
THE PESTICIDE REVIEW

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Santa Clara County Division of Agriculture

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Africanized Honeybees

Moving Northward

Santa Barbara County recently reported the first Africanized honeybee (AHB) find in their county. The Santa Barbara Coastal Vector Control District discovered the swarm in the town of Goleta.

The AHB colonized area includes all of Tulare, Kern, Los Angeles, Orange, Ventura, San Bernardino, Riverside, San Diego, and Imperial counties. Also included are portions of Inyo, San Luis Obispo, and Santa Barbara counties.

The bee has been migrating northward since its accidental release from a breeding program in Brazil in 1957. Migrating 200-300 miles per year, the bees have established themselves throughout most of Mexico, and were first detected in southern Texas in 1990. Naturally migrating swarms of AHB entered California in October 1994.

This insect poses a serious threat to California. The adverse impact is not limited to public health and safety, but also to emergency services, parks and recreation, and to the potential loss of bees for the pollination of crops vital to our economy and food

supply. Our common honeybee, the European honeybee, has been in California since the 1800's. This honeybee plays an integral role in the pollination of 42 different nut, fruit, vegetable, forage, and seed crops directly valued at \$1.5 billion per year. They pollinate crops such as almonds, melons, plums, cherries, avocados, strawberries, and vegetables.

AHB look identical to our European honeybee, just slightly smaller. To differentiate the two races of honeybee, scientists look at their DNA.

There are several behavioral differences between these two races of bees. One well-known difference is that AHB have a tendency to aggressively defend their hive. They typically inflict ten times as many stings per encounter than their European relatives and will pursue an intruder up to a 1/4 mile.

Another distinction is the European honeybee stores up to 5 times the amount of honey compared to its AHB counterparts. AHB puts more energy into reproduction and defense than into making and storing honey. AHB also abscond (move the hive) throughout the year, and can do so every 6 weeks. European honeybees will typically abscond only once a year and will do so in springtime. These behavioral differences may play a role in how far north the AHB's territory can stretch. European honeybees endure cold winters by storing honey to sustain the hive, whereas AHB hives will starve or die of exposure during a cold winter.

Some common sense precautions can help reduce the chance of encountering AHB. Remove debris from yards such as empty boxes, buckets, old tires, and lumber piles; skirt mobile homes to the ground, and take caution when opening water meter boxes. AHB are not selective when it comes to setting up a hive and will pick smaller areas compared to the European honeybee.

If you find a hive or swarm in Santa Clara County that you suspect is AHB, call the Santa Clara County Vector Control District. You can reach them at: (408) 792-5010.

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Pesticide Notice

Can you satisfy 3CCR Section 6618 by complying with Business and Professions Code Section 8538?

Agricultural pest control companies are required to give notice to their clients as prescribed in California Code of Regulations Section 6618. Structural companies have a different notice requirement, which is found in the Business and Professions Code, Section 8538. If a company is licensed to perform both agricultural and structural pest control, is there a notice you can give to your clients to fit both forms of pest control?

Yes. - California Code of Regulations Section 6618 (C)(2) states:

"Compliance by licensed Structural Pest Control Operators with the notice requirements of Section 8538 of the Business and Professions Code meets the requirements of this Section."

Therefore, a company licensed to perform both structural and agricultural pest control can use their structural pesticide notice and be in compliance in either situation.

Agricultural Versus Structural Pest Control

The differences between the two

Our office often receives questions asking for clarification between agricultural and structural pest control. Sometimes the line between the two can be fuzzy, but it is vital that you only carry out the pesticide work for which you are properly licensed. Not only is it illegal to perform pest control outside your license, but you may also encounter insurance and liability issues should something go wrong.

Here are some examples of pest control activities and the correct license required to perform them.

Agricultural Pest Control

Any application of a pesticide to:

- Plants, irrespective of their location in respect to a structure.
- Control indoor pests of interiorscapes in malls, offices, etc.

Agricultural Pest Control cont':

- Control garden or orchard pests such as ants, earwigs, or honey-dew producing insects, even when the treatment is applied adjacent to a structure and incidentally prevents invasion of the structure
- Control rats which are eating backyard fruit (Cannot control rats infesting structures)
- Control swarms of bees in yards.

Structural Pest Control

Any application of a pesticide to:

- Control pests invading structures whether conducted inside or outside the structure
- Control fleas in or around a structure (including treatment of lawn areas nearby)
- Remove bees from a structure
- Control spiders
- Control wood destroying pests or organisms.
- Control ants infesting a structure, including treating the offending nest located outside in the yard.

Agricultural OR Structural Pest Control

There are a few instances where an application can be made under either license.

- Control of pests infesting grain or other agricultural products when such products are stored or placed within structures including railroad cars or grain bins.
- Control of birds on structures. (Agricultural licensees with Category A)

Question Corner:

Do you have a question or something you would like to see in our newsletter? Please write in care of the 'Pesticide Review' at our San Jose Office: 1553 Berger Drive, San Jose, CA 95112

Sudden Oak Death (SOD)

What is it, and where is it?

What is it?

Sudden Oak Death is caused by a newly discovered organism, *Phytophthora ramorum*. The three trees known to succumb to this Phytophthora are black oaks, coast live oaks, and tanoaks. Researchers have found that *P. ramorum* will also infect a number of other California natives. This makes the task of controlling the spread of this organism all the more difficult, if not impossible.

Signs and Symptoms of SOD:

Sudden Oak Death is an appropriate name for this condition. When susceptible oak trees contract *P. ramorum*, they decline quickly. The first noticeable symptom will be the decline of the tree canopy. The leaves will turn brown and will remain clinging to the tree. Another sign of SOD is that the trunk on the three tree species mentioned above, will actually begin to 'bleed' at the infection site.



Active bleeding site



Stained area from an old bleeding site

If you were to chip away the bark under the bleeding site, you would find a "bulls-eye" ring of infection.

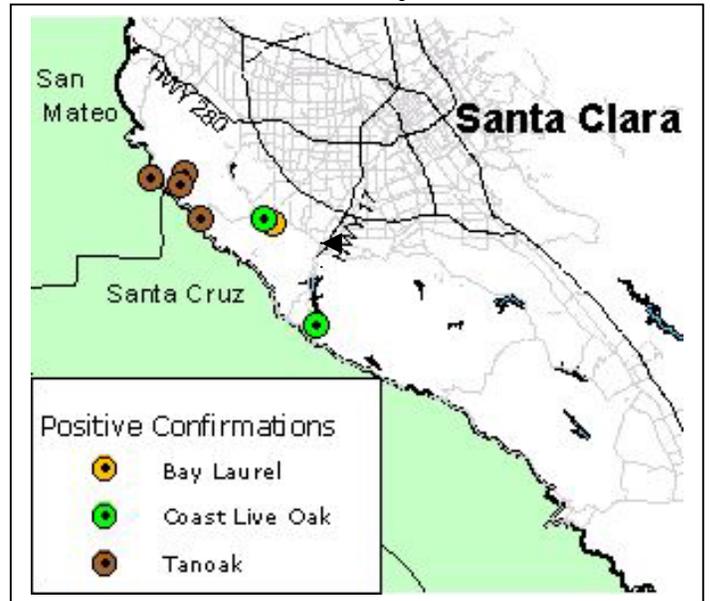


P. ramorum can be identified by culturing tissue samples obtained from the outside ring of these "bulls-eye" areas.

Where is SOD found in California?

Currently, SOD is found in 12 counties: Alameda, Contra Costa, Humboldt, Marin, Mendocino, Monterey, Napa, San Mateo, Santa Clara, Santa Cruz, Solano, and Sonoma.

Map of Sudden Oak Death in Santa Clara County



The known area of infestation in Santa Clara County is in the hills near the border with Santa Cruz and San Mateo Counties. We have not found Sudden Oak Death in the valley area of the county.

Plants known to be hosts or potential carriers of *Phytophthora ramorum*:

This list is from the California Code of Regulations and is updated as new discoveries are made. As of October 1, 2002, the list of plants is as follows:

Trees known to succumb to the disease:

- black oak
- coast live oak
- tanoak

Plants that are known to be carriers of the disease or will show foliar / stem symptoms:

- arrowwood
- bigleaf maple
- California Bay Laurel
- California Buckeye
- California coffeeberry
- coast redwood
- douglas fir
- honeysuckle
- huckleberry
- madrone
- manzanita
- rhododendron species, except azaleas
- Shreve's Oak
- toyon