

**Subject: Re: Natural Steps and pesticide-use**

**Date:** Mon, 08 Aug 2005 17:29:15 -0700

**From:** M E Craver <mecraver@shaw.ca>

**To:** Ernie Crist <ernie\_crist@dnv.org>

**CC:** Corrie Kost <kost@triumf.ca>, Brian Platts <bplatts@shaw.ca>, fonvca@fonvca.org, Mayor and Council - DNV <Council@dnv.org>, Senior Management Committee <managecomm@dnv.org>, James Ridge <James\_Ridge@dnv.org>

Dear Corrie Kost: You have asked me for proof that pesticides are not good for our health. All I can surely offer you is my own personal experience and side-effects I suffer today, as solid proof. I know it is not good for my health. And I am sure I am not the only one out there suffering from pesticide poisoning, either. There *are* science articles out there that prove that the natural alternatives can be better. (In this case, keep away from cats!) "Food for a thought" --

*Source:* **American Chemical Society**

*Date:* 2001-08-28

*URL:* <http://www.sciencedaily.com/releases/2001/08/010828075659.htm>

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## Catnip Repels Mosquitoes More Effectively Than DEET

CHICAGO, August 27 — Researchers report that nepetalactone, the essential oil in catnip that gives the plant its characteristic odor, is about ten times more effective at repelling mosquitoes than DEET — the compound used in most commercial insect repellents.

The finding was reported today at the 222nd national meeting of the American Chemical Society, the world's largest scientific society, by the same Iowa State University research group that two years ago discovered that catnip also repels cockroaches.

Entomologist Chris Peterson, Ph.D., with Joel Coats, Ph.D., chair of the university's entomology department, led the effort to test catnip's ability to repel mosquitoes. Peterson, a former post-doctoral research associate at the school, is now with the U.S. Department of Agriculture Forest Service, Wood Products Insects Research Unit, in Starkville, Miss.

While they used so-called yellow fever mosquitoes (*Aedes aegypti*) — one of several species of mosquitoes found in the United States — Peterson says catnip should work against all types of mosquitoes.

*Aedes aegypti*, which can carry the yellow fever virus from one host to another, is found in most parts of the United States. Yellow fever itself, however, only occurs in Africa and South America, according to the Centers for Disease Control. Vaccines and mosquito control programs have essentially wiped out the disease in the United States, although there have been isolated reports of unvaccinated travelers returning with the disease. The last reported outbreak in this country was in 1905.

Peterson put groups of 20 mosquitoes in a two-foot glass tube, half of which was treated with nepetalactone. After 10 minutes, only an average of 20 percent — about four mosquitoes — remained on the side of the tube treated with a high dose (1.0 percent) of the oil. In the low-dose test (0.1 percent) with nepetalactone, an average of 25 percent — five mosquitoes — stayed on the treated side. The same tests with DEET (diethyl-m-toluamide) resulted in approximately 40 percent to 45 percent — eight-nine mosquitoes — remaining on the treated side.

In the laboratory, repellency is measured on a scale ranging from +100 percent, considered highly repellent, to -100 percent, considered a strong attractant. A compound with a +100 percent repellency rating would repel all mosquitoes, while -100 percent would attract them all. A rating of zero means half of the insects would stay on the treated side and half on the untreated side. In Peterson's tests, catnip ranged from +49 percent to +59 percent at high doses, and +39 percent to +53 percent at low doses. By comparison, at the same doses, DEET's repellency was only about +10 percent in this bioassay, he notes.

Peterson says nepetalactone is about 10 times more effective than DEET because it takes about one-tenth as much nepetalactone as DEET to have the same effect. Most commercial insect repellents contain about 5 percent to 25 percent DEET. Presumably, much less catnip oil would be needed in a formulation to have the same level of repellency as a DEET-based repellent.

Why catnip repels mosquitoes is still a mystery, says Peterson. "It might simply be acting as an irritant or they don't like the smell. But nobody really knows why insect repellents work."

No animal or human tests are yet scheduled for nepetalactone, although Peterson is hopeful that will take place in the future.

If subsequent testing shows nepetalactone is safe for people, Peterson thinks it would not be too difficult to commercialize it as an insect repellent. Extracting nepetalactone oil from catnip is fairly easily, he says. "Any high school science lab would have the equipment to distill this, and on the industrial scale it's quite easy."

Catnip is a perennial herb belonging to the mint family and grows wild in most parts of the United States, although it also is cultivated for

commercial use. Catnip is native to Europe and was introduced to this country in the late 18th century. It is primarily known for the stimulating effect it has on cats, although some people use the leaves in tea, as a meat tenderizer and even as a folk treatment for fevers, colds, cramps and migraines.

A patent application for the use of catnip compounds as insect repellents was submitted last year by the Iowa State University Research Foundation. Funding for the research was from the Iowa Agriculture Experiment Station.

Chris Peterson, Ph.D., is a former post-doctoral research associate at Iowa State University in Ames, Iowa, and is now a Research Entomologist with the U.S. Department of Agriculture Forest Service, Wood Products Insect Research Service, in Starkville, Miss.

Joel R. Coats, Ph.D., is professor of entomology and toxicology and Chair of the Department of Entomology at Iowa State University in Ames, Iowa.

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And another critique of pesticide use and "side-effects" (below). I have been aware of this one for a while: Also, re-read Rachel Carson's "Silent Spring". When you come to the signs of pesticide poisoning, think of me. Science cannot begin to measure the cumulative cause for all our ailments, and cannot even begin to fathom what all the pesticides and chemicals mixing together in our air, earth and water are forming into. I took enough chemistry high school classes to know what happens when you mix one element with another. One molecule out and a benign source can turn nasty. It is a toxic brew out there, I agree.

We have to start somewhere, and stop adding to this toxic brew. So yes, if it takes zero tolerance and banning pesticides in our municipality, so be it. This is poison we are talking about, not candy for "green lawns!" *I can find info from many science journals, both pro and con on pesticide use. How can we know who is right? Plain old, not so common, common sense, and personal experience.* So scientific "proof" ,as it were, is not going to prove a thing. The interesting article:

[Pesticides and Polio: A Critique of the Scientific Literature](http://www.westonaprice.org/envtoxins/pesticides_polio.html)  
[http://www.westonaprice.org/envtoxins/pesticides\\_polio.html](http://www.westonaprice.org/envtoxins/pesticides_polio.html)

--Monica Craver--

Dear Mrs Craver:

It is my opinion that anybody who uses harmful pesticides is an extremist - gullible maybe but an extremist just the same. The evidence that pesticides are harmful is overwhelming and so is the fact that the producers of these harmful pesticides will do anything within their power to keep on producing regardless of damage to human health and/or the environment.

The last line of defence and their last refuge will be to accuse those who are opposed to their frenzy to make profit, of being ideologically motivated - this does not frighten me, of course, indeed I personally consider it to be a badge of honour for what could be more patriotic then to fight for a healthy environment and against those who, for money's sake, poison the globe. Unfortunately there are people who are intimidated by such tactics and give up the struggle, which is the purpose of the campaign in the first place.

Do you remember Vietnam and Agent Orange? It made a lot of money for the producers. The fact that the health of millions of children was ruined for the rest of their lives is rarely reported on. Many of the companies who waxed rich on Agent Orange are the same ones who are producing pesticides - remember it and remember it well.

However, if these extremists including those who have been misled are willing to see the error of their ways and join the ranks of progress, we should certainly welcome them with open arms.

Ernie Crist,

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**From:** Corrie Kost [<mailto:kost@triumf.ca>]

**Sent:** Monday, August 08, 2005 1:42 PM

**To:** M E Craver

**Cc:** Ernie Crist; Brian Platts; [fonvca@fonvca.org](mailto:fonvca@fonvca.org); Mayor and Council - DNV; Senior Management Committee; James Ridge

**Subject:** Re: Natural Steps and pesticide-use

Dear Monica Craver,

I wish life were as simple as Bush put it.. "you are either for us or againsts us". Extreme positions - both ways are almost always wrong. Everything should always remain open to debate. That is how progress is made. The "Natural Steps" are just that - steps. Zero tolerance banning is not a step - it is ideological extremism.

Corrie Kost

M E Craver wrote:

| Dear Councillor Crist and Mr. Platts:

Has anyone bothered to address the criteria in the "Natural Steps Framework"? If there is sincere effort to put the Natural Steps criteria to work within DNV, then the arguments *for* pesticide use automatically become *null and void*. We cannot keep straddling the fence and delaying the "inevitable". **Either we are for the Natural Step Communities criteria, or not!** If we are, pesticide-use arguments become "moot" (*modern usage*: "not worth debating"). If we are not, then pesticide-use arguments become "moot" (*original usage*: "open to debate"). Point taken?

Monica Craver

Ernie Crist wrote:

Dear Mrs Craver:

Corporations producing toxic pesticides will be pleased to hear that there is continued support by sections of the public for the production, distribution and sale of toxic pesticides when they could be forced to produce products without causing harm to human health. Natural agents like organic food is more expensive we have been told. Of course we were also told that the Pinto produced by the Ford Motor Company was safe. Unfortunately, some people believed it and paid with their lives.

The proof of the pudding is in the eating as the saying goes. Facts are stubborn things and the facts are that asthma related diseases among the population, but especially among children are escalating and much of this is due to the increasing use of toxins from pesticides ending up in the atmosphere and the soil. It adds to the stock of toxic pollutants adding to the progressive poisoning of the world around us. Canada is one of the world's worst offenders and per capita is on par with the other corporate controlled power, namely the US. It is little wonder that the US has refused to sign the KYOTO agreement.

Lack of public protest is of course music to the ears of the corporate leaders and saves them a great deal of money and bother and surely money is what this is all about. The human brain evolved through direct experience with the physical world around us. In such an environment well being translates into convenience and what is more convenient than to poison pests from a corporate produced spray can bought in the store. Besides, we can always pretend it is not toxic, after all it says so right on the corporate produced spray can does it not?

What is apparently lacking on the part of the apologists of this corporate agenda is a fundamental understanding of the subversive, corrupting and anti social effects of the corporate mentality. It is also convenient since it saves us the trouble to challenge and go to war against powerful corporations, their paid scientists and their paid lawyers not to speak of our neighbours some of whom have also been brainwashed.

Ernie Crist

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**From:** Brian Platts [<mailto:bplatts@shaw.ca>]

**Sent:** Sunday, August 07, 2005 9:10 PM

**To:** Ernie Crist; M E Craver

**Cc:** Corrie Kost; [fonvca@fonvca.org](mailto:fonvca@fonvca.org); Mayor and Council - DNV; Senior Management Committee; James Ridge

**Subject:** Re: FW: pesticides and herbicides

Dear Coun. Crist & Ms. Craver,

Statements such as "anything which kills insects and/or bugs also kills people" rings of hysteria. This kind of thinking is not based on science, logic or even common sense. It is based instead on emotion and dogma. As Corrie Kost pointed-out, EVERY substance CAN be be harmful to life; it is only a matter of dosage. For example, there are documented cases of healthy people having died from drinking copious amounts of bottled water. No one denies that ingesting or being exposed to anything at an extreme dosage can be harmful to human health.

Consider that beer is good for killing slugs. Of course alcohol can be extremely toxic and can kill you either quickly or over time by prolonged abuse. Yet countless studies show that moderate alcohol consumption, particularly red wine, can be excellent for your health. Consider also, do you ever swim in a pool or drink tap water? I don't need to tell you that both are treated with chlorine which, at the right dose, is about as deadly a substance as you can find anywhere, but used properly is a benefit to human health. Don't forget you also probably wash some of your clothes with a small amount of chlorine bleach. Sodium Hydroxide which was spilled in that recent train derailment near Squamish and unfortunately killed some fish in a creek is widely used in making soap and is probably an ingredient in every cleaning substance you have in your homes. Have you or any of your kids ever picked-up head lice? Well, the only shampoo able to get rid of the nasty and socially embarrassing problem is really just an insecticidal soap -- and you have to scrub your head with it! Have you ever used mosquito repellent? Well, it's a chemical too. I could go on.

The reason why some municipal governments have passed bans on safe pesticide use isn't because there is a greater awareness or environmental responsibility at the local level, but rather, municipal governments are by far the easiest level of government for the irrational anti-pesticide movement to "pick off." As I said in an earlier e-mail, beyond the campaign to ban safe pesticides, there are people convinced -- without any scientific basis -- that cell phones or overhead power lines are causing cancers. Others say that electrical appliances are making them sick. You can even find groups demanding, in the interest of health, a ban on wearing perfume fragrances in public. In spite of people living longer and healthier lives than ever before, we are increasingly, and irrationally, afraid of the latest and trendiest health scares.

When it comes to the safe use of pesticides, a one litre squirt bottle of selective herbicide or insecticide (or 2-4-D weed & feed) used occasionally in my family's garden is of no health threat to anyone. However, my adjacent neighbour's noxious "Horse Tail" weeds and spreading blackberry vines are a direct threat to the use and enjoyment of my garden which my family takes pride in, and spends a great deal of time and money, not to mention hard work, to maintain and keep beautiful thereby benefiting the surrounding neighbourhood.

Sincerely,

-Brian