

Borers branch out from ash trees

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Bad news in the bug department: The emerald ash borer, a tiny, glitter-green insect from China expected to kill virtually all ash trees in the eastern U.S. - unless they are treated with expensive chemicals - may have a new target.

The U.S. Department of Agriculture confirmed that the borer had attacked the white fringe tree, which is in the same family as not only the ash, but forsythia and lilac.

Experts don't know quite what to make of the find yet, other than that it is worrisome.

"This is bringing up more questions than answers," said Tom Tiddens, supervisor of plant health care at the Chicago Botanic Garden, which is part of a "sentinel plant network" that monitors pests and pathogens.

It also has 42 "beautiful" fringe trees to fret over.

Will the half-inch insect be a major fringe tree pest, or a minor one? Will it kill fringe trees, as it does ashes, or just damage them?

Maybe the insect was merely taste-testing a close relative of the ash because, by now, so few ash trees are left alive in Ohio. That's where the discovery was made by a college biology professor on a walk. He passed a fringe tree and decided to examine it. Bingo.

As Tiddens put it, "If the buffet is crowded at the prime-rib station, it

seems logical that the meat loaf station may get some visits."

Or, much scarier: Is the insect adapting?

"I think the finding has some significance," Tiddens said, adding that researchers have wondered for years what would happen after the borer swept through an area, killing all but a few [ash trees](#). "It makes sense they would begin feeding on other stuff in the same family."

The recent discovery showed that the insect's attack on the fringe tree wasn't brief. It completed its life cycle on the tree. Adults laid eggs, which hatched into larvae, which pupated and reemerged through D-shaped holes as adults.

Officials in Pennsylvania and New Jersey, which are experiencing just the early stages of the borer's onslaught, are on the alert, but not alarmed. The fringe tree isn't common in either state.

Paul Kurtz, an entomologist with the New Jersey Department of Agriculture, said he knew of just a few small pockets of fringe trees in the southern part of the state.

"I can say with confidence, this will not really affect the forest diversity in New Jersey," he said.

Forsythias or lilacs, he said, would not be likely targets because they do not have the quantity of bark that the insect needs. Neither "has enough meat on the bones, so to speak," Kurtz said. "I don't see that as a host at all."

What the Ohio discovery has done, he said, is open a re-evaluation of the borer. "Could it have changed its diet? Only research and time will tell."

Likewise, Don Eggen, chief of the forest pest management division in the Pennsylvania Bureau of Forestry, said the unwelcome development is "early on . . . something more to keep a lookout for."

The [emerald ash borer](#) - one of many borers that attack trees - has been chomping its way south and east from Detroit, where it was discovered in 2002. It is believed to have entered the Detroit port on wooden packing crates.

The borer lays its eggs on the bark of ashes. Eventually, the larvae girdle the tree, cutting the flow of nutrients and killing it. For municipalities and homeowners, taking down dead or dying trees in yards and along streets, where they are a safety hazard, has been a huge expense.

To Kay Havens, director of plant conservation science at the Chicago Botanic Garden, the [emerald ash](#) borer's seeming dietary divergence represents a cautionary tale about biocontrol, a common conservation practice. In addition to the insects inadvertently brought into the United States are those introduced intentionally, often in an effort to control invasive plants. Researchers find an insect that feeds on the plant in its native range and, after testing to ensure it won't eat anything else in this country, release it here.

But as now is feared with the emerald ash borer, Havens said, "it happens commonly that insects eat things that we don't expect them to eat at first."

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