2018 Rapid ʻŌhiʻa Death Newsletter

Volume 2, Issue 1

~ He kumu lehua muimui i ka manu ~
An ʻōhiʻa tree in bloom attracts many birds

This is our quarterly newsletter that was designed to update the community on current Rapid ʻŌhiʻa Death (ROD) issues. If you wish to UNSUBCRIBE, scroll down to the bottom to do so.

RapidOhiaDeath.org

Research Updates

- To date, the USDA Daniel K. Inouye Pacific Basin Agricultural Research Service Lab in Hilo has processed more than 3600 samples from symptomatic ‘ōhi‘a trees statewide. So far, detections of the fungus causing Rapid ‘Ōhi‘a Death (ROD), *Ceratocystis*, have only been found on Hawai‘i Island and NOT on any other islands.

- Helicopter aerial survey work continues across the state with no reports of new ROD outbreak sites. On Hawai‘i Island, the disease continues to spread outward from current locations, but no new large outbreak areas have been identified. Hawai‘i Island surveys have focused on identifying the ‘edges’ of infected areas to gauge the rate of disease spread over time.

- Since 2016, the Carnegie Airborne Observatory (https://cao.carnegiescience.edu/) has conducted annual hyperspectral remote sensing aerial mapping of Hawai‘i Island. This mapping technique helps to improve landscape-scale understanding of ROD disease by mapping overall forest health. CAO aerial surveys aid researchers in identifying individual trees and areas of forest that show symptoms of

stress. With that data, ground crews go out to sample trees identified in the survey.

- Exciting news! Our research team was recently awarded funds to expand ‘ōhi‘a resistance work started by ROD pathology team-member, Blain Luiz. Over the next year, our partners at the U.S. Forest Service and Ulu Lehulehu will collect seeds from live ‘ōhi‘a trees in highly Rapid ‘Ōhi‘a Death (ROD) infected areas and grow seedlings to test their resistance to the ROD fungus. If you own land in Puna with healthy looking ‘ōhi‘a still standing in heavily impacted ROD forests and would like to contribute to this research effort, please contact Kainana Francisco at ksfrancisco@fs.fed.us

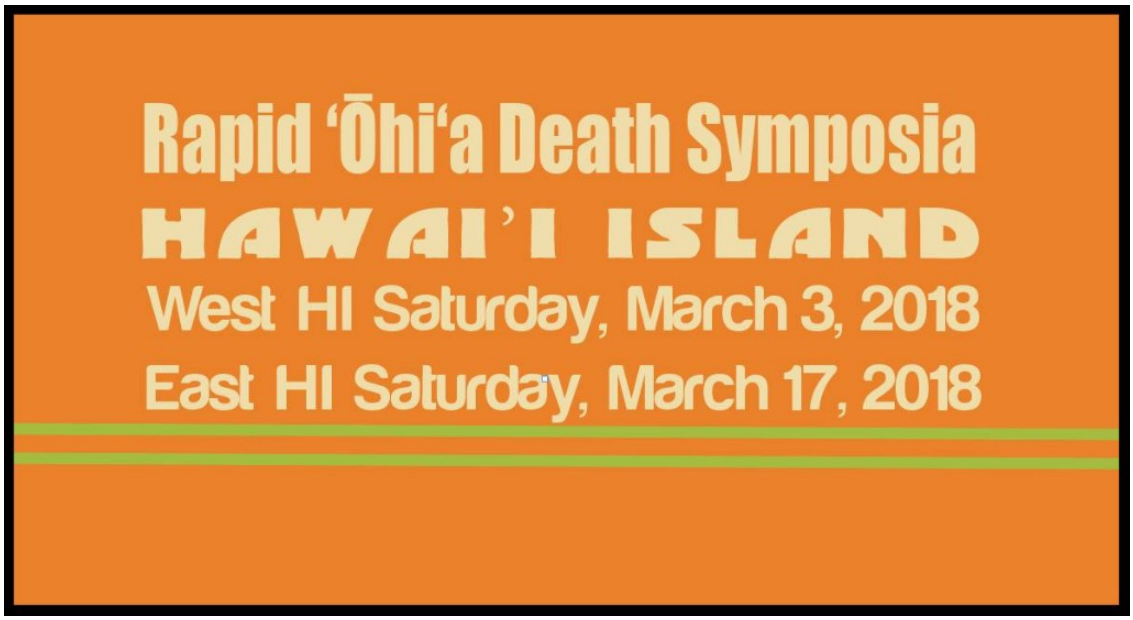
Management Tips

- ROD fungus grows within the wood of infected ‘ōhi‘a trees and its spores can survive for a year or more after the tree is cut. Moving ‘ōhi‘a wood, such as firewood or posts, from infected trees will move the fungus, so

please help us in preventing the spread of ROD by not moving ‘ōhi‘a firewood. If you have infected ‘ōhi‘a wood on your property you may safely burn it in a fireplace, imu, smokehouse, or BBQ. Burning ‘ōhi‘a wood is an effective way to prevent the ROD fungus from spreading because heat destroys the fungus and any spores within the wood.

- If cutting ‘ōhi‘a trees is necessary to install a fence or driveway, ensure chainsaw blades and any other cutting equipment are cleaned with 70% rubbing alcohol before and after use. Avoid injuring nearby ‘ōhi‘a trees as much as possible and keep ‘ōhi‘a wood onsite. If the wood has not been tested, it will be safest to treat the wood as if it is infected. Remember that the only way to confirm the presence of ROD in ‘ōhi‘a wood is to have a sample of wood tested. Resources for collecting samples can be found at www.RapidOhiaDeath.org. Continue to monitor ‘ōhi‘a trees along the fenceline or driveway and keep an eye out for ROD symptoms of rapidly browning leaves.

Upcoming Events



The Rapid ‘Ōhi‘a Death Working Group invites you to join us for the upcoming Rapid ‘Ōhi‘a Death Symposia!

- West HI ROD Symposium, Saturday, March 3, 2018 at the West Hawaii Civic Center, County Council Chambers in Kona, Hawai‘i

- East HI ROD Symposium, Saturday, March 17, 2018 at the University of Hawaii at Hilo UCB 100 in Hilo, Hawai‘i

Refreshments will be available at 8:30AM. We welcome you to enjoy a bit of food and drink, introduce yourself to our speakers, then join us for morning protocol to kick off this 3-hour event, scheduled from 9AM-12PM.

We'll provide updates on Rapid ‘Ōhi‘a Death by the lead researchers and managers and opportunities to ask questions of the panel. Attendees 18yrs+ will receive a free ROD decontamination kit.

This is a free public event. Seating is limited, so please be sure to register at www.RapidOhiaDeath.org

Bill Buckley

Big Island Invasive Species Committee

After graduating from Humboldt State University with a degree in Forestry, I spent several years working in the iconic redwood forests of the Pacific Northwest. I really enjoyed my work there on watershed management, and so I went on to get my Professional Science Master's degree from Oregon State University focusing on watershed restoration. Seeing the positive effects of restoration work on native species, water quality, or health and safety has motivated me in my education and career. When I came to Hawaii my first position was working on the Hybrid Ecosystem Project, studying how to change otherwise degraded forest into functioning ecosystems using the right combination of plants to help thwart future invasion and increase ecosystem functionality. This was a great introduction into Hawaiian ecosystems and the issues surrounding invasive species. Just as I was finishing up my work on that project, Rapid ʻŌhiʻa Death (ROD) appeared and began taking its toll on many of the island's forests.

Currently, in my position at Big Island Invasive Species Committee, I work to control an invasive tree (albizia) as well as protect a native tree (ʻōhiʻa). Working to stop the spread of ROD is important to me because ʻōhiʻa

trees are so environmentally and culturally foundational. ʻŌhiʻa trees provide many ecosystem services that everybody and everything on our island rely upon, so minimizing the impacts of this pathogen on the people and watersheds of Hawaii is our focus. My team works to help further the knowledge of ROD by providing information to the scientists and other land managers working with the disease, and to help slow its spread to other parts of the island and state.

COOPERATIVE EXTENSION
UNIVERSITY OF HAWAI'I AT MANOA

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