

RapidOhiaDeath.org









# November 2019 Rapid 'Ōhi'a Death Newsletter

Volume 3, Issue 4

~ Ka 'ōhi'a hihipe'a o Kealakomo~

The entwining 'ōhi'a branches of Kealakomo This is our quarterly newsletter that was designed to update the community on current Rapid 'Ōhi'a Death (ROD) issues. If you wish to UNSUBCRIBE, scroll down to the bottom to do so.



Research Updates

• Rapid 'Ōhi'a Death (ROD) is now found on Hawai'i Island, Kaua'i, Maui

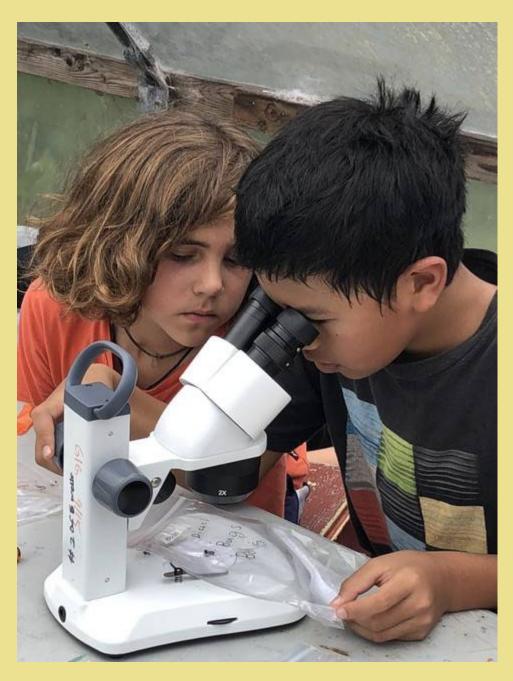
and Oʻahu. ROD is comprised of 2 pathogens, *C. huliohia* and *C. lukuohia*. *C. huliohia* is the less aggressive strain and is found on all 4 islands. The more virulent strain, *C. lukuohia* is only found on Hawaiʻi Island and Kauaʻi. Researchers believe that *C. huliohia* may have been present in the islands for some time but had gone unnoticed. Since *C. lukuohia* has caused so much damage across Hawaiʻi Island, teams have been doing extensive surveys of all main Hawaiian Islands in search of this pathogen. To help stop the spread of this disease, we can all help by sanitizing shoes and gear.

 Nikko Bjontegard, a PIPES University of Hawai'i at Hilo Intern (Pacific Internship Programs for Exploring Sciences) under the mentorship of Kylle Roy (USGS), Kelly Jaenecke (HCSU), and Bob Peck (HCSU) presented her summer research project at the 2019 PIPES symposium, "Assessing the Efficacy of *Ceratocystis* Decontamination Methods to Decrease the Spread Of Rapid 'Ohi'a Death." She found that the use of 5%, 10%, and 20% Clorox Bleach were not consistently effective decontamination methods for destroying *Ceratocystis lukuohia* spores embeded in ambrosia beetle frass, whereas 50%, 70%, and 90% Isopropyl alcohol were all effective decontaminants. She was also able to culture C. lukuohia from soil brushed off of boots after hiking in a RODinfested area. Contaminated frass is believed to be one of the main transportation methods of ROD. Currently, this study is being replicated and expanded to include the test of ethanol as a ROD decontaminant and will be documented in a peer-reviewed journal. Bleach solutions can become ineffective in the presence of organic material, highlighting the need to make sure tools and boots are properly cleaned. Bleach also degrades very quickly, and a fresh solution should be made every week. Because it is easy to miss a tiny piece of frass that may be loaded with viable Ceratocystis spores, it is very important to decontaminate your gear if you have been in a ROD area.



**Management Tips** 

Currently there is no cure for ROD, but that doesn't mean we can't do anything to help. Prevention is still paramount and can happen in many ways, from voicing support for better biosecurity (because there are worse things that can come into the state, including virulent strains of myrtle rust) and changing our behaviors to protect 'ōhi'a -practicing good sanitation, avoiding injuring 'ōhi'a trees (hiking, pruning, land-clearing, etc.), understanding what to do if you see a suspect tree, and understanding what to do if the tree is confirmed infected with ROD.



Island Outreach Updates

# Kaua'i

In the past few months, Kaua'i's outreach efforts included bio-sanitation trainings for tour operators and the Hawaii Department of Transportation, presentations with middle-school students, several workshops on how to grow 'ōhi'a in backyards and collecting 'ōhi'a seeds for conservation, and the

distribution of 143 bio-sanitation kits (sponsored by Hawaii Tourism Authority). In partnership with the Rotary Club of Hanalei Bay, National Tropical Botanical Garden, and Kauai Invasive Species committee, 100 'ōhi'a treelings were handed out at Kaua'i's first Great 'Ōhi'a Giveaway in October. On November 2, 703 people turned out for our annual Arbor Day celebration.

#### O'ahu

Over the course of the last 3 months the Statewide Outreach Coordinator has conducted ROD outreach at 19 events, workshops, classroom visits, and conferences reaching over 970 people. Outreach was conducted on Maui, Oʻahu, Kauaʻi and New Zealand. Efforts included: bio-sanitation trainings for Hawaii Department of Transportation, Maui County Fair, Biosecurity conference in Tauranga, NZ, ROD seed-banking workshop, and Kauaʻi Arbor Day events. Decontamination kits are now available on Oʻahu so feel free to contact (ambyr@hawaii.edu) for your free kit. Kit includes a boot brush, alcohol bottle, spray top, and a tote bag.

#### Maui

During the last few months Maui outreach specialists conducted outreach at several events and held presentations around the island. Staff spoke to over 450 people at events such as the Maui Fair, Arbor Day, and the Maui Green and Beautiful event. Decontamination kits are now available on Maui so contact the Division of Forestry and Wildlife (DOFAW) for your free kit and help to stop the spread of ROD on Maui.

#### Hawai'i Island

The 3<sup>rd</sup> annual 'Ōhi'a Love Fest in Hilo was a blast thanks to all of our partners and volunteering community members. More than 1,400 people attended. The Extension Forester, J.B. Friday, and KUPU intern, Stephanie Pasco, held the fort as ROD Education Specialist Corie Yanger was on maternity leave. In the past few months, they held talk-story sessions, hosted information tables, and conducted presentations reaching community members, youth groups, and State highway and roads workers.

# 'Ōhi'a Seed Conservation Workshop





This workshop is part of the **Rapid 'Ōhi'a Death Seed Banking Initiative**, which is expanding capacity for collection and banking of 'ōhi'a seeds across all islands in response to the ROD crisis. It is free and open to anyone who wants to learn how to properly collect, handle, and process 'ōhi'a seeds, without doing harm to trees or forests, using methods that protect seed viability and ensure conservation value for future restoration.

### **Hilo Workshops**

Friday, November 22, 2019 9am—12pm or 1:30—4:30pm Institute for Pacific Islands Forestry, Large Conference Room 60 Nowelo St, Hilo, Hawai'i Island

To learn more or register for a workshop, visit **ohialove.com** or scan the code below.

Learn more about Hawai'i Seed Bank Partnership and 'ōhi'a seed collections at <u>laukahi.org</u>

Learn more about Rapid 'Ōhi'a Death at rapidohiadeath.org

Support provided by:



**Upcoming Events** 

'Ōhi'a Seed Banking Workshop

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# conservation value for future generations.

Hilo – Nov. 22, 2019 9am – 12pm or 1:30pm – 4:30pm Institute for Pacific Island Forestry (Large conference room) 60 Nowelo St., Hilo, HI 96720

> Kamuela – Nov 23, 2019 1:30pm – 4:30pm Kahilu Town Hall Punawaiola Building 67-1187 Lindsey Rd. Kamuela, HI 96743



Meet Our People

Corie Yanger

ROD Outreach Specialist

U.H. CTAHR - Cooperative Extension

Corie was born and raised on O'ahu, then spent 11 years living in Madison,

Wisconsin before settling in Volcano on Hawai'i Island in 2006. She holds a B.S. in Biological Aspects of Conservation from the University of Wisconsin - Madison and a M.S. in Tropical Conservation Biology & Environmental Science from the University of Hawai'i (UH) at Hilo. Corie found her passion for seeing native ecosystems thrive as a technician for Hawai'i Volcanoes National Park's Native Plant Restoration Program and the National Park Service's Inventory & Monitoring Program. In 2016, she joined the Rapid 'Ōhi'a Death (ROD) team as the ROD Education & Outreach Specialist for Hawai'i Island working through UH's Cooperative Extension. She loves the variety of her work, from sharing updates with community members to creating educational programs, collaborating with partners, developing messages, maintaining the ROD website, mentoring interns, and hosting events like 'Ōhi'a Love Fest. Having spent years exploring and restoring, hiking, camping, botanizing, and living in 'ōhi'a forests, she is honored to be a part of the effort to combat ROD and to work alongside so many dedicated colleagues and partners.









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