https://news.bloombergenvironment.com/environment-and-energy/christmas-tree-farmers-worry-about-life-without-chlorpyrifos

Environment & Energy Report

Christmas trees at the Beverly Tree Farm in Beverly, Mass.

Photographer: Joseph Prezioso/AFP via Getty Images

Christmas Tree Farmers Worry About Life Without Chlorpyrifos

By Adam Allington

Dec. 23, 2019, 3:00 AM

- Various state bans, potential Canadian action put the chemical off limits for some
- Some tree farmers already transitioning to other methods

While atrazine, carbaryl, and chlorpyrifos don't roll off the tongue like Dasher, Prancer, and Vixen, in many ways they're as central to the Christmas experience as any team of Yuletide ungulates.

Most of us probably don't pause to consider what it takes to produce some 25 million healthy green Christmas trees in the U.S. per year.

In most cases it takes chemical pesticides, lots of them. Now a growing number of tree farmers worry they may soon find themselves without access to one of their most important chemicals—chlorpyrifos.

Several states, including California and New York, have announced bans on the chemical. Canada is weighing a similar ban. And overseas, the European Union is banning sales of chlorpyrifos after Jan. 31, 2020.

Humbugs

U.S. Christmas tree farmers, however, say chlorpyrifos is the most effective and affordable weapon they have to defend against an army of sap-sucking aphids, weevils, and midges.

"I don't have to apply insecticides very often, but when I need to, chlorpyrifos is my choice," said Kurt Emmerich, president of the Christmas Tree Farmers Association of New York.

In recent years, many smaller farms that don't supply to wholesale markets have switched over to tree species that aren't as susceptible to pests, thereby reducing the need to spray, said Emmerich. Also, other pesticides also are used by some, including atrazine and carbaryl.

"But for the commercial growers, it's certainly my understanding that it doesn't take long before all roads lead to this product [chlorpyrifos]," said Emmerich. "Because it comes at a reasonable cost and is very effective."

'100,000 Trees That We Could Have Lost'

That is certainly the case for one of the largest Christmas tree farms in Oregon.

"Without that chemical we could have lost 20% of our production," said Bob Schaefer, general manager of Noble Mountain Tree Farm near Salem, Ore.

Every year the farm harvests roughly half a million trees over 3,600 mountainous acres. In the past three years, Schaefer said, unseasonably warm summers have led to an "explosion" of aphids.

“That’s 100,000 trees that we could have lost if we didn’t have chlorpyrifos,” he said. “That could have been devastating for our company. I don’t think we could have dug out of that.”

‘Really Nasty’ Insecticides

Manufactured by Corteva Agriscience and sold under the Lorsban and Dursban brands, chlorpyrifos is an extremely potent neurotoxic insecticide used on a variety of crops.

A number of studies have linked chlorpyrifos to brain development problems in children. The EPA proposed a nationwide ban on the chemical in 2015, but the process was halted when President Donald Trump took office in 2017.

“The insecticides used in this [Christmas tree] industry are really nasty,” said Nathan Donley, a senior scientist with the Center for Biological Diversity. “And because it’s a perennially treated crop, you don’t just have one year of chemical inputs. It can take seven years before a tree is harvested.”

The real risks for this crop, Donley says, are borne by the farm workers who do the spraying, and the ecosystems where the chemicals end up.

But Corteva has said in prior statements that it “fundamentally disagrees” with the conclusions that led to the EU banning chlorpyrifos, and that authorized uses of the products offers wide margins of protection for human health and safety.

No ‘Perfect Chemical’

If chlorpyrifos is eventually banned in the U.S., tree experts say the Christmas tree consumer will notice.

“It’s gonna be more expensive. Most of the alternatives are less effective or more expensive,” said Chal Landgren, a Christmas tree specialist at Oregon State University’s North Willamette Research and Extension Center.

“There is no such thing as the perfect chemical,” Landgren said. “There are substitutes, and they all have different risk and expense profiles.”

‘Wouldn’t Be a Huge Loss’

North of the border, in Canada, the government is considering a proposal to cancel most uses of chlorpyrifos. However, many Christmas tree growers say they’ve already moved on.

“The short answer is that chlorpyrifos wouldn’t be a huge loss,” said Matthew Wright, owner of M. Wright Farm and Forest Ltd., a Nova Scotia-based farmer who exports about 8,000 trees a year to buyers in New England.

Wright says many growers have moved to products that integrate better into a balanced pest management program, where beneficial insects are promoted.

“For aphids we’re now using newer products, like Endeavor [Syngenta], which has a lower toxicity to beneficial insects,” said Larry Downey, a farmer and president of the Canadian Christmas Tree Growers Association. “The old products, they do a good job in general, but they kind of wipe out everything—including the predators that kill the aphids.”