https://www.news-press.com/story/tech/science/environment/2021/01/22/environmental-advocates-alarmed-epa-approval-two-citrus-pesticides-they-say-could-have-dire-conseque/4232671001/

Environmental advocates alarmed by EPA approval of two citrus pesticides they say could have dire consequences for people, wildlife

Amy Bennett Williams

Fort Myers News-Press

To the shock and alarm of environmental advocates, the Trump Environmental Protection Administration handed citrus growers a "parting gift," as <u>one professional journal put it</u>: the ability to use a previously banned neurotoxic pesticide and a broad-spectrum antibiotic to fight citrus greening.

Last week, <u>the EPA</u> announced it would let Florida growers again use Aldicarb after more than a decade of prohibition while also ruling that farmers nationwide can use streptomycin on citrus trees.

Both the timing and the bundling of the two substances caught environmental advocates off-guard, and left them scrambling to respond, said Nathan Donley, a senior scientist at the Center for Biological Diversity, who called the pair of rulings "unbelievably reckless decisions (that) will harm children and farmworkers, and further hamper our ability to combat major public health crises."

Each carries its own risks. The neurotoxic Aldicarb, banned in more than 100 countries, is one of only 36 pesticides the World Health Organization classifies as "extremely hazardous" to humans, even in low doses. "It's a known groundwater contaminant and wherever it's used, the groundwater table is at risk," said Donley.

"Florida has very high aquifers (which) worried the EPA so much in 2010 about its use in citrus, because ... Aldicarb has been detected in Florida groundwater in the past." Used in granules sprinkled on the soil around trees, it's so potent that "if a bird or a mammal comes and ingests just a single granule, they can die from that, so birds and squirrels and rabbits foraging around these (groves) are at very high risk."

The problem with streptomycin is more about the problems that can arise from overuse of drugs used to fight infections in humans: the creation of what the U.S. Centers for Disease Control and Prevention and other health groups call "superbugs". The CDC warns that widespread antibiotic use could worsen the already grave problem of antibiotic-resistant bacteria, which infect at least 2.8 million people and claim almost 36,000 lives annually, Michael Craig, senior adviser for antibiotic resistance, told The News-Press last year.

Citrus greening has devastated Florida crops, leaving an industry grasping for help as yields steadily drop. The incurable bacterial infection carried by a tiny Asian insect first appeared in the early 2000s, and is now spreading in California groves as well. The state's citrus industry has lost 59% of its jobs in the past decade; and the industry has taken an estimated \$2 billion hit in economic impact, according to the University of Florida. Last month's U.S. Department of Agriculture forecast predicted Florida's orange crop to be about 17 percent less than it was last season.

At this point, farmers eager for solutions are cycling through possible cures, said Hendry County extension agent Gene McAvoy of the University of Florida IFAS Southwest Florida Research and Education Center.

Industry research shows that though the antibiotics don't cure greening; they can buy the trees more years of reduced productivity, but farmers frantically searching for ways to hang on are eager to try new methods that appear promising.

"We were hopeful that they would provide a solution, so many growers have tried it," he said. The underwhelming results coupled with the expense have convinced most grove owners McAvoy has talked to to abandon their use.

Hendry County grower Wayne Simmons is one of those who's about ready to give up on antibiotics.

"We have been using them since about 2016 (but) field work has shown we're probably not getting a whole lot of effect from it, so the amount of use in the industry is getting to be less and less every year," he said. "I've moved on, personally."

Aldicarb is a little different McAvoy said. "It's applied to the soil as a nematicide (killing microscopic worms that feed on roots)," he said – not greening itself. "Since these trees are under stress by greening, they're more susceptible."

He recalls before Aldicarb was prohibited, there was such concern about its potential to contaminate groundwater that the state established a stewardship program to combat unsafe use.

Safety is paramount to farmers too, McAvoy says. "Most people I know live on their farm, they have their kids on their farm and they're just as concerned about protecting their farms, families and livelihood as any one."

Donley points out that those who work the crops are at much greater risk than the public.

During the approval process, he said, the EPA itself admitted the substances may harm farmworkers, but "If the harm to farmworkers is from occupational exposures, EPA is allowed to offset that harm by the potential of the pesticide," Donley said. "So the EPA acknowledged that there is going to be some occupational harm, but they have indicated that the potential benefits to agriculture is enough to basically sweep that under the rug."

He acknowledges that citrus greening is a devastating problem. "It breaks my heart what's happening, but these quick fixes to a complex problem are not worth the harm to public health."

He's also dismayed at what he calls "a vast departure from international consensus ... we've just signaled to the world that nothing is off-limits here and the U.S. is willing to do whatever corporate agriculture wants, public health be damned."

The EPA has placed some limits on Aldicarb's use, but Donley worries that the door's now open.

"If they change the formulation around a bit and make it more effective or if they somehow bring the cost down enough, that changes the equation. So while it may not be very highly used right now, that could change in an instant."

He's uncertain whether the Biden administration will take this issue on.

"I think it should be a priority for them but I can see it falling through the cracks ...

This administration has a thousand other things they need to deal with too. And now that these approvals have been made, that makes it harder to walk back."