



MICHIGAN PLANT CARE SPECIALISTS SAY THEY'RE FIGHTING EAB AND WINNING

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As the emerald ash borer makes its way to more trees in the Great Lakes region and beyond, many feel that the ash trees don't stand a chance. But in Michigan, where it is said to have originated, some have a reason to hope.

Dave Roberts, Ph.D., specialist and district horticulture agent at the Michigan State University Extension, has been credited with discovering the emerald ash borer in 2002 in southeast Michigan.

The process started in 2000 when he began looking into why so many ash trees in the region were dying.

"Scientists scoffed at the idea of anything but ash yellows, which is devastating on the east coast, as I understand," he says. "I set up research to see what was causing thousands of ash to decline and die. The number grew every week, eventually to hundreds of thousands. This struck me as something very abnormal."

Roberts couldn't get any funding for the research, so he called a public meeting in January of 2001. He started researching the problem in June of 2001 with about \$5,000 in donations he received from a grant proposal.

He first pursued ash yellows and ruled it out as the culprit. Some had been saying the insect was the chestnut borer, but Roberts thought that identification was off because that species was not known to attack ash trees.

In 2002, he collected logs in southeast Michigan and reared out the adult form of the pest to try to accurately identify it. He found that it was an exotic pest that had been introduced to the region.

In 2001, before the pest was identified, Mark Baldwin, an acquaintance of Roberts, had been experimenting with 30 afflicted trees.

"I treated the trees for the redheaded ash borer," says Baldwin, owner of Mark J.

Baldwin & Associates, a landscape design/build and maintenance company. He adds that the trees exhibited symptoms that the insect was known to leave. "Imidicloprid was labeled for that, so that's what we used."

The trees, which were found to have been infested with the emerald ash borer, are still standing.

"The trees are growing unbelievable amount of growth, as healthy as can be," Roberts says. "All 30 show no serious branch dieback or leaf loss. In 2002, they looked like they were going to die. They have come back."

Roberts adds that the site is highly maintained. Fertilizing the trees has also helped in their recovery.

Thousands of ash trees have been saved since they began treatment, Roberts says. This is why they try to convince people who have the trees to not rush to sentence those trees to death. Some professionals urge people to cut emerald ash trees down if they are in an infested region, whether the tree has been infested or not. But Roberts and Baldwin say taking this action may be unnecessary.

Not all trees may be salvageable, Roberts says. The age of a tree can affect its ability to recover.

"A younger tree will probably have a better chance of recovering than older trees," he says, adding, "That doesn't mean older trees can't be saved. You just really have to start treating it early."

There are three major application techniques, Roberts says:

- **Inject into tree trunk** – about four different products have been shown to be effective.

- **Tree spraying** – douse/spray tree with a chemical. Some of the trees treated this way showed to have 95 percent control or higher. A total of two sprays are all that

that's needed in a year.

- **Soil treatments** – putting a chemical on the soil. The primary product used is Merit. It has shown variable results but as Roberts learns how to apply it better, there will be more positive results, he says. Tree roots pick it up systemically.

Roberts learned about a man near the epicenter of the infestation who had ash trees in his subdivision. Unbeknownst to Roberts at the time, the man started treating the trees with ground treatment when he heard about EAB.

"All the trees in the subdivision are doing well," Roberts says.

The tree pest is similar to grubs in a lawn in that they don't have to be completely eradicated in order to save the plant, Roberts says.

While experimentation is ongoing and researchers have differing opinions about the effectiveness of treating ash trees, Roberts just wants to make sure people are given all the options. Additionally, he has doubts about the effectiveness of cutting and chipping trees. Research he conducted has shown that the insects survive the chipping process.

He suspects a lack of funding is causing officials to tell people to cut down ash trees rather than exploring other, more expensive options, such as treatment.

Baldwin, frustrated with rushed death sentences, wants to spread the word as well.

"There is hope, but we struggle through people saying 'there's no cure, don't waste your time, cut trees down, treatment is not effective.' But the trees are still alive," he says. "That's the proof."

For more information, visit the Michigan State University Extension Web site at www.msue.msu.edu or contact Roberts at robertsd@msu.edu. More information on EAB is available at www.emeraldashborer.info.