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## **Trees and People**

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## Update on Sudden Oak Death Napa, Blitz Coming May 3

Last spring, volunteers in Napa County sampled 43 bay laurel trees for the presence of SOD, the killer of millions of oaks and tanoaks. The good news is there were no positives for the disease on the Valley floor. The bad news is two positives along Dry Creek Road, about 2 miles west of Yountville. The results are posted on the UC Berkeley "matteolab" website:

https://nature.berkeley.edu/matteolab/?page\_id=7878)

The statewide Sudden Oak Death Blitz program shows that the disease persists in California forests and oak woodlands, and it is not going away. Infection rates increase and decrease almost in lock-step with increases and decreases in rainfall. Ironically, the rain our thirsty sate depends on helps to foster the spread of the disease.

It could even get worse if the originally identified strain - NA 1-- hooks up with a more aggressive variant, EU1. Recent results show another variant, NA 2, has been found in a few locations on the SF Peninsula and the East Bay. This one is more tolerant of warm and dry conditions.

U.C. Berkeley's leader on SOD research, Dr. Matteo Garbelotto, calls it one of the worst tree epidemics in the world. Its effects include loss of biodiversity, extirpation of entire tree populations, fire hazard from dead and dying trees, risks of infected trees falling, and loss of highly valued trees on home grounds.

The UC Berkeley Forest Pathology and Mycology Lab organizes the annual SOD Blitz program. It does the testing and research while volunteers make it possible to collect the data from a huge geographical area.

The organism, Phytophthora ramorum is lethal to live oaks, black oak and tanoak but infects many native and non-native landscape plants with minimal harm. California bay laurel is the most significant foliar host. It spreads infections to oaks and tanoaks. Symptoms of the disease are visible in the leaves of infected bay laurels, which volunteers collect for the Blitz.

Susceptible California native oak species include all of the evergreen oaks (coast live oak, canyon live oak and others) plus black oak. Tanoak, which is not a species of Quercus (oaks), is also a victim as well as a spreader of the disease. Fortunately, valley oaks, Oregon white oaks, and blue oaks are not susceptible.

SOD infects the trunks of the susceptible oak species, causing lesions that girdle the trunk and eventually kill the tree. In tanoaks, unlike the true oaks, it can infect and spread from the leaves.

The disease was dubbed "Sudden Oak Death" because infected trees seem to die suddenly. Actually, it infects a tree and grows in the cambial zone for two to three years before the tree "suddenly" dries up. In other plants, where stems and leaves are killed or blighted, the disease is called "Ramorum Blight". In bay laurels, infected leaves tend to be more plentiful in the cool, moist, and shady lower canopy of smaller bay trees. That is convenient for volunteers collecting leaf samples for the Blitz.

A water mold, P. ramorum spreads most readily in mild, rainy weather and in climates, or microclimates, where moisture and foliar host plants are plentiful. Persistent spring rainfall facilitates new infections.

Blitz participants must go online to

"matteolab": <u>https://nature.berkeley.edu/matteolab/?page\_id=7878</u> to view a 15-minute training video and to register for the local Blitz. If you do so, please contact me so we can get a count of sampling packets to request from the lab.

Volunteers should also download the free iPhone app: SODMapMobile, which is needed for getting the GPS coordinates at each sample collection site. GPS coordinates can also be found on Google Earth Pro.

Napa's 2025 SOD Blitz begins on Saturday May 3, 8:30 AM. The packet pick-up location will be the Napa County Ag. Commissioners Office front porch, 1710 Soscol Avenue. A volunteer will be there from 8:30 to greet you.

Participants collect bay laurel leaf samples at any locations they choose and return the completed packets to the pick-up location as late as Monday morning May 5.

Please come and join the Blitz!

Other important websites: www.sodblitz.org www.sodmap.org

suddenoakdeath.org.

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