperative Extension Serv, CTAHR. Mar., 2006.

McDonald, T. 2005. New Pests: Erythrina gall wasp. West Hawaii Ornamental and Landscape E-news. Cooperative Extension Service, UH-CTAHR. Oct., 2005.

McDonald, T. 2005. IPM: Systemic insecticides for treating trees. West Hawaii Ornamental and Landscape E-news. Cooperative Extension Service, UH-CTAHR. Oct., 2005.

Hara, A., Niino-DuPonte, R. Jacobsen, C., Chun, S., McDonald, T., Nagamine, W., and Heu, R. 2005. Cycad Scale on Sago Palm. Cooperative Extension Service, UH-CTAHR Cooperative Extension Service Publication IP-23, Oct. 2005.

Hara, A., Niino-DuPonte, R. Jacobsen, C., Chun, S., Nagata, N., McDonald, T., Nagamine, W., and Heu, R. 2004. What's killing my sago palm? Cycad scale. University of Hawaii, CTAHR and Hawaii Department of Agriculture. (tri-fold brochure).

b. Trade journal publications

McDonald, T. 2023. Plant a tree – but watch out for those figs! *Hawaii Landscape*. Landscape Industry Council of Hawaii. Nov./Dec. 2023.

McDonald, T. 2021. 9th Landscape Management Conference & Tradeshow 2021: Back to the Basics. *Hawaii Landscape*. Landscape Industry Council of Hawaii. Sept./Oct. 2021, p.7.

McDonald, T. 2021. Back in the Saddle Again...Again. *Hawaii Landscape*. Landscape Industry Council of Hawaii. May/June. 2021, p.7.

McDonald, T. 2020. Back in the Saddle Again. *Hawaii Landscape*. Landscape Industry Council of Hawaii. Nov./Dec. 2020, p.5.

McDonald, T. 2019. Big Island Training and Certification Programs. *Hawaii Landscape*. Landscape Industry Council of Hawaii. Mar./Apr. 2019, p. 29.

McDonald, T. 2018. Kona Landscape Maintenance Training & Certification Programs Offered. *Hawaii Landscape*. Landscape Industry Council of Hawaii. Mar./Apr. 2018, p.20.

McDonald, T. 2017. HILA News. *Hawaii Landscape*. Landscape Industry Council of Hawaii. Nov./Dec. 2017, 28-29.

McDonald, T. 2017. Hawaii Island Landscape Training and Certification Programs. *Hawaii Landscape*. Landscape Industry Council of Hawaii. Mar./Apr. 2017, 12-15.

McDonald, T. 2016. Creating loamy lava landscapes in Hawai'i. *Arborist News*. Western Chapter – International Society of Arboriculture. Vol. 42 No. 3. Fall 2016, 30-32.

McDonald, T. 2015. Big Island landscape training and certification programs. *Hawaii Landscape*. Landscape Industry Council of Hawaii. Mar./Apr., 2015.

McDonald, T. 2014. Celebrating Hawaii Island Green Industry - Home Grown Wisdom. *Hawaii Landscape*. Landscape Industry Council of Hawaii. Sept./Oct., 2014.

McDonald, T. 2014. Big Island LICT: HILA 2014 training and certification programs. *Hawaii Landscape*. Landscape Industry Council of Hawaii. p.18. Mar./Apr., 2014.

McDonald, T. 2013. Big Island Landscapers and Nurserymen at Hapuna. *Hawaii Landscape*. Landscape Industry

Council of Hawaii. p.6. Jan./Feb., 2013.

McDonald, T. 2004. Organic-based landscaping increases. *Hawaii Landscape*, Vol. 8 (4) July/Aug. 2004.

McDonald, T. 2004. Invasive pest reconnaissance. *Big Island Association of Nurserymen Quarterly Newsletter*. Jan.-May 2004.

c. Newspaper articles

1. UH-CTAHR/CES weekly column published in the West Hawaii Today (Kailua-Kona) and the Hawaii Tribune-Herald (Hilo):

- *Solving landscape problems through prevention*. Feb. 22, 2015.
- *Earth-friendly farming the natural way*. Feb. 1, 2015.
- *West Hawaii gears up for master gardener training*. Nov. 23, 2014.
- *Tree care safety workshop offered*. May 10, 2014.
- *Landscapers: lower your environmental impact quotient*. Nov. 3, 2013.
- *Landscape education and certification raise the o'o bar*. Mar. 24, 2013.
- *Landscape Issue: Irrigate at night, attract coqui frogs*. Oct. 21, 2012.
- *Basic tree care safety education saves lives*. Feb. 26, 2012.
- *Landscape Issues: water conservation and pesticide reduction*. Oct. 23, 2011.
- *Master Gardeners assist university's mission*. Jan. 9, 2011.
- *Gardener-induced diseases, lazy lawn and pole palms*. Oct. 31, 2010.
- *Don't say "uncle" to ants*. Mar. 7, 2010.
- *Training and certification raise green industry standards*. Mar. 1, 2010.
- *Green industry awards promote quality landscapes*. Sept. 27, 2009.
- *Stimulus package available for Big Isle landscapers*. Mar. 1, 2009.
- *Poor pruning is contagious; training is cure*. Feb. 15, 2009.
- *Master Gardener certification is win-win-win*. Dec. 7, 2008.
- *Earn six-figure income in landscape maintenance business*. Mar. 2, 2008.
- *HILA Landscape awards 2007: Strive for the highest*. Oct. 21, 2007.
- *A look at tree injection & biocontrol of Erythrina gall wasp on wiliwili*. Jan. 28, 2007.
- *West Hawaii landscapers gain national certification*. July 9 and 12, 2006.
- *Hawaii Island Landscape Association promotes green industry*. Mar. 12, 15, 2006.
- *Hila announces 2005 landscape excellence awards program*. Nov. 20 and 23, 2005.
- *New invasive pest threatens native wiliwili trees*. Oct. 2 and 5, 2005.
- *LICH certifies Kona landscape technicians*. July 24 and 27, 2005.
- *Proper chain saw use imperative for laymen and pros*. Feb. 13 and 16, 2005.
- *Landscape classes and training offered by H.I.L.A.* Jan. 30 and Feb. 2, 2005.
- *Some tools for dealing with invasive insects*. Dec. 8 and 12, 2004.
- *Killer figs on the loose*. Nov. 3 and 7, 2004.
- *Cycad scale on sago palms can be defeated with beetles*. Sept. 22 and 26, 2004.
- *Organic-based landscape practices on the rise*. July 14 and 18, 2004.
- *Where have all the soils gone?* Jan. 28 and 30, 2004.
- *Cycad scale wreaks havoc in West Hawaii*. Dec. 3 and 5, 2003.

2. Tropical Gardener column published in West Hawaii Today:

- *Master Gardeners enhance university's mission*. Nov. 15, 2015.
- *Master Gardener training and certification program offered*. Nov. 17, 2013.
- *Master Gardener training starting soon*. Jan. 22, 2012.

3. Urban Gardener column published in Honolulu Star-Advertiser:

- *Natural farming emphasizes observation over chemicals*. July 29, 2018
- *Transplanting potted prize requires wise site selection*. Jan. 7, 2013.
- *Cooler temps fine for propagating vegetables*. Nov. 5, 2012.
- *Chives, scallions grow easily in home container gardens*. Aug. 6, 2012.
- *Growing tomatoes in isles requires a bit of legwork*. Mar. 5, 2012.

- *Photos can help pinpoint problems that ail plants.* Oct. 17, 2011.
4. Master Gardener column published in *West Hawaii Today* (Kailua-Kona):
- *Landscape training and certification programs abound.* Feb. 25, 2007.
 - *Division equals multiplication for math-challenged plants.* Oct. 15, 2006.
 - *UH and KOC collaborate on fall series of classes.* Oct. 8, 2006.
 - *Dwarf koa: A fine specimen tree for Kona landscapes.* Sept 3, 2006.
 - *Growing chocolate is 'cake' in Kona's conditions.* June 25, 2006.
 - *Plant Health Care strategies emphasize prevention.* Apr. 2, 2006.
 - *Dry-season gardening is a challenge in rocky soil.* Jan. 29, 2006.
 - *West Hawaii's top 5 residential gardening issues.* Jan. 22, 2006
 - *Kona gardener squashes competition in pumpkin contest.* Dec. 11, 2005.
 - *Farm Fair features Master Gardeners and much more.* Sept. 4, 2005.
 - *Giant pumpkin-growing contest open to isle gardeners.* June 26, 2005
 - *Propagating plants from seed is made easy.* Feb. 20, 2005.
 - *New series of certification classes are starting soon.* Jan. 2, 2005.

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

a. Instructional videos

Grafting Avocado: Part 1- Theory and Tools. (11:19). Produced by Hawaii Tropical Fruit Growers Association and University of Hawaii College of Tropical Agriculture and Human Resources. May 10, 2012.
<http://youtu.be/PpEtnElQonQ> (250,000 views – 12/28/2023).

Grafting Avocado: Part 2- Making the Graft. (13:58). Produced by Hawaii Tropical Fruit Growers Association and University of Hawaii College of Tropical Agriculture and Human Resources. May 10, 2012.
<http://youtu.be/fll6lOt7z1g> (217,000 views – 12/28/2023).

b. Website development

West Hawaii Master Gardener Program. 2017. <http://cms.ctahr.hawaii.edu/uhmgprogram/HOME/West-Hawaii>.

Hawaii Island Landscape Association. 2012. <http://www.hilahawaii.com>

UH Statewide Master Gardener Program. 2009-10. <http://www.ctahr.hawaii.edu/UHMG>

c. Grafting Demonstrations

- *16th Annual Avocado Festival.* Feb. 11, 2023.
- *15th Annual Avocado Festival.* Apr. 2, 2022.
- *HOVE Garden Club.* Mar.25, 2022.
- *Na'alehu Farmers Market.* Mar. 3, 2021.
- *Na'alehu Farmers Market.* Feb. 3, 2021.
- *HOVE Garden Club.* Mar. 6, 2020.
- *14th Annual Avocado Festival.* Feb. 8, 2020.
- *HOVE Garden Club.* Apr. 9, 2019.
- *HOVE Garden Club.* Mar. 12, 2019.
- *13th Annual Avocado Festival.* Kailua-Kona. Feb. 23, 2019.
- *Hamakua Harvest Annual Farm Festival.* Honoka'a. May 20, 2018.
- *Community Seed Library Speaker Program.* Kailua-Kona Library. Jan. 6, 2018.
- *Hamakua Harvest Annual Farm Festival.* Honoka'a. May 21, 2017.
- *11th Annual Avocado Festival.* Kailua-Kona. Mar. 4, 2017.
- *Hamakua Harvest Annual Farm Festival.* Honoka'a. May 29, 2016.
- *Hawaii Farmers Union, Kohala chapter monthly meeting.* Hawi. Aug. 11, 2015.
- *Eighth Annual Avocado Festival.* Keauhou. Apr. 5, 2014.

- *Seventh Annual Avocado Festival*. Keauhou. July 30, 2013.
- *Sixth Annual Avocado Festival*. Keauhou. Feb. 18, 2012.
- *Third Annual Mango Festival*. Keauhou. July 30, 2011.
- *Fifth Annual Avocado Festival*. Keauhou. Feb. 19, 2011.
- *Second Annual Mango Festival*. Keauhou. July 31, 2010.
- *Fourth Annual Avocado Festival*. Captain Cook. Feb. 20, 2010.
- *Third Annual Avocado Festival*. Captain Cook. Feb. 21, 2009.
- CTAHR Hawaii County Centennial Celebration. Kamuela, Apr. 21, 2008.
- Third/fourth grade class at Innovations Public Charter School. Kona. Mar., 2007.
- *2005 Plant Sale & Field Day*. The Twelve Trees Project (UH-CTAHR, WSARE, USDA-CSREES). Kona Pacific Farmers Cooperative. 2005.
- *14th Annual International Tropical Fruit Conference*. Hawaii Tropical Fruit Growers Assoc. Kona. 2004.

d. Photos published

Vivacious Vivipary. Caption: *A seed germinates while still inside this Kona-grown tangerine*. Island Life section, West Hawaii Today newspaper (Kailua-Kona). Aug. 10, 2023.

e. Photo subject

Live grafting demonstration conducted at 16th Annual Avocado Festival in Kona. Front page of Sunday edition West Hawaii Today newspaper (Kailua-Kona). Feb. 12, 2023.

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

- Advisor to Board of Directors, *Hawaii Island Landscape Association*. 2004 to present.
- Certification Committee, *Landscape Industry Council of Hawaii*. 2007 to present.
- Chair, Advisory Board, *West Hawaii Master Gardener Program*. 2010 to present.
- Regional Conference Committee. *Western Chapter – International Society of Arboriculture*. 2017 to 2022.