Update from the CDFA Diagnostician's Corner: New *Cylindrocladium* blight on California Bay Laurel and Potential New Hosts of *Phytophthora ramorum* in California.

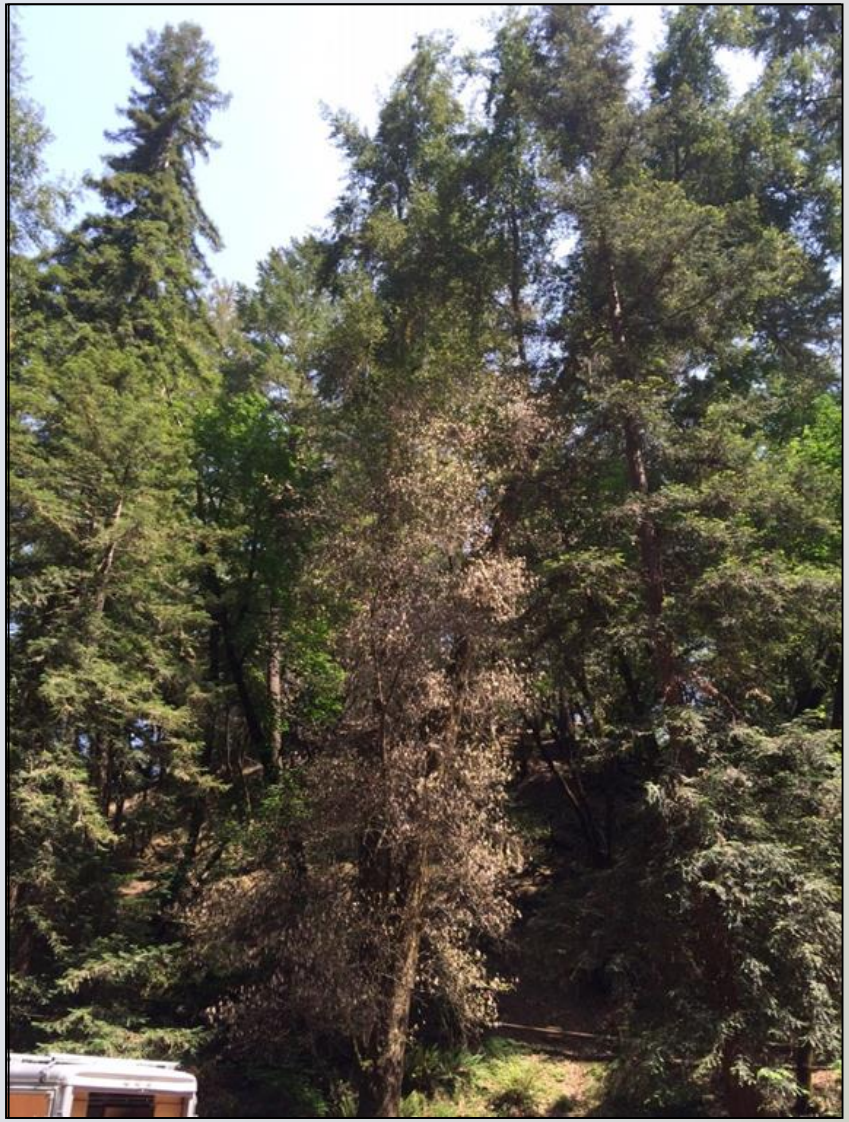
S. Rooney-Latham, C. Blomquist, M. Soriano, C. Lee, L. Bell. D. Zwart, J. Ochoa, T. Swiecki, E. Bernhardt, T. Pastalka and M. Uhler.

66th Annual Meeting of the California Forest Pest Council

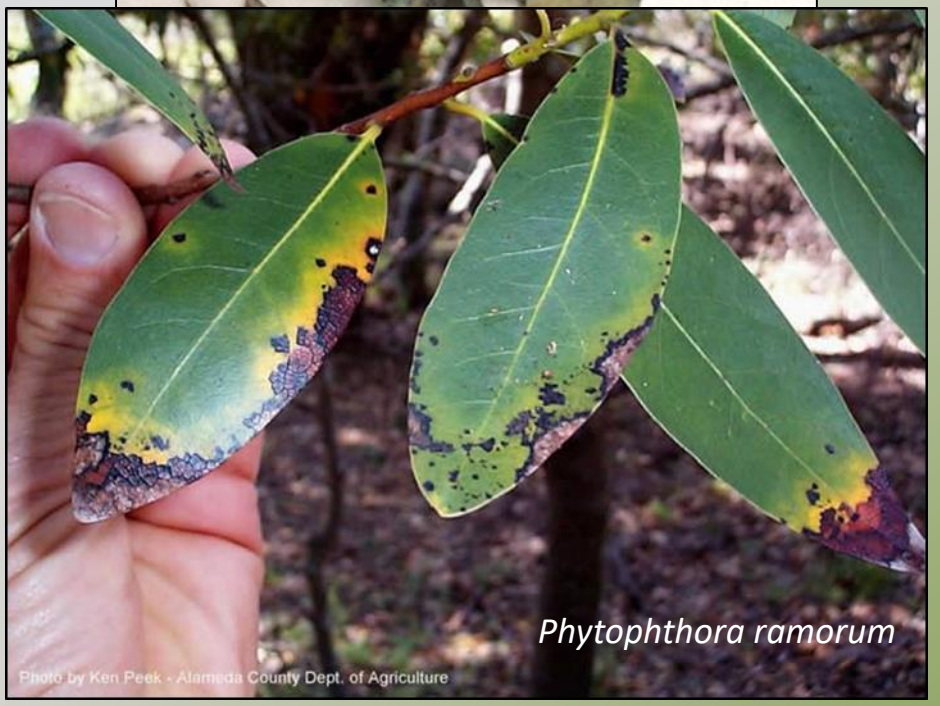
November 15, 2017

cdfa CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

2010 - Unidentified problem on Bay (*Umbellularia californica*) in Armstrong Redwoods State Park (Sonoma Co. CA)



Symptoms on Bay



Phytophthora ramorum

Symptoms on Tanoak

Pathogenicity tests on Bay

February 2017
Similar symptoms on bay in Santa Cruz and Santa Clara Counties

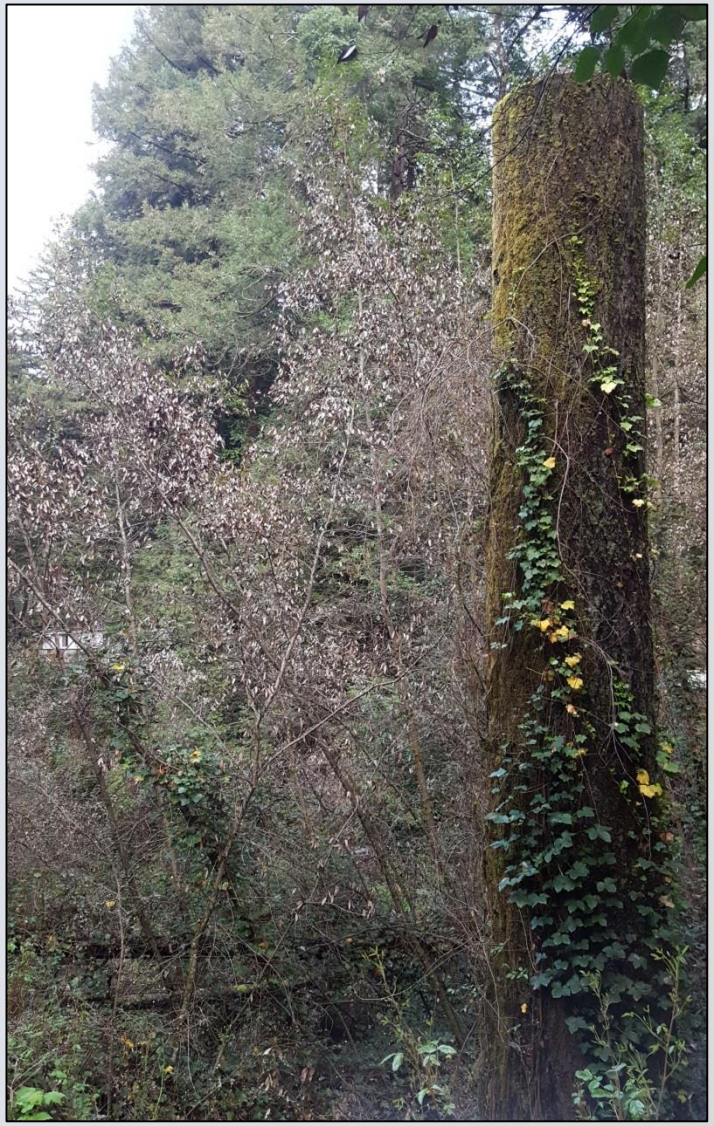


Photo credit: John Chapman SCVWD

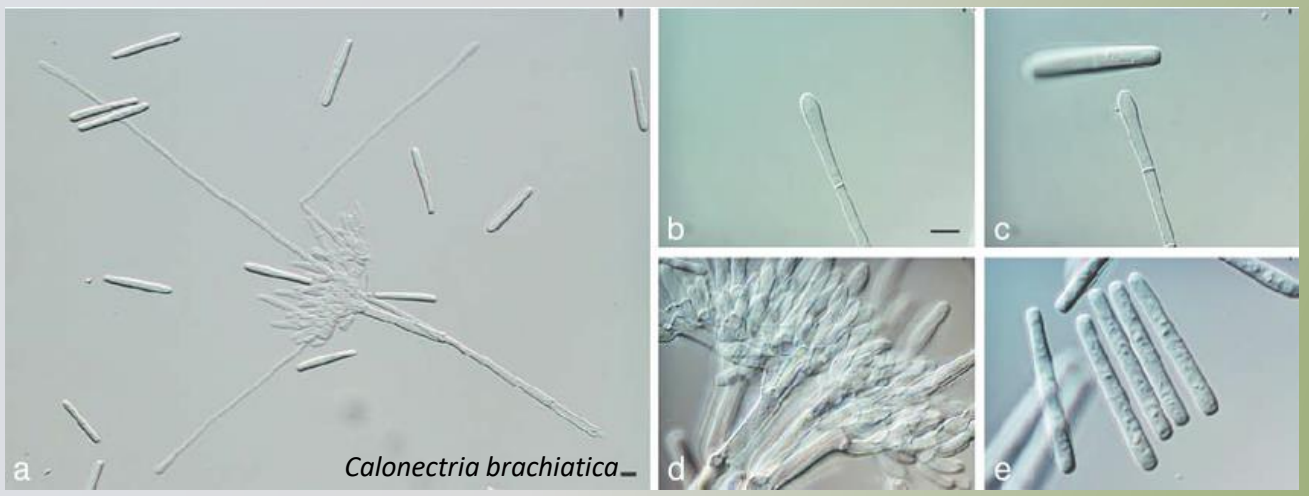
Photo credit: Chris Lee Cal Fire

Cylindrocladium anamorph
= *Calonectria* teleomorph

90-97% match to other *Calonectria* species based on multi-locus sequencing

Calonectria sp. nov

Native or exotic species?



Lombard et al. Persoonia 23, 2009: 41– 47

New potential hosts of *Phytophthora ramorum* in California wildlands

Photo : M. Uhler – Eastern Bay Regional Park

Marin Municipal Water District – Mt. Tamalpais Watershed Area

Large amount of die-off of native plants

P. cinnamomi, P. tentaculata, other *Phytophthora* root issues?

Arctostaphylos glandulosa* and *Arctostaphylos virgata

Chaparral pea
Pickeringia montana

2017 – Above average winter/spring rainfall

Photo Credits M. Uhler – Eastern Bay Regional Park

At least 5 new *Arctostaphylos* species hosts of *P. ramorum* in a Eastern Bay Regional Park

http://www.saveknowland.org/2012/04/12/what-you-wont-learn-at-the-oakland-zoos-earth-day-1-the-galapagos-islands-of-the-east-bay-hills/

Photo Credit T. Swiecki, E. Bernhardt- Phytosphere Research

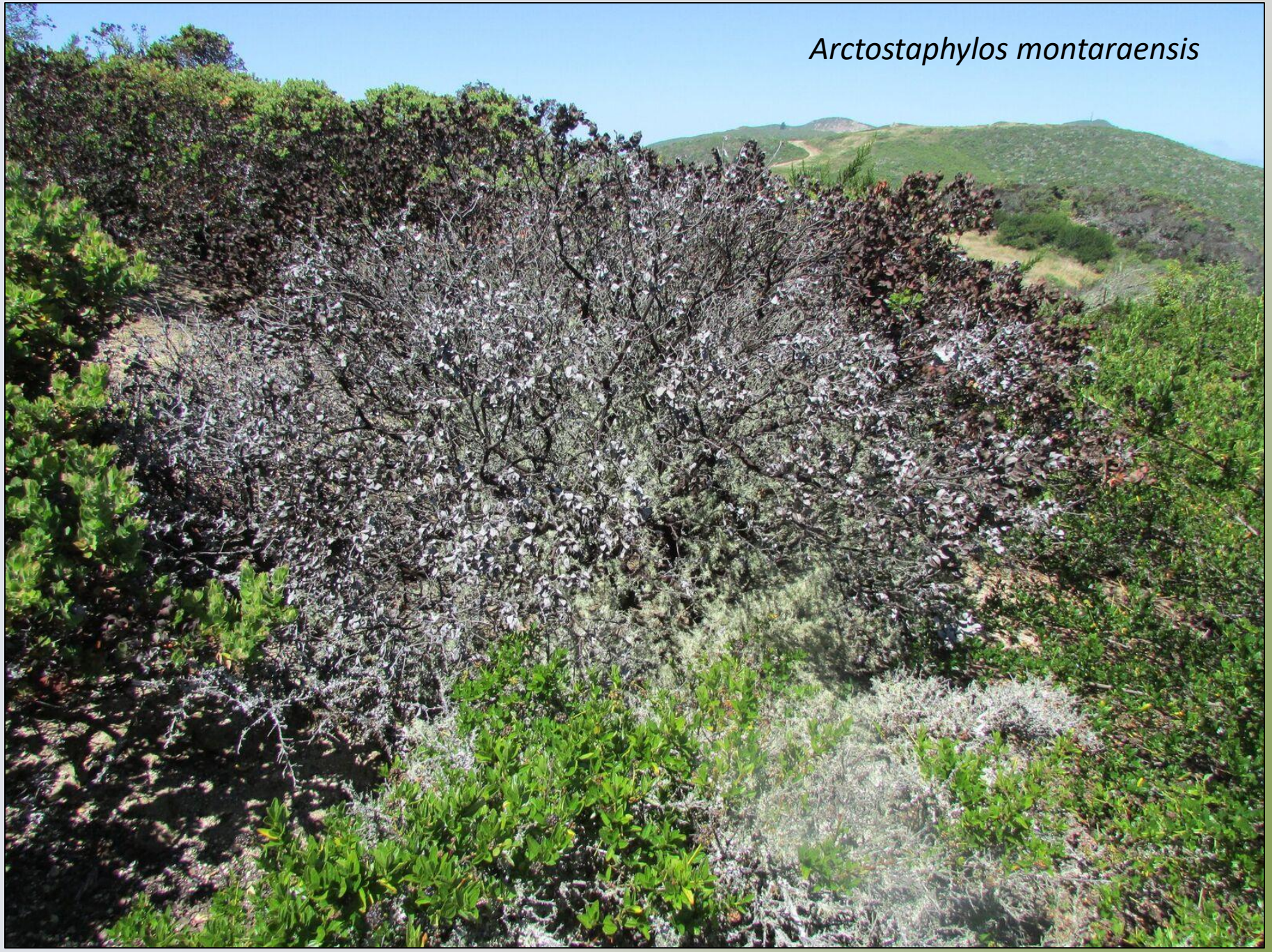


Photo Credit T. Swiecki, E. Bernhardt- Phytosphere Research

2017 Brisbane Box trees (*Lophostemon confertus* =*Tristania conferta*) in Sausalito, CA

STATION
FIVE STAR STATIO

Photo Credits: D. Zwart - Bartlett Tree Research Lab

June 2017

Oct 2017

Presidio 2012
Photo Credit: Christa Conforti - Presidio Trust

Presidio 2012

Photo Credit : Christa Conforti - Presidio Trust

Photo Credit : Christa Conforti - Presidio Trust

Take Home Message

Enter each problem with an open mind without any preconceived notions about what it should be and exhaust all possibilities, even if they seem out of the norm.

Pathogenicity Experiments

Acknowledgments

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- **Presidio Trust** – Christa Conforti
- **Eastern Bay Regional Parks** - Michael Uhler
- **Tomas Pastalka**
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