

Trees



# Chemical tested for use on dying pines

By KEITH MURAOKA

Sentinel Staff Writer

CAPITOLA — An experiment begun Monday will determine once and for all whether a controversial chemical injection treatment for pine trees infected with pitch canker disease works.

Maybe.

William Thomas, a forest pathologist from Lafayette — who developed the treatment utilizing the chemical Fungisol — said the experiment has "dice loaded against us" due to the presence of twig bore beetles that also were killing the treated pines. But University of California Co-Operative Extension Adviser Steve Tjosvold, who set up the experiment, said Thomas was using the insects as a "hedge" if the treatment didn't work.

The experiment, which is being conducted at an undisclosed site in Capitola and is expected to take four months, is drawing interest from several fronts.

Some 2,000 to 3,000 Monterey pines in Santa Cruz County are dying from pitch canker. If the treatment works, up to 1,200 pines along Highway 1 between Santa Cruz and Aptos, earmarked for cutting by the state Department of Transportation, might be spared.

A special inter-agency committee, set up by the state Department of Food and Agriculture, is currently acting on a recommended action plan for the state. At this point, it does not include chemical treatment. In fact, one scientist on the committee has gone so far as to call Thomas a "quack."



Dan Coyro/Sentinel

Entomologist George Reynolds says he has no doubts the fungicide treatment will work.

with plastic-encased capsules of Fungisol by George Reynolds, a forest entomologist from Cambria, who maintained he had "no doubts" about the treatment working. He

some 100 pitch canker-diseased pines in Southern California during the past three years.

Reynolds added, "It frustrates me, after I've seen the evidence

searchers who've developed it (Fungisol), to have to come up here and prove it again."

Yet, Thomas is not so confident, saying he still has "reservations"

presence of beetles in the diseased trees.

At one point, Tjosvold and Thomas argued over the merits of the experiment, with Tjosvold trying to get Thomas to concede the experiment was set up properly.

"I asked him (Thomas) at the very beginning if everything was OK," said Tjosvold. "Now, he's just hedging himself."

Noted Thomas later, "All I'm saying, is if you get negative results, it's (the experiment) still open to question. It's possible that because of the beetles, the disease was re-introduced."

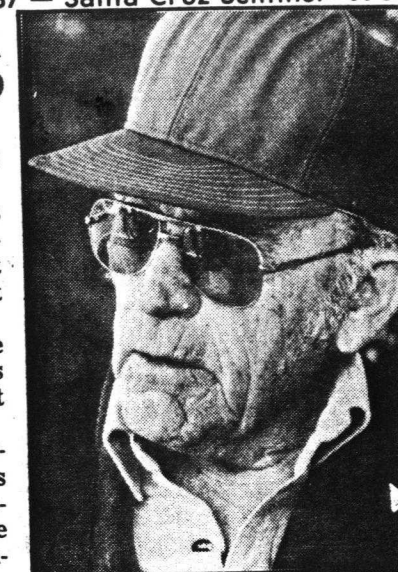
According to Thomas, at least a couple of the diseased pines should have been injected with an insecticide to kill the beetles. Tjosvold said the city of Capitola did not want insecticides to be used.

He maintained the experiment was "a typical situation" in the county, with some insects also attacking the diseased trees. "However, the insects are not the major factor that's killing the trees," Tjosvold added. "What's killing them is pitch canker."

Thomas refused to make such an assumption, questioning the insects factor in the death of trees. "The trouble is, even though the disease is inactivated from the treatment, the insects can reintroduce the fungus," he said.

Tjosvold said the experiment is being conducted solely to examine the effect of Fungisol on pitch canker, not its effect on insects.

Plans call for re-infecting the trees with pitch canker fungus every month or so to see if Fungisol prevents the disease. Whether or not it helps in the first place will be easily



William Thomas

Chemical treatment's developer

causes browning of branch tips before spreading throughout the tree.

"If it works, it works," Tjosvold added. "The issue is so controversial we decided we might as well test it in Santa Cruz County. I hope it works. It's too controversial to say more."

According to Thomas, his detractors "really haven't tried it (Fungisol) on pitch canker."

"They tried it on different kinds of pines and in a totally different climate," he added, referring to the U.S. Department of Food and Agriculture failures that L. David Dwinell talked about two weeks ago. Dwinell, a world-renowned expert on the disease, was flown in from the Southeast where the disease is uncontrollable.

Reynolds added that experiments in the Southeast were conducted improperly — namely by not using a sufficient amount of Fungisol and