

## **Kona Cooperative Extension – Events and Announcements Newsletter**

Volume 9: September 2019

### **Dear Growers and Friends,**

These past couple of months, I attended the American Society for Horticultural Sciences Annual Conference and the Invasive Pest Conference. One common topic that arose was about citrus greening or Huanglongbing (HLB). HLB (*Liberibacter asiaticus*, *L. africanus* and *L. americanus*) greatly reduces citrus production, destroys the economic value of the fruit, and can kill trees. Once a tree is infected, there is no cure for HLB. In the US and its territories, this disease is found in California, Florida, Georgia, Louisiana, Puerto Rico, South Carolina, Texas and the U.S. Virgin Islands. Hawaii bears the vector, *Diaphorina citri*, the Asian citrus psyllid (ACP), but NOT YET the citrus greening disease. Scientists are currently researching resistant and tolerant varieties and rootstocks, ACP trapping and preferences, chemical and nutritional therapies, and best management practices.



Signs and symptoms of Citrus Greening or HLB

Hawaii has a budding citrus industry and many homeowners produce citrus and its Rutaceae relatives on property, including *Murraya koenigii* or curry leaf tree, mock orange, oranges, tangerines, mandarins, lemons, and limes. Because the vector (ACP passes the disease from tree to tree) is already found in Hawaii, we all must do what we can to understand the disease and vector and be extremely careful NOT to introduce HLB into Hawaii.

Citrus greening can be brought to Hawaii and spread with infected plants, ACPs, scion and bud wood.

### **What can you do to help prevent HLB from entering Hawaii?**

- DO NOT SMUGGLE ANYTHING, INCLUDING CITRUS OR RUTACEAE FRUIT, SEEDS, PLANTS, SCION, BUDWOOD, EVEN ORNAMENTALS, ETC. INTO HAWAII!!!
- Comply with all Hawaii state quarantine regulations for imports (<https://bit.ly/2lvv1At>). Contact HDOA plant quarantine (PQ) with questions - (808) 832-0566.
- Have all plants and propagative plant materials inspected by HDOA PQ inspectors upon entry into the state.
- Clearly label all parcels brought into the state by mail or cargo, with the words “Plant Materials” or “Agricultural Commodities” for ease of inspection.
- Provide an invoice or packing manifest to PQ inspectors listing the contents and quantities of the commodities imported.
- Follow all USDA APHIS quarantine regulations for interstate movement and the importation of citrus from other countries. This may include citrus seeds and other propagative plant materials. Contact USDA APHIS with questions - (808) 838-2780.
- Purchase plants locally from a reputable source.

- Contact National Clean Plant Centers (<https://bit.ly/2IPGQRZ>) for plant material (Hawaii has a center as well).

#### Informational HLB and ACP resources:

- UH CTAHR - <https://bit.ly/2krWTFp>
- Univ. of Florida - <https://bit.ly/2koT8Ao>
- Texas A&M - <https://bit.ly/2lyNIJ2>
- UC Riverside - <https://bit.ly/2lVAaBZ>
- Citrus Industry Magazine - <http://citrusindustry.net/>

#### Of possible interest for reading:

- HLB-infested tree therapy with Mn and B - <https://bit.ly/2jS2GDM>
- ACP nymphs may be killed by tiny parasitic wasps and various predators, including lady beetle adults and larvae, syrphid fly larvae, lacewing larvae, and minute pirate bugs. - <https://bit.ly/2clpQFQ>
- Ants that tend and protect ACP nymphs may one day be controlled with alginate hydrogel baits - <https://bit.ly/2lvvdzH>

#### Little Fire Ant Workshop – Kona

Tuesday, September 10, 2019

9:00 am – 11:30 am

Kona Cooperative Extension Service Conference Room  
(79-7381 Mamalahoa Highway, Kealahou, HI 96750)

Registration is required. This class is limited to 30 participants.

For more info and to register, visit

<https://www.hawaiicoffee.com/lfa.html> or contact Gina at 322-4892 by Sept. 6th.

UH CTAHR and the Hawaii Ant Lab (HAL) welcome you to their informational and interactive workshop on Little Fire Ants. During this hands-on workshop, Kiyoshi Adachi of HAL, will teach participants about LFA management basics. He will guide participants in surveying for LFA and demonstrate mixing of bait for treatment in orchard crop situations.

Participants will receive a free LFA sampling kit.

If you suspect LFA on your farm, please bring in a FROZEN/DEAD sample. Collect the ants in a jar or plastic container with a tight lid, freeze the ants for at least 2 days, and provide your name, collection location, and contact information with your sample.

#### Sign-up for USDA FSA's Reimbursement Transportation Cost Payment Program (RTCP) and Market Facilitation Program (MFP):

The **Reimbursement Transportation Cost Payment Program (RTCP)** offsets a portion of the costs of transporting agricultural products over long distances in Hawaii. **Hurry! Sign up for RTCP ends Sept. 6, 2019.**



COOPERATIVE EXTENSION  
UNIVERSITY OF HAWAII AT MANOA  
COLLEGE OF TROPICAL AGRICULTURE AND HUMAN RESOURCES




### Little Fire Ant Workshop for Commercial Coffee, Fruit and Nut Growers

Tuesday, September 10, 2019  
9:00 am – 11:30 am  
Kona Cooperative Extension Service Conference Room  
(79-7381 Mamalahoa Highway, Kealahou, HI 96750)

**Registration is required.** This class is limited to 30 participants.  
Register at [www.hawaiicoffee.com/lfa](http://www.hawaiicoffee.com/lfa) or contact Gina at 322-4892 by Sept. 6.





Little Fire Ants (*Wasmannia auropunctata*) or LFA, are vicious little ants with a sting that can leave you in pain. They can be found in the home, in nearly any crack or crevice, or on the farm, in trees where they have been known to "rain down" on people causing serious welts and long lasting discomfort. If not controlled, LFA can become a major agricultural pest. They can infest fields, where they can damage crops and sting workers.

UH CTAHR and the Hawaii Ant Lab (HAL) welcome you to their informational and interactive workshop on Little Fire Ants. During this hands-on workshop, Kiyoshi Adachi of HAL will teach participants about LFA management basics. He will guide participants in surveying for LFA and demonstrate mixing of bait for treatment in orchard crop situations. UH Extension faculty and staff will be assisting with this event.

Participants will be given a free LFA sampling kit.

If you suspect LFA on your farm, please bring in a FROZEN/DEAD sample. Be sure to collect the ants in a jar or plastic container with a tight lid, freeze the ants for at least 2 days, and provide your name, collection location, and contact information with your sample.

The **Market Facilitation Program (MFP)**, assists Hawaii farmers who continue to suffer from damages because of unjustified trade retaliation from foreign nations. MFP payments will also be made to Specialty Crops producers of almonds, cranberries, cultivated ginseng, fresh grapes, fresh sweet cherries, hazelnuts, **macadamia nuts**, pecans, pistachios, and walnuts. The sign-up period for MFP runs through Dec. 6. Learn more about these programs and others at <https://bit.ly/2jVJDbJ>.

**Away:**

I will be away from the office Oct. 3 and return on Oct. 14. If responses are delayed, please follow-up with me after the 14th. If you have a commercial orchard crop farm emergency, please contact Dr. Alyssa Cho at 808-969-8225 or [acho@hawaii.edu](mailto:acho@hawaii.edu) or Sharon Wages at 808-969-8250 or [smotomur@hawaii.edu](mailto:smotomur@hawaii.edu).

- Andrea

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**UH CTAHR Cooperative Extension Offices was closed on the following days:**

Monday, September 2nd, 2019 in observance of Labor Day

No holidays observed in October

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Visit <https://www.hawaiicoffeeed.com/events-and-announcements> for additional information on the following events, announcements and more.

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**County of Hawaii Survey Concerning Last Year's Eruption**

The County of Hawaii is conducting a survey, through its contractor, The Institute for Sustainable Development, concerning the community impacts of last year's eruption to use for planning purposes and has asked our help in disseminating it. If you would like to participate in this survey, please go to <http://bit.ly/2HvD5ZT>

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**A Taste of the Hawaiian Range**

When: Saturday, September 7, 2019

Where: Old Kahilu Town Hall (Mana Christian 'Ohana) & YMCA Minuke Ole Park  
Behind Parker Ranch Center - Waimea, Hawai'i Island

The 2019 Taste will again offer daytime agricultural-themed activities and educational presentations geared for families before culminating with an evening tasting event showcasing locally produced food.

Click on the below links for details on the following fun:

FREE Daytime Ag Festival - <https://bit.ly/2ZaEb3o>

FREE Presentations - <https://bit.ly/2lqHG7D>

TICKETED Evening Taste Gala - <https://bit.ly/2ZfVSPe>

<https://www.tasteofthehawaiianrange.com/>

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**Mac Nut Pest Workshop - Ka'u and Kohala**

Ka'u Coffee Mill

Island Harvest Inc.

Sat., Sept. 14, 2019  
9:30 – 11:30am  
96-2694 Wood Valley Rd, Pahala, HI 96777

Sat., Oct. 5, 2019  
9:30 – 11:30am  
53-4073 Pratt Rd, Kapaau, HI 96755

At these free workshops, Dr. Alyssa Cho of CTAHR will teach macadamia nut growers to manage pests in the orchard, with a focus on macadamia felted coccid (MFC). Growers will learn integrated pest management strategies and monitoring protocols. The workshop will also cover best practices for chemical control, including calibration and determining application rates. There is no cost to attend, but space is limited, so registration is required. For questions, text or call (808) 430-1876 or email [bigislandmacnut@gmail.com](mailto:bigislandmacnut@gmail.com).

Register at <https://bit.ly/2kf7FPk>

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### **The Farmers' Market at Hāmākua Harvest is turning 5!!**

5th Birthday Celebration for The Farmers' Market at Hāmākua Harvest  
Sunday, September 22nd, 9:00 am - 2:00 pm

Hāmākua Harvest, a growing educational and agricultural hub and weekly farmers' market, will be celebrating their 5th birthday on Sunday, September 22nd from 9:00 am to 2:00 pm at their site at the intersection of Māmane Street and Māmalahoa Highway in Honoka'a. The festivities feature ono food, live music, keiki activities, food and craft vendors, a free educational event and more.

More details on Hāmākua Harvest projects may be found at [www.hāmākuaharvest.org](http://www.hāmākuaharvest.org), and questions may be directed to [info@hāmākuaharvest.org](mailto:info@hāmākuaharvest.org).

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### **29th Annual Hawaii Tropical Fruit Growers Conference "Growing & Marketing Exotic Brazilian Fruit in Hawaii" – Kona**

September 27-29, 2019  
Royal Kona Resort  
75-5852 Alii Dr., Kailua-Kona, Hawaii

Register at - <https://bit.ly/2FRcnKr>  
Conference agenda at - <https://bit.ly/2KWhdug>

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### **11th Annual Nursery Seminar for the Horticultural Industry**

Friday, September 27, 2019  
Hilo Hawaiian Hotel - Moku'ola Rooms 1 & 2

It'll be a full day of presentations from speakers with various areas of expertise addressing plant diseases, insects (beneficial and harmful), "biopesticides" and new chemistries and technologies, plant nutrition and water quality and other topics.

**HDOA CEU & LICT credits are pending...**

**If you have any questions, please contact Ken Ogawa at 960-3802, or E-mail at [ken.ogawa@nutrien.com](mailto:ken.ogawa@nutrien.com)**

Nutrien Grower Invitation and Registration: <http://bit.ly/2Zp2mjr>

11th Annual Seminar Program: <http://bit.ly/2zx9tXH>

Advanced Registration Form: <http://bit.ly/2L5VFKr>

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### **Mahi'ai a Ola: Cultivating minds, families, and communities**

Kamehameha Schools and The Kohala Center have kicked off Mahi'ai a Ola, a campaign to support local farmers, agricultural education, and innovative solutions to improve food security.

Mahi'ai a Ola is made up of three programs:

**Mahi'ai Match-Up:** An agricultural business plan competition in which the winner is awarded a five-year land agreement with KS and a \$10,000 cash prize donated by Ulupono Initiative. The winner will also have the support of KS land asset managers, along with wrap-around business development services and financial guidance from The Kohala Center. Applications for the contest are due by September 20, 2019.

**Mahi'ai a Ao:** Scholarship awards for various agriculture-related educational programs, in partnership with GoFarm Hawai'i.

**MahiX:** An open innovation challenge seeking cooperative solutions to Hawai'i's most pressing agricultural issues.

Funds raised on behalf of Mahi'ai a Ola will provide scholarships and funding for new and innovative ideas and initiatives that support agriculture and food security.

To learn more about Mahi'ai a Ola or to enter the Mahi'ai Match-Up business plan competition, visit [www.ksbe.edu/mahiai](http://www.ksbe.edu/mahiai)

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### **The Molokai Business Conference has been RESCHEDULED to FRIDAY, OCTOBER 18, 2019 - Please Register Online Now!**

*Please register before Friday, October 11, 2019 for a DISCOUNTED Registration Fee of \$10. Lunch is included.*

Note: If you already registered for the August 7, 2019 event that got cancelled, please re-register online!

For more information, please call (808)553-8100 or visit the website at <http://bit.ly/2YugDG8>

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### **BioWorks: Protocol for mixing BotaniGard ES and Kocide 3000**

**Technical elements for the use of BotaniGard ES (*Beauveria bassiana*) and Kocide 3000 as part of the coffee phytosanitary strategy in Hawaii. August, 13, 2019.**

#### **Background information**

Like in many other crops, the tank mixing of various pesticides is a common practice in coffee crops in Hawaii, as it contributes to saving time and economical resources. Due to the local pest management strategy, it is essential to provide elements of the compatibility of Kocide 3000 and BotaniGard ES, two commonly used pesticides of high demand among local coffee growers.

Kocide 3000 (Kocide) is a copper hydroxide fungicide/bactericide which is highly demanded due to its broad-spectrum control.

BotaniGard ES (BGES) is a mycoinsecticide that controls a broad spectrum of soft-bodied insects that attack greenhouse and field plants. The active ingredient in BotaniGard, *Beauveria bassiana* Strain GHA, is an entomopathogenic fungus.

The goal of this document is to provide elements on the compatibility of these two products and establish a protocol for their tank mixing strategy under field conditions without affecting their efficacy.

### **Compatibility test results**

The compatibility of Kocide 3000 and BotaniGard ES was confirmed both physically and technically, considering *Beauveria bassiana* (active ingredient of BotaniGard ES) growth under two different concentrations of Kocide 3000, which were equivalent to a low (1 lb/100 Gal) and high (16 lb/100 Gal) rates used under field conditions for this commercial product.

### **Conclusions**

Kocide 3000 was found compatible at up to 16 lbs/100 gallons, with BotaniGard ES at 1 qt/100 gallons water.

### **Tank mixing protocol**

When tank mixing, mix Kocide 3000 into the water first, then add the BotaniGard ES and spray immediately.

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### **O'ahu RC&D August News and Updates**

For the full newsletter go to <http://bit.ly/31KrH4e>

In this issue:

- In the Field: Women Farmers/Ranchers Potluck Gatherings
  - Congrats to our Waimānalo Watershed Restoration grant awardees!
  - Intern Spotlight: Congratulations, Kaelin!
  - Community Events and Opportunities
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### **Hawaii and Pacific Basin Farm Service Agency August 2019 Newsletter**

To view the full newsletter visit <http://bit.ly/2Hy937X>

In this issue:

- **Sign-Up for the 2019 Reimbursement Transportation Cost Program**
- Breaking New Ground
- New Farmers.gov Feature Helps Producers Find Farm Loans that Fit Their Operation
- **USDA Opens Signup for Market Facilitation Program**
- August 2019 Interest Rates
- FSA Hawaii & Pacific Basin State Committee

- Sign Up Today for Text Alerts from FSA
  - Hawaii County Mailing Address Update
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### **September 2019 The Independent Voice**

To view the full newsletter go to <http://bit.ly/2jXJV1P>

In this issue:

- New KCFA Website is Up and Running
  - All Work and No Play...
  - Coffee Ripeness Debate
  - Moisture Meter Calibration Workshop
  - KCFA Burlap Bags \$4.00
  - October Coffee Fest
  - Volunteers Needed: Coffee & Art Stroll
  - Coffee Cherry Processing Workshop
  - Question for Discussion - Product Liability
  - Beauveria Subsidy
  - TMT Opinion
  - Coffee in Next Round of Chinese Tariffs
  - Note from Kona Coffee Customer
-