

Some ‘bee-friendly’ plants treated with harmful pesticides, study finds

Finding comes as scientists call for bee-killing neonicotinoids to be phased out

By Randy Shore, Vancouver Sun June 25, 2014



Bee-friendly plants such as lavender (above) and salvia may be treated with a pesticide toxic to the insects.

Photograph by: Chris Johnson

Half of the “bee-friendly” plants sampled among nursery plants in B.C. tested positive for a class of pesticides implicated in widespread bee die-offs, according to a new study released by a consortium of environmental groups in the United States and Canada.

Plants widely promoted as attractive to pollinators were collected from London, Ontario, Montreal, Quebec and Vancouver-area nurseries and home stores and tested for the presence of neonicotinoids, also known as neonics, a class of pesticides mainly used on corn and soybean seed, but also on lawns and nursery plants, according to the report released Wednesday by Friends of the Earth Canada.

Lavender flowers and stems from B.C. tested positive for flonicamid, while local salvia samples contained imidacloprid — the most widely used neonic. B.C. samples of shasta daisy and scabosia contained no detectable residue.

In samples that tested positive, concentrations of imidacloprid ranged from 15 to 21 parts per billion in B.C. and from four to 52 parts per billion in Ontario and Quebec. Neonics are toxic to bumblebees and honey bees in chronic low-level exposure at levels as low as 0.1 to 10 parts per billion, the authors say.

The B.C. results are contained in *Gardeners Beware 2014*, a study of plants collected from 18 cities in the United States and Canada.

“People are keenly aware that bees are in trouble and want to create bee sanctuaries in their gardens,” said Bea Olivestri, CEO of Friends of the Earth Canada. “We wanted to know if the plants that garden centres billed as good for bees were safe, so our volunteers went out and collected plants that were promoted as bee-friendly.”

Many of the samples contained neonics in levels that are not immediately lethal but that could be harmful to bees over time. Plants such as salvia and alyssum are often used in large numbers to fill flower beds or long edging, which increases the exposure to insects.

“It’s outrageous that these chemicals are legal to use on the very plants that people buy to help bees,” Olivestri said. She urged gardeners to ask what nurseries spray and to buy organically raised plants to ensure the safety of bees and other pollinators.

Health Canada blamed the use of neonics for a spate of unusual bee deaths in 2012, likely from exposure to pesticide dust raised during planting. When bee mortality reports remained persistently high in 2013, the Pest Management Regulatory Agency concluded that “current agricultural practices related to the use of neonicotinoid treated corn and soybean seed are not sustainable.”

The agency released a new set of best practices for farmers and labelling changes late last year in an effort to mitigate the effects of neonics on pollinators.

“The nursery plant study is a good illustration of just how widespread these [chemicals] are in the environment,” said Lisa Gue, an analyst for the David Suzuki Foundation. A meta-analysis of

800 peer-reviewed studies of the effects of neonics on the environment released this week by the Task Force on Systemic Pesticides — a group of 29 independent scientists — concluded that neonics pose a serious risk to pollinators, butterflies, birds, earthworms and soil microbes. The study has been accepted for publication by the journal Environmental Science and Pollution Research.

“What scientists have found is that effects go way beyond the bees,” said Gue. “Up until now the bees were all we really noticed, but they were the canaries in the coal mine.”

Six groups, including the David Suzuki Foundation, the Canadian Association of Physicians for the Environment and Friends of the Earth, on Wednesday called on federal and provincial governments to phase out the use of neonics.

“These chemicals are becoming so widespread that they threaten the function of planetary ecosystems,” said Gue. “Swift action is required to curb the entry of these chemicals into the environment.”

In addition to investigations by Canadian and U.S. regulators, last year the European Union voted to restrict the use of three neonics — including imidacloprid — for two years to allow further review of their safety.

B.C.’s provincial apiculturist Paul van Westendorp noted that regulators had to take a different approach to assessing neonics to account for the effects of sub-lethal doses over long time periods, which substantially slowed evaluation.

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[Norah G Fon](#)

NORAHG RESPONDS TO GUE — NEONICOTINOID INSECTICIDES ARE ENVIRONMENTALLY-FRIENDLY

Lisa Gue is WRONG ! Gue SHOULD LEAVE SCIENCE TO THE REAL EXPERTS. She is a mere part-time lobbyist who works just two days per week at Suzuki.

<http://wp.me/P1jq40-21m> She is NOT a scientist, and she is NOT a researcher. REAL scientists and researchers have concluded that there is NO unambiguous evidence to suggest that neonicotinoid insecticides are to blame for the decline in bee populations. Under normal use, neonicotinoid insecticides will NOT pose a problem. In the European Union, prohibition against neonicotinoid insecticides was a reaction to over-heated rhetoric. In fact, studies in both Europe and in North America have proven there is NO accumulation and NO bio-accumulation after 10 consecutive years. Why are neonicotinoid insecticides environmentally-friendly and cause no harm to bees ? It is because they are coated on agricultural seed, and the seed is buried in the soil, so it is inaccessible to the bees. Moreover, neonicotinoid insecticides have extremely low toxicity to humans, extremely low toxicity to other mammals as well as birds and fish. They have NO persistence beyond the levels that you would expect in an agricultural field for one year. Additionally, there is NO reason to believe that neonicotinoid insecticides persist in water over long periods of time. Science and statistics DO NOT support demands to recklessly prohibit against neonicotinoid insecticides used in the agriculture industry. There are NO valid reasons for their prohibition. If we had less conventional neonicotinoid use in the environment, WE WOULD STILL HAVE Bee Colony Collapse Disorder, because MANY BEE-KEEPERS ARE NOT COMPETENT TO MANAGE THEIR HIVES. For the whole truth regarding BEES, go to ... <http://wp.me/p1jq40-7zT> <http://wp.me/p1jq40-6WJ> <http://wp.me/P1jq40-2BA> <http://wp.me/p1jq40-6H8> <http://wp.me/p1jq40-7ty> NORAHG is the National Organization Responding Against HUJE that seek to harm the Green space industry. WILLIAM H. GATHERCOLE AND NORA H. G. Get the latest details at The Pesticide Truths Web-Site <http://pesticidetruths.com/> and go to The Complete Library Of Web-Pages, Reports, & References <http://wp.me/P1jq40-2rr>

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[Stewart Hanna](#) · Top Commenter · [Abbey High School](#)

The last few years my fruit trees have yielded less and less fruit until last year I climbed a ladder and pollinated them with a Kleenex tissue. The results were amazing. What is wrong with people, especially the scientist that develop such chemicals as neonicotinoids. Not that nicotine is anything new because anyone knows an arrow tip dipped in nicotine will put down an elephant. Stupid, stupid, stupid, didn't they think for a moment that some insects play a very important role in the production of food and this poison isn't selective? Unbelievable. Just goes to show that an educated person isn't necessarily a smart person.

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[Donna MacCullouch](#) · [Laurentian Regional High School](#)

We are allowing big business to kill us. I agree totally with Stewart Hanna and I am not a tree hugging, sandal wearing person. I grew up on a dairy farm in Quebec. There are so many less bees in recent years, I believe everything I read in regards to the dangers of these pesticides.

Where is our government in banning these? Oh I forgot, they are in the pockets of big business.

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[Robert Wager](#) · Top Commenter · [University of British Columbia](#)

And what was the problem according to PMRA? Dust from seeding. And what did they do? Add a lubricant and some equipment changes to seeding machinery to eliminate the problem. A couple of key points not covered. A couple of things to think about re: neonics: First the western provinces use plenty of neonics and have very little CCD, Australia uses lots of neonics and has zero CCD (also has zero Varroa mits, hmmm)

Second, what do people think was used on seeds before neonics? Perhaps people should look up the EIQ of those older compounds and see how they compare to neonics before they call for a ban on neonics. This exact experiment is going on in Europe right now as they banned neonics for two years.

This whole story about Bees is very emotional but emotions make for very bad decision making tools in science based public policy.

Has anyone every asked what has changed with bee husbandry in the past couple decades? Very interesting. In Canada, colonies used to be destroyed each fall and all the honey harvested. new bees were purchased from the US each spring. Then the vorroa mite arrived in NA. That effectively ended the cross border movement of bees. So now the colonies over-winter but ask how much of the honey is left for the bees and how much is replaced with sugar water (hardly a equitable swap)?

No one wants to see bees harmed and as long as people keep shouting to fix the wrong thing, the real problems with bees will continue. It is very true there are real issues with bees and CCD but knee jerk blaming of one pesticide when evidence shows several reasons why its not that simple will not solve the real problems.

A great site to learn about bees is scientificbeekeeping.com

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Why don't you ask the PMRA about neonics instead of fanning the flames of ignorance. if you did you would find out what every government science department around the world say. Neoponics role in CCD is marginal at best. When people keep shouting to fix the wrong thing the real problem continues.