

RapidOhiaDeath.org





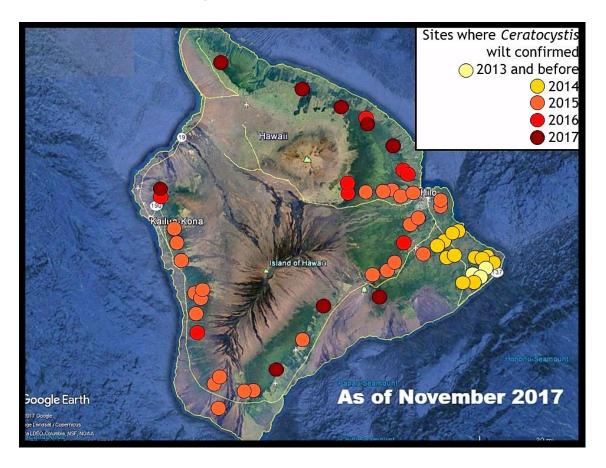
Quarterly Rapid 'Ōhi'a Death Newsletter

Volume 1, Issue 2; November 2017

~ Pua mai nei hoʻi ka lehua ~ "The lehua is blossoming"

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.

Rapid 'Ōhi'a Death Distribution



Research News

- In September 2017, Rapid 'Ōhi'a Death (ROD) was detected in North Kohala on Hawai'i Island. Suspect trees were first seen by air and then confirmed to be infected with ROD by DNA testing. The latest estimate for the size of affected area is about 300 acres with over 50 trees testing positive for the *Ceratocystis* pathogen. Scientists and staff are currently investigating how the disease got established in the area.
- The ROD pathology team has been conducting trials on four different varieties of 'ōhi'a (Metrosideros polymorpha). They've found that after more than three months of being inoculated with Ceratocystis sp. A fungus, there appears to be higher tolerance to the disease in certain varieties of 'ōhi'a versus others. Read more about Blaine Luiz, the team member leading up this important study, under Meet Our People.

- Diseases similar to ROD infect many different species of trees around the world. Once a tree is infected, there are no treatments that can eliminate the infection or "cure" the trees. Management in all cases focuses on avoiding infection. We can proactively care for our forests in ways that will lessen the impact of ROD on 'ōhi'a and we continue to study questions that give us hope. The disease has had variable impact to the forest, which suggests that ROD will have different rates of spread. Also, healthy trees exist in devastated areas, pointing to possible natural resistance or tolerance. While we work to better understand these patterns, we encourage landowners to plant 'ōhi'a and other native species, and give those plants a fighting chance by controlling weeds, feral animals, and invasive plant species.
- ROD is still confined to Hawai'i Island and found nowhere else in the State.



Management Tips

- To help prevent ROD from infecting your trees please avoid wounding them. Wounds can occur from ungulates, heavy machinery, weed whackers, lawn mowers and high winds. If you need to prune your tree, you may use pruning sealant to cover the wound to help prevent infection.
- Lining up some bulldozing work? If you need to have bulldozing done to clear brush on a property, talk with the bulldozer operator about Rapid 'Ōhi'a Death ahead of time. Ask that the operator bring a clean machine to your property and if you want to save individual `ōhi`a trees, hand clear around them to prevent wounding from bulldozing activity.
- The fungus that causes ROD can grow within an 'ōhi'a tree for months before the tree shows any outward symptoms of disease. If you have an apparently healthy 'ōhi'a tree that needs to be cut, follow recommended measures for preventing the spread of ROD, contact us if you have questions, and remember that the only way to confirm the presence of ROD is to have a wood sample tested. Here is our current guide on how to sample for testing https://gms.ctahr.hawaii.edu/gs/handler/getmedia.ashx?moid=2865&dt=3&g=12



Other Announcements

- For general questions about ROD, please contact Dr. J.B. Friday, Extension Forester at jbfriday@hawaii.edu, phone (808) 969-8254, or Corie Yanger, ROD Educational Specialist at cmyanger@hawaii.edu, phone (808) 969-8268.
- Landowners who suspect ROD on islands other than Hawai'i Island should contact the local Invasive Species Committee immediately to have a sample collected.

Kaua'i Invasive Species Committee (808) 821-1490, kisc@hawaii.edu

Oahu Invasive Species Committee (808) 821-7994, oisc@hawaii.edu

Moloka'i Invasive Species Committee (808) 553-5236 ext. 6585, lbuchanan@tnc.org

Maui Invasive Species Committee (808) 573-6472, miscpr@hawaii.edu



Meet Our People: Staff Bio

Blaine Luiz, University of Hawai'i at Hilo

I have been involved with ROD research for about 3 years. I began as a Pacific Internship Program for Exploring Science (PIPES) intern and I've primarily worked with Dr. Lisa Keith studying pathology of the two species of *Ceratocystis* causing ROD. I have been involved with processing samples, maintaining lab cultures, propagating plants, keeping maps up-to-date, and inputting data into data sets being used by the State Department of Land and Natural Resources and U.S. Geological Survey. Currently, I am a master's student at UH Hilo in the Tropical Conservation Biology and Environmental Science program studying whether varieties of 'ōhi'a found on Hawai'i Island have resistance to the disease. The results look promising for observing varying levels of tolerance to *Ceratocystis* in 'ōhi'a, but screening will need to be repeated on a much larger scale. ROD is an enormous problem for the people of Hawai'i, and I'm happy to help provide a better understanding of this disease and what we can do to stop it.

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