## Rare fungus attacking area trees

## By Alexandra Hayne

The mysterious ailment afflicting Monterey pines in Santa Cruz County has been identified, but finding out what it has opened up is another mystery.

The ailment is pitch canker fungus, and the new mystery is that it has never before been seen in California. State Department of Forestry officials are baffled by it. They don't know how it got here—it is common in the southeastern states, especially Florida—how it is transmitted, or exactly how to control it.

Bill Ruskin, a forester in the departments' Felton office, said officials first thought the damage was caused by insects, perhaps the gall wasp or engraver beetle. Affected trees, which can be seen along Highway 1 between Highway 17 and the Park Avenue exit and near New Brighton State Beach, have whole branches that have turned brown from the tips back. In

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addition, there is leakage of pitch along the twigs and branches.

"It looks pretty serious," he said. "It's starting to show up all over the place. It's getting noticeable."

Ruskin said in addition to the trees along the highway and near New Brighton, affected trees have been spotted on Old San Jose Road in the Soquel area.

The damage was first seen in July near the intersection of Highways 1 and 17. A plant pathologist was called in, and samples eventually ended up at the University of California, Berkeley. There, the plant tissue was cultured and the fungus identified last week, Ruskin said.

He said the fungus hasn't

responded well to fungicide, and the recommended treatment now is to cut off the affected limbs and burn them, preferably in dry weather. It seems the spores can only be transmitted under moist conditions.

"We're kind of gearing up to start some sort of (treatment) program," he said. "Private property owners just have to bear the cost, though, unless it becomes a full-blown epidemic on forest land.

"I think we can keep a handle on it if we get out there now."

Ruskin said scientists still aren't sure how the fungus is transmitted. It could be carried by insects such as the gall wasp, which has been seen on the trees, he said, or it could have preceded an insect attack, entering

through a wound in the bark. Regardless, he said, the fungus weakens the tree, inviting insect invasion, and that combination could be deadly.

Ruskin said the UC-Berkeley scientists had seen the fungus drawn down into the tree, not simply staying put in the affected branches.

"That's not good," Ruskin said, adding that the other factor that would determine whether an affected tree lived or died was the extent of secondary invasion by insects.

"We also may recommend an insecticide." he said.

The fungus attacks only pine trees, and although the Monterey pine has been the worst affected, it has been seen on Bishop pines, which are native to this area, and Leppo pines, which, like the Monterey, are not native but have been introduced here.

"As far as we know," Ruskin said, "this is the only recorded location where the fungus has been found."