

# RAPID OHIA DEATH or OHIA WILT

## *Ceratocystis fimbriata*

### WHY SHOULD YOU BE CONCERNED?

- Ohia trees make up more than 50% of all our native forests.
- Our watershed is dependent on these native Ohia forests.
- Depletion of the native Ohia forests will result in an invasion of non-native species, and could greatly affect native flora and fauna.
- It has already killed tens of thousands of mature Ohia trees (*Metrosideros polymorpha*) in forests and residential areas in the Puna and Hilo Districts of Hawaii Island.
- This disease has the potential to kill our native Ohia trees statewide.



Ohia lehua liko are used for lei making.



Ohia forest affected by Rapid Ohia Death.

### SYMPTOMS

- Crowns of the affected Ohia trees turn chlorotic (yellow) and will later turn brown within days to weeks with dead leaves remaining on the branches for some time.
- Rapid Ohia Death may be seen as dark, nearly black staining in the sapwood along the outer margin of the trunks.
- Freshly cut wood infected with *C. fimbriata* may give off an odor similar to ripe or rotting bananas.

### PATHOGEN

- Rapid Ohia Death is a fungal disease which affects the vascular system of the tree and causes the xylem to fail to transport water to the foliage. This results in the wilting of the stems and leaves.
- Soils under infected Ohia trees as well as in frass (i.e., sawdust) associated with wood boring beetles of infected trees, may provide other means of transporting the disease.



Symptoms may first appear on a single branch (right fork of tree). Note left side of the same tree showing no symptoms, however, the entire tree is infected and within weeks will die from the fungus.



Close up of the characteristic dark staining of sapwood from the fungus.

### WHAT CAN YOU DO?

- Do not transport wood of affected Ohia trees to other areas.
- Clean and sanitize all tools with freshly prepared 10% solution of chlorine bleach and water or by using a 70% rubbing alcohol solution.
- Vehicles used off-road in infected forest areas should be thoroughly cleaned so as not to carry contaminated soil to healthy forests. Concerned areas include wheels threads and undercarriage of vehicles.
- Shoes, tools, and clothing used in infected forests should also be cleaned, especially before being used in healthy forests.

#### Acknowledgements:

Dr. J. B. Friday, University of Hawaii CTAHR Cooperative Extension Service  
Dr. Lisa Keith, USDA, Agriculture Research Service  
Dr. Flint Hughes, USDA Forest Service Institute of Pacific Islands Forestry

For updates and more information visit [www.ohiawilt.org](http://www.ohiawilt.org)



Background photo by Stephanie Collins



REPORT A PEST 643-PEST  
[hdoa.hawaii.gov](http://hdoa.hawaii.gov)