

BEE-KILLING CHEMICAL LURKS INSIDE YOUR FOOD¹

Leah Zerbe[©]

An Environmental Protection Agency (EPA) memo recently leaked to a prominent beekeeper outlines agency scientists' concerns over a particular pesticide's effect on honeybees. The pesticide, clothianidin (also known as Poncho), is used to coat corn seeds and other popular food crops grown in the U.S., even though it's banned in France, Italy, and Germany. Because clothianidin is systemic, the pesticide is taken up *inside* the plant, and bees are exposed through pollen and nectar. (The pesticide is also in the food when we eat it, but more on that later.)

Clothianidin falls under the neonicotinoid family of pesticides, meaning it works by creating neurobehavioral and immune-system problems in insect pollinators. Honeybees struck by colony collapse disorder, or CCD, experience these types of symptoms. "Among the neonicotinoids, clothianidin is among those most toxic for honeybees; and this, combined with its systemic movement in plants, has produced a troubling mix of scientific results pointing to its potential risk for honeybees through current agricultural practices," says James Frazier, PhD, professor of entomology at Penn State's College of Agricultural Sciences. "Our own research indicates that systemic pesticides occur in pollen and nectar in much greater quantities than has been previously thought, and that interactions among pesticides occurs often and should be of wide concern."

THE DETAILS: In the leaked memo, dated Nov. 2, an ecologist and chemist with the EPA's Environmental Fate and Effects Division pointed out serious flaws in the industry-funded study used to push approval of the toxic pesticide through, despite its strong link to CCD. Earlier this year, Penn State researchers released another study [linking CCD](#) to a cocktail of pesticides that wind up in honeybee hives. Nonorganic farmers have been using clothianidin in the U.S. during the last eight growing seasons. Interestingly, other countries impacted by CCD that went on to ban the pesticide have enjoyed a rebound in honeybee populations.

Citing the imminent economic and environmental hazards posed by the continued use of clothianidin, the National Honey Bee Advisory Board, Beekeeping Federation, Beyond Pesticides, Pesticide Action Network–North America, and Center for Biological Diversity are asking EPA administrator Lisa Jackson to exercise the agency's emergency powers to take the pesticide off the market. "The environment has become the experiment and all of us—not just bees and beekeepers—have become the experimental subjects," warns Tom Theobald, a beekeeper of 35 years. "We must do better; there is too much at stake."

WHAT IT MEANS: So you don't have a soft spot for honeybees or beekeepers? It's still in your interest to pay attention. Our economy and food security depend on it—bee-pollinated crops account for a third of all the food we eat. Despite the importance of honeybees, millions of toxic pesticides are used in U.S. agriculture every year, and beekeepers continue to lose more than a third of their colonies each winter to CCD. **And how's this to upset your stomach?** According to Pesticide Action Network's "What's on my food?" website, tests have turned up clothianidin levels *inside* conventional potatoes, watermelon, spinach, peaches, tomatoes, kale, summer squash, cherries, and strawberries, with potatoes being most clothianidin-laden. If it's killing honeybees, what's it doing to us?

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Here's how to protect the bees (and your own body) from this pesticide:

- (1) **Know what's on and in your food.** Surely, no one wants to eat anything toxic, but the sad truth is that as farmers who don't use organic growing techniques continue to stack more and more pesticides on food crops (888 million pounds of pesticides are applied each year—about three pounds for every person in the U.S., according to the Pesticide Action Network)—we are constantly ingesting chemicals linked to cancer, diabetes, obesity, ADHD, autism, miscarriage, and many other health problems. More for food for thought: An average American child gets more than five servings of pesticides a day. Use the handy What's on my food? database to learn more about the horrors of conventional food. You'll be craving organic before you know it.
- (2) **Demand organic.** The price of organic food seems awfully affordable once you realize that many agricultural chemicals used in nonorganic foods can lead to early death or a lifetime of health problems. Think about all the money you could save on co-pays and prescriptions if you eradicate these toxicants from your family's life! Search LocalHarvest.org to find organic growers in your area.

And remember this rule of thumb, pointed out in Rodale CEO Maria Rodale's book *Organic Manifesto: Organic trumps local*. If the organic food you need is not available locally, instead of buying chemical-laced local food, opt for out-of-area organic, which keeps poisons out of the food system. The more people buy organic, the more their local farmers will be persuaded to convert to organic, too.