GROWING TIMES

Volume 6, Issue 2 Santa Clara County Division of Agriculture August 2007

Pesticide Use Near Red-Legged Frog Habitat

Picture taken from the National Parks Website photo by Paul G. Johnson II
Excerpts of this article were taken from DPR & EPA's websites

On October 20, 2006, the Federal District Court for the Northern District of California issued a Stipulated Injunction settling an April 2, 2002 case brought against the Environmental Protection Agency (EPA) by the Center for Biological Diversity (CBD). In their suit, CBD alleged that EPA was in violation of the Endangered Species Act by failing to ensure that EPA's registration of 66 pesticides does not adversely affect the California red-legged frog (a threatened species native to California).

The federal government agreed to submit a joint motion to the court, asking the court to issue a Stipulated Injunction (injunction) to resolves the lawsuit.

On October 20, 2006, the U.S. District Court for the Northern District of California imposed no-use buffer zones around California red-legged frog upland and aquatic habitats for certain pesticides.

This injunction and order will remain in effect for each of the 66 pesticides until EPA goes through formal consultation with the Fish and Wildlife Service (FWS) on each of the 66 active ingredients, and FWS issues a Biological Opinion including a "not likely to adversely affect" statement for the pesticides. Each pesticide, in turn, will be removed from the list as this occurs.

The injunction lists specific buffer zones for ground and aerial applications. Ground applications have a 60 foot no-use buffer zone and aerial applications have a 200 foot buffer zone. These buffer zones start from the edge of four specific kinds of California red-legged frog habitat areas: Aquatic Feature, Aquatic Breeding Habitat, Non-Breeding Aquatic Habitat, and Upland Habitat. To see the list of pesticides with buffer zone restrictions and for a PowerPoint presentation defining these habitat areas, visit DPR's website: http://www.cdpr.ca.gov/docs/es/rl_frog/index.htm

An additional resource for habitat information is Fish & Game's website: http://www.fws.gov/sacramento/es/animal_sp_acct/red_legged_frog.htm

Red-legged frog at Elkhorn Slough
Photo by Greg Hofmann

INSIDE THIS ISSUE

DPR Supports Natural Alternative To Fumigants

Field Study Could Bring Sweet Smell of Success Back for Garlic Growers
July 9, 2007
Media contact: Glenn Brank brank@cdpr.ca.gov

SACRAMENTO - - The Department of Pesticide Regulation will fund research that could provide California's onion and garlic industry with a natural fungus fighter.

"This project offers a unique example of how our environmental and economic interests complement each other," said DPR Director Mary-Ann Warmerdam. "While modest in scale, this research points the way toward effective pest management without the use of fumigants."

If successful, the $40,000 project could be a major boost for growers who cultivate more than 50,000 acres of garlic and onions worth more than $300 million (plus significant revenue from processed products) a year.

California's garlic and onion industry is threatened by "white rot," a rapidly spreading, persistent soil fungus that destroys the bulbs.

White rot, which can lie dormant in the soil for up to 40 years, already has disrupted production on more than 13,000 acres of prime farm land in the San Joaquin Valley counties of Kern, Kings and Fresno.

In the Santa Clara-Gilroy area - - known as the "Garlic Capital of the World" - - less than 500 acres remain under cultivation due to white rot.

Soil fumigants such as methyl bromide and metam-sodium destroy most white rot but cannot eradicate it, and the cost of fumigation has become economically impractical for many growers, who face pressure from foreign competitors.

Under DPR's two-year grant, the California Garlic and Onion Research Advisory Board and the University of California Cooperative Extension will commercially field test a naturally based compound found in onions and garlic. The compound "tricks" white rot into germinating, but in the absence of a crop, the fungus dies from starvation or is severely weakened.

Robert Ehn, technical manager for the onion and garlic board, said there appear to be no side effects from the treatment, other than the garlicky smell. “As white rot spreads, more and more acreage is being forced out of production," said Ehn. "This project is of critical importance, given the pressures on our industry."

Earlier this year, DPR proposed new regulations that would cap overall fumigant use in the San Joaquin Valley to reduce air emissions and meet state air goals. However, fumigant use has already declined in the onion and garlic fields due to falling commodity prices.

According to industry sources, more garlic is now imported from China than produced in California. Chinese production skyrocketed from about 50,000 pounds to nearly 3 million pounds in the last decade.

Industry contact: Robert Ehn, Technical Manager California Garlic and Onion Research Advisory Board: (559) 297 9322.

PHOTO CAPTION: A healthy young garlic bulb next to a shriveled bulb infected with white rot. (Photo by Shannon Mueller, U.C. Cooperative Extension, Fresno.)

Backflow Prevention

Acceptable backflow devices

California Code of Regulations, Section 6610 requires pesticide application equipment be equipped with an air-gap separation, reduced pressure principle backflow prevention device, or double check valve assembly.

Why is there a regulation requiring an air-gap or backflow prevention for pesticide equipment?

When a filling hose is submerged in a tank of pesticides without backflow prevention, the pesticides in the tank can easily contaminate the water source by way of backpressure or backsiphonage.

Backpressure can cause the flow in a hose to reverse direction when the pressure at the end of the hose is greater than the point where it is connected to the water supply. Water will flow to the spot of least resistance and if the pressure at the end of the submerged hose is greater than the supply end, the liquid will flow from the tank back to the water source.

The second phenomenon, backsiphonage, can occur when there is a drop in the supply line pressure. If the filling hose is submerged in a tank, and the supply line experiences a drop in pressure, a vacuum can be created that will suck the water from the tank back into the water supply.

Are there any specific requirements for air-gaps and anti-siphoning devices?

Yes. Air gaps must be at least half the diameter of the fill pipe, but no less than 1-inch above your tank. If you would like to read the Enforcement Letter addressing the subject of backflow prevention, click on the following web link:

http://www.cdpr.ca.gov/docs/enfcmpli/penfltrs/penf2001/2001012.pdf

If you have an anti-siphon device, or are interested in obtaining an anti-siphon device, check with your local water supplier to assure your device is acceptable.

Despite Buzz on Bees, Experts Disagree on Seriousness of Problem

March 13, 2007
Monterey Herald
Jim Downing

SACRAMENTO, CA -- Bees are dying by the billions. Nobody knows why. And the crops they pollinate - California almonds especially - are at risk.

Or at least that's been the buzz.

In the past month, the new and mysterious honeybee ailment known as "colony collapse disorder," which seems to cause entire hives of bees to leave home and never return, has made the front page of newspapers from Sacramento to New York. Fox News and National Public Radio aired reports. A "CBS Evening News" crew spent weeks following a bee-disease investigator around the nation. Even Comedy Central's Stephen Colbert took up the issue, urging investors to hoard bees.

But the story says that despite all the attention, there's little solid data on the severity of the problem.

Eric Mussen, a bee specialist with the University of California, Davis, was quoted as saying, "I'm not convinced that it's so much worse than what we saw in 2004 and 2005."

While bees are undoubtedly in trouble this year, Mussen said, there's little evidence so far that it's anything other than the continuation of their long struggle with disease, environmental stress, and the hardship of being hauled cross-country in midwinter to pollinate crops in California.

For questions or comments, please contact:
Santa Clara County Division of Agriculture
"Growing Times"
1553 Berger Drive, San Jose, CA 95112
Or, e-mail:
scc.agriculture@aem.sccgov.org

* This newsletter is available on-line on our website: http://www.sccagriculture.org

Santa Clara County Division of
Agriculture
1553 Berger Drive
San Jose, CA 95112
http://www.sccagriculture.org

The Growing Times is published by the Santa Clara County Division of Agriculture. This newsletter is published several times a year and is intended to provide information and education to the agricultural community in Santa Clara County.

Inside this issue: