

Beekeepers Ask EPA to Remove Pesticide Linked to Colony Collapse Disorder, Citing Leaked Agency Memo

Pesticide Already Illegal in Germany, Italy & France Based on Scientific Findings

SAN FRANCISCO and WASHINGTON, D.C. – Beekeepers and environmentalists today called on EPA to remove a pesticide linked to Colony Collapse Disorder (CCD), citing a leaked EPA memo that discloses a critically flawed scientific support study. The November 2nd memo identifies a core study underpinning the registration of the insecticide clothianidin as unsound after EPA quietly re-evaluated the pesticide just as it was getting ready to allow a further expansion of its use. Clothianidin (product name “Poncho”) has been widely used as a seed treatment on many of the country’s major crops for eight growing seasons under a “conditional registration” granted while EPA waited for Bayer Crop Science, the pesticide’s maker, to conduct a field study assessing the insecticide’s threat to bee colony health.

Bayer’s field study was the contingency on which clothianidin’s conditional registration was granted in 2003. As such, the groups are calling for an immediate stop-use order on the pesticide while the science is redone, and redesigned in partnership with practicing beekeepers. They claim that the initial field study guidelines, which the Bayer study failed to satisfy, were insufficiently rigorous to test whether or not clothianidin contributes to CCD in a real-world scenario: the field test evaluated the wrong crop, over an insufficient time period and with inadequate controls.

According to beekeeper Jeff Anderson, who has testified before EPA on the topic, “The Bayer study is fatally flawed. It was an open field study with control and test plots of about 2 acres each. Bees typically forage at least 2 miles out from the hive, so it is likely they didn’t ingest much of the treated crops. And corn, not canola, is the major pollen-producing crop that bees rely on for winter nutrition. This is a critical point because we see hive losses mainly after over-wintering, so there is something going on in these winter cycles. It’s as if they designed the study to avoid seeing clothianidin’s effects on hive health.”

Clothianidin is of the neonicotinoid family of systemic pesticides, which are taken up by a plant’s vascular system and expressed through pollen, nectar and gutation droplets from which bees then forage and drink. Scientists are concerned about the mix and cumulative effects of the multiple pesticides bees are exposed to in these ways. Neonicotinoids are of particular concern because they have cumulative, sublethal effects on insect pollinators that correspond to CCD symptoms – namely, neurobehavioral and immune system disruptions.

According to James Frazier, PhD., professor of entomology at Penn State’s College of Agricultural Sciences, “Among the neonicotinoids, clothianidin is among those most toxic for honey bees; and this combined with its systemic movement in plants has produced a troubling mix of scientific results pointing to its potential risk for honey bees through current agricultural practices. 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.” Dr. Frazier said that the most prudent course of action would be to take the pesticide off the market while the flawed study is being redone.

Clothianidin has been on the market since 2003. With a soil half-life of up to 19 years in heavy soils, and over a year in the lightest of soils, commercial beekeepers are concerned that even an immediate stop-use of clothianidin won’t save their livelihoods or hives in time.

“We are losing more than a third of our colonies each winter; but beekeepers are a stubborn, industrious bunch. We split hives, rebound as much as we can each summer, and then just take it on the chin – eat our losses. So even these big loss

numbers understate the problem,” says 50-year beekeeper, David Hackenberg. “What folks need to understand is that the beekeeping industry, which is responsible for a third of the food we all eat, is at a critical threshold for economic reasons and reasons to do with bee population dynamics. Our bees are living for 30 days instead of 42, nursing bees are having to forage because there aren’t enough foragers and at a certain point a colony just doesn’t have the critical mass to keep going. The bees are at that point, and we are at that point. We are losing our livelihoods at a time when there just isn’t other work. Another winter of ‘more studies are needed’ so Bayer can keep their blockbuster products on the market and EPA can avoid a difficult decision, is unacceptable.”

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," said Tom Theobald, a 35-year beekeeper. "In an apparent rush to get products to the market, chemicals have been routinely granted "conditional" registrations. Of 94 pesticide active ingredients released since 1997, 70% have been given conditional registrations, with unanswered questions of unknown magnitude. In the case of clothianidin those questions were huge. The EPA's basic charge is "the prevention of unreasonable risk to man and the environment" and these practices hardly satisfy that obligation. We must do better, there is too much at stake."

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Resources:

- Letter to the EPA (appended)
- Clothianidin & CCD Fact Sheet (appended)
- Timeline of the clothianidin decision (available)
- Copy of the November 2nd memo, as well as other relevant EPA documentation (available)

Available for Interviews:

Tom Theobald, bkpr.tom@indra.com, 303.652.2266

Beekeeper and owner of the Niwot Honey Farm for 35 years. One of the founders of the Boulder County Beekeepers' Association and its president for 30 years, he began beekeeping after 10 years with IBM. In addition to operating a commercial beekeeping operation he has at different times been a boatman on western whitewater and Montana trout rivers, a hunting guide and horse packer, volunteer fire chief in his home town, and for the past 20 years, a freelance writer. Tom was the last County Bee Inspector in the state of Colorado, a position created in 1891 and retired in 2000.

Jeff Anderson, jsa.cmhf@juno.com, 209.847.4731

Beekeeper, with 34 years experience. He owns California Minnesota Honey Farms a family owned and run operation of just under 3000 bee colonies. Jeff is currently a member of the National Honey Bee Advisory Board, a joint board formed by the two National beekeeping organizations, The American Beekeepers Federation, and the American Honey Producers organization to deal with pesticide issues at the National level.

David Hackenberg, buffybee@sunlink.net, 813.713.1239

Beekeeper who first discovered a mysterious disappearance of honeybees now known as Colony Collapse Disorder (CCD). He is featured in the films [Vanishing of the Bees](#) and [Nicotine Bees](#), as well as this [60 Minutes](#) segment. Mr. Hackenberg founded [Hackenberg Apiaries](#) in 1962 as a high school vo-ag project. Today, he and his son operate approximately 3,000 hives of bees in 5 states for pollination and honey. David has served as president of the American Beekeeping Federation. He currently sits as co-chair on the National Honey Bee Advisory Board.

James Frazier, Ph.D, professor of entomology at Penn State's College of Agricultural Sciences
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Dr. Frazier works at the Center for Pollinator health at Penn State, where his research focuses on synergistic and sublethal effects of multiple pesticides on the chemical senses and chemically mediated behaviors of honeybees in relation to honeybee health and CCD in collaboration with Chris Mullin and Maryann Frazier. He also researches chemical ecology: specifically, the structure and function of insect chemosensory systems and the impact of sensory systems on chemically mediated behavior. Penn State's Pollinator health center is a leading institution in research on rapid pollinator population decline.