

Virulent strain of sudden oak death confirmed in Del Norte County

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A year after scientists first investigated a possible outbreak of sudden oak death on trees in Del Norte County, they confirmed last week the first-ever presence of a more aggressive form of the strain.

Yana Valachovic, UC Cooperative Extension Humboldt-Del Norte County Director, reported to the Del Norte County Supervisors at their Oct. 13 meeting about the discovery of the European strain of the pathogen near Little Mill Creek of North Bank Road.

The pathogen is a water mold that can kill oaks and tanoaks, threaten wildlife habitat and cause fire risk.

It was introduced to California on nursery stock from an unknown location in 1995, according to a sudden oak death economic impact study in February 2019.

Valachovic said the European strain of the sudden oak death pathogen is potentially detrimental to the region's conifer species.

"As it's exhibited in the United Kingdom, where they grow many commercial conifer species by plantation, including several species that are native to Northern California, they've seen pretty substantial mortality," Valachovic explained. "It's also known to cause damage to at least smaller diameter Douglas fir trees and we're watching to try to learn more about what it might do to some of our other conifer species."

As a result of the presence of the sudden oak death, Valachovic said Del Norte County has been added to a list of other California counties with additional quarantine regulations.

"Where we've confirmed it is relatively close to U.S. 101 on 197, we don't know how it will behave in California. This pathogen has always provided some tricks — it's difficult to predict," she said.

The tree disease also had also been found in Monterey, Santa Cruz, Santa Clara, San Mateo, San Francisco, Alameda, Contra Costa, Solano, Napa, Marin, Sonoma, Lake, Mendocino, Humboldt and Trinity counties.

Valachovic worked with a team of scientists, including Del Norte Agricultural Department and the California Oak Mortality Task Force, sampling vegetation and local streams and conducting helicopter surveys to confirm whether and where the disease was present.

They confirmed that sudden oak death is present and die-off was occurring along North Bank Road close to Little Mill Creek and its connection with U.S. 101 near Smith River.

“This is a concern because this introduced plant disease is very aggressive on tanoak and leads to expansive tanoak mortality,” she Valachovic. “There are years where it’s fairly aggressive mortality and there are years where it can be quiet. It responds to warm, wet conditions. That’s when you see the greatest expansion.”

Valachovic shared images of dead tanoaks in Humboldt and Curry counties.

Sudden oak death reproduces via spores and has more than 100 hosts of both native and common garden plants. While hosts can include rhododendrons and ferns, some plants are super spreaders and others are typhoid Marys, providing the perfect environment for quick reproduction, Valachovic explained.

She added that other plants are not a major vector for the pathogen, although they experience some irritation and die back from sudden oak death. However, once established, sudden oak death spreads quickly.

“What we’ve seen in Humboldt County is a growth rate of around 1,500 acres a year since it was established in 2004 with little to no management following since then,” she Valachovic. “So, we’re dealing with something that can move rather quickly and rather significantly.”

Chris Lee, chair of the California Oak Mortality Task Force, told The Triplicate the latest information about sudden oak death, including photos of symptoms on most of the known plant hosts, tips on diagnosis, best-management practices and contact numbers for technical assistance, can be found at <http://suddenoakdeath.org>. For additional information about disease monitoring and management, he directed landowners to check out the University of California Cooperative Extension Humboldt-Del Norte website at http://cehumboldt.ucanr.edu/Programs/Forestry/Sudden_Oak_Death/ and the UC Berkeley Forest Pathology and Mycology Laboratory website at https://nature.berkeley.edu/garbelottowp/?page_id=117.

Lee also said he is available to visit properties to assess tree disease issues, and the task force has other forest health specialists in other parts of California that do the same thing. Contact Lee at christopher.lee@fire.ca.gov or at (707) 726-1254. Additionally, UC Cooperative Extension Humboldt-Del Norte has experts who can do the same: <http://cehumboldt.ucanr.edu> or (707) 445-7351.